Caring for the Coast

CLINICAL SERVICES PLAN 2012 – 2022

NSW Government Health Central Coast Local Health District
### Version Control & Distribution

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Distribution Key Changes &amp; Issued to/for</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Health Services Development Plan</td>
</tr>
<tr>
<td>V1.0 v1.2</td>
<td>26/03/2012</td>
<td>Internal development and review by Health Services Planning Team</td>
</tr>
<tr>
<td>V1.3</td>
<td>27/03/2012</td>
<td>Chief Executive for review</td>
</tr>
<tr>
<td>V2.0</td>
<td>30/03/2012</td>
<td>Circulated to LHD Board, Executive, Clinical Council, Reference Groups, Community Engagement Committee for review and comment</td>
</tr>
<tr>
<td>V2.1</td>
<td>04/04/2012</td>
<td>Internal review by HSPU</td>
</tr>
<tr>
<td>V2.2</td>
<td>11/05/2012</td>
<td>Inclusion of comments and changes received post circulation</td>
</tr>
<tr>
<td>V3.0</td>
<td>18/05/2012</td>
<td>Circulated to CE.</td>
</tr>
<tr>
<td>V3.1</td>
<td>20/05/2012</td>
<td>Circulated to combined Medical Staff council</td>
</tr>
<tr>
<td>V3.2</td>
<td>22/05/2012</td>
<td>Advanced copy circulated to Cathryn Cox SRHSCP Branch NSW Ministry of Health</td>
</tr>
<tr>
<td>V3.3</td>
<td>25/05/2012</td>
<td>CE for review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical Services Plan</td>
</tr>
<tr>
<td>V1</td>
<td>30/07/2012</td>
<td>Circulated to CE and CCLHD Board</td>
</tr>
<tr>
<td>V2</td>
<td>27/08/2012</td>
<td>Editorial and formatting changes based on final edit</td>
</tr>
<tr>
<td>V3</td>
<td>05/09/2012</td>
<td>Inclusion of Forward (unsigned) and minor amendments based on comments from Board members</td>
</tr>
<tr>
<td>V4</td>
<td>18/09/2012</td>
<td>Inclusion of signed Forward, minor editorial changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endorsement of CSP by CCLHD Board – 24/09/2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Circulation to Kathy Meleady Director, SRHSCP Branch NSW Ministry of Health for comment</td>
</tr>
<tr>
<td>V4.1</td>
<td>October 2012</td>
<td>Minor Editing. Initial print run for LHD Board and Senior Executive Copy provided to Minister for Health (22/11/2012)</td>
</tr>
<tr>
<td>V5.0</td>
<td>11/12/2012</td>
<td>Inclusion of version control and distribution table and minor editorial corrections</td>
</tr>
<tr>
<td></td>
<td>27/12/2012</td>
<td>Comments received from SRHSCP Branch NSW Ministry of Health</td>
</tr>
<tr>
<td>V6.0</td>
<td>16/04/2013</td>
<td>Final review and edit, inclusion of relevant comments from Ministry of Health, inclusion of additional detail in Chapters 1, 7, 9, 11, 12.10 and 12.12</td>
</tr>
</tbody>
</table>
Central Coast Local Health District respectfully acknowledges the traditional owners and custodians of the land:

The Darkinjung Nation of the Central Coast region
Foreword

A time of change, challenge and opportunity

The growth and ageing of the Central Coast population over the next ten years will drive demand for public health services at a pace that will challenge the Local Health District.

Much of the focus on access to health care will need to shift to Wyong as its population expands by more than 17 per cent. This will make Wyong Hospital increasingly pivotal in the provision of hospital based services.

Community based services will need to grow, too, as they take on a larger role in the provision of primary care throughout the Central Coast. Our community itself will have to take more responsibility to improve and maintain good health in the population.

National Health Reforms with new priorities are being implemented that will impact on how health services are funded and delivered. New performance targets, standards and increased accountability have been defined and will be linked to funding.

Changing models of care, innovation and strong partnerships will increasingly be key components of health services.

On July 1, 2011, Central Coast Local Health District was formed and a Chief Executive and Board were appointed. With that change came increased local management, decision making, responsibility and accountability in the allocation of resources and delivery of local health services.

To ensure we meet the needs of our community, comprehensive planning and consultation – including with our community and particularly with staff and clinicians – has taken place in which our challenges and needs were identified.

From that planning, this Clinical Services Plan has been developed in addition to an Asset Strategic Plan, setting in place comprehensive strategies to meet those challenges and needs well into the future.

This plan provides details on the current scope of our services and the strategies – short term and long term – that we believe are necessary to help us meet the changing demands of our community during the next decade.

In developing the plan it is acknowledged that some strategies will require significant funding and as a result will have longer lead times before implementation. However, there are many short term strategies that will commence the transformation of the Local Health District to more effectively and efficiently meet the needs of the community.

We would like to acknowledge the efforts of all those who contributed to the formulation of our plans.

We now look forward to working together to progress those plans into action and we invite ongoing comment and feedback from our community and stakeholders.

Matt Hanrahan
Chief Executive

Paul Tonkin
Board Chair
Table of Contents

Foreword ......................................................................................................................... I
Table of Contents ........................................................................................................... II
List of Tables .................................................................................................................... III
Glossary .......................................................................................................................... V
1 Executive Summary ....................................................................................................... 2
  1.1 Introduction ............................................................................................................... 2
  1.2 Issues and Challenges .............................................................................................. 9
  1.3 Strategic Directions .............................................................................................. 12
  1.4 Service Development Strategies .......................................................................... 17
  1.5 Capital Development Strategies ........................................................................... 20
2 Service and Facility Profiles ......................................................................................... 25
  2.1 Gosford Hospital .................................................................................................... 25
  2.2 Wyong Hospital ..................................................................................................... 27
  2.3 Community Health ............................................................................................... 29
  2.4 Woy Woy Hospital ............................................................................................... 29
  2.5 Long Jetty Health Facility ..................................................................................... 29
3 Central Coast Local Health District ............................................................................... 31
  3.1 Geographic Profile ............................................................................................... 32
  3.2 Population Profile ............................................................................................... 32
  3.3 Facilities and Services .......................................................................................... 32
  3.4 Governance and Service Organisation .................................................................. 33
  3.5 Partnerships ........................................................................................................... 33
4 Population and Activity .............................................................................................. 35
  4.1 Population Data ..................................................................................................... 35
  4.2 Residents health status .......................................................................................... 36
  4.3 Activity Data ......................................................................................................... 38
  4.4 Projected Demand and Supply for Central Coast LHD ........................................... 41
5 Emergency Medicine .................................................................................................. 46
  5.1 Gosford Hospital ED ............................................................................................. 47
  5.2 Wyong Hospital ED ............................................................................................... 48
  5.3 Strategic Directions ............................................................................................... 49
6 Anaesthetics, Surgery and ICU ..................................................................................... 50
  6.1 Service Scope ......................................................................................................... 50
  6.2 Current services, resources and organisation ...................................................... 50
  6.3 Issues, challenges and opportunities ..................................................................... 51
  6.4 Strategic Directions ............................................................................................. 54
  6.5 Anaesthetics and Pain Management ................................................................... 55
  6.6 Critical Care (ICU/HDU and Retrieval) ............................................................... 57
  6.7 General Surgery .................................................................................................... 58
  6.8 Orthopaedics ......................................................................................................... 58
  6.9 Vascular Surgery ................................................................................................... 59
  6.10 Ophthalmology .................................................................................................... 59
  6.11 Urology ................................................................................................................ 60
  6.12 ENT/Otolaryngology/Head and Neck ................................................................. 61
  6.13 Plastics and Reconstructive Surgery ................................................................ 62
  6.14 Paediatric Surgery ............................................................................................... 62
  6.15 Gynaecology and Breast Surgery ....................................................................... 63
  6.16 Thoracic Surgery .................................................................................................. 63
  6.17 Wound Management ........................................................................................... 64
7 Medicine ....................................................................................................................... 65
  7.1 Service Scope ......................................................................................................... 65
  7.2 Current services, resources and organisation ...................................................... 65
  7.3 Issues, challenges and opportunities ..................................................................... 66
  7.4 Strategic Directions ............................................................................................. 68
  7.5 Cardiology ............................................................................................................. 69
  7.6 Endocrinology and Diabetes ................................................................................. 72
  7.7 Gastroenterology ................................................................................................... 75
Clinical Services Plan 2012-2022

7.8 General Medicine ................................................................. 76
7.9 Neurology .................................................................. 77
7.10 Renal Medicine and Renal Dialysis ................................................................. 79
7.11 Respiratory Medicine ................................................................. 80
8 Cancer and Clinical Haematology ................................................................. 83
9 Aged and Sub-Acute Care ................................................................. 85
9.1 Acute Aged Care ................................................................. 85
9.2 Sub-Acute Aged Care and Rehabilitation ................................................................. 88
9.3 Dementia care ................................................................ 97
10 Women’s, Children’s and Family Health ................................................................. 99
10.1 Maternity and Neonatal Services ................................................................. 99
10.2 Paediatric Services ................................................................. 105
11 Mental Health ................................................................... 109
11.1 Service Scope ................................................................. 109
11.2 Adult Mental Health Services ................................................................. 111
11.3 Children and Young People’s Mental Health Service (CYPMH) ................................................................. 116
11.4 Specialist Mental Health Services for Older People (SMHSOP) ................................................................. 118
12 Primary, Community and Allied Health Services ................................................................. 121
12.1 Service Scope ................................................................. 121
12.2 Current services, resources and organisation ................................................................. 122
12.3 Issues, challenges and opportunities ................................................................. 123
12.4 Strategic Directions ................................................................. 124
12.5 Allied Health ................................................................. 126
12.6 Child, Youth and Family ................................................................. 128
12.7 Chronic Care, Aged Care and Rehabilitation ................................................................. 131
12.8 Drug and Alcohol Services ................................................................. 136
12.9 Oral Health ................................................................. 137
12.10 Aboriginal Health Service ................................................................. 138
12.11 Multicultural Health Service ................................................................. 139
12.12 HIV and Related Programs (HARP) ................................................................. 140
12.13 Sexual Assault Service ................................................................. 141
12.14 Women’s Health ................................................................. 141
13 Population Health Services ................................................................. 142
13.1 Health Promotion ................................................................. 142
13.2 Public Health ................................................................. 143
14 Clinical Support Services ................................................................. 145
14.1 Medical Imaging ................................................................. 145
14.2 Pharmacy ................................................................. 147
14.3 Pathology ................................................................. 148
15 Other Support Services ................................................................. 149
15.1 Clinical Information Services ................................................................. 149

APPENDICES ........................................................................ 150
Appendix A: CCLHD Planning Framework ................................................................. 151
Appendix B: Mapping of Clinical Groups to NSW Health ESRGs ................................................................. 152
Appendix C: Current and Projected Resident Demand ................................................................. 153
Appendix D: Role Delineation – Current and Proposed Levels ................................................................. 155
Appendix E: Central Coast LHD Functional Units Summary ................................................................. 157
Appendix F: Community Health Facilities and Services ................................................................. 159
Appendix G: CCLHD Governance ................................................................. 161
Appendix H: Health Service Planning Reference Groups ................................................................. 162
Appendix I: CCLHD Clinical Council and HSP Steering Committee ................................................................. 163

List of Tables
Table 1: Proposed configuration of services at Gosford and Wyong Hospitals by 2022 ................................................................. 30
Table 2: SEIFA Index for Central Coast LGA ................................................................. 36
Table 3: Life Expectancy in years, Central Coast Residents (2006/07) ................................................................. 37
Table 4: Central Coast LHD Built Hospital Bed Capacity June 2011 ................................................................. 38
Table 5: Internal flows between Gosford and Wyong hospitals by LGA 2010/11 ................................................................. 39
Table 6: Central Coast Adult Acute Demand in Public Hospitals outside of CC LHD ................................................................. 40
Clinical Services Plan 2012-2022

Table 7: Projected Growth by age and admission type for CCLHD Hospitals (Base Case) .......... 42
Table 8: Projected Growth by age and admission type for Gosford Hospital (Base Case) ............ 42
Table 9: Projected Growth by age and admission type for Wyong Hospital (Base Case) .......... 42
Table 10: Comparative 2021/22 ICU projections ................................................................. 43
Table 11: Comparative 2021/22 HDU projections ............................................................... 43
Table 12: Summary of scenarios and estimated activity and adult acute bed requirements .......... 44
Table 13: Current and Projected Estimated Operating Rooms ............................................. 45
Table 14: Role Delineation and Capacity per ED February 2012 ........................................... 46
Table 15: ED Presentations and Admissions 2006/07 – 2010/11 ............................................ 46
Table 16: ED Activity and projected presentations to 2022 .................................................... 47
Table 17: ED Treatment Space Requirements ........................................................................ 47
Table 18: Cardiology Services at Gosford and Wyong Hospitals .......................................... 70
Table 19: Central Coast LHD Current and Planned Sub Acute and Non Acute Bed Capacity ......... 89
Table 20: Sub-Acute Inpatient Overnight Activity 2010/11 ..................................................... 91
Table 21: CC Inpatient Overnight Rehabilitation Activity by Hospital and Payment Status 2010/11 .... 92
Table 22: CC Sub-acute activity by Hospital and LGA of Residence 2010/11 ........................... 92
<table>
<thead>
<tr>
<th>AAT</th>
<th>Acute Assessment Teams</th>
<th>COPD</th>
<th>Chronic Obstructive Pulmonary Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABF</td>
<td>Activity Based Funding</td>
<td>COPM</td>
<td>Children of Parents with a Mental Illness</td>
</tr>
<tr>
<td>ABI</td>
<td>Acquired Brain Injury</td>
<td>CORT</td>
<td>Community Out-Reach Team</td>
</tr>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
<td>CPAP</td>
<td>Continuous Positive Airway Pressure</td>
</tr>
<tr>
<td>ACAT</td>
<td>Aged Care Assessment Team</td>
<td>CRT</td>
<td>Cardiac Resynchronisation Therapy</td>
</tr>
<tr>
<td>ACE</td>
<td>Acute Care of the Elderly</td>
<td>CS</td>
<td>Community Services (previously DoCS)</td>
</tr>
<tr>
<td>ACI</td>
<td>NSW Agency for Clinical Innovation</td>
<td>CSP</td>
<td>Clinical Services Plan</td>
</tr>
<tr>
<td>ACSQC</td>
<td>Australian Council for Safety and Quality in Healthcare</td>
<td>CSSP</td>
<td>Clinical Services Strategic Plan</td>
</tr>
<tr>
<td>AFRM</td>
<td>Australian Faculty of Rehabilitation Medicine</td>
<td>CT</td>
<td>Computed Tomography</td>
</tr>
<tr>
<td>AHS</td>
<td>Area Health Service</td>
<td>CTCA</td>
<td>Computerised Tomography Coronary Angiography</td>
</tr>
<tr>
<td>AICD</td>
<td>Automatic Implantable Cardiac Defibrillator</td>
<td>CVS</td>
<td>Chorionic Villus Sampling</td>
</tr>
<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
<td>CYPMH</td>
<td>Children and Young Peoples Mental Health</td>
</tr>
<tr>
<td>AOT</td>
<td>Assertive Outreach Team</td>
<td>DBMAS</td>
<td>Dementia Behaviour Management Advisory Service</td>
</tr>
<tr>
<td>APAC</td>
<td>Acute Post Acute Care</td>
<td>DRG</td>
<td>Diagnosis Related Group</td>
</tr>
<tr>
<td>APS</td>
<td>Acute Pain Service</td>
<td>DVA</td>
<td>Department of Veterans’ Affairs</td>
</tr>
<tr>
<td>ASACC</td>
<td>Aged care, Sub-Acute &amp; Complex Care (Clinical Division previously RACS)</td>
<td>EBUS</td>
<td>Endoscopic Bronchial Ultrasonography</td>
</tr>
<tr>
<td>AS&amp;ICU</td>
<td>Anaesthetics, Surgery and Intensive Care Unit (Clinical Division)</td>
<td>ECHO</td>
<td>Echocardiogram</td>
</tr>
<tr>
<td>ASET</td>
<td>Aged Care Services in Emergency Team</td>
<td>ECT</td>
<td>Electroconvulsive Therapy</td>
</tr>
<tr>
<td>ASET-BA</td>
<td>Aged Care Service Emergency Team</td>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>ASU</td>
<td>Acute Surgical Unit</td>
<td>ED SSU</td>
<td>Emergency Department Short Stay Unit (previously EMU)</td>
</tr>
<tr>
<td>BASIS</td>
<td>Behaviour Assessment &amp; Intervention Service</td>
<td>EEG</td>
<td>Electroencephalograph</td>
</tr>
<tr>
<td>BEACH</td>
<td>Bettering the Evaluation and Care of Health</td>
<td>EGC</td>
<td>Electrocardiograph/Electrocardiogram</td>
</tr>
<tr>
<td>BIVP</td>
<td>Bi-Ventricular Pacing</td>
<td>ELP</td>
<td>Equipment Loan Pool</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
<td>eMR</td>
<td>Electronic Medical Record</td>
</tr>
<tr>
<td>BPSD</td>
<td>Behavioural and Psychological Symptoms of Dementia</td>
<td>EPAS</td>
<td>Early Pregnancy Assessment Service</td>
</tr>
<tr>
<td>BPS-MI</td>
<td>Behavioural and Psychological Symptoms of Mental Illness</td>
<td>EPS</td>
<td>Electrophysiology Study</td>
</tr>
<tr>
<td>CACH</td>
<td>Children’s, Aged &amp; Community Health Directorate (previously PCAH)</td>
<td>ERCP</td>
<td>Endoscopic Retrograde Cholangio-pancreatography</td>
</tr>
<tr>
<td>CADE</td>
<td>Confused and Disturbed Elderly</td>
<td>ESRG</td>
<td>Enhanced Service Related Group</td>
</tr>
<tr>
<td>CALD</td>
<td>Culturally and Linguistically Diverse</td>
<td>ETAMI</td>
<td>Early Triage in Acute Myocardial Infarction</td>
</tr>
<tr>
<td>CAMHS</td>
<td>Child and Adolescent Mental Health Service</td>
<td>ETT</td>
<td>Exercise Tolerance Test</td>
</tr>
<tr>
<td>CC</td>
<td>Central Coast</td>
<td>FACETS</td>
<td>Family Assessment Consultation</td>
</tr>
<tr>
<td>CCDGP</td>
<td>Central Coast Division of General Practice</td>
<td>FMS</td>
<td>Functional Mobility Scale</td>
</tr>
<tr>
<td>CCLHD</td>
<td>Central Coast Local Health District</td>
<td>FTE</td>
<td>Full Time Equivalent</td>
</tr>
<tr>
<td>CCU</td>
<td>Coronary Care Unit</td>
<td>GEM</td>
<td>Geriatric Evaluation and Management</td>
</tr>
<tr>
<td>CEC</td>
<td>Community Engagement Committee</td>
<td>GP</td>
<td>General Practice or General Practitioner</td>
</tr>
<tr>
<td>CHC</td>
<td>Community Health Centre</td>
<td>GSAC</td>
<td>Gosford Surgical Admissions Centre</td>
</tr>
<tr>
<td>CHOC</td>
<td>Community Health and Outpatient Care Program</td>
<td>HARP</td>
<td>HIV and Related Programs</td>
</tr>
<tr>
<td>CL</td>
<td>Consultation Liaison</td>
<td>HASI</td>
<td>Housing and Accommodation Support Initiative</td>
</tr>
<tr>
<td>CMO</td>
<td>Career Medical Officer</td>
<td>HBTT</td>
<td>Home Based Treatment Team</td>
</tr>
<tr>
<td>CNC</td>
<td>Clinical Nurse Consultant</td>
<td>HDU</td>
<td>High Dependency Unit</td>
</tr>
<tr>
<td>CNS</td>
<td>Clinical Nurse Specialist</td>
<td>HERRS</td>
<td>Home Education and Respiratory</td>
</tr>
<tr>
<td>CNSS</td>
<td>Community Neurological Support Service</td>
<td>HETI</td>
<td>Health Education and Training Institute</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
<td>HSP</td>
<td>Health Service Planning</td>
</tr>
<tr>
<td>COATS</td>
<td>Community Outreach and Therapy Service</td>
<td>HVSS</td>
<td>High Volume Short Stay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IBD</td>
<td>Inflammatory Bowel Disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICIS</td>
<td>Integrated Clinical Information System</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICU</td>
<td>Intensive Care Unit</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Definition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEO</td>
<td>Index of Education and Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IER</td>
<td>Index of Economic Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ILR</td>
<td>Implantable Loop Loopers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM&amp;T</td>
<td>Information Management and Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOL</td>
<td>Intraocular Lens Insertion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPAC</td>
<td>Infection Prevention and Control Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRSD</td>
<td>Index of Relative Socio-economic Advantage and Disadvantage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHH</td>
<td>John Hunter Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LHD</td>
<td>Local Health District</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LINAC</td>
<td>Linear Accelerator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOS</td>
<td>Length of Stay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAU</td>
<td>Medical Assessment Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCHS</td>
<td>Multicultural Health Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCI</td>
<td>Mild Cognitive Impairment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MERIT</td>
<td>Magistrates Early Referral into Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MH-CCP</td>
<td>Mental Health Clinical Care and Prevention Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHICU</td>
<td>Mental Health Intensive Care Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHS</td>
<td>Mental Health Service (Clinical Division)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MHTAL</td>
<td>Mental Health Telephone Access Line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI</td>
<td>Magnetic Resonance Imaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>Multiple Sclerosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAIDOC</td>
<td>National Aboriginal and Islander Day Observance Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEAT</td>
<td>National Emergency Access Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEST</td>
<td>National Elective Surgery Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGO</td>
<td>Non-government organisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NICU</td>
<td>Neonatal Intensive Care Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIV</td>
<td>Non-Invasive Ventilation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOF</td>
<td>Neck of Femur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSCCH</td>
<td>Northern Sydney Central Coast Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSP</td>
<td>Needle Syringe Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCC</td>
<td>Ongoing Complex Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTP</td>
<td>Opioid Treatment Programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAC/RIS</td>
<td>Picture Archiving and Communication/Radiology Information System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PANOC</td>
<td>Physical Abuse and Neglect of Children (Child Protection Service)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAU</td>
<td>Paediatric Ambulatory Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCA</td>
<td>Palliative Care Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCAH</td>
<td>Primary, Community and Allied Health Directorate (now CACHI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCI</td>
<td>Percutaneous Coronary Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PECC</td>
<td>Psychiatric Emergency Care Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEPE</td>
<td>Pregnancy and Early Parenting Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>Positron Emission Tomography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEM PAC</td>
<td>Paediatric Emergency Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PND</td>
<td>Perinatal Depression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POC</td>
<td>Point of Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RACFs</td>
<td>Residential Aged Care Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RACS</td>
<td>Rehabilitation and Aged Care Services (Clinical Division) now ASACC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMO</td>
<td>Resident Medical Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNSH</td>
<td>Royal North Shore Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPAH</td>
<td>Royal Prince Alfred Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SANE</td>
<td>Sexual Assault Nurse Examiner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SARA</td>
<td>Surgical Acute Rapid Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCN</td>
<td>Special Care Nursery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEIFA</td>
<td>Socio-Economic Index for Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEPS</td>
<td>Separations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHC</td>
<td>Sexual Health Clinic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIAM</td>
<td>Sub-Acute Inpatient Activity Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLA</td>
<td>Statistical Local Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMHSOP</td>
<td>Specialist Mental Health Services for Older People</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMR</td>
<td>Standardised Mortality Ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMO</td>
<td>Senior Medical Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPECT CT</td>
<td>Single-Photon Emission Computed Tomography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRG</td>
<td>Service Related Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRMO</td>
<td>Senior Resident Medical Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSDB</td>
<td>Statewide Services Development Branch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEMI</td>
<td>ST-segment Elevation Myocardial Infarction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-BASIS</td>
<td>Transitional Behaviour Assessment &amp; Intervention Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCU</td>
<td>Transitional Care Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIA</td>
<td>Transient Ischaemic Attack</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOE</td>
<td>Trans-oesophageal Echocardiogram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TTE</td>
<td>Trans-thoracic Echocardiogram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCC</td>
<td>Urgent Care Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAT</td>
<td>Venous Access Team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VATS</td>
<td>Video-assisted Thorascopic Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VBAC</td>
<td>Vaginal Birth After Caesarean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VLS</td>
<td>Very Long Stay inpatient beds (mental health beds)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMO</td>
<td>Visiting Medical Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WC&amp;FH</td>
<td>Women’s, Children’s and Family Health (Clinical Division)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCHN</td>
<td>Western Child Health Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOOS</td>
<td>Weighted Occasions of Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WyPAU</td>
<td>Wyong Paediatric Assessment Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Caring FOR THE COAST

OUR VISION
Healthy people – vibrant community

OUR MISSION
Promote and enhance the health and wellbeing of our community

OUR VALUES
Collaboration • Openness • Respect • Empowerment

OUR STRATEGIC PRIORITIES

Our patients
Provide best practice care to ensure patient safety and satisfaction

Our staff
Support and develop our most important resource and provide a safe and rewarding workplace

Our resources
Use resources effectively and efficiently

Our community
Invest in better health by promoting a healthy lifestyle and available health services

Our future
Develop strong and effective partnerships to meet the community’s health needs
1 Executive Summary

1.1 Introduction

Central Coast Local Health District (CCLHD) has produced this Clinical Services (CSP) to articulate clinical service strategies and capital requirements to meet current and future LHD health service needs to 2021/22.

Key objectives include:
- Clarification of the roles and functions of each facility, particularly the expansion of Wyong Hospital
- Articulation of clinical service strategies to meet trends in service delivery, changing models of care and growing demand
- Estimation of bed capacity and service requirements for projected activity
- Identification of capital requirements across facilities and services.

The Plan focuses on health service demands and projected requirements to 2021/22. It has become evident throughout the planning process that acute inpatient and community health services are operating at capacity. Current activity data and modelling show that expansion of workforce and acute and sub-acute beds, ambulatory treatment places and community health services are required as a matter of urgency (i.e. one to five years) to meet current demand and allow for some growth. Significant capital and infrastructure development is required to meet the projected growth in demand which will occur over the next ten years to 2022.

While there is a degree of urgency around major capital expansion of CCLHD health facilities it is recognised that there are significant demands on the health capital program across NSW and long lead times (planning, approval, commencement and commissioning) for major health capital developments and it is unlikely that these will provide short to medium term solutions for the Central Coast.

A mix of capital and recurrent funding, increased clinical workforce, and collaborative arrangements with the private sector is required now to make best use of available infrastructure and to meet current to medium term demand. In the medium to long term CCLHD will require major capital investment to meet the projected continuing growth in demand to 2022 and beyond, with these enhancements CCLHD will be able to provide more effective and better integrated models of care to meet future demands.

A Health Services Development Plan, focusing on capital requirements, was prepared specifically to meet the deadlines and timeframes associated with the preparation of the NSW Treasury forward capital program. This Clinical Services Plan builds on that earlier plan and incorporates:
- service models which promote best practice and efficient use of current resources
- strategies and services which can be enhanced through increased recurrent funding and investment
- capital developments which can occur independently of any major redevelopment.

1.1.1 CCLHD Strategic Plan: Caring for the Coast

CCLHD plans are linked in a comprehensive planning framework (appendix A) that reflects the national health reforms, the NSW State Health Plan and NSW Health CORE values, and which links the LHD Strategic Plan to this Clinical Services Plan. The framework also describes a system of supporting and enabling plans, and local implementation plans that will be progressively developed.

The CCLHD Strategic Plan Caring for the Coast sets out the vision, purpose, values and strategic directions and initiatives to be implemented over a 3-5 year period, and how these align with state priorities and NSW Health’s strategic directions.
The Strategic Plan sets out five priority or focus areas including:
A. Caring for our patients – providing best practice patient focused services
B. Caring for our community – investing in better health
C. Caring for our staff and colleagues – supporting and developing our people and systems
D. Caring for our facilities and resources – using resources efficiently and effectively
E. Caring for our future – building proactive partnerships and system integration.

Each of the strategic actions identified in this Clinical Services Plan is linked to one or more of these focus areas.

1.1.2 Planning Process and Consultation

The development of the Clinical Services Plan required a high level of engagement across the LHD including Board members, the Executive team, Divisional Managers, Clinical Directors, Heads of Departments and managers of key nursing, allied health and clinical support services. That engagement will continue to be critical in the translation of the strategic directions into clinical and operational plans.

Planning was undertaken using existing clinical division and organisational structures and communication channels (Appendix H).

- The Clinical Council performed the role of steering committee and was a critical point for providing feedback, guidance and resolution of areas of contention
- Reference groups were established for each clinical division. Important links with the Clinical Council and Executive were reinforced with the inclusion of an executive sponsor, Director of Medical Services and Clinical Directors on each group. Cross Divisional representation focused planning on the patient journey along the care continuum, particularly for aged care, chronic disease management and community health services. A key function of reference group members was to consult and communicate with staff within their Division throughout the planning process.

Reference Groups, in consultation with Divisional staff, were asked to identify:
- Issues, challenges, and gaps in services
- Strategic service changes to be implemented by 2021/22
- Key enablers and barriers to implementing the proposed strategies.

The development of an intranet page supported the planning process ensuring that all CCLHD staff had easy access to current information and provided opportunity for direct feedback.

A number of forums were held with medical, nursing and allied health staff to seek feedback on the draft Plans. Forum participants were asked to consider:
- What should happen over the next two years to enable CCLHD to better respond to current pressures and position itself for a better long term future?
- How should CCLHD grow Wyong Hospital and best meet the health needs of the Wyong LGA?
- What should the CCLHD clinical leadership structure look like in the future and how do we strengthen clinical engagement?
- How will CCLHD develop effective alternatives to hospitalisation, especially for medical patients?
- What are the opportunities to improve efficiency and implement activity based funding?

Community consultation commenced early with the involvement of the Community Engagement Committee (CEC). The CEC was actively involved both in the refinement of the proposed planning approach and in the review of the draft plan. The CEC was also instrumental in the planning and delivery of two community forums, jointly hosted with the CC NSW Medicare Local, in Gosford and Wyong LGAs. Local government, NGO and other community service providers participated in these forums along with general community members. The discussion points at each of the workshops were many and varied however the following issues were universally identified as important these were:
- Shortage of GPs, after hours services and gap costs
The need for more community based services and ‘one-stop shops’
Improved access and transport needs
Improved communication to the community of the services available
Addressing aged care needs
Increased communication and coordination between health service providers
Illness prevention through good health promotion.

1.1.3 Previous Planning
In developing this Plan, the CCLHD has taken the opportunity to carefully consider and build on the range of work undertaken in recent years in health services and capital planning for the Central Coast region. Those plans and related documents include:

- Central Coast Services Strategy (2006)
- Master Planning for Gosford Hospital (2006)
- Planning for the Gosford Citylink (2008)
- Clinical Services Strategic Plan for Northern Sydney Central Coast Health (CSSP, 2008)
- Primary and Community Health Services Strategic Plan for Northern Sydney Central Coast Health (PaCH, 2010)
- Central Coast Health Service Statement for proposed developments – capital expansion plan for Gosford and Wyong Hospitals (2010/11)
- Caring for the Coast – Strategic Vision for the Future – CCLHD (2011)
- Caring for the Coast – A Strategic Plan for the CCLHD (draft – 2011/12).

The reality of this preceding work is that most of the major issues, well known and oft repeated over recent years, have not been addressed with the necessary enhancements identified in those plans, reviews and proposals. With each passing year and report, the Central Coast lags further behind in matching its health resources (capital, recurrent and clinical workforce) to the increasing local demand for health services.

In effect, this Plan is the eighth document in six years to identify or propose much needed health service enhancements for the Central Coast region. The main messages from the preceding seven reports were and remain:

- Bed Requirements - Gosford Hospital is operating at an average occupancy level of 95.5% of built capacity and Wyong Hospital at 91.5% occupancy meaning there is a current shortfall of 60 built beds required to operate at 85% occupancy and without any changes to current clinical practice. CCLHD will require an additional 167 adult acute beds by 2021/22 (if 20% flow reversal is included the bed requirement increases to 188). The greatest growth rates in the CCLHD are in the north eastern part of the Wyong LGA (Warnervale-Wadalba and The Entrance) furthest from the Gosford Hospital. The greatest increase will be in the 70+ age group; by 2022, one in four acute hospital beds on the Central Coast will be occupied by patients aged 85 years or more.
- Emergency Department (ED) - there are 110,000 ED presentations each year. Since 2006/07 ED presentations have increased by 14% at Gosford Hospital and 19.3% at Wyong Hospital. Both EDs are overcrowded and struggle to function effectively with long off-stretcher times and poor emergency admission performance.
- High reliance on public health systems – poor access to GPs and allied health providers in the area, limited support services for the ageing in the community and lower than NSW average private health insurance rates, particularly in Wyong LGA has resulted in significant increases in demand for acute inpatient services.
- Community based services - community health services are functioning at capacity and are unable to meet growing demand. Across the LHD services are dispersed across poorly functioning buildings and rental accommodation.
Population and lifestyle factors - the CCLHD has socioeconomically disadvantaged communities, particularly within Wyong LGA, with higher lifestyle risk factors (education, physical activity, diet, obesity, smoking, alcohol/drug use, psychological distress). There are higher than NSW average death rates from all causes, and in particular from cancers, respiratory disease and stroke. There are comparatively high rates of preventable disease and chronic diseases.

Ageing population – In 2008/09 patients aged 70 years and older represented 47.3% of separations and 61.8% of bed days. By 2021/22 this is projected to have grown to 52.9% and 66% respectively. It is estimated that 92% of increased bed requirements will be for patients aged 70 years and older, predominantly for urgent medical admissions.

Medical Admissions – In 2010/11 61.6% of separations and 72.2% of bed days are medical, mainly driven by the ageing population and chronic disease. Shortages in medical beds results in overflow to surgical beds with a direct impact on surgical throughput and cancellation of surgery.

Surgical Capacity - Since 2008/09 the number of procedures performed and the demand for operating rooms at both Gosford and Wyong hospitals has grown significantly supported partly by increased funding to meet elective surgery targets. Gosford Hospital’s operating theatres are functioning at capacity, although operating theatre capacity at Wyong Hospital is under-utilised due to operational and service arrangements across the acute hospitals and availability of specialist surgeons. There will be additional demand and pressure on the operating theatre capacity to meet the National Elective Surgery Target (NEST).

Renal Dialysis Capacity - renal dialysis is functioning at built capacity and cannot meet growth in demand.

Access to sub-acute and community health services - there are delays in transfer of inpatients to rehabilitation and other sub-acute services, influenced by existing models of care that are constrained by limited sub-acute beds and insufficient community health services.

Inpatient demand - more Wyong residents are admitted to hospital than Gosford residents. There are significant patient flows from Wyong LGA to Gosford Hospital with only minor flows in the opposite direction.

1.1.4 Recent Service Developments

There have been some welcome recent enhancements on the Central Coast, including:

- The Regional Cancer Centre which incorporates expansion of the Cancer Care Centres at Gosford and Wyong Hospitals as well as construction of radiation oncology services at Gosford Hospital
- Woy Woy Hospital sub-acute beds (funded through COAG plus a NSW Election commitment)
- Long Jetty/Wyong Hospital sub-acute care and transitional care beds
- An Urgent Care Centre (UCC) and Emergency Department Short Stay Unit (ED SSU) at Wyong Hospital.

1.1.5 Planning Context

This Plan reflects priorities identified in the National Health Reforms, the NSW State Plan and the current service agreement between CCLHD and NSW Health. The Plan also responds to changing service trends and contemporary models of care.

1.1.5.1 Service Agreement between CCLHD and NSW Health

The Service Agreement between CCLHD and NSW Ministry of Health supports the devolution of decision making, responsibility and accountability for the safe, high quality, patient centred care to the LHD by setting out the service and performance expectations and funding arrangements.
The Service Agreement identifies the key priorities for the Local Health District including addressing the priorities identified in the NSW State Plan and implementing the approved recommendations of the NSW Health Governance Review and Taskforces. Priorities are set out in four domains including:

- **Safety and Quality** – accreditation, patient satisfaction and patient safety
- **Patient Flow** – contemporary models of care, integration across health care settings and providers, appropriate utilisation of hospitals, strengthening of community health services, better mental health services, improved dental health services, and culturally appropriate Aboriginal and multicultural health services
- **Finance and Management** – embedding performance and financial management frameworks, implementing the ehealth strategy, developing activity based funding and associated competencies, and building a sustainable workforce including promoting Aboriginal employment
- **Population Health** – preventative care including among other things, smoking, overweight/obesity, and risk drinking; reducing potentially avoidable hospital admissions; improving child protection services and emergency response planning and readiness.

The Service Agreement identifies the importance of achieving a balanced budget and agreed performance benchmarks and the need to develop an efficiency improvement plan, and highlights the need for local strategic and annual plans.

### 1.1.5.2 National Access Targets

As part of the National Health Reform, the National Partnership Agreement on Improving Public Hospital Services was endorsed in 2011. The objective of the agreement is to improve access to public hospital services through better alignment of resources and patient flow; the focus is on elective surgery, Emergency Department (ED) services and sub-acute care. The intention is to achieve improved patient experience and outcomes.

The objectives and outcomes of the Agreement will be achieved through:

- a higher proportion of elective surgery patients seen within clinically recommended times, and a reduction in the number of patients waiting beyond the clinically recommended time
- a higher proportion of patients presenting to a public hospital ED either admitted to hospital, referred to another hospital for treatment, or discharged within four hours of presentation.

Performance will be monitored and measured against the National Emergency Access Target (NEAT) and the National Elective Surgery Target (NEST) which commenced in January 2012. Both targets will be incrementally achieved over four years to 2015. The LHD is required to report against a suite of key performance indicators pertinent to each target which measure the impact of implementation on safety and quality of patient care. Both targets are linked to financial incentives to support their implementation and achievement.

**NEAT** requires that by 2015 90% of presentations to ED are admitted to an inpatient unit, discharged, or transferred to another hospital within four hours of arrival in the ED. The target for 2012 is 69% of presentations and increases to 76% in 2013 and 83% in 2014.

**NEST** requires that by 2015 100% of elective surgical cases are completed within their clinical urgency category by 2015. As with NEAT the target increases annually for category 1 100% achievement is required by 2013, for categories 2 and 3 100% achievement is required by 2015.

Successful achievement of both targets requires a whole of hospital response and is reliant on good alignment of resources and patient flow between acute, sub-acute, primary and community based health care and services.

### 1.1.5.3 Activity Based Funding

Under the national health reforms activity based funding (ABF), using an efficient national price, will make up the majority of funding for all LHDs. A progressive roll out is planned commencing with acute
Clinical Services Plan 2012-2022

inpatient services and eventually covering all services types including acute, sub-acute and ambulatory care.

Under the ABF program, the NSW Ministry of Health expects to enter into a price-volume contract with the LHD for the allocation of funds from July 2012. Most payments from the Commonwealth/State funding pool will include specific performance targets, such as the NEAT/NEST payments.

NSW expects to receive its share of national growth funds over a 6 year period from 2014-2020 and it is anticipated that a significant portion of these growth funds will focus on out of hospital services to reduce hospital admissions.

While there are still opportunities for greater efficiencies, ABF provides an opportunity to enhance resources, as both Gosford and Wyong Hospitals have been consistently below the peer price on an average cost weighted separation basis.

CCLHD needs to continue managing its resources effectively with the introduction of ABF and the new contracting and performance arrangements. Funding and budgeting implications for CCLHD associated with the new funding environment include:

- Development of costing, budgeting and financial management skills across both clinical and management staff to ensure that service costs remain at or below the benchmarked price and to manage situations where costs exceed the efficient price
- Accurate and timely clinical coding of all case mix funded activity
- Individual services will need to operate within their budgets and this will involve devolving realistic budgets to clinical services, achieving revenue targets and maximising revenue opportunities
- Providing services in a financially efficient way by continuing to invest in innovative services and models of care that reduce the need for hospital admission, reduce length of stay and streamline clinical care.
- Recurrent funding for any activity increases in ABF ‘in scope’ services will be subject to Service Purchasing Agreements between CCLHD and the Ministry of Health. These increases will be included in the annual negotiations with the Ministry which determine the Annual Targets for the financial year as funding will only be provided for agreed services and any net cost of service impact over the agreed targets will be considered unfunded.

1.1.5.4 Service Delivery Trends

Health services and systems are continuing to evolve as a result of new technologies and therapies, developments in fields such as genomics, better diagnostic capabilities, new clinical techniques and ongoing improvement in the way services are provided. Key service delivery trends and approaches that are considered in the development of clinical services for the Central Coast include:

- Increasing focus on patient-centred care and patient satisfaction
- Continuing emphasis on patient safety, quality and risk management to inform service networking, facility role delineation and credentialing
- Increasing medical specialisation with fewer ‘general’ physicians and surgeons and growth in services that use multidisciplinary approaches to care
- Impact of new and advanced technologies on what services are available and how services are delivered, providing alternatives to current practices such as increased use of interventional therapies as an alternatives to surgery
- Continuing change in the nature of hospital care with ongoing reductions in length of stay for inpatient admissions
- Increased use of ambulatory and/or short stay models of care, hospital in the home and community based models of care, with potential to stem the growth in demand for some hospital services
Community health services playing an increasingly important role in hospital demand management and in delivery of chronic, complex and continuing care in the community to facilitate the shift in setting of care

Greater emphasis and links with Health Promotion and Population Health and illness prevention programs which target high risk behaviours within the Central Coast community to improve health, reduce the incidence of chronic diseases, and as a means of managing demand for hospital services

Networking and integration of clinical services across geographic areas and facilities will need to continue. For workforce and infrastructure reasons not all facilities will provide all services but access to core services will be guaranteed within CCLHD or with other LHDs for more specialised, high cost or low volume care

Continuing focus on process improvement to underpin efficient and effective performance

Use of case management and care coordination as tools to focus on chronic disease management

Recognition of the need to manage aged care service provision across the care continuum rather than in the traditional silos of acute care, community based services, assessment, prevention and residential aged care facilities (RACFs)

Telehealth and eHealth opportunities and changing health technology that supports mobile, community based care and support, and better networking between facilities and specialists/professionals.

1.1.5.5 Contemporary Models of Care

The use of evidence based models of care and service frameworks will continue to reduce inappropriate clinical variation, support better utilisation of hospitals and improve the patient journey. New models that are considered in the development of clinical services for the Central Coast include:

- ED – Quick triage, patient streaming, and early treatment zones, Urgent Care Centres/ Fast Track for low acuity/low complexity presentations; ED SSU to manage short stay patients who would otherwise be admitted to inpatient care; restricted access to areas that care for paediatric patients
- Surgery – Surgical Acute Rapid Assessment (SARA) /Acute Surgical Unit (ASU); High volume short stay surgery; separation of emergency and elective surgical streams; post-acute care at home rather than as an inpatient
- Medicine – emphasis on managing chronic disease in ambulatory setting rather than crisis management in ED/inpatient care
- Rehabilitation services - across a range of settings including inreach to acute settings, ambulatory, or home based, and collocation of inpatient rehabilitation services with other acute hospital services
- Paediatric services - delivered through non-inpatient ambulatory models to minimise the need for hospital admission
- Maternity – midwifery led care for mothers with normal risk pregnancies, antenatal care in community settings, early discharge, universal home visiting
- Non-acute mental health –step-down from acute inpatient services supported by locally provided non-acute beds
- Dialysis – shift toward home dialysis and alternatively delivered through satellite facilities where home based dialysis is unsuitable
- Ambulatory and Outpatient services – increasing service provision and range of services offered in the non-inpatient setting including rapid review clinics for patients seen in ED and for chronic care patients for timely assessment; and also to accommodate the increasing array of ambulatory based treatments to reduce the need for inpatient admission.
1.2 Issues and Challenges

1.2.1 Population level issues and challenges

- The Central Coast experiences higher than average population growth. The population of the Central Coast will rise by 11.6% by 2021 to reach a total of about 355,400 people. Population growth in the Wyong LGA will be even higher (17.7%). By 2021, population levels and age profiles of the two LGAs will be virtually identical – 177,774 in Gosford, 177,626 in Wyong.
- All age groups on the Central Coast will increase, but the greatest proportional increase will be in those people over 70 years. By 2021/22 it is expected that one in four acute beds in Gosford and Wyong Hospitals will be occupied by patients aged 85 years or older.
- When comparing populations using the Socio-Economic Index for Areas (SEIFA), the population of the Central Coast is relatively disadvantaged. This relative disadvantage is particularly acute in Wyong North East SLA.
- CCDGP estimates of chronic disease and associated risk factors show that rates of type 2 diabetes, chronic obstructive pulmonary disease, asthma and relatively high alcohol consumption are all higher on the Central Coast than the equivalent NSW rates.
- Recent estimates of dementia prevalence indicate around 5,000 Central Coast residents currently living with dementia. This figure is expected to grow by more than a third by 2021/22 and may triple by 2050.
- Private health insurance rates on the Central Coast in 2001 were lower than the NSW average at 45.6%, and were notably lower in the Wyong LGA at 38.2%.
- The Central Coast has relatively poor access to GPs and hospital specialists and limited support services for the ageing community. The lack of primary care and aged care support services influence demand for acute/inpatient services and these gaps will need to be addressed to ensure hospital demand can be managed.

1.2.2 Service level issues and challenges

- CCLHD provides efficient services. Both Gosford and Wyong hospitals are below the peer price on an average cost weighted separation basis, and while there are still opportunities for greater efficiencies, it is imperative that CCLHD receives appropriate funding for current and future activity given the growth and ageing of the population. The ability of the LHD to meet the projected increases in demand in the absence of capital expansion in the short to medium term will be reliant on increased recurrent funding to enhance and expand services.
- Both Gosford and Wyong Hospitals are operating at their physical capacity, while there is the potential to create some capacity through improved efficiency in the management of patient flow within the hospitals this will only have a limited effect in meeting the demand. To better manage inpatient demand there is a shift toward increased provision of services in the non-inpatient environment (ambulatory and outpatient setting and in the community) to achieve this will require significant investment and expansion of these services.
- Introduction of NEAT and NEST place additional pressures on the hospitals to manage already overstretched services. In the absence of any additional physical capacity to accommodate expanded services or introduce new models additional recurrent funding will be required to increase staffing and resources required to improve patient throughput.
- Wyong Hospital is located in an area of significant population growth (17.7%) over the next ten years. To accommodate this growth in demand there will need to be significant growth in the volume and types of services which are available locally. To date there have been difficulties attracting the specialist medical workforce required to support and grow these services.
- Operating theatres at Gosford Hospital are functioning at capacity while there is some spare capacity at Wyong Hospital the ability of the LHD to accommodate the increased surgical throughput required to meet the NEST will be challenging irrespective of strategies to create the inpatient accommodation to manage these patients.
The admitted patient workload reflects the high rate of medical admissions for older patients (51% of separations and 61% of bed days in 2010/11) and people with chronic conditions as well as the growth in demand for emergency and planned surgery (15% growth in surgical activity since 2008/09).

The issues around adequate physical capacity are compounded for many of the services which are operating at functional capacity secondary to available workforce whether this is due to a lack of funded positions or a shortage of available workforce.

Rehabilitation – there has been a shortfall of public inpatient rehabilitation beds on the Central Coast which has implications for length of stay in the acute inpatient environment and the level of services available to residents. There are no public general rehabilitation beds located in the Gosford LGA.

Community health services – there is a shift toward increased provision of services in the community setting with development of such services as Acute/ Post Acute Care (APAC), chronic disease programs as well as growth in the traditional community based programs. This expansion of services has not always been accompanied with a commensurate growth in resources particularly workforce and also physical space, consequently many of the services are operating at functional and physical capacity. A further factor for the community health services is that many of them are currently housed in accommodation which is no longer adequate for the service provided and services are not always located in the areas where population growth and demand is occurring.

There are several service gaps which have been identified and which will require development to meet the needs of the community into the future. The chronic pain management service is one service for which there a significant need for further development and expansion is required as a priority.

Many services both in the inpatient and community setting are limited due to a lack of ancillary accommodation which has often been the areas reduced in previous capital expansions. Inadequate staff accommodation limits the number of staff and also the capacity of staff to work effectively.

The demand for health related transport has increased significantly over the last decade and given the ageing population and increasing prevalence of disability in older people it is expected that transport demand will continue to increase.

- Transport to and from health services has always occurred informally through families, friends and neighbours providing assistance to people who face barriers to accessing transport.
- Where the use of private cars or public transport is either not available or practical, the demand for non-emergency health related transport falls largely to community transport providers.
- The provision of transport to facilitate good access to health services for disadvantaged groups is recognised as a critical or essential component in the delivery of health services both in the acute and community setting. It is regularly raised as an issue during consultations with service users and community participation groups.
- There are three main community transport providers on the Central Coast including: Central Coast (Wyong) Community Transport Inc covering residents of the Wyong area, Coastwide Community Transport Ltd covering residents of the Gosford area, and Bungree Aboriginal Association providing Aboriginal specific services for the whole of the area.

1.2.3 Workforce issues and challenges

Workforce has been identified as an issue across all the services and disciplines having a direct impact on the level, type and volume of services able to be provided and the capacity to meet current demand, implement changes to service delivery and a significant impediment to service expansion. Many of the service strategies are reliant on an adequate workforce both in numbers of positions and skill mix.
The following issues have been identified:

- Shortages in funded positions to accommodate the current workload:
  - Position numbers have not kept pace with growth in demand or changing models of care (e.g. a shift from acute hospital based services to providing services in the community)
  - Position numbers have been reduced or frozen due to budgetary constraints in a number of non-frontline direct patient care services
- There are known workforce shortages in particular disciplines and specialties e.g. obstetricians, ED physicians, and some allied health disciplines such as podiatrists. There are also known difficulties attracting staff, principally specialist medical staff, to work on the Central Coast particularly to work at Wyong Hospital.
- Many positions associated with specific programs (many of which are community based) only provide temporary or part time contracts. These positions become unattractive for staff looking for more permanent or fulltime employment. Pooling of program funds to enable employment of staff for more than one program or on a more permanent basis may overcome this.
- Accommodation issues also play a part with many of the community based services having physical constraints with insufficient space to accommodate any additional staff.

Staff shortages extend beyond clinical positions with many of the reductions in staff positions secondary to budgetary constraints occurring in non-clinical positions and support staff. This frequently results in clinical staff being required to undertake non-clinical duties.

Apart from nursing there are no established profession staffing benchmarks and it is therefore difficult to ascertain the current shortfall and determine the appropriate workforce requirement to meet service growth.

The following areas have been highlighted as particular areas of concern:

- Senior medical workforce – there are shortages across a number of specialties particularly at Wyong Hospital; current staffing models were designed to support traditional inpatient and hospital based services while contemporary ambulatory and outpatient models of care will require staffing models that support working across care settings and with multidisciplinary teams.
- Registrar numbers – the capacity to attract and support registrar numbers. The number of training places is in part dependent on the level of senior medical support that can be provided. Registrar numbers can boost the seniority and after-hours coverage and support for more junior medical staff and may be a means of attracting future specialist workforce.
- Junior Medical staff – difficulties attracting junior medical officers with many attracted to the larger Sydney based tertiary facilities.
- Allied Health – shortages across all disciplines predominantly due to a lack of funded positions, compounded by lack of staffing benchmarks as an indicator of staffing requirements.
- Nursing – senior specialist nursing roles such as Nurse Practitioners and CNC as an adjunct to service provision. In addition there are issues around recruitment of RNs which is compounded by the ageing RN workforce this will have implications for recruitment into the future with an ageing and potentially shrinking workforce.
- Shortages across other clinical and non-clinical workforce contribute to delays in providing services such as diagnostics which have the potential to contribute to delays in patient processing and discharge.
1.3 Strategic Directions

CCLHD faces a large number of challenges in meeting the current and projected demand for acute and non-acute hospital services and community based services.

Capital investment is required to build a ‘next generation’ health service that can incorporate new models and processes of care. While it is recognised that major capital development will not be completed in the short term it is imperative that planning and development is commenced immediately to ensure these facilities are available as soon as possible.

In the interim it is essential that the CCLHD develops and implements a range of non-capital service strategies which will enable it to more effectively use existing infrastructure and meet both the current and projected growth in demand which will inevitably occur prior to the completion any major capital developments.

Service and capital needs can be met in two stages: short term refurbishment and extension, and long term rebuild and expansion. Both stages will require substantial recurrent enhancements, growth in clinical workforce and implementation of small capital projects to meet community health care demands.

While there is an immediate need for service expansion and enhancement on the Gosford Hospital site, there is an equal or greater need for service enhancement at Wyong Hospital. Service enhancement at Wyong Hospital will not only respond to the health needs of the growing population in Wyong North East Statistical Local Area (SLA) but will also afford the opportunity to move secondary level services for this same population from Gosford Hospital; in turn this will release much needed capacity at Gosford Hospital and allow it to further develop tertiary level services for the whole of CCLHD. Similarly, better and more integrated and coordinated use of community health services and the sub-acute capacity at Woy Woy and Long Jetty health facilities will influence the efficiency of acute services at Gosford and Wyong hospitals.

It is also essential that services which provide alternatives to hospitalisation, such as ambulatory care, acute/post-acute care (APAC), chronic disease management and community based services are enhanced and expanded to meet this growing demand.

Recognising the resource challenges faced on the Central Coast (capital, recurrent and specialist workforce) prioritised strategies will target revised models of care, enhanced recurrent budget, additional clinical staff and minor capital expenditure focusing on:

- Developing and implementing strategies using existing and enhanced recurrent resources to manage the expected growth in demand in the short term
- Enhancing a cohesive and integrated health network across the whole of the Central Coast, including between Gosford and Wyong hospitals (medical, surgical, maternity, paediatric, emergency, aged care) and enhancing the clinical networks with other LHDs so patients can access complex services not available on the Central Coast (e.g. neurosurgery)
- Responding to the unmet and increasing demand for acute and non-acute hospital services by improving functional relationships along the care continuum
- Targeting investment in hospital in the home and community based service models to strengthen the interface between inpatient and community based services
- Ensuring effective utilisation of the expanded sub-acute capacity due to come on line at Woy Woy Hospital to take some pressure off the acute hospital services and meet the needs of the ageing population with increasingly complex and chronic health needs
- Further developing coordinated chronic disease programs
- Working with the Medicare Local to improve access to GPs and after hours care
- Promoting efficient and effective integration of acute, sub-acute, and community health and clinical support services together with health services provided by the private and non-government sectors
Clinical Services Plan 2012-2022

- Securing capital enhancements to refurbish and expand existing facilities for both hospital based and community health services
- Enhance teaching and research capacity: building on the relationship with the University of Newcastle to maximise teaching capabilities and capacity to supervise an increasing number of students and junior clinical staff, and investment in continuing workforce education and development
- Enhance the clinical information systems to ensure functionality across sites (including the community health services), reduce duplication of processes, and improve business information systems to support services and service delivery as well as financial and other business processes with timely and accurate coding of clinical records
- Enhance strategies to ensure clinical care is delivered safely and is monitored accordingly.

1.3.1 Acute Hospital Services

There will be increased self-sufficiency with most secondary and tertiary level services provided locally. Patients will still be required to travel outside the LHD for statewide services (such as severe burn injury, spinal cord injury and organ transplants) and some highly specialised tertiary services such as neurosurgery and cardiothoracic surgery.

Gosford Hospital will continue to provide a comprehensive range of secondary level health services to meet the needs of the local catchment population. In addition it will enhance existing and develop new tertiary level services for the whole Central Coast population. Services will include maternity, paediatrics, mental health and some complex and tertiary level services including trauma, interventional cardiology and cancer.

Wyong Hospital will function as a major metropolitan hospital with expansion and enhancement of inpatient and ambulatory capacity to meet the clinical demands and projected growth of the local population, and to support new models of care. Most ‘core’ clinical services will be provided at role delineation level 4. Patients requiring more complex and tertiary level services will be transferred to Gosford Hospital or the most appropriate tertiary facility.

1.3.2 Ambulatory and Outpatient Services

Expanded and reconfigured ambulatory and outpatient areas are required to accommodate the changing service models and the increasing trend of providing services in non-inpatient settings; significant changes to workforce models may also be required. This trend aims to minimise the need for admission to hospital and reduce length of stay through earlier discharge with timely follow up.

A large number of clinical services have identified opportunities for providing care in this environment. The development of these models will be critical in the management of the projected growth in demand for acute care across CCLHD.

The funding implications of shifting care from admitted to non-inpatient settings are as yet unknown in the new ABF environment and will influence the rate at which these models can be implemented.

The shift toward delivery of care in the non-inpatient setting will require changes to how existing ambulatory and outpatient services are currently provided. Some of the key models or types of services proposed include:

- Rapid Access /Review Clinics where patients are referred directly and have timely access to specialist services for review and assessment. These clinics could reduce presentations to ED and the need for inpatient admission. These clinics would be suitable for:
  - Referrals from ED (e.g. TIA) for patients who might otherwise be admitted for further investigation
Clinical Services Plan 2012-2022

- Review, assessment and treatment of known patients who have developed symptoms or a change in their condition (e.g. cancer patients who become febrile or dehydrated and require assessment and possibly some treatment prior to being able to be sent home)
- Patients enrolled in chronic care programs where a decline in their condition is noted; timely review and commencement of treatment could prevent further deterioration and potentially reduce the need for admission to hospital
- Timely review post discharge enabling earlier discharge.

- Multidisciplinary Clinics where patients can either be seen by a multidisciplinary team and/or are able to see a range of service providers individually (specialists, allied health etc.) during a single visit. This approach could facilitate improved coordination of care and consultation across providers and improved patient experience
- Ambulatory Care based treatments e.g. infusions (drug treatments, blood products, etc.). There are increasing indications and treatment options across a growing number of specialties for provision of care on an ambulatory basis reducing the need for patients to be admitted to hospital for these treatments
- Procedural clinics where an increasing array of procedures can be conducted in a non-inpatient setting either in specialists’ rooms or in a hospital clinic environment.

To accommodate these changes ambulatory and outpatient facilities at both Gosford and Wyong Hospitals will require:

- Expanded and additional outpatient clinic space to accommodate additional clinics and larger multidisciplinary teams
- Additional ambulatory care assessment and treatment spaces/chairs to accommodate the increasing demand for ambulatory therapies
- Facilities to support provision of procedures
- Collocated/easy access to diagnostics, particularly medical imaging and pathology services with timely reporting. This is of particular importance for rapid review clinics
- Adequate clerical and IT support with an electronic booking system which can be accessed out of hours (e.g. via ED), electronic linked medical records, clerical/secretarial support or voice recognition software for report writing
- Teaching space – as more treatments are provided in this environment teaching will also be an integral part and teaching space should be included.

There are several models for locating services which should be considered:

- Status Quo Model: Continuation of the current model with expansion of the outpatient and ambulatory treatment spaces to accommodate the expected growth in demand and changed models
- Institute Model: Service specific outpatient ambulatory assessment and treatment areas – these can be attached to clinical areas, for example, cancer care where the outpatient, chemotherapy, ambulatory and rapid review services are collocated with the Cancer Care Centre
- Precinct Model: As part of a separate purpose built area/precinct where all ambulatory and outpatient services, including diagnostics are located and with provision to undertake some non-inpatient treatments and procedures. This would be located on the hospital campus. Potentially the specialist centre could be part of this development or collocated with it.

Many treatment areas and clinics will need to be located in proximity to or on acute hospital campuses to facilitate access to specialist teams; however there will also be a number which would be suited to provision in a community based setting such as Community Health Centres. The potential for this will be considered as part of development of the community based infrastructure.
1.3.3 Sub-acute Services

Woy Woy and Long Jetty health facilities will continue to provide sub-acute inpatient and outpatient services and a range of community health services. On completion of the new sub-acute facility in 2013 Woy Woy will have facilities to provide sub-acute geriatric rehabilitation including five beds which can be used for end of life care as well maintenance/ restorative care. There will be sub-acute beds located at Long Jetty health facility for maintenance/restorative and end of life care.

Inpatient general rehabilitation and sub-acute geriatric rehabilitation unit will continue to be provided at Wyong Hospital. A 30 bed general rehabilitation unit equipped with a gymnasium, hydrotherapy pool and outdoor exercise facility is required at Gosford Hospital.

Further development of outpatient and community-based clinics and services is proposed including provision of ambulatory rehabilitation services, will be developed through two community-based rehabilitation centres one in the south and one in the north of the LHD.

1.3.4 Community Health Services

To meet the future needs of the Central Coast community, significant investment in both capital and recurrent funding for community based health services is required. In particular, there is a need for expanded services in the population growth areas in north Wyong and Warnervale to ensure the provision of appropriate and accessible services for these communities.

Services delivered in community health settings will operate through a hub and spoke model. This will include establishment of key hubs for child, youth and family services, chronic disease, and aged care and rehabilitation services. For a number of services that require wide distribution and easy local access by the population outreach services will be offered at all sites (e.g. for community nursing, early childhood, mental health and drug and alcohol).

1.3.5 Clinical Support Services

Growth in direct patient services in acute, ambulatory and community health settings requires commensurate growth in clinical support services including medical imaging, pathology, pharmacy, clinical technology services, sterilising services, venous access team and the infection prevention and control services. For all these services as well as the other clinical support services this would include ensuring the service is accommodated in appropriate facilities which support the service provided and are of flexible design to accommodate equipment changes. The development of new techniques and equipment provides opportunity to improve and streamline services.

For pharmacy services the introduction of automated dispensing systems, electronic medication management and information management support will ensure that cost pressures can be better controlled in this fast growing service. It will also allow pharmacists to focus more on direct patient needs and support a more targeted clinical service for higher need patients.

For Medical Imaging services:

- The expected growth in secondary level services at Wyong Hospital will require on-site access to MRI services and an additional CT scanner as well as comprehensive after-hours support
- The growth in tertiary level services at Gosford Hospital will require expanded capacity for interventional radiology and consideration of an on-site nuclear medicine service with both diagnostic and therapeutic capabilities
- The growth in ambulatory type services will require additional capacity to respond to service requests in a timely manner so that inpatient admission can be avoided.
1.3.6 Other Support Services

Non-clinical and other support services that are critical to the safe, efficient and effective provision of services include patient transport, carer support, information and communication technology, health information services, environmental services (laundry, cleaning, waste management etc.), food services, engineering and security. Car parking for patients, visitors and staff is also critical to the delivery of health services. While these services are not specifically addressed in this clinical services planning document they will require commensurate enhancement and development to keep pace with increased activities experienced to date and the further increases that are anticipated.

1.3.7 Population Health Services

The Health Promotion and Public Health services have an important role in monitoring and improving the health of the Central Coast community both through addressing health related behaviours and environmental issues such as infectious disease risks and urban development which impact on the health of the community.

Just a few factors account for most of the preventable death and chronic disease in Australia namely tobacco smoking, physical inactivity, obesity, alcohol, lack of fruit and vegetables, fall injury risks among older people, communicable disease, and illicit drugs are the main challenges. Many chronic diseases are largely preventable such as type 2 diabetes, cardiovascular disease and chronic obstructive pulmonary disease (COPD).

Adequate recognition and resourcing of prevention, promotion and early intervention as integral parts of service provision is required beyond the four state-wide priorities of tobacco control; obesity and overweight; healthy active aging; and risky alcohol consumption. Improved collaboration between the broad population approach of the Health Promotion Service and more targeted activities of individual services and service providers is desirable, with scope to address specific local health issues. Continued engagement with CCLHD services as well as other agencies and service partners (government and non-government including CC NSW Medicare Local) to provide integrated programs which target existing and emerging community needs, and address factors which contribute to health disadvantage.

Continued strengthening of the role of the Public Health Unit in environmental health issues and risks, infectious disease surveillance and control, immunisation, and the public health component of the LHD response to emergencies. This will include engagement and partnerships with both government and non-government agencies in relation to future development on the Central Coast to achieve healthy urban development.

1.3.8 Education, Teaching and Research

Education and teaching are integral to the training and development of the workforce, research, as well as acute, community, population health services and clinical support services. The quality and reputation of teaching and research activities in CCLHD is a key factor in recruitment and retention of high calibre staff in all areas.

Research and education are vital pillars that underpin excellence in clinical service delivery. Research (including health technology assessment) informs what care to provide and education informs how to provide that care. CCLHD is committed to ensuring that care is safe, effective, appropriate, and accessible.

The development of teaching and research plans with overarching principles, objectives and strategies will provide support for current educational and research activities and direction for the future. These plans will build on the strategies identified in this Clinical Services Plan 2012-2022.
1.4 Service Development Strategies

This section details the range of service development actions and strategies required at LHD level to address these issues and challenges. Strategies focus on:

- **Workforce** – to respond to immediate needs and develop a detailed workforce strategic plan to recruit, grow, support and develop the clinical workforce ensuring the right skills and competencies are available to meet increasing demand with high quality and innovative care.

- **Clinical services redesign** – including strategies to respond to the increasing demand on ED and the development of innovative models of care (MAU, outpatient and ambulatory care services) to manage the increasing volume of unplanned presentations to acute services.

- **Information management and technology** – ensuring that tools, systems and processes are designed to support clinical services.

- **Relationships and partnerships** – recognising that CCLHD does not provide health services in isolation but rather relies on developing robust relationships with a range of partners including the CC NSW Medicare Local, GPs, the Ambulance Service of NSW, local government, NGOs, RACFs, private providers, NSW Health Education and Training Institute (HETI), universities, and other educational and research organisations, and a number of other government bodies.

- **Organisation structure and performance** – including reviewing the appropriateness of current structures and ensuring that clinical divisions and services have sufficient support and resources to implement the proposed strategies and models of care.

These strategies complement the detailed and specific strategies identified by each of the Clinical Divisions and their component services. Division and service level strategies are included in the individual chapters relating to each those services.

Throughout the Clinical Services Plan where new, expanded or significant enhancement of service(s) is identified the individual service in conjunction with the relevant Division will be required to undertake a business planning process to identify the resources required and implementation strategies (including stages for implementation) to enable the LHD Board and Executive to evaluate and priorities service requirements in line with available resources.

### Workforce Planning

1. Develop a clinical workforce services plan that details current workforce numbers and arrangements, determines future workforce needs and gaps, and identifies a range of workforce models that support integration between professional groups and across clinical settings, and support the delivery of proposed models of care that can better meet the needs of the ageing and increasingly chronic and complex patient caseload. The Plan should also consider innovative solutions for ‘difficult to recruit to positions’, enhancement of the Aboriginal workforce, as well as opportunities to improve staff recruitment arrangements for short term program funded positions.

2. The medical workforce plan should, among other things, consider sustainable approaches to after-hours rostering and increased specialist presence, staff specialist and VMO models, development of generalist and specialist services (particularly for the high volume of unplanned medical admission of older patients with multiple comorbidities), and approaches to increasing levels of junior and registrar level support.

3. The allied health workforce plan should, among other things, consider the resources and skill mix required to provide both acute and community based services, 7 day cover of essential service areas and arrangements to ensure continuity of care during periods of leave, and scope of practice, use and settings for allied health assistants, and innovative models of care.

4. The nursing workforce services plan should, among other things, consider the costs and benefits of senior specialist nursing roles such as Nurse Practitioners and Clinical Nurse...
Clinical Services Plan 2012-2022

Consultants as adjuncts to service provision.

5 The clinical support services workforce plan should, among other things, consider implications and sustainable responses to increasing demand for the provision of clinical support over extended hours and days.

6 Develop a workforce plan that outlines sustainable approaches to the enhancement of non-clinical support services to match the pace and direction of change in clinical services. This plan should, among other things, consider clerical and administrative services, environmental and food services, engineering and security, and IM&IT services.

<table>
<thead>
<tr>
<th>Clinical Services Redesign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce non-emergency presentations to the ED and provide appropriate ED alternatives</td>
</tr>
<tr>
<td>7 Provide information to the community and health care providers, with details of how and when to access acute hospital services (MAU, outpatient, ambulatory care), community health services, or other public and private health service providers as alternatives to ED referral or presentation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute Unplanned Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Develop an overarching LHD strategy to improve acute unplanned intake services and achieve NEAT/NEST KPIs. This strategy will guide and support the implementation of MAU, SARA/ASU and other innovative acute service models such as PEMPAC and acute adult ambulatory care (e.g. rapid review clinics). It will consider service design principles, and internal and external referral and discharge pathways including links with primary and community based services as well as clinical support services, in addition to service structures, integration across traditional service boundaries, and clinical leadership. It will also consider the resources required to deliver essential clinical and clinical support services over extended hours to meet the needs of the large number of patients who present after-hours and at weekends.</td>
</tr>
<tr>
<td>9 Improve patient flow processes including discharge planning, integration with and referral to community based services such as APAC, community nursing and ongoing and complex care programs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Assessment Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Review MAU model of care for both Gosford and Wyong hospitals so that it can better respond to the high volume of unplanned medically complex but stable ED presentations, direct referrals from GPs, specialist rooms and RACFs (3rd door concept), or for selected care pathways e.g. TIA, chest pain, etc.</td>
</tr>
<tr>
<td>11 Determine MAU workforce models, operational policies and business rules for admission and discharge, patient profiles, lengths of stay, senior and junior medical staff cover and collaboration across general and sub-specialty medical services, allied health support, priority access to diagnostic imaging, pathology and other clinical support services, access to inpatient beds, and streamlined referral and response times for ASET, chronic care programs, and community nursing and APAC services.</td>
</tr>
<tr>
<td>12 Locate MAU beds separate from beds for longer stay patients and increase MAU capacity at Gosford Hospital from 10 to 24 beds. Wyong capacity remains unchanged.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-admitted Specialist Services</th>
</tr>
</thead>
</table>
| 13 Develop an overarching LHD strategy to improve access to non-admitted specialist care. This strategy will guide and support the implementation of rapid review clinics, multidisciplinary outpatient and ambulatory care models including consideration of funding mechanisms, suitable locations and collocations (acute hospital, community health or alternative sites), and clinical
support services.

Alternatives to acute hospital service provision

14 Develop an overarching LHD strategy that identifies appropriate alternatives to service provision on acute hospital sites including: development of stand-alone services (e.g. for selected high volume short stay surgery or ambulatory care), collaboration with private sector providers, or other innovative solutions where service demand exceeds available capacity.

Information Management and Technology

Telehealth

15 Develop a comprehensive telehealth plan that details current capacity and capabilities, applications currently in use; identifies State or Commonwealth funding opportunities and potential areas for investment with particular reference to clinical applications that can assist in the provision of care across acute and sub-acute health facilities (e.g. from Gosford to Wyong Hospital or sub-acute centres, or to RACFs); can address gaps in services by facilitating access to highly specialised services and services not provided within the LHD; can support the provision of care in community health settings, and as an adjunct to home based care.

16 Work with selected clinical services to develop and operationalise identified telehealth applications in Rehabilitation and Aged Care (links with RACFs), Diabetes programs (education, insulin stabilisation and high risk foot clinics), and Neurology (stroke assessment, monitoring of patient progress at home and rehabilitation).

Clinical Informatics

17 Improve access to real-time hospital and community health activity information for Divisional Managers, Clinical Directors and Service Managers.

18 Improve IT systems to better support administrative processes, clinical service scheduling and booking of planned episodes of care in outpatient, ambulatory, APAC, community nursing, diagnostic imaging and pathology services. Booking systems need to be accessible 24/7 to support early discharge or the transfer of care from ED or other acute settings to outpatient or community health settings.

Relationships and Partnerships

19 Develop new approaches to improve coordination and collaboration between CC LHD acute, sub-acute and community health services and other health service providers including RACFs and NGOs.

20 Develop outreach services that support RACFs in the management of residents with an acute illness or exacerbation of chronic disease while avoiding the need to transfer to ED including ASET outreach, medical outreach and review, access to mobile pathology and radiology services, extended hours telephone support, telehealth support for virtual assessments and senior specialist clinician involvement, education to encourage increased use of and communication of Advanced Care Directives in RACFs, and direct referral/access to MAU beds. (Cross Reference with ASACC strategies)

21 Engage with the Medicare Local to identify diagnostic imaging and pathology services required to support GP management of acute and chronic health needs of patients, to improve referral pathways to specialist services, and to identify alternative solutions for areas of chronic GP shortage e.g. community based Nurse Practitioners.

22 Engage with the Central Coast NSW Medicare Local to improve access to GPs and after-hours care.

23 Identify short and long term strategies or partnerships with private sector health care providers
to address current shortfall in CCLHD built capacity including opportunities for leasing surge beds to manage winter bed pressures, contracting some short stay surgery services, collocating new outpatient or ambulatory care in existing medical centres, developing private hospital services in Wyong LGA.

24 Develop relationships with HETI, universities and other training/education bodies to enhance CCLHD teaching and research competence and capacity, invest in the continuing education and development of the workforce, support and supervise an increasing number of students and junior clinical staff, and improve workforce recruitment and retention. (Consideration should be given to proposals for oral health and podiatry training opportunities and the development of academic medicine services.)

25 Work collaboratively, through a Health Transport Network, with community transport organisations and the NSW Ambulance Service to improve the availability and access to health related community transport.

26 Engage with local government, CC NSW Medicare Local and relevant government agencies (housing, education, transport, others) to address the social determinants of health.

**Organisation Structure and Performance**

27 Review current Divisional structures and consider, among other things, the development of a Critical Care Division, possibly including ICU/HGU, ED and MAU, separate to the Division of Medicine.

28 Develop new approaches to improve coordination, collaboration and integration of services across Divisional boundaries: For older people consider services spanning the Divisions of Medicine and ASACC and CACH (specifically acute aged care and chronic disease management programs), and the Divisions of ASACC and Mental Health (specifically SMHSOP, ASET-BA, DBMAS, BASIS); For children and families consider services spanning the Divisions of CC Kids & Families, Mental Health and CACH.

29 Identify additional resources required to support Divisions in the implementation of endorsed and prioritised strategic actions. Consideration should be given to the establishment of a Project Team with appropriate expertise to guide and support implementation, and existing capacity and capabilities within individual Divisions.

30 Develop and agree on approaches to monitoring and reporting on progress against agreed milestones.

**1.5 Capital Development Strategies**

Prior to any capital investment detailed master planning incorporating Gosford and Wyong hospitals and the sub-acute facilities at Long Jetty and Woy Woy is required to address congestion issues on both acute hospital sites and make best use of the available sub-acute resources. Master planning of the Community Health facilities is required to identify opportunities for developments that will optimise services provided, ensure they are appropriately located and meet the growing community demand. Master planning will provide a comprehensive and cohesive blueprint for the acquisition of new facilities, or redevelopment or expansion of existing facilities, and will maximise the functionality of buildings to support contemporary health care delivery.

Given the quantum of identified capital requirements master planning will be required for each site and community health to enable determination of estimated capital funding requirements and potential staging of redevelopment.
The LHD Asset Strategic Plan complements the CSP through further articulating and quantifying the capital and asset needs identified as part of this planning process. The Asset Strategic Plan is reviewed annually and:

- Identifies smaller projects which will not be dependent on major capital redevelopment or funding and can be undertaken independently of any major capital redevelopment
- Prioritises capital and equipment need including acquisition, maintenance and equipment replacement
- Develop business cases for individual projects.

This section details capital development actions and strategies required at LHD level followed by a collated list of capital strategies drawn from the detailed strategies identified by each of the Clinical Divisions and their component services. Division and service specific strategies are included in the individual chapters relating to each service.

### Capital Works and Assets Management

31 Develop master plans for Gosford, Wyong, Long Jetty and Woy Woy hospitals and Community Health facilities.

32 Develop a prioritised and staged implementation plan for completion of identified capital strategies.

33 Update the LHD Asset Strategic Plan to include a prioritised range of smaller asset projects that can be undertaken independently of any major capital redevelopment strategy e.g. refurbishment, reconfiguration or upgrading of existing buildings to make them fit for purpose or for new use, new building projects, and acquisition, maintenance or replacement of major equipment.

34 Increase medical and surgical bed base to 454 beds at Gosford Hospital and 290 beds at Wyong Hospital (an increase of 92 and 96 beds respectively or 188 total) by 2021/22.

35 Align new, or realign existing, infrastructure to better match and support the implementation or improvement of agreed models of care.

#### 1.5.1 Summary of Capital Development Strategies

**Acute Hospital Inpatient Capacity**

Approximately 188 additional adult acute inpatient beds, 92 at Gosford Hospital and 96 and Wyong Hospital, to support:

- Projected growth in acute inpatient demand across CCLHD
- Service development at Wyong Hospital
- Increased capacity at Gosford Hospital for expected return of external patient flows.

Within this increase in bed capacity:

- ICU/HDU at Gosford Hospital to increase from current 16 beds built capacity to 24 beds
- ICU/HDU at Wyong Hospital to increase from current 8 beds built capacity to 12 beds
- Configuration of surgical beds at Gosford and Wyong Hospitals to support:
  - High Volume Short Stay perioperative model
  - Surgical Acute Rapid Assessment (SARA)/Acute Surgical Unit (ASU) models
- ED SSU beds at Gosford (16 beds) and Wyong (13 beds).

**Operating Theatre Capacity**

- 10 operating theatres at Gosford Hospital (plus two procedure rooms) with one theatre equipped for endovascular procedures
- 6 operating theatres at Wyong Hospital (plus two procedure rooms)
- Additional recovery beds at each site.
AMBULATORY AND OUTPATIENT CAPACITY

Both Gosford and Wyong Hospitals will require infrastructure to support:

- Rapid access/review clinics (e.g. Respiratory, Neurology, Cancer and Haematology)
- Expected growth in outpatient services and the types of clinics provided with a number of new clinics identified (e.g. pain clinic, ophthalmology, audiology, doppler studies, Uro-Dynamic Studies)
- Additional ambulatory care chairs/ space to accommodate an increase in indications for chair based therapies (separate to requirements for cancer care).

EMERGENCY DEPARTMENT CAPACITY

- Gosford Hospital:
  - Additional 19 treatment spaces (includes 2 additional resuscitation rooms) to meet current shortfall and projected demand to 2022 when 52 treatment spaces will be required
  - Redesign and modification to accommodate changing models of care: quick triage, patient streaming, an early treatment zone and an expanded Urgent Care/ Fast Track area (currently only 3 chairs)
  - 16 bed ED SSU – collocated with ED
  - PECC – 6 beds
  - Secure paediatric area.
- Wyong Hospital:
  - Additional 20 treatment spaces (includes additional resuscitation room) will be required by 2022 to accommodate the projected increase in demand (this is in addition to the 8 chair UCC which is currently in planning along with a 13 bed ED SSU)
  - Redesign and modification to accommodate changing models of care: quick triage, patient streaming and an early treatment zone.
- Appropriate waiting space and parking for ED patients and their relatives is required for both Gosford and Wyong EDs.

CANCER AND HAEMATOLOGY

- Collocation of inpatient and ambulatory cancer and haematology services with the Regional Cancer Care Centre at Gosford Hospital
- Expansion of the ambulatory care centre at both Gosford and Wyong Hospitals to accommodate additional chemotherapy and ambulatory therapy treatment space requirements. Additional 16 chemotherapy chairs will be required at each site by 2022.

ACUTE MEDICINE SERVICES

- Endoscopy suite at Gosford Hospital with 2 labs (one negative pressure lab) and pre and post procedure preparation and recovery area
- Replacement of the Diabetes Education Centre on the Gosford Hospital campus and construction of a Diabetes Education Centre on the Wyong Hospital campus
- 20 chair Renal Dialysis Unit on the Long Jetty health facility site with home training facilities (10 chairs to be commissioned initially with remaining chairs commissioned according to increased demand)
- Expansion of the Respiratory Investigation Unit at Wyong Hospital, replacement of ageing equipment at Gosford
- Expansion of the Sleep Investigation Unit at Gosford Hospital.

INTERVENTIONAL CARDIOLOGY

- Additional Interventional Cardiology Lab (2nd lab) to enable 24 hour PCI and expanded range of interventional procedures to be offered locally (location of the labs to be reviewed)
- Inclusion of additional space to allow for pre-procedure preparation and recovery for non-inpatients.
**Clinical Services Plan 2012-2022**

**Rehabilitation**
- 30 bed rehabilitation unit onsite at Gosford Hospital with capacity for future expansion
- Refurbishment of the rehabilitation unit at Wyong Hospital to support the model of care as well as future expansion of the unit to accommodate additional demand and bed requirements for rehabilitation
- Two community-based rehabilitation centres located in the north and south of the Central Coast that can cater for a broad range of generalist and specialist rehabilitation therapies (ideally these would be located in the community rather than an acute hospital site and locations should be considered as part of the planning for community health infrastructure).
- Refurbishment or replacement of existing ward area at Woy Woy Hospital to maintain its suitability for ongoing patient accommodation.

**Obstetric/Maternity Services**
- Women’s Health Centre/Ambulatory Care Unit for high risk pregnancies, gynaecology and uro-gynaecology services
- Gosford Maternity Unit to expand to 6-8 birthing suites with baths and 36 inpatient beds (including 2 high dependency beds)
- Collocated (low/normal risk, midwifery led) birthing centre with 3-4 birthing suites, each with bath for water immersion
- Expansion of Special Care Nursery to 20 cots (10 high dependency, 10 low dependency) with large resuscitation bay, mother stay unit with bathroom and kitchenette.

**Paediatric Service**
- 10 bed (8 short stay and 2 procedure rooms) Paediatric Emergency Medicine Paediatric Acute Care (PEMPAC) at Wyong Hospital located in proximity to the Emergency Department (and relocation of the Wyong Paediatric Assessment Unit)
- Redevelopment of part of Gosford Children’s ward to accommodate a Paediatric Ambulatory Care Unit including acute review, outpatient, and shared care clinics, short stay and home based care services.

**Medical Imaging**
- MRI machine at Wyong
- CT Scanning including
  - CT perfusion scanning capabilities at Wyong will require a software upgrade to existing machine.
  - Second CT scanner for Wyong
  - Cardiac CT availability at both Gosford and Wyong hospitals as part of the proposed Chest Pain Assessment Service.
- Increased availability to ward based ultrasound for a number of the specialty services
- New services to be developed will include:
  - Nuclear Medicine located at Gosford Hospital with both diagnostic and therapeutic capabilities
  - Two camera system (a gamma camera and a SPECT CT)
  - Hot laboratory
  - PET scanner at Gosford Hospital
  - Mobile x-ray service for the Central Coast for x-ray imaging in RACFs and patient's homes.
- Expanded capacity for interventional radiology including other specialties e.g. Vascular surgery and space located close to theatres
- Additional space requirements for Medical Imaging to allow for new equipment and sufficient recovery, bed bays and reporting rooms.

**Mental Health**
- Access to short stay beds (at Gosford Hospital) for Child and Adolescent Mental Health patients (a number of options have been proposed)
- Psychiatric Emergency Care Centre (PECC) at Gosford Hospital (6 beds)
Clinical Services Plan 2012-2022

- 38 bed non-acute inpatient unit at Wyong Hospital for adult Mental Health patients (11 adult non-acute and 27 very long stay beds)
- 7 additional acute SMHSOP beds
- 21 bed non-acute inpatient unit at Wyong Hospital for older Mental Health patients (T-BASIS, non-acute SMHSOP and very long stay beds).

**Primary and Community Health**

Significant investment across CCLHD to develop an effective service delivery platform for community based services, including:

- Ensuring services are located and easily accessible in the population growth areas of Wyong North East – potential locations include Warnervale, Tuggerah and Lake Haven
- Establishment of two service hubs focussed on child and family services (to include oral health and mental health services) in Gosford LGA (to replace current leased premises and services delivered through old cottages) and Wyong LGA (to replace Wyong Central)
- Establishment of two service hubs focused on aged care, rehabilitation, sub-acute and chronic disease services with a hub located in both the south and north of the LHD
- Expansion of Lake Haven and Erina CHCs to support expected growth.

**Additional Capital Requirements**

As part of any service expansion or development there are additional capital requirements to accommodate additional staff, patients and visitors. Many of the following areas are currently inadequate and require expansion as a matter of urgency to accommodate current demand and will be essential to accommodate any additional demand. They include:

- Adequate ancillary accommodation on Gosford and Wyong hospital sites for staff supporting inpatient services. There is currently a significant shortage of accommodation for staff and clinical departments across the inpatient facilities as well as the community based services. This will include additional space requirements for increases in individual departments such as: additional coders which will be required for implementation of ABF
- Parking is inadequate on both Gosford and Wyong hospital campuses as well as a number of community facilities. Solutions are required to address the current shortfall and to expand car parking capacity to accommodate the expected increase in patients, visitors and staff
- Space requirements will need to be reviewed with allowance made for expected additional demand for the following services which will be impacted by any further growth in activity or services including capital expansion:
  - Pathology Services
  - Sterilising Services Department
  - Health Information Services (including Medical Records)
  - Clinical Technology Services (including Biomedical Engineering)
  - Patient transport and fleet services with secure parking to accommodate increases in community based services and mobile workforce
  - Storage – sterile stores and other consumables, and receiving dock
  - Food Services
  - Environmental services - laundry, cleaning, engineering, plant and waste services.
- Suitable accommodation will need to be identified for the Population Health Services (Public Health and Health Promotion) which are currently located in leased premises on the Ourimbah campus of the University of Newcastle and which they will need to vacate by 2015.
2 Service and Facility Profiles

2.1 Gosford Hospital

Gosford Hospital is a principal referral hospital providing a comprehensive range of secondary level services, including maternity, paediatrics, mental health and some complex and tertiary level services including trauma, interventional cardiology and cancer. Specific changes and developments that will be required by 2022 include:

**For Emergency Department Services:**

As a level 5 ED Gosford Hospital will provide a full range of services and models of care. The ED will be expanded to accommodate:

- modified triage and waiting room to support Quick Triage and Patient Registration and a patient streaming zone
- early treatment zone close to triage, the acute treatment areas and the waiting room
- 19 additional treatment spaces including additional resuscitation rooms to meet the increasing numbers of presentations
- Urgent Care Centre / Fast Track area
- Secure paediatric treatment area
- PECC 6 beds and ED SSU 16 beds.

**For Ambulatory & Outpatient Services:**

An expanded and reconfigured ambulatory and outpatient precinct will support the increased provision of care and treatments in an ambulatory setting. The precinct will include facilities for rapid review clinics, specialist and multidisciplinary clinics, ambulatory treatments and minor procedures.

**For Critically Ill Patients:**

Gosford will continue to provide level 5 ICU/HDU services and support Wyong Hospital. Capacity will be increased to accommodate up to 24 beds. The mix of ICU/HDU will vary according to clinical demand.

**For Medical Patients:**

Gosford Hospital as the principal referral hospital provides a comprehensive range of subspecialty medical services and an increasing range of tertiary services.

Chest Pain Assessment service for prompt assessment and decision making for patients presenting to ED.

Two collocated cardiac interventional suites that will accommodate 24/7 percutaneous coronary intervention and a range of other interventional procedures including pacemaker insertion, implantable devices and electrophysiology studies and procedures.

Better integration of acute and community health services to improve the management of patients with heart failure and other chronic disease and their rehabilitation or ongoing care needs.

Redevelopment of the Diabetes Education Centre.

Development of an LHD wide obesity service including a multidisciplinary weight management program and consideration of options for bariatric surgery. (The most appropriate location for this service will need to be identified as part of the service development proposal).

Expansion or introduction of ambulatory and outpatient clinics for inflammatory bowel disease, chronic liver disease and Hepatitis C.

Expansion of acute stroke service with 24/7 thrombolysis and telehealth links to ED and Wyong Stroke Unit; and development of outpatient/ambulatory clinics for neurovascular and memory disorders and epilepsy.

Further development of tertiary respiratory services including expansion of non-invasive ventilation and non-ventilation sleep clinic.

There will be further development of models of care for an expanded acute geriatric inpatient service including shared care models.

**For Cancer Patients:**

Additional chemotherapy, ambulatory care and inpatient capacity will be provided through the Regional Cancer Care Centre along with a Radiation Oncology service with 2 linear
accelerators and capacity for a third to accommodate future growth.

**FOR SURGICAL PATIENTS:**

Gosford Hospital will provide an increasing range of tertiary or complex surgical services for all residents of CCLHD in addition to meeting local secondary level needs.

Physical resources will be reconfigured or developed to accommodate additional operating theatres and recovery beds, and an acute surgical/rapid assessment unit.

The peri-operative suite will have 2 additional operating theatres (10 in total), 2 procedure rooms and recovery beds. One theatre will need to be equipped for endovascular procedures.

An endoscopy suite with 2 labs (one negative pressure lab) with pre and post procedure preparation and recovery area which may or may not be collocated with the theatres suite.

Comprehensive models of care will include:
- Integrated Booking Unit
- High Volume Short Stay Surgical Centre
- Surgical Acute Rapid Assessment/Acute Surgical units (SARA/ASU)
- Expanded inpatient wards focusing on complex or longer length of stay caseloads.

New surgical specialty services will include (non-bypass) thoracic surgery.

**FOR WOMEN & BABIES:**

Coordinated multidisciplinary ambulatory services for women with high risk pregnancies will be provided in one location including:
- high risk antenatal clinics
- antenatal day assessment unit
- early pregnancy assessment service
- genetic counselling services.

Maintenance of the level 5 maternity service to support women and babies with complex needs during pregnancy and at birth

Reconfigured birthing suite to accommodate 6-8 multifunctional birthing rooms with baths and expansion of the maternity ward up to 36 beds.

Better access to continuity of care midwifery led models for women with normal pregnancies with a 3-4 bed birthing centre collocated on the Gosford Hospital site.

There will be increased physiotherapy involvement in antenatal education, inpatient post natal care and follow up outpatient clinics, particularly for women with anal sphincter tears.

There will be increased social worker and Safe Start Program resources to support vulnerable and at risk women and babies.

The Special Care Nursery will be expanded to accommodate up to 20 cots.

**FOR CHILDREN & FAMILIES:**

An ambulatory care unit will be established incorporating acute review clinics, outpatient clinics, shared care clinics, short stay and home based care.

Paediatric surgery will continue to be concentrated on the Gosford Hospital site where paediatrician expertise is available 24/7 to support sub-specialist surgeons in the management of children in the post-op period.

**FOR MENTAL HEALTH PATIENTS:**

A PECC will be established at Gosford Hospital.

There will be more community based services improving access to assessment, treatment and early intervention of mental health issues.

There will be access to regional CAMHS beds (located Hornsby Hospital) and short stay (<72 hours) beds for adolescents with acute mental health presentations.

**FOR SUB-ACUTE OR AGED CARE PATIENTS:**

There will be a general rehabilitation unit onsite with 30 beds equipped with a gymnasium, hydrotherapy pool and outdoor exercise facility. There will be scope for future expansion.

There will be a centralised dementia intake program to coordinate assessment, support and assistance for services operating across the LHD.

**FOR PALLIATIVE CARE PATIENTS:**

There will be enhanced inpatient consultation service with capacity to provide extended hours of coverage including on-call; direct care admissions; outpatient clinics and ambulatory
services for symptom management, advanced care planning, and access to minor procedures and treatment on an ambulatory basis.

**FOR MEDICAL IMAGING SERVICES:**
CT scanner with capabilities to undertake perfusion scanning and cardiac CT. On-site nuclear medicine services encompassing diagnostic and therapeutic capabilities, a two camera system (gamma camera and SPECT-CT), hot laboratory, expanded interventional radiology capabilities and a PET scanner.

2.2 Wyong Hospital

Wyong Hospital will function as a major metropolitan hospital with expansion and enhancement of inpatient and ambulatory capacity to meet the clinical demands and projected growth of the local population, and to support new models of care. Most ‘core’ clinical services will be provided at role delineation level 4. Patients requiring more complex and tertiary level services will be transferred to Gosford Hospital or the appropriate tertiary care facility.

Workforce development will be integral, recognising that it is the major potential limiting factor to achieving the required level of service development. By 2022 it is envisaged that the following services will be provided/ available at Wyong Hospital:

**FOR EMERGENCY DEPARTMENT SERVICES:**
There will be a full range of ED services and models of care including acute care, resuscitation, urgent care centre, PECC, and ED SSU. The ED will be expanded to accommodate:
- modified triage and waiting room to support Quick Triage and Patient Registration and a patient streaming zone
- an early treatment zone in proximity to triage, the acute treatment areas and the waiting room
- 20 additional treatment spaces including an additional resuscitation room to meet the increasing numbers of presentations.

**FOR AMBULATORY & OUTPATIENT SERVICES:**
An expanded and reconfigured ambulatory and outpatient precinct will support the increased provision of care and treatments in an ambulatory setting. The precinct will include facilities for rapid review clinics, specialist and multidisciplinary clinics, ambulatory treatments and minor procedures.

**FOR CRITICALLY ILL PATIENTS:**
The ICU/HDU will support the expanded acute medical and surgical services, increasing its capabilities to role delineation level 4 and increasing capacity to 12 beds.

**FOR MEDICAL PATIENTS:**
Sub-specialty medical services will be available on-site including: Cardiology, Respiratory, Endocrinology, Gastroenterology, Neurology (acute stroke unit and thrombolysis), and Renal Medicine.

Cardiology and respiratory services will be supported by onsite cardiac stress testing and an expanded respiratory investigation service. There will be an expansion in the range and number of sub-specialty outpatient clinics provided.

There will be further development of models of care for an expanded acute geriatric inpatient service including shared care models and orthogeriatrics.

**FOR CANCER PATIENTS:**
Additional chemotherapy and ambulatory care capacity will be provided in an expanded cancer care centre along with a range of inpatient and outpatient oncology services.

**FOR SURGICAL PATIENTS:**
A broad range of emergency and elective surgery will be provided to meet most non-tertiary surgical demand for the population of Wyong LGA. This will include expanded surgical services both in terms of volume and complexity within fully commissioned capacity, supported by
increased anaesthetic and sub-specialty surgical coverage.

Physical resources will be reconfigured or developed to accommodate two additional operating theatres (6 theatres in total) and recovery beds, and an acute surgical/rapid assessment unit.

High volume short stay services will encompass ophthalmology, minor gynaecology, urology and endoscopy.

More complex surgery will encompass some gastrointestinal surgery and orthopaedic trauma.

Paediatric Surgery will operate under a 16-hour model and minor paediatric surgical procedures (emergency and elective) will be provided where overnight admission is not anticipated.

**FOR WOMEN & BIRTHS:**
The stand-alone midwife-led birthing service will continue to care for women with low risk pregnancies, supported by the comprehensive obstetric service at Gosford Hospital.

Antenatal and postnatal services will be expanded at Wyong and surrounding community health centres according to demand.

**FOR CHILDREN & FAMILIES:**
The Wyong Paediatric Ambulatory Care Unit will be expanded and further developed to provide a paediatric emergency medicine, paediatric acute care model (PEMPAC) with 10 short stay beds for management of lower triage paediatric ED presentations (codes 3, 4 and 5). It will be located in proximity to the ED.

Minor unplanned surgery not requiring overnight stay will be provided.

**FOR MENTAL HEALTH PATIENTS:**
The existing acute inpatient units consisting of 30 adult beds, 4 PECC beds and 15 acute aged beds will be complemented by a 38 bed adult non-acute unit (11 non-acute and 27 very long stay beds) to provide a step down from acute inpatient care and fill a long identified gap in service for patients requiring rehabilitation.

An additional 7 acute SMHSOP beds as well as a 21 bed unit incorporating T-BASIS beds, non-acute SMHSOP and very long stay beds will cater for the rapid increase in the aged population and growth in dementia that is projected for the Central Coast.

**FOR DRUG & ALCOHOL PATIENTS:**
The community detoxification team will be re-established to complement the inpatient detoxification unit and enable detox in inpatient or community settings. More local community based facilities will be identified for counselling of client with drug and alcohol dependencies with an increased focus on vulnerable groups including young people, Aboriginal people and peri-natal women.

**FOR SUB-ACUTE OR AGED CARE PATIENTS:**
There will be onsite inpatient general rehabilitation and sub-acute geriatric rehabilitation beds. Rehabilitation service with onsite access to a gymnasium, hydrotherapy pool and outdoor exercise area.

There will be a centralised dementia intake program to coordinate and streamline assessment, support and assistance for services (operating across the LHD).

An increased number of psycho-geriatricians to assess and either manage or provide consultancy service for behaviourally challenged patients in inpatient and outpatient/community settings.

There will be an inpatient behavioural unit with appropriate facilities to manage these patients and provide behaviour related therapy (T-BASIS).

**FOR PALLIATIVE CARE PATIENTS:**
There will be enhanced inpatient consultation service with capacity to provide extended hours of coverage including on-call; direct care admissions; outpatient clinics and ambulatory services for symptom management, advanced care planning, and access to minor procedures and treatment on an ambulatory basis.

**FOR MEDICAL IMAGING SERVICES:**
Expanded general radiology services, 2 CT scanners (with cardiac and perfusion scanning capabilities), trans-oesophageal echo (TOE) and MRI.
2.3 Community Health

Community health services will grow as strategies to move care from acute inpatient to community settings increase.

Primary and community health services will provide crucial support to continuum of care for patients of CCLHD. This will be undertaken through:

- Active in-reach into inpatient settings to identify patients suitable for earlier discharge and follow up in community settings
- Effective communication and strong links with General Practice to support hospital avoidance and management of patients in the community
- Integration between the wide range of Community Health services to enable shared care and efficient referral to meet patient needs.

To meet these demands considerable redevelopment and enhancement of community health infrastructure is required. Future requirements will be based on:

- Future role of existing CHCs with reference to building age, suitability for purpose and geographic location
- Options for the expansion of Lake Haven and Erina CHCs
- Establishment of two hubs for Child and Family Health and Oral Health services, one in Gosford LGA and one in Wyong LGA, possibly at Tuggerah
- Establishment of two community based rehabilitation centres for chronic and aged care and rehabilitation services, one in the south and one in the north of the LHD
- Sufficiently large and well designed CHCs to provide services for a diverse range of patients including Early Childhood, Mental Health, Allied Health, Drug and Alcohol, Ongoing and Complex Care services, Community Nursing, Youth Health, Antenatal clinics and Needle Syringe Program
- Options for ophthalmology and other suitable outpatient services located at a nonhospital site e.g. Tuggerah.

2.4 Woy Woy Hospital

Woy Woy Hospital will continue to provide sub-acute inpatient and outpatient services and a range of community health services.

Inpatient services will be provided as part of the clinical stream of aged care, sub-acute and complex care services.

Inpatient services will be:

- 30 bed sub-acute aged care unit providing geriatric rehabilitation and non-specialist palliative (end of life) care with aged care patients under the care of the geriatric medicine team.
- Slow stream rehabilitation/maintenance unit providing multidisciplinary step-down or restorative care for patients requiring a longer hospital stay.

There is a 20 bed Transitional Care Unit onsite. Patients may remain in transitional care for a maximum of 12 weeks, under the medical care of a general practitioner.

2.5 Long Jetty Health Facility

Limited sub-acute inpatient services will be provided through 12 sub-acute beds for Maintenance Care (slow stream, step-down or restorative care) for patients awaiting placement, guardianship and patients who are non-weight bearing and awaiting fractures to heal prior to rehabilitation and also non-specialist palliative care (end of life) beds.

A satellite renal dialysis unit with a home dialysis training facility will be located on site with a built capacity of 20 chairs ten of which will be commissioned initially with others commissioned as demand requires.

A range of community and outpatient services are provided on site and it is proposed that a new building will absorb many of the existing services currently located in various small cottages on site.

A 12 bed Transitional Care Unit located onsite with patients under the care of a GP.
Table 1: Proposed configuration of services at Gosford and Wyong Hospitals by 2022

<table>
<thead>
<tr>
<th>CLINICAL SPECIALTY SERVICE PROFILE</th>
<th>Gosford</th>
<th>Wyong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>✦</td>
<td>✦</td>
</tr>
<tr>
<td>Intensive Care/High Dependency</td>
<td>✦</td>
<td>✦</td>
</tr>
<tr>
<td>Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Theatres</td>
<td>✦</td>
<td>✦</td>
</tr>
<tr>
<td>Procedure Rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex Surgery</td>
<td>✦</td>
<td>✦</td>
</tr>
<tr>
<td>Sub-Specialty Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Ear, Nose Throat Surgery/Head and Neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gynaecology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic and Reconstructive Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ophthalmology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Assessment Unit</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Sub-Specialty Services: Cardiology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Interventional Cardiology</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>· Chest Pain Assessment Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Endocrinology &amp; Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Obesity Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastroenterology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Stroke Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>· Dialysis Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Sub-Specialty Medical Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient Oncology/ Haematology</td>
<td>✦</td>
<td>#</td>
</tr>
<tr>
<td>Medical Oncology –non-inpatient</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged &amp; Sub-Acute Care Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Aged Care</td>
<td>✦</td>
<td>✦</td>
</tr>
<tr>
<td>Rehabilitation- General &amp; Aged</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's &amp; Children's Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birthing Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Care Nursery</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Ambulatory / Outpatient Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatric Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatric Inpatient Unit</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Paediatric Ambulatory Care</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Acute Inpatient Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PECC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Non-Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMHSOP - Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-BASIS – inpatient</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Other clinical services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palliative Care</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>Drug &amp; Alcohol Inpatient Detoxification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI</td>
<td>✦</td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Centre (Level 5 or 6 Service)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service on-site</td>
<td>✦</td>
<td>Future increase in service proposed</td>
</tr>
<tr>
<td>New service</td>
<td></td>
<td># Development of service to be considered in future</td>
</tr>
<tr>
<td>No service on-site</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3 Central Coast Local Health District

Services on the Central Coast cater for the full range of health care needs, from prevention and primary health care services typically delivered in community based settings through to acute and emergency care services provided in hospital settings. The map below identifies the health facilities operated by CCLHD within the Statistical Local Areas (SLAs).

Figure 1: Central Coast LHD boundaries and facilities
3.1 Geographic Profile

CCLHD is one of 18 geographic Local Health Districts in NSW:

- Covers an area of 1,853 square kilometres, stretching from the Hawkesbury River to the southern shoreline of Lake Macquarie, and encompasses the local government areas of Gosford and Wyong
- There are 318,369 residents (4.4% of the NSW population), most of whom live in townships located along the coast and lakes. Smaller numbers live in the inland areas west of the F3 freeway from Sydney to Newcastle. There is a large influx of visitors to the coastal areas during the summer months
- There are an estimated 6,423 Aboriginal and Torres Strait Islanders living in the area representing 2.2% of the CCLHD population
- Approximately 12% of the population were born in non-English speaking countries; approximately 5% speak a language other than English at home although less than 0.5% report poor proficiency in English
- Approximately 20% of the population reports having a disability with nearly 5% reporting a profound or severe disability.

3.2 Population Profile

On average CCLHD residents have:

- Low socioeconomic status (particularly within Wyong LGA) with low levels of educational attainment, in low paid employment and relatively high rates of public housing
- Low levels of physical activity and poor diet resulting in significant and increasing rates of overweight and obesity and high rates of Type 2 diabetes
- High levels of psychological stress and high rates of mental health conditions along with high rates of drug and alcohol use
- High rates of preventable disease and rates of presentation to the emergency department and admission to hospital for acute and chronic conditions
- High death rates from all causes, in particular cancers, respiratory disease and stroke
- Low rates private health insurance
- Difficulty accessing public health services due to poor public and private transport options
- Poor access to General Practitioners.

3.3 Facilities and Services

- Are provided from two acute hospitals located in Gosford (predominantly at role level 5) and Wyong (predominantly at level 3), two sub-acute facilities located in Woy Woy and Long Jetty, 11 sites where community health services are provided located across the geographic region, and two school dental facilities in East Gosford and The Entrance
- Are provided in partnership with a number of NGOs and not-for-profit organisations
- Span population health, disease control and health promotion, through to acute hospital services, subacute care and rehabilitation and a wide range of early intervention, short term and ongoing care for acute and chronic illnesses and palliative care
- Highly specialised or tertiary care (e.g. neurosurgery, cardiothoracic surgery, spinal, burns and organ transplant services) for Central Coast residents is provided by principal referral hospitals in Sydney or Newcastle
- Private hospital services are provided to the CCLHD population by three private hospitals (Gosford, Berkley Vale and Brisbane Waters), two day surgery centres (Central Coast Endoscopy, Central Coast Day Hospital – eye surgery), 304 general practitioners (230 FTE or 1 GP for every 1,369 residents) and private allied health providers.
3.4 Governance and Service Organisation

- The CCLHD Board is chaired by Mr Paul Tonkin and comprises a further nine Board Members who jointly bring a wealth of experience and local knowledge to the management of the LHD.
- The CCLHD Executive team is led by Chief Executive Matt Hanrahan and comprises six directors covering the portfolios of acute services; clinical governance; nursing and midwifery; children’s, aged and community health; workforce and culture, and finance. The executive team works with the CCLHD Board, local clinicians and community to provide the best possible health care to the people of the Central Coast.
- Clinical services are organised in five clinical divisions located within two directorates (Acute Services Directorate and Children’s, Aged and Community Health Directorate), each division has a clinical director and a divisional manager. The divisions are:
  - Medicine
  - Anaesthetics, Surgery and ICU (AS&ICU)
  - Mental Health
  - Aged Care, Sub-Acute and Complex Care (ASACC) (previously Rehabilitation and Aged Care Services)
  - Central Coast Kids and Families (previously Women’s, Children’s and Family Health)
- Clinical support services include medical imaging, pathology, pharmacy, sterilising services, clinical technology, venous access team, and the infection prevention and control services (IPAC).
- Non-clinical and other support services that are critical to the safe, efficient and effective provision of services include patient transport, carer support, information and communication technology, health information services, environmental services (laundry, cleaning, waste management etc.), food services, engineering and security. While these services are not specifically discussed in this planning document they will require commensurate enhancement and development to keep pace with increased activities experienced to date and the further increases that are anticipated.

3.5 Partnerships

3.5.1 Collaboration with General Practice

- CCLHD has a successful track record of collaboration with General Practice (GP) and primary care services. A GP Collaboration Unit was established between CCLHD and the Central Coast Division of General Practice (CCDGP) in 2000 to support and enhance engagement with GPs. Models of shared care have been established in diabetes, mental health, antenatal care and acute/post-acute care.
- In July 2012 the CCDGP became the Central Coast NSW Medicare Local as part of the Federal Government Health Reform agenda. The Medicare Local is an independent not-for-profit organisation focused on the delivery of quality health outcomes to local communities within the Gosford and Wyong LGAs. The Medicare Local will continue to provide General Practices the range of services offered by CCDGP but will have a broader role within the Central Coast community. This will include engaging with community and health services to identify health service demand and service gaps, working with a wide range of organisations to coordinate health strategies for the region, conducting after hours needs assessment, developing a regional health profile, establishing an online health directory and working with a wide range of health providers to improve linkages and communication.
- CCDGP has a long history of partnership with CCLHD supported by formal links including CCDGP (now Medicare Local) representation on the CCLHD Board and the LHD Chief Executive Matt Hanrahan is a member on the Board of the Medicare Local, as well as a Joint Executive Committee that oversees collaborative activity between the two organisations and General Practice. This is supported by the jointly funded GP Collaboration Unit that promotes communication, collaboration and partnership, assists and supports the development of
clinical models of care and contributes to strategic planning and policy development within both CCLHD and CCGDP. As the Central Coast NSW Medicare Local develops, the strong partnership between the two organisations will continue. In particular the role of primary health care in supporting the continuum of care for residents of the Central Coast, including hospital avoidance, will be further developed and supported through collaborative activities coordinated by the GP collaboration Unit.

3.5.2 Other Partnerships

- Strong partnerships underpin the District’s efforts to improve the health and wellbeing of the community, plan effective services with the non-government and private sectors, and integrate and better coordinate services for patients. In addition to the partnership with General Practice and the Medicare Local, key CCLHD partnerships include:
  - The Ambulance Service of NSW
  - Aboriginal Controlled Community Health Organisations (Eleanor Duncan)
  - NGO services who provide health services under contract (e.g. drug and alcohol rehabilitation, mental health, or out of home care for vulnerable children)
  - Supporting aged care in the community including hostel, nursing home and dementia care
  - Other government agencies such as Family and Community Services, Housing and Education
  - Local private providers to streamline two-directional referral pathways
  - Private hospitals (with particular reference to the opportunities this might offer in the short term as potential additional capacity if required and in the longer term development of services at/near Wyong Hospital).

3.5.3 Carer Support

- Carers are key partners in healthcare supporting those they care for in a range of ways as well as delivering care outside the hospital setting
- In the 2006 ABS Census 11% of the Central Coast population (approximately 25,000 people) identified that they had an unpaid caring role for a person with a disability, long term illness or problems related to aged care
- Numbers of carers in the Central Coast community can be expected to increase over the next 10 years with an ageing population and an increasing incidence of chronic disease. Carers themselves are ageing, with a high proportion (41% in 2006) aged over 55 years. It is also considered that a large number of carers remain hidden within the Central Coast population, creating challenges for the healthcare system to identify and support this group.
- It is generally recognised that carers themselves are a vulnerable group in the population given the uniqueness of their role. They may not receive or prioritise appropriate medical treatment for themselves as their time is generally devoted to meeting the needs of others. Carer stress and wellbeing can impact on the health status of the person they support. Failure to identify, engage and support carers will compromise the health and wellbeing of both carer and patient potentially leading to increased demand on local health services.
- With an increase in strategies that support hospital avoidance and early discharge of patients the role of carers becomes increasingly important as people traditionally cared for in the hospital setting are moved into the community earlier or remain at home for their treatment. This has the potential to increase the stress on carers. It is important for CCLHD to be aware of the needs of both the patient and the carer and work to identify, support and enhance carer health and wellbeing at all points in the healthcare system.
4 Population and Activity

In this section the current population and population projections for the CCLHD catchment are summarised, followed by summaries of relevant epidemiological and socio-economic data and health service activity. The relevant activity data tables are at Appendix C.

4.1 Population Data

Approximately 318,369 people resided on the Central Coast in 2011, about 4.4% of the NSW population. Comparatively large numbers of older people (70 plus years of age) live on the Central Coast (10.4% of the total population, compared to the NSW average of 8.1%).

The population of the Central Coast will increase by 11.6% by 2021 to reach a total of about 355,400 people. This compares with the projected growth in NSW of 11.1% by 2021. The highest growth rate (17.7%) is projected for the Wyong LGA. In the Wyong North-East Statistical Local Area (SLA), which forms part of the Wyong LGA, population growth will be 25.7% over that period.

The result is that by 2021, Wyong LGA population will grow from 150,900 in 2011 to 177,600 and Gosford City LGA population will grow from 167,500 in 2011 to 177,800. 72% of the Central Coast’s population increase will be in the Wyong LGA, with 55% of all Central Coast growth (20,400 additional residents) in the Wyong North-East SLA alone.

4.1.1 Ageing of the Population

The population of all age groups on the Central Coast will increase, but the greatest proportional increase will be in people 70 years plus, which will grow by 28% from about 41,900 to about 53,500 (an increase of more than 11,600 people). As older people use health services more than the rest of the population, demand for health services can thus be expected to exceed substantially the rate of population growth.

The prevalence of people living alone also increases with age; this particularly affects the level of post-acute health care support they require. The trend peaks for people aged 85 years and over. At present on the Central Coast about 37% (over 2,600 people) aged 85 years and older live alone. This figure will almost certainly rise out to 2022.

4.1.2 Aboriginal Population

In 2006 (the most recent year for available data) about 6,500 Aboriginal and Torres Strait Islander people lived on the Central Coast, about 2.2% of the total population. This is slightly higher than the NSW average of 2.1%. The majority of the Aboriginal and Torres Strait Islander population on the Central Coast reside in the Wyong LGA.

In NSW, the Aboriginal population have a life expectancy 9.3 years below that of the whole population for males, and 9 years for females. Compared with the total population of the Central Coast they are much younger, with approximately 37% of the population in 2006 aged less than 15 years and only 4.3% aged 65 years and older (compared to 15.1% for the total Central Coast population).

The Aboriginal population have lower socioeconomic status than the Central Coast population as well as lower levels of education. The overall health status is poor with a higher prevalence of chronic diseases including diabetes, cardiovascular disease, respiratory disease and kidney disease. There are higher rates of known risk factors such as smoking, drug and alcohol use, poor diet, overweight and obesity and oral health issues.

There are a higher proportions of teenage pregnancy, smoking during pregnancy, late first antenatal visit (beyond 14 weeks gestation), low birth weight babies, and infant mortality.
4.1.3 Social Indicators of Health

The relationship between social disadvantage and higher demand for health services is widely recognised, and was detailed in the NSW Health and Equity Statement: In all Fairness, 2004. Socio-economic conditions can be compared using the Socio-Economic Index for Areas (SEIFA), developed by the Australian Bureau of Statistics (ABS).

The SEIFA quantifies the relative level of advantage/disadvantage within a specific area of Australia, where the average score is 1000. Using these measures, most of the Central Coast is relatively disadvantaged; however, there are pockets that may be classified as advantaged. West Gosford, Wyong south and west and, in particular, Wyong North-East statistical local areas (SLAs) on the Central Coast are comparatively disadvantaged (table 2).

The SEIFA is comprised of a suite of four summary measures created from census information – they are:

- Index of Relative Socio-economic Advantage and Disadvantage (IRSA D)
- Index of Relative Socio-economic Disadvantage (IRSD)
- Index of Economic Resources (IER)
- Index of Education and Occupation (IEO).

Table 2: SEIFA Index for Central Coast LGA

<table>
<thead>
<tr>
<th>SLA of Residence</th>
<th>Advantage and Disadvantage (IRSA D)</th>
<th>Disadvantage (IRSD)</th>
<th>Economic Resources (IER)</th>
<th>Education &amp; Occupation (IEO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford (C) - East</td>
<td>1,050</td>
<td>1,045</td>
<td>1,049</td>
<td>1,022</td>
</tr>
<tr>
<td>Gosford (C) - west</td>
<td>986</td>
<td>988</td>
<td>979</td>
<td>965</td>
</tr>
<tr>
<td>Wyong (A) - North-East</td>
<td>942</td>
<td>958</td>
<td>975</td>
<td>896</td>
</tr>
<tr>
<td>Wyong (A) - South and West</td>
<td>969</td>
<td>977</td>
<td>979</td>
<td>934</td>
</tr>
</tbody>
</table>


4.1.4 Private Health Insurance

Levels of private health insurance influence the ability of the population to access private sector health services. Private health insurance rates on the Central Coast in 2001 (the latest year’s data available) were lower than the NSW average at 45.6%, and were notably lower in the Wyong LGA (38.2%).

4.2 Residents health status

Health-related behaviours play a role in the development of many health conditions that account for a large amount of morbidity and mortality, including cardiovascular and respiratory disease, diabetes and some cancers. Smoking, alcohol abuse, obesity and physical inactivity have all been identified as negative effects on overall health status.

4.2.1 Smoking and Obesity

Smoking rates among Central Coast residents have remained relatively stable over time with approximately one in four males and one in five females smokers. While smoking rates are generally higher for males than for females, in 2009 on the Central Coast the rates were 24.4% for men and 15.7% for women. Overall smoking rates on the Central Coast in 2009 were higher than NSW rates (men 20.3% and women 14.2%) with the male rate much higher and female rate slightly higher than for NSW.

The rates of overweight and obesity for people over 16 years on the Central Coast increased between 2006 and 2010 (particularly for females) and are higher than the NSW rates, with 58.1% compared to 54.3% in NSW overall. 64.2% of men and 50.7% of women on the Central Coast were reported as overweight or obese in 2010.
4.2.2 Morbidity and mortality rates

Life expectancy for Central Coast residents from 2003-2007 was slightly lower than that for NSW. This is reflected in the higher than average age-adjusted death rates per hundred thousand populations on the Central Coast of 850 for men and 550 for women, compared to the NSW averages of 777 and 515 respectively (table 3). The age-adjusted potentially avoidable death rates are also higher than for NSW, with 260 for men and 140 for woman on the Central Coast, compared to the NSW rates of 221 and 123 respectively.

Standardised Mortality Ratio (SMR) data for 2002/2006 for the Central Coast LGAs (Gosford and Wyong) show that the latter has significantly higher death rates than the NSW average overall – 102.5 compared 100 – and that both Gosford and Wyong LGAs have relatively high SMRs for cancer, accidents, strokes and respiratory disease.

Notably, death rates on the Central Coast from cancer for males (257.9 per 100,000 persons) and females (152.2 per 100,000 persons) are significantly higher than the equivalent NSW rates. Similarly, cancer incidence (new cases) rates for males (613.6 per 100,000 population) and females (429.9 per 100,000 persons) are significantly higher than the equivalent NSW rates.

Table 3: Life Expectancy in years, Central Coast Residents (2003-07)

<table>
<thead>
<tr>
<th>Place of Residence</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Coast</td>
<td>78.1</td>
<td>83.2</td>
</tr>
<tr>
<td>NSW</td>
<td>79.2</td>
<td>84.0</td>
</tr>
</tbody>
</table>

Source: NSW Health, Centre for Epidemiology and Research. Health Statistics NSW

4.2.3 Chronic disease rates

Estimates of chronic diseases and associated risk factors by the Central Coast Division of General Practice in 2007/08 showed that the rates on the Central Coast for Type 2 diabetes (including with co-morbid obesity), chronic obstructive pulmonary disease, asthma and relatively high alcohol consumption were all higher than the equivalent NSW rates. The rates for circulatory system disease and physical inactivity were also higher for Wyong LGA.

4.2.4 Disability

The ABS census data (2006) estimated that 14,770 or 4.8% of the Central Coast population had a profound or severe disability (i.e. requiring help or assistance in one or more of the three core activity areas of self-care, mobility and communication). The percentage is higher in the Wyong LGA with 5.4% of the population reporting profound or severe disability.

The number and percentage of population with a disability increases significantly from 75 years onwards with 3,747 (17.8%) of people aged 75 to 84 and 3,007 (42.6%) of people aged over 85 years reporting having profound or severe disability.

4.2.5 Dementia

The incidence of dementia and its health-related burden increases with age, and the prevalence doubles every five years past the age of 60. It is estimated that one in four people over the age of 85 years will have dementia.

Recent estimates of dementia prevalence indicate around 5,000 Central Coast residents currently living with dementia. This figure is expected to grow by more than a third over the next ten years and more than triple by 2050.
4.3 Activity Data

This section focuses principally on adult acute inpatient capacity across both medical and interventional services. The Clinical Groups referred to relate to Clinical Departments in CCLHD (as best approximated) and have been constructed by combining specific NSW Health ESRGs (Enhanced Service Related Groups). Detailed mapping of ESRGs against Clinical Groups are shown in Appendix B.

Note: Bed capacity data has been sourced from the NSW Bed Audit Sign off Report of June 2011.

4.3.1 Current bed capacity

Table 4: Central Coast LHD Built Hospital Bed Capacity June 2011

<table>
<thead>
<tr>
<th>Bed Type</th>
<th>Gosford Hospital</th>
<th>Wyong Hospital</th>
<th>Long Jetty Health Facility</th>
<th>Woy Woy Hospital</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Adult Medical/Interventional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICU/HDU</td>
<td>16</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>CCU</td>
<td>8</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Overnight</td>
<td>332</td>
<td>162</td>
<td>-</td>
<td>-</td>
<td>494</td>
</tr>
<tr>
<td>Same Day</td>
<td>6</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>Sub Total Acute Adult</td>
<td>362</td>
<td>194</td>
<td>-</td>
<td>-</td>
<td>556</td>
</tr>
<tr>
<td>Maternity</td>
<td>32</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>Nursery</td>
<td>32</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>Special Care Nursery</td>
<td>10*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10*</td>
</tr>
<tr>
<td>Paediatric</td>
<td>38</td>
<td></td>
<td></td>
<td>-</td>
<td>38</td>
</tr>
<tr>
<td>Sub Total Maternity, Cots &amp; Paediatric</td>
<td>110</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>130*</td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PECC</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Adult Acute</td>
<td>30</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>65</td>
</tr>
<tr>
<td>Older Person Acute</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Sub Total Mental Health</td>
<td>30</td>
<td>54</td>
<td>-</td>
<td>-</td>
<td>84</td>
</tr>
<tr>
<td>Drug and Alcohol</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Sub-Acute</td>
<td>-</td>
<td>58</td>
<td>12**</td>
<td>23**</td>
<td>93</td>
</tr>
<tr>
<td>Renal Dialysis Chairs</td>
<td>22</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>34</td>
</tr>
<tr>
<td>Total Built Beds</td>
<td>524</td>
<td>353</td>
<td>12**</td>
<td>23**</td>
<td>914*</td>
</tr>
</tbody>
</table>

Source: NSW Bed Audit Sign-Off Report (15/6/2011)  *Includes 2 additional cots funded post bed audit in 2011/12 budget increasing the number of cots to 10.  **20 Transition Care Beds at Woy Woy and 12 at Long Jetty not included

4.3.1.1 Acute beds

Gosford Hospital has 362 and Wyong Hospital has 194 acute adult beds, totalling 556 acute adult inpatient beds. This includes built ICU/HDU beds (not all of which are currently funded), CCU, same day and overnight beds (including surge capacity beds), but does not include Emergency Department spaces.

Maternity beds, paediatric beds and nursery cots total 112 in Gosford Hospital (includes 2 additional special care nursery cots funded in the 2011/12 budget), with 20 maternity beds and nursery cots in Wyong Hospital, an overall total of 132 beds.

Acute mental health beds comprise 30 in Gosford Hospital and a total of 54 adult and older person’s acute beds in Wyong Hospital. Wyong Hospital also has 15 drug and alcohol detoxification beds, totalling 99 beds in all.

4.3.1.2 Sub-Acute beds

There are 58 sub-acute inpatient beds located at Wyong Hospital (30 general rehabilitation and 28 sub-acute aged care/ GEM), 12 in Long Jetty Health Facility and 23 in Woy Woy Hospital (not including 20 separately funded Transitional Care beds). Total of 93 sub-acute beds.
4.3.1.3 Renal Dialysis Chairs

There are also 34 renal dialysis chairs – 22 in Gosford (hospital and satellite) and 12 satellite chairs in Lake Haven near Wyong Hospital.

Total Built capacity

There is a total of 787 acute inpatient beds, 93 sub-acute beds and 34 chairs. The total current built bed (and renal chair) capacity is thus 914. It should be noted not all this capacity is currently utilised due to available funding.

4.3.2 Bed Occupancy

In 2010/11, Gosford Hospital operated at an average bed occupancy level of 95.5% of built capacity (based on 126,138 occupied bed days) while Wyong Hospital operated at an average bed occupancy level of 91.5%. As activity is not evenly distributed throughout the year both facilities operated at or above 100% occupancy for significant times of the year.

In order to achieve an average operating occupancy of 85%, allowing for flexibility for peaks and troughs of patient demand, built capacity at Gosford Hospital would need to be increased by 45 acute adult beds and Wyong Hospital by 15 acute adult beds, representing a current shortfall of 60 built beds across both facilities, equivalent to two 30-bed wards. It should be noted that this shortfall figure does not include Emergency Department spaces, child and maternity, mental health or sub-acute beds, or renal dialysis chairs.

4.3.3 Internal Patient Flows

Patients of CCLHD flow internally between Gosford and Wyong hospitals and externally to public hospitals outside CCLHD and to private hospitals.

The factors that determine internal patient flow (residents of Gosford and Wyong LGAs being admitted to Gosford or Wyong hospitals) are varied and include proximity, availability and role level of services at each site, service models at a specialty level across the CCLHD and level of clinical support services available at each hospital. The distribution of Wyong and Gosford LGA resident flows between Gosford and Wyong hospitals is shown in Table 5.

Table 5: Internal flows between Gosford and Wyong hospitals by LGA 2010/11 (Adult Acute Activity)

<table>
<thead>
<tr>
<th>Clinical Group</th>
<th>Gosford LGA</th>
<th>Wyong LGA</th>
<th>Total</th>
<th>Gosford LGA</th>
<th>Wyong LGA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gosford Hospital</td>
<td>Wyong Hospital</td>
<td>Total</td>
<td>Gosford Hospital</td>
<td>Wyong Hospital</td>
<td>Total</td>
</tr>
<tr>
<td>Interventional Cardiology</td>
<td>99.6%</td>
<td>0.4%</td>
<td>100%</td>
<td>87.8%</td>
<td>12.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Cardiology Rem.</td>
<td>98.4%</td>
<td>1.6%</td>
<td>100%</td>
<td>23.0%</td>
<td>77.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Cardiology Total</td>
<td>98.6%</td>
<td>1.4%</td>
<td>100%</td>
<td>29.2%</td>
<td>70.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>97.9%</td>
<td>2.1%</td>
<td>100%</td>
<td>19.7%</td>
<td>80.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Neuroscience</td>
<td>98.5%</td>
<td>1.5%</td>
<td>100%</td>
<td>41.9%</td>
<td>58.1%</td>
<td>100%</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>94.2%</td>
<td>5.8%</td>
<td>100%</td>
<td>26.9%</td>
<td>73.1%</td>
<td>100%</td>
</tr>
<tr>
<td>Cancer</td>
<td>98.7%</td>
<td>1.3%</td>
<td>100%</td>
<td>57.2%</td>
<td>42.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>97.3%</td>
<td>2.7%</td>
<td>100%</td>
<td>50.2%</td>
<td>49.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Renal</td>
<td>98.9%</td>
<td>1.1%</td>
<td>100%</td>
<td>78.4%</td>
<td>21.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Other Medicine</td>
<td>96.7%</td>
<td>3.3%</td>
<td>100%</td>
<td>35.4%</td>
<td>64.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Drug &amp; Alcohol</td>
<td>27.6%</td>
<td>72.4%</td>
<td>100%</td>
<td>6.4%</td>
<td>93.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>95.9%</td>
<td>4.1%</td>
<td>100%</td>
<td>59.9%</td>
<td>40.1%</td>
<td>100%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>93.5%</td>
<td>6.5%</td>
<td>100%</td>
<td>38.2%</td>
<td>61.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Urology</td>
<td>90.8%</td>
<td>9.2%</td>
<td>100%</td>
<td>62.2%</td>
<td>37.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>90.0%</td>
<td>10.0%</td>
<td>100%</td>
<td>52.1%</td>
<td>47.9%</td>
<td>100%</td>
</tr>
<tr>
<td>ENT</td>
<td>99.4%</td>
<td>0.6%</td>
<td>100%</td>
<td>94.3%</td>
<td>5.7%</td>
<td>100%</td>
</tr>
<tr>
<td>FMS – Dental</td>
<td>97.2%</td>
<td>2.8%</td>
<td>100%</td>
<td>81.6%</td>
<td>18.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>59.5%</td>
<td>40.5%</td>
<td>100%</td>
<td>8.5%</td>
<td>91.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>96.7%</td>
<td>3.3%</td>
<td>100%</td>
<td>73.1%</td>
<td>26.9%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Averaged across all Clinical Groups, 93.1% of adult acute admissions for Gosford LGA residents occurred in Gosford Hospital and only 6.9% in Wyong Hospital. By contrast, for Wyong LGA residents, the proportion is 39.9% admitted to Gosford Hospital and 60.1% to Wyong Hospital.

Wyong LGA residents travel to Gosford Hospital because: some key services are not available at Wyong Hospital (e.g. interventional cardiology, ENT, cancer, endocrinology, renal); or because the service model refers patients to Gosford Hospital (e.g. orthopaedic trauma, complex urology, vascular surgery, gynaecology); or because of proximity, with part of south Wyong LGA being closer to Gosford Hospital than to Wyong Hospital.

Gosford LGA residents are more likely to travel to Wyong Hospital for Drug and Alcohol and ophthalmology services, explained by the fact that these services are concentrated at Wyong Hospital for all residents of CCLHD.

With an increase in capability in specialist and clinical support services (including intensive care), an increased medical workforce and resulting bed and operating theatre increases, the population growth in the Wyong North-East SLA area is likely to see the proportion of Wyong LGA residents travelling to Gosford Hospital reduce to around 30% by 2021. The impact of this scenario in terms of activity is shown in Table 12. This assumes that service availability at Wyong Hospital can meet demand and allows for the continued role of Gosford Hospital as the principal referral hospital for the Central Coast.

### 4.3.4 External Patient Flows

In 2010/11 there were 6,221 Central Coast residents’ admissions to public hospitals outside CCLHD (1,664 to Royal North Shore Hospital), representing 14.8% of all Central Coast resident demand in public hospitals. A detailed list of Central Coast resident flows to public hospitals outside of CCLHD and to private hospitals in 2010/11 is available in Appendix C. Many such flows can be explained by the need to travel for tertiary and state-wide services not available locally e.g. Cardiothoracic Surgery, Neurosurgery, Major Trauma, Spinal Cord Injury, Severe Burns etc.

However, over time, with sufficient capacity, clinical support and appropriate funding, a number of specialties will expect to be able to increase their current capability and be in a position to provide more services to CCLHD residents at Gosford Hospital, reducing the need for patients to travel for care. Likely specialties include Interventional Cardiology, Thoracic Surgery, some Spinal Surgery, Oncology, General Surgery, Plastic Surgery and ENT. Patients will continue to travel out of the CCLHD for highly specialised low volume services such as Neurosurgery and Cardiothoracic Surgery as well as statewide services.

Initial modelling demonstrates the potential impact that a reduction in CCLHD outflows might have on Gosford Hospital or, alternatively, identifies the capacity that might need to be provided to allow this to occur. The capacity needed to accommodate a flow return of 20% to 30% in 2021/22 would be in the range of 20 to 30 additional beds at Gosford Hospital. This is shown in Table 6.

### Table 6: Central Coast Adult Acute Demand in Public Hospitals outside of CCLHD (2021/22)

<table>
<thead>
<tr>
<th>Category</th>
<th>Base Case</th>
<th>20% Flow return</th>
<th>25% Flow return</th>
<th>30% Flow return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seps</td>
<td>Bed Days</td>
<td>Seps</td>
<td>Bed Days</td>
</tr>
<tr>
<td>Medical</td>
<td>2,815</td>
<td>11,431</td>
<td>563</td>
<td>2,286</td>
</tr>
<tr>
<td>Interventional</td>
<td>4,020</td>
<td>21,538</td>
<td>804</td>
<td>4,308</td>
</tr>
<tr>
<td>Total</td>
<td>6,835</td>
<td>32,969</td>
<td>1,367</td>
<td>6,594</td>
</tr>
<tr>
<td>Beds @ 85% occupancy</td>
<td>106</td>
<td>21</td>
<td>27</td>
<td>32</td>
</tr>
</tbody>
</table>

It is significant that, despite relatively low levels of private health insurance (particularly in the Wyong LGA) 44.7% of admissions of Central Coast residents (34,058) are to private hospitals. Clinical Groups
with the highest proportion of private utilisation are predominantly surgical or procedural, with many coinciding with high patient flows to public hospitals.

This suggests local supply constraints within CCLHD potentially related to available clinical workforce, funding, theatre capacity or a combination of factors. While it is not proposed to plan for a return of activity from private to public hospitals, the situation will be monitored, particularly in relation to the effect of recent Commonwealth government changes in the private health insurance rebate.

4.4 Projected Demand and Supply for Central Coast LHD

The base case (that is no changes to patient flows) for projected adult acute inpatient demand and supply for Central Coast residents has been estimated using the NSW Health modelling tool aIM2010. The base year for projections is 2008/09, with two subsequent years of data now available for 2009/10 and 2010/11.

The data show an overall projected increase in activity between 2008/09 and 2021/22 of 22.3%. Services such as General Surgery, Orthopaedics, Cardiology and Gastroenterology are in line with average growth but contribute significantly to overall growth in admissions because of their high volume nature.

4.4.1 Caveats in relation to the projection modelling

A number of caveats need to be outlined about the modelling as they apply to capacity requirements for CCLHD. Firstly, the National Health Reform Agenda is likely to affect hospital utilisation in ways that may not be modelled in aIM2010.

The application of the National Elective Surgery Target (NEST) and the National Emergency Access Target (NEAT) and activity-based funding (ABF) policies may have an unpredictable effect on hospital utilisation. For example, significant additional funding to address surgical waiting lists has led to some surgical specialties already exceeding projected 2021/22 levels.

Secondly, changes in private hospital insurance rates as a result of a reduction in the Private Health Insurance (PHI) rebate may potentially lead to some Central Coast residents either dropping or reducing their rate of coverage. This could have consequences with a transfer of activity from private to public hospitals in the future which is not captured in the current aIM projections.

Finally, the inevitable decline in the Veteran population (the majority of whom are in their eighties and who have access to private hospital coverage) may also see an increase in the proportion of older patients using public hospitals over time. This is particularly significant for the Central Coast, which has one of the highest concentrations of veterans over 70 years of age in NSW.

Some effects of changes have already been observed. Between 2008/09 and 2010/11 Central Coast resident demand grew by 5.0%, where the expected growth based on 2021/22 projections would have been only 3.1%.

Comparisons of actual and expected growth by Clinical Group show some significant variations (in both directions), with many groups growing much faster than expected, including ENT (9.2% vs. 0.5% expected), Urology (8.7% vs. 2.9% expected), and General Surgery (8.3% vs. 2.9% expected).

4.4.2 Projected supply and demand by hospital

Projected increases across both hospitals between 2008/09 and 2021/22 are significant (22.0% increase in separations and 20.3% increase in bed days) with Wyong Hospital expected to grow slightly faster than Gosford Hospital.

This reflects the expected population growth for Wyong LGA. Overall growth is almost as equally strong for medical and interventional services.
Clinical Services Plan 2012-2022

Of significance is the projected growth by age. Patients aged over 70 years represent the vast majority of expected growth in both separations but more particularly in bed days. Patients aged over 70 years represent 78.2% of the increase in separations (6,118 of 7,828) across CCLHD, and 91.8% of the increase in bed days (34,765 of 37,875).

This means that nine out of ten of the additional beds required in CCLHD by 2021 will be for patients aged over 70 years. Growth in this age group is stronger for interventional (41.0%) than for medical (34.2%) admissions. A reconciliation of current and projected adult acute inpatient activity for Gosford and Wyong hospitals shows that, at 85% average bed occupancy, the current shortfall of 60 beds will grow to 167 beds by 2021/22.

Under the base case scenario, this represents a requirement for 117 more adult acute beds at Gosford Hospital and 50 more adult acute beds at Wyong Hospital by 2021. (For further details refer to Appendix C). It outlines current and projected adult acute inpatient activity against required beds under the base case scenario to be treated locally; the overall figures are only likely to increase.

Table 7: Projected Growth by age and admission type for CCLHD Hospitals (Base Case)

<table>
<thead>
<tr>
<th>CCLHD Facilities</th>
<th>Separations</th>
<th>Bed Days</th>
<th>Growth 08-09 to 21-22</th>
<th>Separations</th>
<th>Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;70 Medical</td>
<td>10,291</td>
<td>11,082</td>
<td>08-09 21-22</td>
<td>46,738</td>
<td>48,868</td>
</tr>
<tr>
<td>Interventional</td>
<td>8,426</td>
<td>9,345</td>
<td>08-09 21-22</td>
<td>24,581</td>
<td>25,434</td>
</tr>
<tr>
<td>Total</td>
<td>18,717</td>
<td>20,427</td>
<td>08-09 21-22</td>
<td>71,319</td>
<td>74,429</td>
</tr>
<tr>
<td>&gt;70 Medical</td>
<td>11,433</td>
<td>15,337</td>
<td>08-09 21-22</td>
<td>87,283</td>
<td>114,222</td>
</tr>
<tr>
<td>Interventional</td>
<td>5,396</td>
<td>7,610</td>
<td>08-09 21-22</td>
<td>27,914</td>
<td>35,741</td>
</tr>
<tr>
<td>Total</td>
<td>16,829</td>
<td>22,947</td>
<td>08-09 21-22</td>
<td>115,197</td>
<td>149,962</td>
</tr>
<tr>
<td>All Adult Medical</td>
<td>21,724</td>
<td>26,420</td>
<td>08-09 21-22</td>
<td>134,021</td>
<td>163,208</td>
</tr>
<tr>
<td>Interventional</td>
<td>13,822</td>
<td>16,954</td>
<td>08-09 21-22</td>
<td>52,495</td>
<td>61,183</td>
</tr>
<tr>
<td>Total</td>
<td>35,546</td>
<td>43,374</td>
<td>08-09 21-22</td>
<td>186,516</td>
<td>224,391</td>
</tr>
</tbody>
</table>

Table 8: Projected Growth by age and admission type for Gosford Hospital (Base Case)

<table>
<thead>
<tr>
<th>Gosford Hospital</th>
<th>Separations</th>
<th>Bed Days</th>
<th>Growth 08-09 to 21-22</th>
<th>Separations</th>
<th>Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;70 Medical</td>
<td>6,385</td>
<td>6,182</td>
<td>08-09 21-22</td>
<td>29,542</td>
<td>30,720</td>
</tr>
<tr>
<td>Interventional</td>
<td>5,921</td>
<td>6,436</td>
<td>08-09 21-22</td>
<td>19,271</td>
<td>20,090</td>
</tr>
<tr>
<td>Total</td>
<td>12,306</td>
<td>12,618</td>
<td>08-09 21-22</td>
<td>48,813</td>
<td>50,810</td>
</tr>
<tr>
<td>&gt;70 Medical</td>
<td>6,628</td>
<td>8,854</td>
<td>08-09 21-22</td>
<td>52,525</td>
<td>68,536</td>
</tr>
<tr>
<td>Interventional</td>
<td>3,682</td>
<td>5,197</td>
<td>08-09 21-22</td>
<td>23,161</td>
<td>29,259</td>
</tr>
<tr>
<td>Total</td>
<td>10,310</td>
<td>14,051</td>
<td>08-09 21-22</td>
<td>75,691</td>
<td>97,795</td>
</tr>
<tr>
<td>All Adult Medical</td>
<td>13,013</td>
<td>15,666</td>
<td>08-09 21-22</td>
<td>82,067</td>
<td>99,256</td>
</tr>
<tr>
<td>Interventional</td>
<td>9,603</td>
<td>11,634</td>
<td>08-09 21-22</td>
<td>42,437</td>
<td>49,349</td>
</tr>
<tr>
<td>Total</td>
<td>22,616</td>
<td>27,299</td>
<td>08-09 21-22</td>
<td>124,504</td>
<td>148,605</td>
</tr>
</tbody>
</table>

Table 9: Projected Growth by age and admission type for Wyong Hospital (Base Case)

<table>
<thead>
<tr>
<th>Wyong Hospital</th>
<th>Separations</th>
<th>Bed Days</th>
<th>Growth 08-09 to 21-22</th>
<th>Separations</th>
<th>Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;70 Medical</td>
<td>3,906</td>
<td>4,270</td>
<td>08-09 21-22</td>
<td>17,196</td>
<td>18,266</td>
</tr>
<tr>
<td>Interventional</td>
<td>2,505</td>
<td>2,908</td>
<td>08-09 21-22</td>
<td>5,310</td>
<td>5,353</td>
</tr>
<tr>
<td>Total</td>
<td>6,411</td>
<td>7,179</td>
<td>08-09 21-22</td>
<td>22,506</td>
<td>23,619</td>
</tr>
<tr>
<td>&gt;70 Medical</td>
<td>4,805</td>
<td>6,484</td>
<td>08-09 21-22</td>
<td>34,758</td>
<td>45,686</td>
</tr>
<tr>
<td>Interventional</td>
<td>1,714</td>
<td>2,413</td>
<td>08-09 21-22</td>
<td>4,748</td>
<td>6,482</td>
</tr>
<tr>
<td>Total</td>
<td>6,519</td>
<td>8,896</td>
<td>08-09 21-22</td>
<td>39,506</td>
<td>52,167</td>
</tr>
<tr>
<td>All Adult Medical</td>
<td>8,711</td>
<td>10,754</td>
<td>08-09 21-22</td>
<td>51,954</td>
<td>63,952</td>
</tr>
<tr>
<td>Interventional</td>
<td>4,219</td>
<td>5,321</td>
<td>08-09 21-22</td>
<td>10,058</td>
<td>11,834</td>
</tr>
<tr>
<td>Total</td>
<td>12,930</td>
<td>16,075</td>
<td>08-09 21-22</td>
<td>62,012</td>
<td>75,786</td>
</tr>
</tbody>
</table>
4.4.3 Intensive care demand projections

The usual methodology for estimating ICU/HDU requirements is to examine the current rate of utilisation by ESRG and apply to projected activity by ESRG.

This method is considered inadequate and misleading for the CCLHD, as it would entrench the current, under-resourced activity of the ICU at Gosford Hospital in particular, which is limited by funded and built capacity that results in surgery cancellations and access block to the ICU itself, leading to intensive nursing being undertaken in some other wards.

As an alternative, and given the projected 20% increase in admissions to 2021, a comparison of both Gosford and Wyong hospitals against peer hospitals was undertaken.

For Gosford Hospital, Hornsby, Wollongong and Blacktown hospitals were considered as appropriate comparators as these hospitals support a nearby hospital without an ICU and the complexity of services is similar. The average utilisation of these hospitals applied to Gosford Hospital’s 2021 projected activity indicates a requirement for 22.3 beds, assuming 75% occupancy.

An ICU/HDU of 24 built beds is proposed (configured as 3 by 8 beds or 2 by 12 beds) to support future growth and the increasing capability of Gosford Hospital specialties.

A similar approach applied to Wyong Hospital, with Fairfield and Maitland Hospitals serving as comparators, indicates a need for 8.9 beds. In relation to Wyong Hospital it is proposed that, to support an increase in capability to allow more complex work to be performed, a pod of 12 built beds for a combined ICU/HDU is required.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Seps</th>
<th>ICU Rate</th>
<th>HDU Rate</th>
<th>ICU Hours</th>
<th>HDU Hours</th>
<th>ICU Beds</th>
<th>HDU Beds</th>
<th>Total Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford</td>
<td>27,299</td>
<td>2.16</td>
<td>1.71</td>
<td>51,339</td>
<td>45,851</td>
<td>7.8</td>
<td>7.0</td>
<td>14.8</td>
</tr>
<tr>
<td>Hornsby</td>
<td>27,299</td>
<td>2.91</td>
<td>2.16</td>
<td>81,919</td>
<td>69,388</td>
<td>12.5</td>
<td>10.6</td>
<td>23.0</td>
</tr>
<tr>
<td>Nepean</td>
<td>27,299</td>
<td>3.28</td>
<td>1.86</td>
<td>74,507</td>
<td>46,913</td>
<td>11.3</td>
<td>7.1</td>
<td>18.5</td>
</tr>
<tr>
<td>Sutherland</td>
<td>27,299</td>
<td>2.97</td>
<td>4.25</td>
<td>81,326</td>
<td>124,683</td>
<td>12.4</td>
<td>19.0</td>
<td>31.4</td>
</tr>
<tr>
<td>Wollongong</td>
<td>27,299</td>
<td>3.35</td>
<td>2.58</td>
<td>61,510</td>
<td>59,872</td>
<td>9.4</td>
<td>9.1</td>
<td>18.5</td>
</tr>
<tr>
<td>Bankstown</td>
<td>27,299</td>
<td>2.46</td>
<td>2.07</td>
<td>73,221</td>
<td>60,278</td>
<td>11.1</td>
<td>9.2</td>
<td>20.3</td>
</tr>
<tr>
<td>Blacktown</td>
<td>27,299</td>
<td>4.76</td>
<td>2.95</td>
<td>98,699</td>
<td>68,255</td>
<td>15.0</td>
<td>10.4</td>
<td>25.4</td>
</tr>
<tr>
<td>Campbelltown</td>
<td>27,299</td>
<td>1.28</td>
<td>3.44</td>
<td>59,151</td>
<td>141,377</td>
<td>9.0</td>
<td>21.5</td>
<td>30.5</td>
</tr>
<tr>
<td>Suggested</td>
<td>27,299</td>
<td>-</td>
<td>-</td>
<td>80,709</td>
<td>65,838</td>
<td>12.3</td>
<td>10.0</td>
<td>22.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Seps</th>
<th>ICU Rate</th>
<th>HDU Rate</th>
<th>ICU Hours</th>
<th>HDU Hours</th>
<th>ICU Beds</th>
<th>HDU Beds</th>
<th>Total Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wyong</td>
<td>16,075</td>
<td>-</td>
<td>2.17</td>
<td>-</td>
<td>34,188</td>
<td>-</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Canterbury</td>
<td>16,075</td>
<td>-</td>
<td>9.77</td>
<td>-</td>
<td>193,824</td>
<td>-</td>
<td>29.5</td>
<td>29.5</td>
</tr>
<tr>
<td>Fairfield</td>
<td>16,075</td>
<td>-</td>
<td>2.98</td>
<td>-</td>
<td>55,582</td>
<td>-</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Maitland</td>
<td>16,075</td>
<td>-</td>
<td>3.77</td>
<td>-</td>
<td>61,261</td>
<td>-</td>
<td>9.3</td>
<td>9.3</td>
</tr>
<tr>
<td>Suggested</td>
<td>16,075</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>58,422</td>
<td>-</td>
<td>8.9</td>
<td>8.9</td>
</tr>
</tbody>
</table>

NB. The total projected bed base remains unchanged as ICU/HDU beds are already included.

4.4.4 Summary Adult Acute bed requirements

Table 12 outlines the projected changes to adult acute bed requirements at Gosford and Wyong Hospitals.

- The base case scenario for 2021/22 indicates a requirement for 479 beds at Gosford Hospital (117 more than the current number) and 244 beds at Wyong Hospital (50 more than current)
- Internal redistribution of patients between the Gosford and Wyong Hospitals could result in a transfer of approximately 46 beds between the two facilities
- Future reversal of public outflows could require an additional 21 beds at Gosford Hospital.
The net result under these assumptions would be a requirement for 454 beds at Gosford (an increase of 92 over current numbers) and 290 beds at Wyong Hospital (an increase of 96 beds over current numbers).

Table 12: Summary of scenarios and estimated activity and adult acute bed requirements

<table>
<thead>
<tr>
<th>Gosford Hospital 2008-09</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>13,013</td>
<td>82,067</td>
<td></td>
</tr>
<tr>
<td>Interventional</td>
<td>9,603</td>
<td>42,437</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22,616</td>
<td>124,504</td>
<td>401</td>
</tr>
</tbody>
</table>

(actual built bed capacity 362 beds)

<table>
<thead>
<tr>
<th>Wyong Hospital 2008-09</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>8,711</td>
<td>51,954</td>
<td></td>
</tr>
<tr>
<td>Interventional</td>
<td>4,219</td>
<td>10,058</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12,930</td>
<td>62,012</td>
<td>200</td>
</tr>
</tbody>
</table>

(actual built bed capacity 194 beds)

<table>
<thead>
<tr>
<th>Gosford Hospital Base Case 2021-22</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>15,666</td>
<td>99,256</td>
<td>320</td>
</tr>
<tr>
<td>Interventional</td>
<td>11,634</td>
<td>49,349</td>
<td>159</td>
</tr>
<tr>
<td>Total</td>
<td>27,300</td>
<td>148,605</td>
<td>479</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wyong Hospital Base Case 2021-22</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>10,754</td>
<td>53,952</td>
<td>206</td>
</tr>
<tr>
<td>Interventional</td>
<td>5,321</td>
<td>11,834</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>16,075</td>
<td>65,786</td>
<td>244</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gosford Hospital Redistribution of Internal Flows</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>(1,404)</td>
<td>(10,599)</td>
<td>34</td>
</tr>
<tr>
<td>Interventional</td>
<td>(1,390)</td>
<td>(3,638)</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>(2,794)</td>
<td>(14,237)</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wyong Hospital Redistribution of Internal Flows</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>1,404</td>
<td>10,599</td>
<td>34</td>
</tr>
<tr>
<td>Interventional</td>
<td>1,390</td>
<td>3,638</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>2,794</td>
<td>14,237</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gosford Hospital Reversal of Outflows (25%)</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>563</td>
<td>2,286</td>
<td>7</td>
</tr>
<tr>
<td>Interventional</td>
<td>804</td>
<td>4,308</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>1,367</td>
<td>6,594</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wyong Hospital Outcome</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>14,825</td>
<td>90,943</td>
<td>293</td>
</tr>
<tr>
<td>Interventional</td>
<td>11,048</td>
<td>50,019</td>
<td>161</td>
</tr>
<tr>
<td>Total</td>
<td>25,873</td>
<td>140,962</td>
<td>454</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wyong Hospital Outcome</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>12,158</td>
<td>74,551</td>
<td>240</td>
</tr>
<tr>
<td>Interventional</td>
<td>6,711</td>
<td>15,472</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>18,869</td>
<td>90,023</td>
<td>290</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gosford Hospital Base Case 2021-22</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>1,182</td>
<td>8,876</td>
<td>293</td>
</tr>
<tr>
<td>Interventional</td>
<td>1,445</td>
<td>7,582</td>
<td>161</td>
</tr>
<tr>
<td>Total</td>
<td>3,257</td>
<td>16,458</td>
<td>454</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wyong Hospital Base Case 2021-22</th>
<th>Seps</th>
<th>Bed Days</th>
<th>Beds*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>1,404</td>
<td>10,599</td>
<td>34</td>
</tr>
<tr>
<td>Interventional</td>
<td>1,309</td>
<td>3,638</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>2,794</td>
<td>14,237</td>
<td>46</td>
</tr>
</tbody>
</table>

* Note beds referred to estimated bed requirements at 85% occupancy

4.4.5 Operating Theatres

Operating Theatre requirements were estimated based on activity estimates derived from the NSW Health Acute Activity projection tool (aIM2010) and additional activity not captured in the aIM2010 tool including ECT, non-admitted patients, and patients admitted under medical ESRGs. Activity that was considered more appropriate to be delivered in a procedure room rather than an operating theatre was estimated separately. These mainly relate to endoscopy procedures.

The results, shown in the table below, compare current capacity with estimated capacity required (using ideal operating parameters) for activity delivered in the years 2008/09 and 2010/11 as well as for 2016/17 and 2021/22. The final row shows the recommended number of operating rooms required to support a redistribution of surgical activity to Wyong Hospital by 2021/22.
### Table 13: Current and Projected Estimated Operating Rooms

<table>
<thead>
<tr>
<th>Operating Rooms</th>
<th>Gosford Hospital</th>
<th>Wyong Hospital</th>
<th>CC LHD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OT</td>
<td>PR</td>
<td>OT</td>
</tr>
<tr>
<td>Current</td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2008/09</td>
<td>10.5</td>
<td>0.9</td>
<td>2.4</td>
</tr>
<tr>
<td>2010/11</td>
<td>11.0</td>
<td>1.0</td>
<td>2.9</td>
</tr>
<tr>
<td>2016/17</td>
<td>11.7</td>
<td>1.0</td>
<td>2.7</td>
</tr>
<tr>
<td>2021/22</td>
<td>12.7</td>
<td>1.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Recommended</td>
<td>10.0</td>
<td>2.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

*Built capacity at Wyong Hospital is 4 Operating Theatres but one is uncommissioned
OT = Operating Theatres  PR = Procedure Rooms

It can be seen that the required operating theatre numbers for Gosford Hospital in 2008/09 and 2010/11 exceeded the actual built requirements and for Wyong Hospital in 2010/11 came close to current available capacity.

The implications for Gosford Hospital is that the current level activity can only be delivered by operating outside of ideal parameters such as unsustainably high levels of utilisation, and increased operating out of hours and on weekends. While this pressure could be alleviated somewhat if some activity could be transferred to Wyong Hospital by opening the fourth operating theatre, currently uncommissioned, Central Coast LHD is still short on ideal theatre capacity to meet current activity.

Estimated requirements for 2021/22 are approximately 16 operating theatres and 4 procedure/endoscopy rooms, totalling 20 operating rooms. This represents an increase of 4 operating rooms over current built capacity. In order to support the proposed surgical redistribution between Gosford and Wyong hospitals it is proposed that two additional theatres be constructed at each facility.

A final caveat needs to be made regarding the projected level of activity used to support the estimate of operating room requirements. The aIM2010 tool projects activity from a base year of 2008/09. Between 2008/09 and 2010/11 Central Coast LHD experienced a strong growth surge in surgical activity, partly supported by increased funding to meet elective surgery performance targets. This level of growth far exceeds the projected annualised growth estimate from the aIM2010 tool.

While it may seem unlikely to occur, if the growth seen over the past three years were to continue to 2021/22 there would be a need for an additional 4 operating theatres over the current estimated theatre requirements (i.e. 24 operating rooms). It is recommended that this issue be monitored over time to determine whether a further review of operating theatre requirements is required. A revision of aIM2010 has been undertaken, aIM2012 when released will include 2010/11 as the base year.
5 Emergency Medicine

Gosford and Wyong Emergency Departments (ED) are among the busiest in NSW with Gosford ED receiving 55,420 and Wyong ED 54,070 presentations in 2010/11. The number of presentations at each of the EDs has increased significantly over the past 5 years with the effect that both EDs struggle to accommodate demand within their current built capacity.

Gosford Hospital has a Level 5 ED with 33 treatment spaces. As a designated regional trauma service it is required to manage major trauma patients, some of which will require transfer for tertiary and specialist care after initial assessment and resuscitation at Gosford Hospital.

Wyong Hospital has a Level 3 ED with 28 treatment spaces. An 8-chair Urgent Care Centre (UCC) and a 13-bed Emergency Department Short Stay Unit (ED SSU) also known as Emergency Medicine Unit (EMU) are currently in the planning phase for Wyong Hospital. When complete the addition of the UCC chairs will increase the number of treatment spaces to 36.

As the role of Wyong Hospital changes over the next ten years the role delineation of the ED will also increase to Level 4.

The patient profile differs between Gosford and Wyong EDs reflecting not only difference in the role delineation of each service but also differences in availability of GPs and primary health care services across each of the LGAs as alternatives to accessing these services through an ED.

Table 14: Role Delineation and Capacity per ED February 2012

<table>
<thead>
<tr>
<th>Role Delineation</th>
<th>Gosford</th>
<th>Wyong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation Spaces</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Adult Spaces</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Paediatric Spaces</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Other Spaces/Areas</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Total Spaces</td>
<td>33</td>
<td>28*</td>
</tr>
<tr>
<td>PECC</td>
<td>-</td>
<td>4</td>
</tr>
</tbody>
</table>

*Note: 8 Chair UCC and 13 Bed EMU currently in planning at Wyong Hospital

Introduction of the National Emergency Access Targets (NEAT) in January 2012 emphasise the importance of having well-functioning and adequately resourced EDs to facilitate timely access for patients (particularly those presenting by ambulance) and improve patient assessment and treatment processes and ultimately improved patient throughput.

Table 15: ED Presentations and Admissions 2006/07 – 2010/11

<table>
<thead>
<tr>
<th></th>
<th>2006/07</th>
<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
<th>Change 2006/07 to 2010/11</th>
<th>% Change 2006/07 to 2010/11</th>
<th>Growth Per Annum (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gosford</td>
<td>48,584</td>
<td>49,915</td>
<td>50,706</td>
<td>54,600</td>
<td>55,420</td>
<td>6,836</td>
<td>14.1%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Wyong</td>
<td>45,292</td>
<td>48,684</td>
<td>51,169</td>
<td>53,473</td>
<td>54,070</td>
<td>8,778</td>
<td>19.4%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Admissions* (% admissions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gosford</td>
<td>15,484 (31.9%)</td>
<td>15,150 (30.4%)</td>
<td>14,630 (28.9%)</td>
<td>14,810 (27.1%)</td>
<td>16,066 (29%)</td>
<td>582</td>
<td>3.8%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Wyong</td>
<td>8,033 (17.7%)</td>
<td>8,280 (17%)</td>
<td>8,218 (16.1%)</td>
<td>8,749 (16.4%)</td>
<td>9,141 (16.9%)</td>
<td>1,108</td>
<td>13.8%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

*Excludes: Died in ED; Admitted and Discharged from ED; Transferred to another hospital; Dead on arrival

Using linear projections indicates a significant increase in ED activity for both Gosford & Wyong EDs to 2022. It should be noted that ED activity is difficult to project given the range of variables such as availability and accessibility of GPs as well as the impact of alternative models of care on ED presentation numbers which could result in either an under or over estimation of activity.
Both Gosford and Wyong EDs will require significant expansion and redesign to enable them to address current demand and projected growth in presentations and to facilitate implementation of the ED models of care as recommended by the NSW Ministry of Health.

Table 16: ED Activity and projected presentations to 2022

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford</td>
<td>55,420</td>
<td>66,467</td>
<td>75,606</td>
<td>20,204</td>
</tr>
<tr>
<td>Wyong</td>
<td>54,070</td>
<td>69,626</td>
<td>81,631</td>
<td>27,586</td>
</tr>
</tbody>
</table>

Table 17: ED Treatment Space Requirements

<table>
<thead>
<tr>
<th>NSW Health Guidelines</th>
<th>Current</th>
<th>Based on 2010/11 Activity</th>
<th>Projected to 2017 (estimated)</th>
<th>Projected to 2022 (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gosford</td>
<td>Wyong</td>
<td>Gosford</td>
<td>Wyong</td>
</tr>
<tr>
<td>Presentations</td>
<td>55,420</td>
<td>54,070</td>
<td>66,467</td>
<td>69,626</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>75,606</td>
<td>81,632</td>
</tr>
<tr>
<td>Resuscitation spaces</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(1:15,000 presentations)</td>
<td></td>
<td></td>
<td>4 (estimated)</td>
<td>4</td>
</tr>
<tr>
<td>Adult Treatment Spaces</td>
<td>16</td>
<td>16</td>
<td>30 (estimated)</td>
<td>29 (estimated)</td>
</tr>
<tr>
<td>1:1,460 presentations</td>
<td></td>
<td></td>
<td>1,400 admissions</td>
<td></td>
</tr>
<tr>
<td>1:400 admissions</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>(1:1,460 presentations)</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other – Consultation rooms</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fast Track</td>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total ED Treatment Spaces</td>
<td>33</td>
<td>28*</td>
<td>38 (estimated)</td>
<td>37 (estimated)</td>
</tr>
<tr>
<td>UCC (no. chairs)</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ED SSU (estimation)</td>
<td>-</td>
<td>-</td>
<td>16 (estimated)</td>
<td>9 (estimated)</td>
</tr>
<tr>
<td>MAU</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: NSW Health, SSDB, Activity Planning Guideline for Emergency Department Services, November 2006

Note: The configuration of treatment spaces (excluding resuscitation spaces) required in 2017 & 2022 cannot be determined at this point; however it is anticipated that the treatment spaces will include a mix of acute, sub-acute, paediatric, and fast track/UCC.

* 8 UCC Chairs currently in planning are not included

5.1 Gosford Hospital ED

The following issues highlight that the ED will require significant capital investment and expansion as a matter of urgency:

- ED presentations have increased 14% since 2006/07 (an additional 6,836 presentations per annum)
- The ED was commissioned in 2006 – although the unit is relatively new the activity and presentations (55,420 in 2010/11) have already exceeded the activity originally projected to 2016 (51,540)
- The ED is overcrowded and struggles to function effectively – based on 2010/11 activity using the NSW Health planning guidelines of 1 treatment space per 1,460 presentation (or 400 admissions) the ED currently requires 38 treatment spaces (including an additional resuscitation room)
- Projecting ED activity is difficult given the number of supply factors other than population growth – however, based on trended activity over 5 and 10 years using linear projection, ED activity at Gosford Hospital is estimated to rise to about 66,467 presentations by 2017 and 75,606 by 2022 – this will require an additional 19 treatment spaces including 2 additional resuscitation spaces
- Patient throughput has also been adversely affected by access difficulties to inpatient beds, some of which may be alleviated by implementation of an ED SSU and a PECC and improved utilisation of MAU.

Since the design and construction of the current ED a number of new models of care and practice changes have been promoted by the NSW Ministry of Health. These include Quick Triage and patient streaming, an early treatment zone, Fast Track/ Urgent Care Centre for management of low acuity low complexity patients, Psychiatric Emergency Care Centres (PECC), and ED Short Stay Units (ED SSU) also known as Emergency Medicine Units (EMU) for short stay ED patients with length of stay up to 24
hours. Changes in policy for management of paediatric patients now also require that access to paediatric areas be controlled and monitored to reduce unauthorised access. Facility, funding and staffing constraints have prevented the full and effective adoption of these service models.

Significant expansion of the ED is required to accommodate additional treatment space requirements and allow adequate space for future expansion in response to increases in demand. This will necessitate redesign and modification to accommodate the following models of care and other requirements:

- Modified triage and waiting room (including a separate paediatric waiting area) to accommodate Quick Triage and patient registration and a patient streaming zone
- Creation of an early treatment zone in proximity to triage, the acute treatment areas and the waiting room
- Urgent Care Centre / Fast Track area
- Secure paediatric treatment area
- PECC – 6 beds
- ED SSU – 16 beds
- Appropriate parking and waiting space for patients and relatives.

The sexual assault service for the Central Coast is located at Gosford Hospital, as part of this service a forensic medicine area is required for victim assessment. Consideration should be given to locating this in proximity to the ED.

5.2 Wyong Hospital ED

The following issues highlight that the ED will require further capital investment and expansion in the short to medium term, prior to 2016/17:

- ED presentations have increased 19.4% since 2006/07 (an additional 8,778 presentations per annum)
- The ED is overcrowded and struggles to function effectively – based on 2010/11 activity using the NSW Health planning guidelines of 1 treatment space per 1,460 presentation (or 400 admissions) the ED requires 37 treatment spaces. The ED currently has 28 treatment spaces (3 resuscitation rooms, 16 adult treatment spaces, 5 paediatric spaces and 4 house doctor consultation rooms). This will increase to 36 on completion of the UCC in 2012/13
- Based on trended activity over 5 years using a linear projection, ED activity at Wyong Hospital is estimated to rise to about 69,626 presentations by 2017 and 81,631 by 2022 – this will require an additional 20 treatment spaces including at least one additional resuscitation space
- Patient throughput has been adversely affected by insufficient inpatient beds; this will be alleviated to an extent by provision of additional beds to accommodate an ED SSU and improved utilisation of the PECC and MAU.

Wyong ED will require further expansion to accommodate additional acute treatment spaces and allow adequate space for future expansion in response to increases in demand. This will necessitate redesign and modification to accommodate the following models of care:

- Modified triage and waiting room area to allow for Quick Triage and patient registration and patient streaming
- Creation of an early treatment zone in proximity to triage, the acute treatment areas and also the waiting room
- Appropriate parking and waiting space for patients and relatives.
## 5.3 Strategic Directions

### Emergency Medicine

**Adequate physical capacity to accommodate current and projected levels of activity and changing models of care**

36. In the short term - Redesign and expand Gosford ED to accommodate an additional 5 treatment spaces (including additional resuscitation room and paediatric bed), 16 bed ED SSU, 6 bed PECC and additional office space, to manage current demand, improve functionality and accommodate quick triage, patient streaming, early treatment zone, Fast Track/Urgent Care Centre, and a secure paediatric area. (Parking and waiting room space for patients and relatives will also need to be considered.)

37. In the short term - Redesign and expand Wyong ED to improve functionality and to accommodate quick triage; patient streaming; early treatment zone; and appropriate office space to accommodate staff and teams providing services in ED. Appropriate parking and waiting space for patients and relatives is required.

38. Medium to Longer term requirement - Expand Gosford ED to accommodate an additional 14 treatment spaces and expand Wyong ED to accommodate an additional 20 treatment spaces by 2022.

### Improved processes for movement of patients out of the ED

39. Identify medically stable complex patient cohorts that would benefit from direct referral and management in MAU following initial triage in ED.

40. Identify patient cohorts suitable for referral to Rapid Review or regular sub-specialty review clinics from ED, as an alternative to inpatient management.

41. Implement a direct admission process for inter-hospital transfers and location for transfers for sub-specialty review not requiring management in an ED.

42. In collaboration with AS&ICU, ASACC and site management at Gosford and Wyong hospitals improve transfer and discharge processes to inpatient wards, transfers to other hospital(s) and discharge; improved availability, hours of operation and access to patient transport for appropriate patients; utilisation of a hospital based transfer team; extended hours of availability for transit lounge; review of nurse escort policy for internal transfers.

### ED Workforce and staffing strategies

43. Identify additional ED positions required to bring staff levels up to equivalent peer hospitals, prioritise positions and develop a recruitment strategy.

44. Review current and alternative staffing models and roles to support senior medical staff and maximise their role and function in the ED including additional senior nursing and allied health roles, use of technical assistants, and clerical and other support staff.

45. Develop a training and education strategy addressing development of ACEM Diploma and Certificate course at Wyong ED, networking of registrar training across both sites, redevelopment of RN Advanced Practice role, and development of an LHD simulation centre.
6 Anaesthetics, Surgery and ICU

6.1 Service Scope
The Division of Anaesthetics, Surgery and ICU (AS&ICU) encompasses:
- Anaesthetics and Pain Management
- Critical Care, including Intensive Care (ICU), High Dependency (HDU) and Retrieval services
- Sub-specialty services including:
  - Orthopaedics
  - Vascular surgery
  - Ophthalmology
  - General surgery
  - Urology
  - ENT/Otolaryngology and Head and Neck surgery
  - Maxillofacial surgery
  - Plastic and reconstructive surgery
  - Paediatric surgery
  - Gynaecology and breast surgery.
- Endoscopy services, while supported by AS&ICU, are managed through the Division of Medicine.

6.2 Current services, resources and organisation
AS&ICU services are provided at both Gosford and Wyong hospitals although the complexity, scope and role delineation differs between the sites.

Gosford Hospital is a principal referral hospital and regional trauma service providing a comprehensive range of secondary level services and an increasing range of tertiary services. Wyong Hospital is an acute major metropolitan hospital providing a range of secondary level services including general surgery and some sub-specialty services.

Gosford Hospital has:
- Eight operating theatres and two endoscopy/procedure rooms
- A Surgical Admissions Centre (GSAC) accommodating surgical patients in 29 beds (due to the design of the GSAC there are limitations on the type of patient and planned length of stay that can be accommodated in the unit; for example the unit can accommodate either 20 inpatient short stay and 9 day surgery patients or 24 inpatient overnight and 5 day surgery patients)
- Three surgical wards accommodating inpatient services in 92 beds
- A combined level 5 ICU/HDU with 14 funded beds within a built capacity of 16 beds; the mix of ICU/HDU varies according to clinical demand.

Wyong Hospital has:
- Four built operating theatres, three of which are operational, and two endoscopy/procedure rooms
- A Day Only Unit accommodating day surgery patients in 10 beds
- Two surgical wards accommodating inpatients in 63 beds
- A six bed, level 3 HDU with built capacity of eight beds.
6.3 Issues, challenges and opportunities

Growth in surgical demand
- CCLHD has experienced very substantial growth in surgical demand over the last six years. There has been a 8.2% increase in elective surgery since 2005/06 and a 30.7% increase in unplanned surgery since 2005/06.
- There has also been a 7.1% increase in endoscopy activity since 2005/06 on top of unmet capacity of 100 patients per month, plus demand for specialist ERCP of about 10/month currently being undertaken at Gosford Hospital during emergency theatre time rather than elective time.

Operating theatre capacity to manage current and future workload
- Cancellation of elective surgery can occur at short notice due to competing demands of emergency surgical patients, particularly orthopaedic trauma, admitted from the Emergency Department or transferred from Wyong Hospital.
- Current activity levels at Gosford Hospital can only be delivered by operating outside of ideal parameters such as unsustainably high levels of utilisation, and increased operating out of hours and on weekends. While this pressure could be alleviated somewhat if some activity could be transferred to Wyong Hospital by opening the fourth operating theatre which is currently uncommissioned Central Coast LHD is still short on ideal theatre capacity to meet current activity.

Surgical ward capacity
- The high demand for medical beds at both Gosford and Wyong hospitals results in surgical beds being used to accommodate non-surgical patients who have been admitted via the Emergency Department. This in turn reduces the capacity of surgical services to manage its workload with any degree of predictability.
- Cancellation or deferral of elective surgical cases can occur at short notice particularly when there are high numbers of medical patients occupying surgical beds; this issue is more problematic at Gosford Hospital where more surgical services are currently provided.
- Wards and other surgical spaces are poorly designed and configured and cannot always accommodate the increasing number of bariatric patients.

Distribution of surgical services
- Surgical services are concentrated at Gosford Hospital while a large part of the population demand is concentrated in Wyong LGA. This issue will be further compounded with the anticipated population growth, particularly in Wyong North-East SLA.
- There are a high number of transfers from Wyong to Gosford Hospital for emergency surgical management of orthopaedic trauma and general surgery. The high number of transfers results in surgical delays, longer lengths of stay and inconvenience for patients and families, particularly for ortho-geriatric patients.
- The concentration of services at Gosford Hospital reflects the historical roles of the two hospitals and it is recognised that Wyong Hospital needs to develop its services to manage most of the secondary demand for the local population.

Critical Care support
- There is significant pressure on the 13 funded ICU beds at Gosford Hospital to ensure that the Unit can fulfil its role as part of the state wide critical care services network and meet local elective surgical demand.
- Cancellation of elective surgery due to the unavailability of an ICU/HDU bed is not uncommon. Scheduling of theatre lists for complex cases likely to require ICU admission have been altered to avoid times when beds are less likely to be available. Greater certainty is required when scheduling elective surgery patients who may require critical care support.
- The development of the HDU at Wyong Hospital has reduced some pressure on demand on Gosford since more patients can be safely managed at Wyong. To further reduce pressure on Gosford ICU...
the Wyong HDU needs to increase its capabilities and associated resources (particularly medical and nursing staff and clinical support services) to manage selected ICU patients.

National Elective Surgical Targets (NEST)

- In 2011 a national partnership agreement was signed by NSW Health and the Federal Government to improve access for elective surgical patients. Additional monies will be available to assist LHDs in meeting the targets. NEST will require that 100% of elective surgical cases are completed within their clinical urgency category by 2015. This target will be incrementally achieved over a four-year period.
- The LHD is working with the AS&ICU Division to focus on the immediate impact of the targets and strategies that can be implemented over the next two years. The health services planning process considers models of care and resources required and confirms the strategic response to the NEST targets.

Contemporary models of care for emergency and elective surgery

The Division of AS&ICU is actively redesigning emergency surgical services to reflect the contemporary organisation and models of care described in the NSW Health Emergency Surgery Guidelines. Key focus areas are:

- Allocating sufficient emergency surgery sessions within standard working hours to reduce or avoid the need to provide surgery during night time hours
- Moving selected elective surgical procedures to Wyong Hospital to free up theatre capacity at Gosford Hospital
- Reducing the need to transfer selected emergency patients from Wyong to Gosford Hospital, and realigning processes for when transfer is the most appropriate clinical course
- Identifying dedicated beds to manage emergency surgery presentations both before and after their procedure.
- The Division is also redesigning elective surgical services to further improve the management of frequently performed procedures with predictable lengths of stay and standard care protocols for short stay patients.
- The models of care described in the NSW Health Surgical Futures Plan for Greater Sydney and the High Volume Short Stay Surgical Model Toolkit will provide Central Coast patients greater predictability of surgery with no interruptions from emergency surgery; this will contribute to CCLHD achieving its NEAT and NEST targets.

Other issues

- Management of complex patients who require multidisciplinary support, particularly older orthopaedic trauma patients
- Increasing demand for chronic pain services integrated across the acute inpatient and the non-acute outpatient and community settings
- Development of new technologies and services including Interventional Radiology
- Development of services for low volume complex surgery (e.g. thoracic surgery)
- Workforce availability, particularly to support the enhancement of surgical services at Wyong Hospital.

6.3.1 Models of Care

Because of current capacity limits at Gosford Hospital, and the anticipated population growth and associated increased demand in Wyong North-East SLA, maintenance of the status quo with complex work at Gosford Hospital and limited emergency/elective work at Wyong Hospital is not an option, either in the short or long term. Maintenance of current models of care/service delivery models will also limit the capacity of Gosford Hospital to develop its role as a tertiary hospital.
The Division of AS&ICU is progressively changing the organisation and models of care to improve the delivery of comprehensive emergency and elective surgical services. In 2011/12 the Integrated Booking Unit (IBU) was reconfigured to:

- Coordinate all day only, extended day only, and other planned admissions
- Administration of pre-operative questionnaire and triage of patients requiring attendance at pre-admission clinic for pre-operative assessment/preparation
- Pre-admission clinic with multidisciplinary team (geriatrics, rehabilitation) and allied health input, with particular emphasis on elderly patients in relation to discharge needs and management of potential delirium.

In many other instances the models have only been partially implemented due to physical resource and space constraints. Other models of care that will be fully implemented to support the provision of surgical services across both Gosford and Wyong hospitals over the next decade to 2021/22 include:

High Volume Short Stay (HVSS) Surgical Centre
- The High Volume Short Stay (HVSS) model will encompass patients who require day only, extended day only and other planned procedures requiring a stay of no more than 72 hours; this model separates routine/predictable and complex inpatient workload
- Both Gosford and Wyong hospitals will need to provide this model in the short term to make best use of the available infrastructure; in the long term consideration will be given to developing a single HVSS centre for the CCLHD.

Surgical Acute Rapid Assessment (SARA)/Acute Surgical Unit (ASU)
- Based at both Gosford and Wyong hospitals, SARA/ASU units will accept surgical referrals from ED, directly from specialist rooms or inter-hospital transfers. It will play a key role in meeting the NEAT/NEST targets. Length of stay will typically be less than 24 hours
- SARA/ASU will facilitate the surgical assessment for hitherto undifferentiated surgical patients or where their presenting condition is evolving/yet to declare, along with the pre-operative workup of patients who would benefit from early surgery such as trauma orthopaedic patients
- Post-operative care will be provided only to those patients expected to be discharged home within a few hours of surgery. Patients will be transferred directly from operating theatres to the Acute Surgical Unit or inpatient ward depending on their anticipated length of stay
- The Acute Surgical Unit will manage emergency and semi-urgent surgery and high volume short stay cases for predictable surgery requiring length of stay of <72 hours.

Inpatient surgical wards
- Inpatient wards focus on complex caseloads or where length of stay is >72 hours.

6.3.2 Service Development Principles

The proposed development of surgical and related services and the capital build/expansion at Gosford and Wyong hospitals acknowledges that:

- Complex and high-end specialist surgery will be concentrated at Gosford Hospital with full ICU support (e.g. open aortic and complex endovascular, major head and neck, and major gastrointestinal surgery)
- Sub-specialty services more commonly provided on planned/day only basis at other locations will need to maintain capabilities, equipment and services at Gosford Hospital to support it in its role as a regional trauma centre
- Broad range of emergency and elective surgery will be provided at Wyong Hospital to meet most non-tertiary emergency and elective surgical demand for the population of Wyong LGA. A gradual expansion of services will be planned to match the growth in surgeons willing and available to work at Wyong Hospital.
A parallel development and expansion of other clinical and clinical support services both in- and after-hours is required at Wyong Hospital including:

- Development of commensurate medical services (general and subspecialist) to manage comorbidities
- Development of Wyong HDU to NSW Health role delineation level 4 ICU with an appropriate staffing profile
- Access to medical imaging equipment, radiographers and radiology review/reporting (including MRI) and after hours services
- Access to pathology and blood bank/transfusion services 24/7
- Access to other clinical support services such as Pharmacy
- Medical staffing model that addresses specialist on-call arrangements and after hours on-site registrar/SRMO/RMO cover
- Nurse staffing model that addresses adequate nursing support/expertise across shifts
- Allied Health staffing models that support early identification and management of acute health needs that influence recovery and discharge
- Enhanced community health services (nursing and allied health) to support ongoing recovery at home following (early) discharge.

### 6.4 Strategic Directions

**Anaesthetics, Surgery and ICU**

**Release additional surgical capacity at Gosford Hospital**

46. Identify high volume short stay services that can be transferred to Wyong Hospital e.g. ophthalmology, minor gynaecology, urology and endoscopy.

47. Identify moderate complexity patients who are currently transferred from Wyong to Gosford Hospital for care e.g. #NoF and some gastrointestinal surgery with a view to developing these services at Wyong hospital in the future.

**Improve utilisation of available resources at Wyong Hospital to accommodate increased volume and complexity of surgical services**

48. Commission 4th operating theatre and procedure rooms and additional recovery beds.

49. Identify additional HDU capacity requirements (see ICU/HDU section for further details).

50. Identify gaps in current clinical support services and confirm requirements for the safe, effective and efficient management of increased HVSS and more complex caseloads (Pathology, Imaging, Telehealth).

51. Identify gaps in current workforce and confirm achievable and sustainable staffing models particularly for afterhours on-site junior medical and registrar cover and general and specialist on-call rostering arrangements.

**Reconfigure patient accommodation resources to separate emergency and planned surgical activity at both Gosford and Wyong hospitals to improve safety of care while achieving NEAT/NEST indicators:**

52. Streamline planned pre-admission processes in the Integrated Booking Unit including pre-operative assessment and preparation, particularly for elderly patients who require complex pre-operative care.

53. Establish a separate HVSS unit to stream day only, extended day only and other short stay planned surgical patients.

54. Establish SARA/ASU for the assessment and management of acute surgical patients referred from
ED or specialist rooms (length of stay will typically be less than 72 hours).

55 Configure inpatient wards to accommodate patients in “home specialty” whenever possible.

56 Reconfigure surgical accommodation to better meet the needs of an increasing number of bariatric patients.

Reconfigure operating theatre schedule to provide sufficient emergency operating sessions and provide greater certainty for elective surgical services

57 Schedule additional lists to accommodate increased emergency surgical activity at Wyong Hospital.

58 Schedule additional lists to accommodate increased elective, HVSS activity at Wyong Hospital.

59 Review and reconfigure Gosford Hospital operating schedule in light of capacity released to reduce frequency of service delivery outside ideal parameters (i.e. after hours and weekends).

60 Expand operating theatre capacity to provide 10 Operating theatres (one hybrid for endovascular procedures) and 2 Procedure Rooms at Gosford Hospital and 6 operating theatres and 2 procedures rooms at Wyong Hospital. Increase recovery beds at each site to support emergency and elective workload and models of care.

Improve efficiency and effectiveness of acute inpatient services to minimise length of stay of patients with complex post-operative recovery needs

61 Identify patient cohorts where additional allied health support could achieve measurable change in length of stay in acute hospital setting and improve patient outcomes (physiotherapy, occupational therapy, social work, nutrition).

62 Identify patient cohorts where in-reach rehabilitation services could achieve measurable change in length of stay in acute hospital setting and improve patient outcomes.

63 Identify patient cohorts that no longer need acute post-operative care but who are unsuitable for discharge home and/or would benefit from transfer to inpatient sub-acute care at Long Jetty or Woy Woy for re-conditioning or rehabilitation (very elderly orthopaedic or gastrointestinal surgical patients).

64 Identify patient cohorts that could complete their post-operative care and recovery at home with appropriate support from Community Nursing or APAC Services.

Explore alternatives to surgical service provision on-site at Gosford and Wyong hospitals to manage a scenario where demand exceeds available capacity prior to major capital redevelopment

65 Identify suitable patient cohorts for service provision under contract with local private hospital provider and key principles to be incorporated in such contract.

66 Identify specific services that could be provided at a stand-alone day surgery centre located at a central point for Central Coast e.g. Tuggerah.

6.5 Anaesthetics and Pain Management

The Anaesthetic Department provides a flexible and responsive service which supports a number of other specialties including maternity and paediatric services. Gosford Hospital offers level 5 anaesthetic services with 24-hour on-site registrar but no sub-specialties; Wyong Hospital offers level 3 services for good to moderate risk patients as required.

Services encompass pre-operative assessment and post-operative pain management as well as general anaesthetic services in the operating theatre. There has been a significant growth in anaesthetic services outside the operating theatre suite supporting interventional radiology, medical imaging, cardioversions and endoscopy services.
There is also an increasing demand for anaesthetic involvement in multidisciplinary pre-operative assessment and preparation of older patients or those with multiple co-morbidities.

Pain is an important factor in illness and injury, affecting diagnosis, treatment and recovery. The Gosford Hospital Acute Pain Service (APS) currently focuses on the pain management needs of surgical and post-operative patients.

As acute surgical procedures increase in complexity and decrease in length of stay, the APS will need to expand and develop new methods of service delivery and changes in practice including outpatient follow up and ambulatory methods of analgesia delivery. While the Gosford Hospital APS is reasonably well developed and is positioned to respond to increasing demand, the Wyong Hospital APS will need to expand and develop its service in parallel with the anticipated growth in surgical activity.

Increasing activity at Wyong Hospital site will require increased consultant cover to around three sessions per week (currently one session per week), with the appointment of one or more pain specialists, increased nursing time at both sites, and provision of 24/7 coverage at Gosford.

The increasing incidence of chronic disease will also see an increasing incidence in chronic pain. The results of the Bettering the Evaluation and Care of Health (BEACH) program suggest that almost 20% of GP consultations relate to an individual with chronic pain. This is consistent with the 2006 South Australian Health Omnibus Report, with 20% of adults reporting chronic pain and 5% reporting pain that interfered extremely with daily activity.

The current chronic (non-cancer) pain clinic at Gosford Hospital is provided by a small team consisting of an Occupational Therapist, a Physiotherapist and a Clinical Psychologist. There are no pain management medical specialists practising in the public sector on the Central Coast although an anaesthetist is currently in training with the Faculty of Pain Medicine at the Royal College of Anaesthetists. The absence of medical input means that not all patients can be successfully managed locally and many patients need to travel to Sydney to access services, often with long waits for appointments.

The APS will develop a comprehensive cancer and non-cancer, chronic pain management service including interventional practices provided by anaesthetic consultants with specific skills in chronic pain management.

Changing trends in service delivery will require redevelopment of the current APS model, moving away from acute inpatient care to encompass an integrated service delivery model with formal ties to primary, allied and community services in order to provide improved complex and ongoing care. This will require collaboration with the ASACC, Children’s, Aged and Community Health Directorate (CACH) and general practitioners. There will also be an increasing need for the APS to provide consultation and advice on treatment and management of patients within the community through collaboration with GP practices.

Additional access to a procedure room, short stay admission capacity and necessary support services such as medical imaging, equipment (additional pumps for inpatient care and disposable pumps for outpatient care) will be required, along with allied health services including pharmacy, physiotherapy and occupational therapy, and telephone follow up.

### 6.5.1 Strategic Directions

#### Anaesthetics

67 Develop implementation plan for the enhancement of services commensurate with a change from level 3 to level 4 at Wyong Hospital with the management of good, moderate and bad risk patients across the spectrum of emergency and elective secondary level services.

#### Pain Management

68 Participate with CACH Directorate in the development of an implementation plan for the CCLHD multidisciplinary chronic pain management service incorporating specialist medical input.
6.6 Critical Care (ICU/HDU and Retrieval)

Critical Care services are managed as a single department across Gosford and Wyong hospitals. Gosford Hospital has 13 funded and 16 built ICU beds. Wyong Hospital has 6 funded and 8 built HDU beds. Each unit has a Clinical Director and Nurse Unit Manager.

The service also encompasses a Retrieval Service to manage the transfer of critically ill patients between Wyong and Gosford hospitals, and a Rapid Response Team supporting patients who have deteriorated in ward areas.

The opening of the HDU at Wyong Hospital has provided some pressure relief on the demand for critical care beds at Gosford although the full impact of this is limited by the existing clinical capability constraints both within the HDU and Wyong Hospital generally (i.e. limited after-hours access to clinical support and sub-specialty services).

Key challenges for the Critical Care Service include:
- Ageing infrastructure of the Gosford ICU which is approximately 20 years old
- Determining the tipping point for the transition from HDU to ICU level services at Wyong Hospital
- Managing demand within the existing bed complement, notably the increasing number of elderly patients with complex needs and multiple co-morbidities (both within the critical care environment and for selected patients in the general ward environment)
- Managing exit block for patients ready for discharge from ICU/HDU where ward beds are already fully occupied by elective and emergency admissions
- Avoiding or reducing the impact of nocturnal discharge, which is associated with a higher than predicted mortality, through greater availability of ICU/HDU beds.

Predicting ICU demand is difficult; demand may decrease with the introduction of less invasive surgical techniques but the ageing and growing population and societal expectations may dictate that more aggressive treatment options be offered than is currently the case.

Gosford Hospital will remain the main ICU service for the Central Coast, supporting its role as a regional major trauma centre and tertiary service provider.

6.6.1 Strategic Directions

<table>
<thead>
<tr>
<th>ICU/HDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>71</td>
</tr>
<tr>
<td>72</td>
</tr>
<tr>
<td>73</td>
</tr>
<tr>
<td>74</td>
</tr>
<tr>
<td>75</td>
</tr>
</tbody>
</table>
provide greater certainty for elective surgical patients where ICU/HDU support may be required (including consideration of an "extended recovery" function as part of the peri-operative suite).

76 Enhance provision of ICU/HDU outreach or liaison services to support complex patients and staff in wards and other non-critical care areas.

77 Support the development of clinical capabilities in selected wards to manage patients with treatment limitations requiring therapies historically provided in ICU, for example low dose vasopressors in a geriatric high dependency ward or to septic oncology/haematology ward patients, or non-invasive ventilation in a chronic respiratory failure ward.

6.7 General Surgery
General surgery services are provided at Wyong Hospital while Gosford Hospital provides services using a sub-specialty model. Continued provision of a general surgical roster at Wyong Hospital is expected in both the short and long term. Sub-specialty rosters will develop alongside the general roster with new sub-specialty appointments expected to participate.

6.8 Orthopaedics
Gosford Hospital is the primary centre for major orthopaedic surgery for the CCLHD. Approximately 53% of elective wrist and hand procedures, 37% of knee procedures, 35% of hip and knee replacements, and less than 22% of other elective orthopaedic procedures are provided at Wyong Hospital. The balance of elective workload is provided at Gosford Hospital along with all emergency orthopaedic surgery.

There is currently no orthopaedic trauma service provided at Wyong Hospital. Patients presenting at Wyong Hospital ED who require emergency orthopaedic trauma surgery are referred to Gosford Hospital, including elderly patients with hip fractures and children who require inpatient care for orthopaedic conditions.

The provision of comprehensive orthopaedic services at Wyong Hospital is seen as a major driver and a critical element in the development of services on that site. Increasing provision of both elective and emergency orthopaedic services at Wyong Hospital would have the key benefits of:
- Reducing demand on Gosford Hospital
- Reducing the number of inter-hospital transfers
- Improving the utilisation of operating theatre capacity at Wyong Hospital
- Improving local access for the growing Wyong LGA population.

By 2021/22 it is anticipated that there will be sufficient demand/workload to provide an efficient service and justify the on-site availability of consultant surgeons and registrars with separate Senior Medical Staff (SMS) rosters for Gosford and Wyong hospitals.

6.8.1 Strategic Directions
Orthopaedics

78 Develop a staged implementation plan for the provision of orthopaedic trauma services at Wyong Hospital including:
- Consideration of patient profile
- Additional operating theatre time, trauma equipment and bed capacity, and ICU/HDU support
- Clinical support service requirements (24/7 access to diagnostic imaging, pathology, pharmacy and pain management services)
- Achievable and sustainable staffing models for junior and senior medical cover and allied health support (particularly physiotherapy, including routine weekend cover).
In collaboration with the Aged Care, Sub-Acute and Complex Care Division, fully implement the ortho-geriatric model of care as described by the NSW Agency for Clinical Innovation (ACI) at both Gosford and Wyong Hospital.

6.9 Vascular Surgery

Vascular surgery encompasses both open and endovascular procedures. Increasingly minimally invasive approaches and endovascular techniques are being utilised for major vessel surgery such as aneurysm repair and carotid endarterectomy.

Endovascular procedures can be undertaken in the operating suite with x-ray equipment or increasingly in appropriately equipped purpose defined interventional suites. The provision of complex vascular surgery is dependent on the support of ICU/HDU beds and flexible access to angiography.

Vascular and endovascular surgery is facing increasing demand as vascular pathology increases in the ageing population and as patients develop more co-morbidity. In 2010/11 approximately 40% of activity at Gosford and Wyong hospitals was unplanned and almost 56% was for patients over 70 years of age.

Vascular surgery has clinical relationships with a large range of clinical services; key among these are renal medicine, diabetology, cardiology, neurology and stroke, and trauma services.

High end vascular surgery (open aortic and complex endovascular) will be concentrated at Gosford Hospital to provide an efficient and effective service for this small but significant patient cohort. At the same time, the facility to perform mid-range vascular procedures on both an elective and emergency basis should be enhanced at Wyong Hospital to avoid unnecessary patient transfers.

6.9.1 Strategic Directions

Vascular Surgery

80 Develop a business case for the establishment of outpatient access to venous and arterial Doppler studies.

81 Develop a staged implementation plan for the expansion of services at Wyong Hospital to provide mid-range emergency and elective procedures on-site.

82 Outline minimum specifications for hybrid operating theatre, including fixed rotational flat plane angiography with in-theatre CT scan and Le Maître valvulotome, at Gosford Hospital to support the provision of high-end vascular surgery (open aortic and complex endovascular).

6.10 Ophthalmology

Consultation services:

- Patients access consultative services almost exclusively through private rooms and waiting times for appointments can be up to 12 months for routine appointments. There is currently no publically funded ophthalmic consultative service on the Central Coast.

- With population growth, increased disease prevalence (such as diabetes) and increased therapeutic and investigative options there will be a significant increase in the demand for outpatient services for the management of ophthalmic patients.

- In addition to the documented increases in cataract surgical services increases in other conditions such as glaucoma, diabetic retinopathy, macular degeneration, ocular surface diseases, peri-ocular cancer and paediatric conditions will need to be addressed.

- An efficient public outpatient service with two consulting rooms, a registrar and senior medical officer could see approximately 250 patients per week. Minor procedures and laser could be undertaken in this setting. Registrar training would be incorporated.
• Features of a dedicated outpatient facility (as in other level 5 and 6 hospital) would include:
  o 2 dedicated eye consult rooms
  o 1 orthoptist work-up room
  o 1 laser room
  o 1 angiography room/OCT
  o 1 visual field room
  o Retinal laser
  o SLT laser
  o Yag laser
  o Optical coherence tomography unit
  o Field analyser
  o Retinal camera and angiography
  o Scanner/IOL master
  o Slit lamps.
• Equipment costs are estimated at $500,000. The facility could be located on one of the acute hospital sites or as a stand-alone entity in an accessible area of the Central Coast (e.g. Tuggerah).

Surgical Services:
• Cataract surgery is the most common ophthalmology procedure and approaches 100% as a planned day-only procedure. Only a very small volume of elective surgical activity requires admission to inpatient services overnight
• Currently 78% of public ophthalmology procedures in CCLHD are provided at Wyong Hospital. Trauma and Paediatric surgery are provided at Gosford Hospital only. The remaining elective activity has been retained at Gosford Hospital to maintain skills and equipment and ensure the service can fully support the provision of the trauma service
• Further relocation of services from Gosford to Wyong Hospital is not anticipated, although additional sessions will be required with demand. An additional two sessions per week at Wyong Hospital should provide sufficient capacity.

6.10.1 Strategic Directions

Ophthalmology

83 Develop business case for the introduction of retinal consulting and surgical services.

84 Develop a staged implementation plan for the introduction of additional sub-specialty services including retinal surgery, glaucoma and corneal surgery, and oculoplastic and periocular cancer therapy.

85 Develop business case for the provision of comprehensive, sustainable public outpatient consultation service including:
  ● Estimated demand for services
  ● Resources required to support service provision (staffing, clinic space, clinical support services, non-clinical support services)
  ● Medical staffing model (VMO sessional arrangement or public care through a private practice model)
  ● Funding sources and/or potential revenue streams.

6.11 Urology

The urology service treats patients with kidney, bladder, and prostate and male reproductive organ problems. Problems include cancer, stones, infections, incontinence, sexual dysfunction and pelvic floor problems.
Services are provided at Gosford Hospital. Presentations to Wyong Hospital ED who require surgical intervention are transferred to Gosford Hospital.

6.11.1 Strategic Directions

Urology

86 Identify high volume short stay procedures that could be managed at Wyong Hospital.

87 Develop a staged implementation plan for the expansion of services at Wyong Hospital to provide a comprehensive on-site service including:
   - Clinical Nurse Educator at Gosford Hospital and in longer term for Wyong Hospital
   - Rotation of resident/senior resident to Wyong Hospital to facilitate improved decision making and treatment at Wyong Hospital or transfer to Gosford Hospital
   - In the long term a Urology Registrar should be located at Wyong Hospital to complete the full service of urological care without the need to transfer to Gosford Hospital.

88 Develop business case for the development of an additional outpatient clinic, and an Urodynamic Studies Unit with free-standing or dedicated x-ray service with tilt-table and recording equipment to assist those patients who have complex incontinence issues (including gynaecology patients).

89 Develop business case for the introduction of new equipment, procedures and services (where additional resources or support services are required) including: Laser prostatectomy, Omni-tract surgical (table mounted) retractor.

6.12 ENT/Otolaryngology/Head and Neck

The ENT service treats patients with a wide variety of conditions of the head and neck including surgical oncology treatment of the mouth, tongue, pharynx and larynx, hearing conditions, or sinus or other base of skull disease. Common procedures are Tonsillectomy, Adenoidectomy, and Myringotomy.

The ENT service is concentrated at Gosford Hospital with only a small volume of mainly non-procedural activity occurring at Wyong Hospital.

In 2009/10 and 2010/11 CCLHD has been undertaking more ENT surgery than NSW Health projected for 2021/22 (Appendix C); the difference is significant and demand has increased greater than expected. This situation has been precipitated by additional funding to tackle waiting lists and a spike in activity in 2007/08 that has been maintained.

6.12.1 Strategic Directions

ENT Surgery

90 Develop a staged implementation plan for the development of sub-specialty streams of otology, rhinology, head and neck, and general/paediatrics.

91 Develop business case for the provision of public outpatient consultation service with access to audiology support services.

92 Develop business case for the introduction of new equipment, procedures and services (where additional resources or support services are required) including: CT image guidance, stroboscope, CO2 laser, bone anchored hearing aids, balloon sinuplasty, head and neck reconstruction with free-flap option.
6.13 Plastics and Reconstructive Surgery

Plastic surgery includes many types of reconstructive surgery, hand surgery, microsurgery and the treatment of burns. Reconstructive surgery corrects functional impairments caused by skin contractures after burn injuries, traumatic injuries such as facial bone fractures, congenital abnormalities such as cleft lip or palate, developmental abnormalities, tumours including breast reconstruction following mastectomy, infections, or other diseases. Microsurgery is generally concerned with the coverage of a defect where there is no tissue available; free flaps of skin, muscle, bone, fat or a combination can be moved from another part of the body and reconnected to a local blood and nerve supply. A significant number of surgical sub-specialties require plastic and reconstructive surgery support.

6.13.1 Strategic Directions

<table>
<thead>
<tr>
<th>Plastics and Reconstructive Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 Develop business case for the development of plastics and reconstructive services as a distinct specialty including:</td>
</tr>
<tr>
<td>- Scope of services and best practice multidisciplinary models of care for melanoma, skin cancer and breast cancer reconstruction, limb and facio-maxillary trauma reconstruction, acute and non-acute hand surgery, elective procedures, and management of general plastics patients not requiring specialised multidisciplinary care, e.g. lacerations in cosmetically sensitive areas, simple burns and areas of soft tissue loss</td>
</tr>
<tr>
<td>- Resources required to support best practice models including additional staff (4 Senior Medical Staff with an accredited registrar), full after hours roster and consultation service, specialist equipment (operating microscope, digital imaging), access to regular outpatient clinics (and dressing clinic), and appropriate links with relevant tertiary and statewide services (e.g. Statewide Burn Injury Service) for advice, referral and education support.</td>
</tr>
<tr>
<td>- Funding sources or potential revenue streams.</td>
</tr>
</tbody>
</table>

6.14 Paediatric Surgery

For more detailed information relating to paediatric services please refer to section 10.2.

6.14.1 Strategic Directions

Paediatric surgery will continue to be concentrated on the Gosford Hospital site where paediatrician expertise is available 24/7 to support sub-specialist surgeons in the management of children in the post-operative period. Wyong will develop its capacity to manage some minor procedures in selected patients to reduce delays in treatment and avoid the need for transfer to Gosford Hospital.

The provision of more comprehensive elective surgery for children over 2 years and emergency surgery for over 12 year olds at Wyong Hospital is proposed by general and sub-specialty surgeons (with child-appropriate pre-and post-operative accommodation); key infrastructure at Wyong Hospital will need to be configured so that it could accommodate an increased role in paediatric surgery if required.

<table>
<thead>
<tr>
<th>Paediatric Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 Define and agree patient profiles and minor surgical procedures that can safely be provided for children at Wyong ED or PEMPAC (Paediatric Emergency Medicine Paediatric Acute Care) unit.</td>
</tr>
</tbody>
</table>
6.15 Gynaecology

Gynaecology services are provided predominantly (83% of local public supply) in Gosford Hospital’s Surgical Assessment Centre (GSAC). More than 50% of Central Coast resident demand is managed in the private sector.

In 2010/11 Gosford Hospital had 681 day only and 651 overnight separations with an average length of stay of 2.3 days, utilising 1,486 bed days or the equivalent of 5 overnight beds at 80% occupancy.

For the same period Wyong Hospital had 172 day only and 102 overnight separations with a slightly longer length of stay at 2.7 days utilising 277 bed days or the equivalent of 1 overnight bed at 80% occupancy.

6.15.1 Strategic Directions

Gynaecology and Breast Surgery

95 Identify high volume short stay procedures that could be managed at Wyong Hospital.

96 Develop business case for the establishment of a dedicated ambulatory/outpatient Women’s Health Centre including:

- Scope of care and best practice models for Obstetrics, Gynaecology (including provision of colposcopy and hysteroscopy), and Uro-gynaecology (including provision of uro-dynamic studies).
- Resources required to support best practice models including additional staff, specialist equipment, access to clinical support services (pathology for specimen ultrasound and medical imaging for mammography), and access to short stay beds.
- Funding sources or potential revenue streams.

6.16 Thoracic Surgery

Patients requiring thoracic surgical services are currently referred under networking arrangements to Royal Prince Alfred Hospital (RPAH).

Consideration has been given to the development of a sustainable service for patients with non-complex, non-bypass lung and mediastinal procedures including video-assisted thorascopic surgery (VATS), pleurodesis, mediastinoscopy and lobectomy. RPAH would continue to see patients whose thoracic surgery needs are outside the scope of the proposed CCLHD service. Statewide and Rural Health Service and Capital Planning Branch in the Ministry of Health have given in-principle support for this proposal.

The development of a thoracic surgical service at Gosford Hospital would support the Regional Cancer Centre and reverse current public outflows of about 100 separations per annum. The service would provide a significant improvement on access to services for palliative procedures closer to home.

6.16.1 Strategic Directions

Thoracic Surgery

97 Develop business cases for the reversal of outflows to other public hospitals including:

- Estimate of current outflows and likely flow reversal.
- Resources required to support service provision including estimated beddays in inpatient wards and ICU/HDU, estimated operating theatre time, new/replacement equipment (e.g. VATS) and consumables, and additional staff.
- Staff training needs across medical, nursing and allied health.
- Funding sources and/or potential revenue streams.
6.17 Wound Management

Wound management services are managed across the AS&ICU Division and the Children’s, Aged and Community Health Directorate (CACH).

The acute wound management service is provided by 1FTE Clinical Nurse Consultant covering both Gosford and Wyong hospitals providing support across all acute specialties and services. There is an increasing demand for wound consultations, staff and patient education in evidence based wound management and pressure injury prevention/management in the acute care setting.

Non-acute wound management is provided by the Community Nursing Service in CACH.

6.17.1 Strategic Directions

Wound Management

98 Develop business case for the expansion of acute wound management services including

- Scope of care and best practice clinical models for on-site support for acute patient services at both Gosford and Wyong hospitals
- Mentoring, education and support for clinical staff
- Resources required including staff, specialist equipment (e.g. compression pumps) and products (consumables)
- Use of telehealth and imaging services for wound assessment (measurement and monitoring) and expert consultation across geographic and health care settings
- Data collection systems for analysis of wound prevalence, treatments and outcomes, and maintenance of appropriate patient records.
7 Medicine

7.1 Service Scope

The following clinical services are included as part of Medicine:

- Cardiology
- Endocrinology and Diabetes
- Gastroenterology
- General Medicine – Medical Assessment Unit (MAU)
- Neurosciences
- Renal Medicine
- Respiratory Medicine.

Due to the nature and age of many of the patients who are treated through the medical sub-specialties, there are close links with chronic and complex care programs, acute post-acute care (APAC), community based services (including community nursing), rehabilitation and aged care services.

7.2 Current services, resources and organisation

Medicine sub-specialty services are provided at both Gosford and Wyong hospitals although the complexity, scope and role delineation differs between the sites.

Gosford Hospital as the principal referral hospital provides a comprehensive range of sub-specialty medical services and an increasing range of tertiary services.

Wyong Hospital currently provides limited sub-specialty coverage with the medical staffing model substantially based around a single general medicine admission roster with subsequent transfer to sub-specialist care when necessary. By 2022 it is envisaged that Wyong Hospital will provide an expanded range and level of sub-specialty services.

7.2.1 Acute activity trends in Medicine

In 2010/11 medical admissions accounted for 22,636 separations (20,482 overnight and 2,154 day only) and 127,560 bed days across Gosford and Wyong hospitals; 61.5% of medicine separations and 61.8% of bed days were at Gosford Hospital. Between 2008/9 and 2010/11 overnight medical separations increased by 9.6% across both sites (by 8.7% at Gosford Hospital, and 10.9% at Wyong Hospital); bed days declined by 0.6% across both sites (bed days decreased by 1.7% at Gosford Hospital whereas they increased by 1.3% at Wyong Hospital). Over the same period day only activity remained stable at 9.4% to 9.5% of medical inpatient activity.

In 2010/11 medical admissions accounted for 73.4% of overnight separations and 73.9% of bed days; 90% of these separations were unplanned, accounting for 89.3% of overnight medical bed days. 86.9% of overnight medical admissions were via ED.

In 2010/11 patients aged over 70 years accounted for 55% of overnight medical separations and 63.8% of bed days (at Wyong Hospital the figures were 60.2% separations and 68.9% bed days). Their average length of stay is seven days compared to six days for all overnight medical patients.

Cardiology, respiratory medicine and neurology are the three SRGs with the highest number of separations and bed days, accounting for 44.1% of overnight medical separations and 41.1% of bed days in 2010/11. Cardiology has the most overnight medical separations at both Gosford and Wyong hospitals; however respiratory medicine has the highest number bed days (17% of the total). At Wyong Hospital, respiratory medicine accounts for 19.8% medical overnight separations and 21.9% of bed days.
7.3 Issues, challenges and opportunities

Volume of activity and growth in demand for medical services

- There has been a substantial increase in medical admissions since 2008/9, in 2010/11 overnight medical admissions accounted for 344 inpatient beds (125,402 overnight bed days) 212 beds at Gosford and 132 beds at Wyong Hospital
- With projected growth in population, in combination with growth in the older age groups and prevalence of chronic disease, it can be expected that demand for medical admissions will continue to increase
- This increasing demand in combination with the large volume of unplanned admissions and admissions via ED indicate the need for further development of alternative models of care aimed at hospital avoidance and reducing inpatient lengths of stay.

Prevalence of chronic disease

- The prevalence of a number of chronic diseases (type 2 diabetes, circulatory system diseases, COPD, hypertension and asthma) are higher on the Central Coast (particularly in the Wyong LGA) than the NSW rates
- The percentage of people with at least one chronic condition increases with age as does the likelihood of people having multiple chronic conditions
- The AIHW reported that in 2007/08 more than half of all potentially preventable hospitalisations were as a result of chronic conditions such as diabetes, asthma, angina, hypertension, congestive heart failure and COPD
- The rates of chronic disease within the Central Coast population can be expected to continue to increase associated with the continuing levels of smoking, increasing rates of overweight and obesity and higher prevalence of other known lifestyle risk factors. This will place increasing demand on the health services. Many of these chronic conditions are preventable.

Increasing patient complexity

- Associated with an ageing population, rising prevalence of chronic disease and patients with multiple co-morbidities places additional demands on the inpatient and community health services to manage these patients
- The increasing complexity and the presence of multi-morbidities presents additional challenges for a health system that has become increasingly specialised and focused on individual sub-specialty management
- This environment emphasises the importance of case/care management and coordination between specialties as well as between community based and inpatient health services to meet the needs of these patients.

Infrastructure constraints

- Lack of built capacity places great constraints on service provision and limits expansion. This extends beyond inpatient capacity and includes ambulatory and outpatient/clinic space, community health centres as well as work and office space for departments and staff.
- Lack of inpatient beds means that there is continuous pressure for beds and a backlog of patients in the ED. The high number of medical admissions, particularly cardiology and respiratory patients, frequently exceeds bed availability in the medical inpatient units resulting in overflow to other areas including surgical inpatient units with consequent postponement and cancellations of surgery.

National Emergency Access Targets (NEAT)

- The NEAT requires that 90% of presentations to the Emergency Department (ED) are discharged, referred, transferred or admitted within 4 hours of arrival. An initial target of 69% compliance was set for 2012; this will increase to 76% by 2013 and 83% by 2014 before reaching the final target in 2015.
- NEAT has placed increased emphasis on models of care that can reduce unplanned admissions through ED and inpatient length of stay, and improved patient throughput. Strategies are aimed at
hospital avoidance (such as rapid access outpatient clinics for patient follow-up to reduce unplanned admissions through the ED) and on well-coordinated care in both the inpatient environment and with community based services to facilitate earlier discharge of inpatients and post discharge management in the community.

- The LHD has identified that, apart from physical facility constraints, the relative under provision of medical staff at registrar and career medical officer (CMO) level, especially out of hours, is a barrier to timely transfer to sub-specialist care when necessary.

Access to sub-specialty services at Wyong Hospital

- A key impediment to the development of specialist services at Wyong Hospital is the availability of specialist medical workforce. While some specialists work across both campuses, the larger proportion of the senior medical workforce works at or is based at Gosford Hospital and provides consultative services to Wyong Hospital. This limits the capacity of medical services at Wyong Hospital and the ability to expand and develop its services to meet the growing demand in the Wyong catchment.
- The current arrangements necessitate the transfer of some types of patients to Gosford Hospital for review and to access either diagnostic services or sub-specialty care, frequently prolonging the length of stay above what should be required. The distance between the hospitals necessitates separate on-call rosters. However, operating two sub-specialty on-call rosters is not feasible with the current overall medical specialist numbers.
- To address this will require building specialty services to a sustainable level through either an increased sub-specialty medical workforce at Wyong Hospital or further development of the general medicine model. The Division of Medicine has identified that in the timeframe of this Plan, the priority need is for progression to sub-specialty rosters in neurology and respiratory medicine (in addition to the existing cardiology roster) while recognising that remaining medical services will continue on a general medical admission model for the foreseeable future.

Workforce

- Workforce has been identified across all services and disciplines as an issue with a direct impact on the level and type of services able to be provided and the capacity to meet current demand or implement changes to service delivery, and service expansion.
- Increase in medical specialist workforce numbers at both Gosford and Wyong hospitals:
  - At Wyong Hospital to increase sub-specialty cover, enable development of services, and reduce need for transfer to Gosford Hospital for non-tertiary level care
  - At both Gosford and Wyong hospitals to improve inpatient coverage, clinical supervision and timely decision making
  - At both Gosford and Wyong hospitals to increase the capacity to attract and support registrars. (The number of training places is in part determined by the level of senior support that can be provided)
- Allied health workforce numbers (across all disciplines) - affects timely review of referrals, time to commencement and the level of interventions which can be provided. Inadequate numbers mean limited outpatient and community involvement for ongoing care and constrains the performance of some new models of care including the Medical Assessment Units (MAU)
- Senior specialist nursing roles (such as Nurse Practitioner and CNC) have been identified as an adjunct to service provision across a number of specialities.

Other Issues

- Poor access to rehabilitation and a shortage of sub-acute beds results in delays in discharge and suboptimal care for the ongoing sub-acute management of the patient
- Access to many community and home based programs, including the chronic care programs, is difficult as these services struggle to manage demand within the available resources; resulting in delays in discharge and more frequent readmission
There are several sub-specialties which are currently either not provided or are provided as a limited service. Infectious Diseases, Obesity Services, Clinical Immunology, Rheumatology, Dermatology and Clinical Pharmacology/Toxicology services have been identified as requiring expansion or introduction over the life of this Plan.

7.4 Strategic Directions

In the face of increasing demand and inpatient capacity constraints the strategic directions for the Division of Medicine focus on maximising the use of available inpatient and ambulatory capacity to meet the clinical demands of projected growth; and supporting new models of care.

To achieve this the proposed strategic directions include:

- Development and expansion of medical services, including the range of sub-specialist services provided at Wyong Hospital to a level that is sustainable and which can meet the population demand
- A shift toward delivery of services in the non-inpatient environment with a range of referral sources (ED, inpatient, community based services and GPs) that:
  - Allow rapid access to specialists and multidisciplinary teams without admission
  - Provide an alternative to inpatient care and reduce the need for inpatient admission for some patients – this includes increased use of ambulatory treatment spaces and options
  - Enable earlier discharge of patients with timely follow-up if required
  - Prevent or reduce deterioration in chronic disease through timely specialist review and management when changes in conditions become apparent
- Improving links with sub-acute/post-acute services including inreach rehabilitation, early supported discharge, and increased hours of operation to facilitate increased patient numbers and patient access
- Use of telehealth: improved links to Wyong Hospital (until full sub-specialty coverage achieved) to facilitate specialist consultation, timely decision making and reducing the number of transfers to Gosford Hospital and some of the on-call requirements.

The proposed strategies for Medicine are contingent on a parallel development and expansion of other clinical and clinical support services both in- and after-hours including:

- Access to medical imaging equipment, radiographers and radiology review/reporting (including MRI) and after-hours cover
- Medical staffing model that addresses specialist on-call arrangements and after hours on-site registrar/SRMO/RMO cover
- Nurse staffing that addresses adequate nursing support and expertise across shifts
- Allied Health staffing models that support early identification and management of health needs that influence recovery and discharge
- Community health services to support recovery at home with early discharge.

**Medicine**

<table>
<thead>
<tr>
<th>Improve the efficiency and effectiveness of Medicine Services for older patients and those with complex needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>
101 Improve links between acute services and sub-acute/rehabilitation services with early assessment of rehabilitation and reconditioning health needs, in-reach rehabilitation for patients in acute settings, timely referral and transfer to sub-acute facilities, early supported discharge, and coordination of post-discharge services. Identify patient cohorts that no longer need acute medical care but who are unsuitable for discharge home and/or would benefit from transfer to inpatient sub-acute care at Long Jetty or Woy Woy for re-conditioning or rehabilitation. (Cross reference ASACC and CACH strategies).

Outpatient and Ambulatory Care - Expand and enhance capacity to meet the clinical demands of current and projected growth through the development of suitable alternatives to inpatient admission

102 Develop "Rapid Review Clinics", initially for respiratory and cardiology services, supported by high priority access to medical imaging, pathology and other clinical support services, to facilitate the referral and follow up of appropriate patients presenting to ED, GP or other health care provider or self-referral of patients enrolled in chronic care programs.

Wyong Hospital - Expand and enhance medical services and access to sub-specialty services.

103 Identify priority services for development at Wyong Hospital and a staged process for development.

104 Develop models of care for the provision of general and sub-specialty medicine to an increasingly complex caseload with multiple comorbidities at Wyong Hospital including consideration of clinical support service requirements, after hours/on-call rostering, recruitment opportunities and training and educational needs.(Cross Reference to General Medicine strategies).

105 Identify gaps in current workforce (medical, nursing, allied health and support services) and confirm achievable and sustainable staffing models particularly for after-hours on-site junior medical and registrar cover and general and specialist on-call arrangements (Cross Reference to General Medicine strategies).

106 Further develop networking of sub-specialty services between Gosford and Wyong hospitals.

Future development of other Clinical Services

107 Appoint a second Infectious Diseases specialist to support the establishment of an on-call roster, direct inpatient care at Gosford Hospital and consultation service to Wyong Hospital within the next 2-3 years. (Cross reference with Clinical Support Services – Pathology strategies).

108 Review/assess the need for a Clinical Immunology service in 3-5 years.

109 Review/assess the need to expand the Rheumatology service in 3-5 years.

110 Review/assess the need for a Clinical Pharmacology/Toxicology service within the next 2-3 years.

111 Review/assess the need to provide an expanded Dermatology service in 3-5 years.

7.5 Cardiology

Cardiac services are provided across the spectrum of care. Inpatient sub-specialty cardiology services are provided at both Gosford and Wyong hospitals. Wyong Hospital provides CCU and telemetry services with basic ultrasound services. Patients requiring a higher level of care or specific cardiac investigation and management are referred to Gosford Hospital.
In 2010/11:
- Cardiology had the highest number of overnight medical separations and accounts for approximately 18% of overnight separations and 12% of bed days
- Overnight separations increased by 8.7% and bed days by 1.7% since 2008/9
- People aged over 70 years accounted for 61% of overnight separations and 73% of cardiology bed days
- Overnight cardiology separations accounted for 43 inpatient beds (23 at Gosford Hospital and 20 at Wyong Hospital)
- Within the Cardiology SRG Chest Pain had the highest number of overnight separations, followed by Heart Failure and Shock, which had the highest number of bed days, accounting for 28% of cardiology bed days
- Overnight separations for Chest Pain increased by 7.2% since 2008/9 while bed days remained the same. Overnight separations for Heart Failure and Shock increased by 12.3% and bed days increased by 10%.

The majority of cardiology patients are aged over 70 years and are likely to have a chronic cardiac condition. It can be expected with the ageing population on the Central Coast that this cohort of patients will increase. Models of care which can reduce the need for inpatient management will become increasingly important, as will the role of prevention programs to reduce the prevalence of cardiovascular disease in the community.

Table 18: Cardiology Services at Gosford and Wyong Hospitals

<table>
<thead>
<tr>
<th>Service</th>
<th>Gosford</th>
<th>Wyong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Delineation</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>CCU Beds</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Ward Beds (telemetry+ other)</td>
<td>20+12</td>
<td>12</td>
</tr>
<tr>
<td>Angiography Suite (number)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Interventional STEMI (ST-segment Elevation Myocardial Infarction)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Basic Ultrasound</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Trans-Oesophageal/Trans-Thoracic (TOE/TTE)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Exercise Tolerance Test (ETT)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Implantable devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Permanent</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bi-ventricular pacing (BVP)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Automatic Implantable Cardiac Defibrillator (AICD)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cardiac Rehabilitation</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Heart Failure Rehabilitation</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Electrophysiology Services (EPS)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Emerging Technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac CT</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cardiac MRI</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Cardiac and heart failure rehabilitation programs are provided through the Ongoing and Complex Care service. Both programs are provided onsite at Gosford and Wyong hospitals and also offer a home-based service.

Interventional cardiac services are provided at Gosford Hospital during business hours and include cardiac angiography (both diagnostic and interventional) and an implantable devices service (temporary and permanent pacemaker insertion). Patients requiring electrophysiology and after-hours PCI (percutaneous coronary intervention) services are referred to Royal North Shore Hospital.
On the Central Coast there is one public interventional cardiology laboratory located at Gosford Hospital which services admitted and non-admitted patients. This lab is poorly located (isolated from support services) and has no dedicated pre- or post-procedure patient space. This limits the efficiency of the service and requires that patients (transferred and non-admitted) are accommodated within the Cardiology ward pre and post-procedure, currently four inpatient beds are quarantined for this purpose. The lack of space also requires that non-admitted cardioversions are undertaken in CCU (approximately four per week). Replacement of the cardiac catheter laboratory equipment occurred in 2011 with funding through COAG National Health and Hospital Reform Funding Capital Allocations 2010/11.

Provision of a comprehensive interventional cardiac service with twenty four hour availability of PCI is currently limited due to the availability of only a single interventional lab at Gosford Hospital. Twenty four hour access to PCI and primary angioplasty treatment will enhance the management of patients with ST segment Elevation Myocardial Infarction (STEMI) and is required to implement the Pre-Hospital Assessment for Primary Angioplasty (PAPA) model locally. PAPA is a pre-notification and bypass model to transport patients with STEMI to the nearest centre able to provide PCI for timely access to primary angioplasty. Early access to cardiac reperfusion for patients with STEMI either through thrombolysis or ideally primary angioplasty has been demonstrated to improve patient outcomes. Implementation of the Pre-Hospital Thrombolysis (PHT) model in collaboration with the Ambulance Service of NSW should also be considered.

Gosford Private Hospital is the sole private provider of interventional cardiology services on the Central Coast opening a single lab in 2012. Following the withdrawal of interventional cardiology services at Brisbane Waters Private Hospital in late 2012 Gosford Private has indicated that a second interventional laboratory will be developed at the hospital. There are no interventional cardiology services located in the Wyong LGA.

In 2010/11 there were 2,238 inpatient separations for Central Coast residents for interventional cardiology of these 425 separations (19% activity) were at Gosford Hospital; 1,424 separations (63.6%) in private facilities; and 364 outflows (16.5%); 28.9% of activity was Day Only. Growth in activity between 2008/09 and 2010/11 was 6.9% which was higher than the aM2010 projection of 4.3%. The most common procedure was Cardiac Investigative Procedures (ESRG 121) which accounted for 55.4% of activity (1,239 separations), followed by Percutaneous Coronary Angioplasty (ESRG 122) with 26.8% activity (599 separations) and Other Interventional Procedures (ESRG 129) with 17.9% activity (400 separations). The majority of outflows were to Royal North Shore Hospital (180 separations or 32.4% outflows) and St Vincent’s Hospital (88 separations or 15.8% activity). The breakdown of outflow separations by ESRG is: Cardiac Investigative Procedures 140 separations (37.2% activity); Percutaneous Coronary Angioplasty 136 separations (36.2%) and Other Interventional Cardiology 100 separations (26.6% activity).

Expansion of interventional cardiology services at Gosford Hospital will reverse the number of public outflows from CCLHD and has the potential to increase activity at Gosford Hospital by up to 84% (376 separations) and bed days by 45%, aM2010 projects a 22.7% (512 separations) increase in activity to 2021/22. This will place additional demand for inpatient beds.

7.5.1 Strategic Directions

Increased range and level of diagnostic and treatment services available for the management of acute cardiac patients which will include:

- Implementation of a chest pain assessment and management service in conjunction with the ED
- Timely access to thrombolysis and implementation of the pre-hospital thrombolysis (PHT) model in collaboration with the Ambulance Service of NSW
- Expansion of the interventional cardiology service and capabilities to include: 24 hour PCI, Electrophysiology Studies (EPS) and increased diagnostic capabilities.
Clinical Services Plan 2012-2022

Reduction of demand for inpatient management for patients with chronic cardiac disease including heart failure through improved management in the community, enhancement of community and home-based chronic care programs, cardiac rehabilitation and timely access to outpatient assessment and review.

### Cardiology

112. Develop an implementation plan for the provision of chest pain assessment and management services at Gosford and Wyong Hospital EDs for patients with low to moderate risk chest pain. The plan will include preferred location at each site, arrangements for 24/7 access to laboratory testing, stress testing, imaging and reporting or reviewing results.

113. Develop a pre- and post-procedure area in proximity to the interventional cardiology lab for non-admitted interventional cardiology patients (Gosford Hospital).

114. Construct a second collocated interventional laboratory at Gosford Hospital to manage anticipated demand and to support the provision of 24 hour PCI as well as an expanded range of cardiac diagnostic and interventional procedures including AICD, cardiac resynchronisation devices, implantable loop recorders and electrophysiology studies and ablation procedures.

115. Expand reperfusion service for acute ST-segment Elevation Myocardial Infarction (STEMI) to provide 24 hour access to Percutaneous Coronary Intervention (PCI) for patients requiring primary angioplasty.

116. Implement Pre-Hospital Thrombolysis (PHT) and Pre-Hospital Assessment for Primary Angioplasty (PAPA) models in collaboration with Ambulance Service of NSW and the Agency for Clinical Innovation (ACI) with bypass of Wyong Hospital for STEMI patients.

117. Expand cardiac diagnostic capabilities at Wyong Hospital including access to onsite transoesophageal echocardiography (TOE).

118. Improve integration between inpatient and community based cardiac services for the management of patients with chronic disease including improved in-reach and coordination of care.

119. Expand community based services to accommodate increased volume of patients and enhance specific programs for management of chronic heart failure and cardiac patients.

120. Expand cardiac rehabilitation to accommodate increased demand and consider collocation with proposed Community based Rehabilitation Centres (Cross reference to ASACC strategies).

121. Expand cardiac research, education and training to support a cardiovascular clinical research program with links to the University of Newcastle.

### 7.6 Endocrinology and Diabetes

Endocrinology encompasses disorders of the pituitary, thyroid, adrenal and other hormone producing organs as well as metabolic bone disease. Diabetes is the largest component of the endocrinology service, and also the part of the service which is projected to grow rapidly due to the increased prevalence of diabetes in the community. Diabetes is a significant contributing factor to a number of other chronic diseases and conditions.

According to the NSW Chief Health Officers Report (2010) in 2009, 9.4% of males and 7% of females aged 16 years and over reported having diabetes or high blood sugar. The Australian Institute of Health and Welfare (AIHW) have identified that the prevalence has more than doubled in ten years from 1998 to 2008. It is predicted that the prevalence of diabetes will continue to increase rapidly which has significant implications for the health system overall and in particular for diabetes management services. Diabetes prevalence increases with age and socioeconomic disadvantage and is more prevalent among the Aboriginal and Torres Strait Islander population where the prevalence is estimated to be three times that of the non-indigenous population.
It has been estimated that up to 50% of people with diabetes are not aware that they have diabetes often until they present with complications. Earlier diagnosis and management has the potential to reduce and delay the onset of complications.

Type 2 diabetes accounts for about 88% of all diabetes cases and primarily affects people older than 40 years. It has been estimated that about 5% of pregnancies are affected by gestational diabetes which increases maternal and neonatal risk and the complexity and level of antenatal care required. About 10% of diabetes is Type 1, the prevalence of Type 1 diabetes in children has been estimated to be 1.4% and increasing by 2.8% per annum. Insulin pumps are being increasingly used in the management of Type 1 diabetes however the cost of the pumps is relatively expensive ($4,000 to $9,000), while there are health insurance rebates for the pumps private health insurance rates on the Central Coast are relatively low.

Obesity is a key risk factor for a number of chronic conditions in particular type 2 diabetes, cardiovascular disease and hypertension. Excess weight is also implicated in a number of other conditions with life and health implications including obstructive sleep apnoea, certain cancers, depression, social problems, osteoarthritis as well as metabolic syndromes such as insulin resistance. Metabolic syndrome is becoming increasingly common among children and adolescents, and its prevalence increases directly with the degree of obesity.

There is a high prevalence of overweight and obesity among both children and adults on the Central Coast. In 2011 it was estimated that 56.9% of the Central Coast population aged over 16 years were overweight or obese (NSW 52.6%) of this 23.7% were obese.

Another key area for the endocrinology service is metabolic bone disease in particular osteoporosis; with the ageing population it can be expected that the demand for an osteoporosis service will continue to increase. Establishment of a comprehensive osteoporosis service in collaboration with other specialist services such as rheumatology and the aged care services is required.

The endocrinology and diabetes services are provided predominantly on an outpatient and ambulatory basis. An inpatient consultative service is provided at Gosford Hospital; at present there is a limited service at Wyong Hospital. The RNS Hospital paediatric and adolescent diabetic service continue to provide an outreach service to Gosford Hospital however there are no paediatric or adolescent services at Wyong Hospital.

The Diabetes Education Centre is located at Gosford Hospital. A limited service is provided at Wyong Hospital, limited services are also provided in community health centres at Toukley, Long Jetty, Erina, Lake Haven and Woy Woy.

The Diabetes Education Centre is currently located in an old house which is part of the Gosford Hospital campus. There are constraints on the volume and types of services as well as the number of staff which can be accommodated due to age and size of the facility. Relocation or redevelopment of the building is required to enable future service development and expansion to meet both current and future demand.

The endocrinology and diabetes service is severely constrained in the volume and range of services which can be provided due to a lack of endocrinologists and difficulties with recruitment. This has meant that services are concentrated on the Gosford Hospital campus.

There are workforce shortages across all disciplines (medicine, nursing and allied health). This is particularly notable for essential areas such as podiatry and orthotics. To enable the services to function at current levels and to accommodate the identified service developments, significant increases in workforce are required across all disciplines in particular: endocrinologists, diabetes educators, dietitian, psychologist, exercise physiologist, podiatrist, endocrine nursing staff and registrars.
7.6.1 Strategic Directions

**Endocrinology**

122 Develop endocrinology services at Wyong Hospital providing both inpatient consultation and outpatient clinics.

123 In collaboration with ASACC and other specialised services participate in the development of a comprehensive osteoporosis service. (Cross reference ASACC Falls Prevention Service strategies).

124 Expand the range and availability of endocrine specific clinics to include a thyroid clinic with access to thyroid ultrasound, and a specific bone clinic.

**Diabetes**

125 Develop a business case for the proposed expansion and enhancement of the diabetes services (adult and paediatric) including: specialist medical staff, medical trainees/registrar, diabetes educators, allied health (dietitian, psychologist, exercise physiologist, podiatrist) and clerical support; as well as establishment of a service at Wyong Hospital, potential sites for satellite diabetes clinics and education centres and other resource requirements. Develop a staged implementation plan for the proposed enhancements.

126 Develop a diabetes inpatient consultation, outpatient and education service at Wyong Hospital.

127 Redevelopment of the Diabetes Education Centre on the Gosford Hospital campus.

128 Expand and enhance specialist outpatient services including: increased frequency of multidisciplinary diabetic clinics (conduct routine post discharge review), diabetes complication clinic, specialist clinics (high risk foot clinic), involvement with other specialist services (ophthalmology, vascular, renal, cardiology, etc.), and develop improved links with health coaching and ongoing and complex care programs.

129 Develop a Rapid Review Clinic to support GPs, improve diabetes control in the community and decrease complication rates.

130 Establish a high risk foot clinic at Gosford Hospital (cross reference with CACH strategies).

131 Develop an Aboriginal diabetes clinic to provide comprehensive diabetes management, education services and management of complications. Identify the most appropriate location for the clinic.

132 Develop a home-based Diabetes in the Elderly program to follow-up, support, coach and monitor elderly patients commenced on insulin. Further explore the potential role and use of telemedicine to support this program.

133 Develop an Insulin Pump service and establish an equipment pool to facilitate access to high cost equipment.

134 Enhance endocrine/diabetes maternity services including pre-conception counselling, expanded educator services and Practice Nurse hotline, increased frequency of antenatal endocrine diabetes clinic at Gosford Hospital to twice per week and potential future clinic at Wyong Hospital (cross reference with WC&FH strategies).

136 Develop telehealth applications to improve availability and access to diabetes services including specialist medical consultations, insulin stabilisation program, Diabetes in the Elderly program, and high risk foot services. (Cross reference with LHD telehealth strategies).
Develop a data base for diabetes and endocrinology services.

Develop a business case for a multi-disciplinary weight management program targeting adults with: a BMI of 35, or BMI 30 with significant obesity co-morbidities, and children with a BMI over the 97th percentile including: workforce and equipment requirements, volume of service required, location of service(s), a staged implementation plan and identify future service expansion requirements.

Identify options for access to bariatric surgery for suitable patients and whether this service should be established locally or accessed through established providers.

7.7 Gastroenterology

Gastroenterology, encompassing general and endoscopic services, is provided at both Gosford and Wyong hospitals. Routine and emergency diagnostic and therapeutic endoscopy and colonoscopy services are provided at both sites. There is currently no after-hours on-call service at Wyong Hospital requiring transfer of patients to Gosford Hospital for emergency procedures. ERCP is provided predominantly from Gosford Hospital with a limited service provided at Wyong Hospital. There has been a 7.1% increase in admitted endoscopy activity since 2005/06. Admitted activity increased by 10.6% between 2008/09 and 2010/11.

Liver disease services are provided at Gosford Hospital including consultant led treatment clinics and a CNC led clinic. A hepatitis treatment (interferon) clinic is located at Gosford Hospital; the demand for this service continues to increase. There is an emphasis on increasing the number of people receiving treatment for hepatitis C (only 2% of those affected are treated) and it is expected that this will continue to 2022.

The number of people with long duration of infection subsequently developing end stage liver disease will continue to increase as a result of disease progression following treatment failure, as well as the large number of people with untreated disease. This will require increased resources and complex care model to manage the health care needs of those with end stage liver disease and associated complications of liver cancer and liver failure.

It can be expected that there will be continued growth in demand for services secondary to the National Bowel Cancer Screening program. Equity of access to screening for residents across the Central Coast will need to be factored in to the future expansion of services, particularly the demand from the growth areas in Wyong North East.

Endoscopy procedures at both Gosford and Wyong hospitals are undertaken in procedure rooms located within the operating theatre suites. At Gosford Hospital issues around availability and access to the procedure room as well as differences in the model of care for patient management have been identified. At present this is not problematic at Wyong Hospital due to the lower demand for the procedure rooms and no after-hours emergency procedures are currently undertaken there.

The availability of appropriately trained and experienced endoscopy nursing support is acknowledged as critical to service delivery. At present there are no on-call specialist nursing staff to support after hours emergency procedures.

7.7.1 Strategic Directions

Construct an endoscopy suite at Gosford Hospital, operationally separate to the operating theatres and staffed by specialist endoscopy staff, with 2 procedure rooms +/- a separate ERCP room, with one room equipped as a negative pressure room.
141 Purchase specialised endoscopy equipment including paediatric endoscopes (HD) and super-slim specialised gastroscopes.

142 Extend emergency after hours on-call endoscopy service to include Wyong Hospital (highly specialised procedures will continue to be conducted at Gosford Hospital). Include specialist nursing staff as part of the on-call roster for both Gosford and Wyong hospitals.

143 Develop a business case for the expansion of the gastroenterology service including additional workforce requirements (additional specialist gastroenterologist +/- general physician at Wyong Hospital, additional specialist nursing staff to support on-call service for both Gosford and Wyong hospitals, additional advanced and basic registrar positions and junior medical staff to support expanded service, and appointment of a Director of Endoscopy.

Liver Clinic and Hepatology Services

144 Develop expanded outpatient clinic capacity for the provision of Gastroenterology and Liver Disease Clinics including establishment of an Inflammatory Bowel Disease (IBD) Clinic (Gosford Hospital). Explore options for future provision of services at Wyong Hospital.

145 Implement a complex care model to manage the health care needs of those with end-stage liver disease and associated complications of liver cancer and liver failure.

146 Expand the Hepatitis C treatment service including provision of satellite or outreach clinics in Wyong LGA.

147 Collaborate with mental health services to provide pre-treatment assessment and management of patients on treatment whose mental health deteriorates.

148 Develop strategies to support the provision of free-of-charge or low cost imaging services for liver disease patients due to the volume of services required over an extended period.

7.8 General Medicine

At present Wyong Hospital operates a general medicine/general ‘take’ roster due to limited sub-specialty coverage. Gosford Hospital operates a full sub-specialty roster with no general medicine coverage. The general medicine/general ‘take’ roster at Wyong Hospital is covered by sub-specialists. There are currently no medical specialists practising as general physicians at either Wyong or Gosford hospitals. There are several sub-specialists who also have qualifications as general physicians but practice in their sub-specialty. Continued provision of a general ‘take’ roster at Wyong Hospital is expected in both the short and long term. It has been identified that the priority need at Wyong Hospital is for progression to sub-specialty rosters for neurology and respiratory medicine.

As patient complexity and the numbers of patients with multi-morbidities continues to increase along with the shift to sub-specialisation of medical specialists there is increasing focus on the role of general physicians in the management of these patients in to the future. As many of these patients are also older there has been increased pressure on the gerontologists to fulfil this role. The role of general physicians in the operation and management of the MAU is key.

7.8.1 Strategic Directions

General Medicine

149 Maintain general ‘take’ on-call roster at Wyong Hospital for the interim. Identified priority services for sub-specialty cover are respiratory medicine and neurology.

150 Review of General Medicine as an identified specialty and as a means of providing after-hours specialist medical cover at Wyong Hospital to determine the LHD position. Include consideration of
future medical workforce requirements to manage increasing patient complexity including undifferentiated patients and those with multi-morbidities; future model and requirements for Gosford Hospital; and medical staffing models for MAU. Identify workforce requirements to support General Medicine roster, recruitment strategies and opportunities, training opportunities, and staged implementation.

7.9 Neurology

The Neurology Service includes management of: Parkinson’s disease, multiple sclerosis, epilepsy, motor neurone disease, neuromuscular disease, dementia and headaches. The stroke service encompasses the acute and ongoing management of stroke and transient ischaemic attack (TIA).

Patients requiring neurosurgery and interventional neuro-radiology are transferred to RNSH, it is expected that these arrangements will continue.

Neurology patients are managed within a specialist ward at Gosford Hospital. At Wyong Hospital patients are admitted to a general medical ward. There are acute stroke units at both Gosford (8 beds) and at Wyong Hospital (4 beds). Intravenous thrombolysis is provided at both sites although it is in a limited capacity at Wyong Hospital.

Neurology and stroke services at Wyong Hospital have been limited due to the availability of medical staff. The recent employment of a stroke neurologist has facilitated the further development of the stroke model of care including increased use of thrombolysis for suitable patients.

A significant demand increase (particularly for stroke services) is expected over the next ten years due to population ageing and increased incidence and prevalence of chronic neurological disease and stroke.

The trend in neurology care has been toward an increased focus on the use of outpatient clinics and ambulatory care for the management of neurology patients. At present outpatient neurology clinics are based at Gosford Hospital however additional capacity and range of clinics are required to improve access for patients including future provision of clinics at Wyong Hospital. Expansion of ambulatory care facilities/ chairs is also required to accommodate the increasing trend toward the use ambulatory infusion therapies.

The management of stroke, in particular the administration of thrombolytic therapy to suitable stroke patients, has been proven to improve outcomes for these patients. The timeframe for administration of thrombolysis for acute stroke is four hours from onset of symptoms. Administration of thrombolysis is dependent on a range of factors extending from the pre-hospital environment through to the in-hospital environment, and is reliant on well-established systems (including access to diagnostic imaging) and timely availability of appropriately skilled staff.

There are two multidisciplinary community/home based therapy services – the Community Neurological Support Service (CNSS) and the Community Outreach Team (CORT). CNSS provides interventions for people who have experienced stroke or other neurological events (such as ABI, spinal cord injury/lesions, Guilliane Barre, MS exacerbations etc.). CORT provides services for adults with progressive neurological conditions such as Parkinson’s disease, Motor Neurone Disease, MS or other progressive neurological conditions. Currently both these services are operating at capacity with demand exceeding available supply.

Access to both specialised rehabilitation (inpatient, community and home based) as well as slow stream rehabilitation (maintenance care) is required to support neurology patients following acute episodes (including stroke) and also patients with chronic degenerative/progressive neurological conditions. Currently there is limited access to public rehabilitation services (both inpatient and outpatient) on the Central Coast.
### 7.9.1 Strategic Directions

In line with the overall strategic direction of maximising the use of available inpatient and ambulatory capacity the neurology service is developing alternative service models aimed at hospital avoidance and reducing inpatient length of stay. Proposals to achieve this include:

- Implementation of an alternative model of care for patients presenting with TIA where patients are either referred to a neurovascular (rapid review) clinic for investigation, review and follow-up or alternatively managed in the MAU with priority access to relevant diagnostics and review with a view to reducing the number of admissions and the length of stay for patients with TIA.
- Increased use of technology such as telehealth to support timely decision-making (in the case of thrombolysis in stroke) and also to support review and management of neurology patients in the community and/or their home.
- Increased patient management in the community supported by community and home-based programs and rehabilitation for post-acute patients and also patients with degenerative neurological conditions to reduce the need for hospitalisation or the duration of inpatient stay.

#### Neurosciences

151 Develop a business case for expansion of the neurology services including additional workforce requirements: additional specialist neurologists, nurse practitioner, advanced trainees and allied health to accommodate proposed models of care and projected demand for services, including a staged implementation plan.

#### Stroke and TIA services

152 Develop and expand the Acute Stroke Services operating at Gosford and Wyong hospitals - increase capacity at Wyong Hospital to 8 beds and provide thrombolysis from dedicated bed at each site with 1:1 nursing.

153 Develop capacity for tele-stroke assessment and management (including increased capabilities in ED; remote viewing of EEGs for consultants; real-time multimodal imaging assessment) across both Gosford and Wyong hospitals, as well as access to videoconferencing for family conferences. (Cross reference with LHD telehealth strategies).

154 Develop an agreed Model of Care for the management of TIA including consideration of Neurovascular Clinic (rapid review clinic) and/or management in MAU (with high priority access to diagnostic testing and reporting) at both Gosford and Wyong hospitals.

155 Improve access to CT perfusion scanning at Wyong Hospital (recently commenced at Gosford Hospital) for acute stroke and high risk TIA patients.

#### Neurology

156 In collaboration with the rehabilitation services develop inpatient rehabilitation or inreach service for stroke and neurology patients at Gosford Hospital. (Cross reference with ASACC strategies).

157 Collaborate in the development of a community based rehabilitation service for post-acute or periodic rehabilitation for patients with degenerative neurological conditions in collaboration with ASACC. (cross-reference to ASACC strategies).

158 Enhance community and home based treatment and rehabilitation (CORT and CNSS) programs. Identify service development requirements for specific patient groups such as Acquired Brain Injury (ABI) and patients with spasticity. Develop telehealth technologies as an adjunct to home based therapies and as a monitoring tool (cross reference LHD telehealth strategies).

159 Expand and enhance outpatient clinics and services including: Neurovascular Clinic, Memory disorders clinic (with ASACC), and a proposed epilepsy service.
160 Increase ambulatory care chairs at Gosford and Wyong hospitals to accommodate increased demand for infusion therapies as well as access to the Therapeutic Apheresis Service (cross reference Cancer and Clinical Haematology strategies).

161 Expand neurology service at Wyong Hospital with allocated neurology beds ('home ward').

162 Enhance neurophysiology services and equipment including replacement of nerve conduction equipment, improved capacity for remote reporting of EEGs by consultants, access to EEG reports via Powerchart, access to transcranial doppler and development of neurophysiology trainee positions.

7.10 Renal Medicine and Renal Dialysis

CCLHD provides comprehensive secondary and tertiary services in relation to the diagnosis, assessment and management of adults with renal disease. Inpatient renal medicine services are provided at level 5 at Gosford Hospital and level 3 at Wyong Hospital. Gosford Hospital is the primary referral site for acute dialysis services and in-centre dialysis across the LHD. There is no inpatient renal medicine service at Wyong Hospital. There are no public renal outpatient clinics on the Central Coast.

Public renal dialysis is provided through 34 chairs across three locations: In-centre at Gosford Hospital (12 chairs), a satellite unit on the Gosford campus (10 chairs), and at a satellite unit at the Lake Haven Community Centre (12 chairs, 11 of which are utilised currently), 1 chair located within the satellite unit at Gosford Hospital is utilised for home-dialysis training. There are no private facilities available on the Central Coast for dialysis.

All services operate on a 6 day, two shifts per day basis consistent with the accepted mode of delivery.

Home dialysis training and support is provided in conjunction with the Sydney Dialysis Centre. Specialist nurses provide training and support for over 45 home peritoneal dialysis clients and over 20 home haemodialysis clients. The number of clients taking up home dialysis and requiring training and support is continuing to grow since the establishment of two dedicated training chairs locally and the recent appointment of an additional training nurse at Gosford Hospital.

The percentage of people undertaking home haemodialysis and peritoneal dialysis has risen since 2009 in response to recent efforts. However it is considered likely future efforts will have only a limited impact on the increasing demand for satellite dialysis into the future. Reasons for this include the increasing numbers of older clients (an increasing number of whom live alone) who may be unable to manage dialysing at home as well as the low socioeconomic status of residents in the Wyong LGA where the bulk of growth in demand is expected.

The current dialysis services on the Central Coast are operating at capacity and are unable to accommodate any additional demand. The NSW Dialysis Capacity Audit 2011, conducted by the NSW Ministry of Health, showed that the Gosford and Lake Haven Satellite Units were at 100% capacity and Gosford in-centre at 90% capacity in 2011.

The projected growth in demand for dialysis services on the Central Coast is 5.0% pa (an additional 70 dialysis patients to 2022). Almost half of the 17,000 satellite dialysis treatments provided in the CCLHD each year is for Wyong LGA residents; 36% of Wyong residents travel to Gosford for dialysis. With the projected population growth in the Warnervale, Wadalba and The Entrance areas, and a projected 29.8% increase in 70-84 year old residents, the Lake Haven Satellite Dialysis Unit will not be able to meet the increased demand.

There is an urgent need to establish an additional satellite renal dialysis service on the Central Coast. It is proposed to establish a satellite dialysis centre at Long Jetty Health Facility with capacity to accommodate 20 chairs, 10 of which would be commissioned in the short term to meet demand with further chairs commissioned in response to future increases in demand. The centre will also have
additional space to accommodate expanded home training facilities. The aim of this service will be to enhance the home haemodialysis and peritoneal dialysis training programs to achieve the targets set by NSW Health of having 50 per cent of dialysis patients on home therapies.

Renal transplantation occurs outside of the CCLHD, mostly at Westmead Hospital, however ongoing care and monitoring of patients occurs in the private sector without backup from CCLHD. With over 18 Central Coast residents receiving a renal transplant in 2010/11, a dedicated transplant nurse is required to ensure local follow-up of Central Coast residents.

7.10.1 Strategic Directions

There is a requirement for increases in staffing, including nurse practitioners, community based nurse specialists, specialist and junior medical staff and allied health staff to support expansion of the Renal Service across the LHD which would include: provision of inpatient services to Wyong Hospital; establishment of public outpatient clinics (initially at Gosford Hospital with future expansion to Wyong Hospital); as well as increased support to the satellite dialysis services.

Renal Medicine and Renal Dialysis

163 Establish a 20 chair satellite haemodialysis service on the Long Jetty site with 10 chairs to be commissioned initially and further chairs commissioned according to future increases in demand.
164 Develop a home dialysis training facility at Long Jetty as part of the satellite haemodialysis centre
165 Expand renal services (including workforce) to accommodate increasing demand for renal services and provision of services to Wyong Hospital.
166 Develop public renal outpatient clinics, initially at Gosford Hospital and then at Wyong Hospital.
167 Develop capacity for local follow up and support for renal transplant patients with a dedicated Transplant Nurse.

7.11 Respiratory Medicine

Inpatient and outpatient respiratory medicine services are provided at both Gosford Hospital (role delineation level 5) and Wyong Hospital (level 3). Respiratory medicine is currently the largest user of inpatient beds and demand for these services will continue to increase due to the increasing incidence and prevalence of respiratory disease in the community.

The following services are also provided:
- Respiratory Investigation Unit based at Gosford Hospital with a satellite service located at Wyong Hospital
- Sleep Investigation Unit for overnight sleep studies located at Gosford Hospital
- Bronchoscopy is undertaken at both Gosford and Wyong hospitals
- Non-Invasive Ventilation (NIV) for respiratory failure patients is provided through two ward-based beds at Gosford Hospital
- Tuberculosis (TB) service is provided through an outpatient/outreach service based at Gosford Hospital
- Cystic Fibrosis clinic is located at Gosford Hospital provided in conjunction with RPAH and Westmead Children's Hospital
- Pulmonary rehabilitation operates as a centre-based service located onsite at Gosford, Wyong and Long Jetty hospitals; a home based program is also available through the Home Education and Respiratory Rehabilitation Service (HERRS)
- Asthma Education and Management Service operates as outpatient based programs. Separate programs are offered for adults with a central point of referral through the Ongoing and Complex Care Service based at Wyong Hospital.
There is limited thoracic surgery provided at Gosford Hospital with patients referred predominantly to RNSH or RPAH for surgery.

Respiratory Medicine accounts for 14.8% of all overnight separations and 17% of overnight bed days at Gosford and Wyong hospitals. It has the highest number of bed days of all medical ESRGs. Of the respiratory inpatient activity, Chronic Obstructive Pulmonary Disease (COPD) is the most significant, accounting for 36% of overnight respiratory separations and 38% bed days at Gosford Hospital and 47% of overnight respiratory separations and 52% of bed days at Wyong Hospital in 2010/11.

Growth in demand for the respiratory services across all spectrums of care (inpatient, outpatient, community based and diagnostic and investigation services) has outstripped the current availability. Enhancement and expansion of all these services across both Gosford and Wyong hospitals is required to meet both current and projected demand. The inpatient and service demand from this service has flow-on effects on access to inpatient beds for other specialties, including surgery.

Demand management will require that alternative models of care be developed and implemented to reduce inpatient demand through better management and maintenance in the community. This should include timely access to specialist review resulting in hospital avoidance, reduction in unplanned and avoidable admissions, and earlier discharge.

7.11.1 Strategic Directions

The strategic vision for the respiratory services is toward a comprehensive clinical care model encompassing inpatient, ambulatory and community based clinical services for acute and chronic respiratory conditions to reduce avoidable admissions, length of stay and readmission rates with a particular focus on patients with COPD and standardised care across the LHD.

### Respiratory Medicine

168 Develop a business case for expansion of the Respiratory Medicine services detailing additional workforce requirements including specialist respiratory physicians, senior nursing positions, and allied health. Devise a staged implementation plan for the proposed enhancements.

169 Develop and expand respiratory medicine as a sub-specialty service at Wyong Hospital.

170 Expand size and frequency of multidisciplinary outpatient clinic services at both Gosford and Wyong hospitals.

171 Develop Rapid Review Clinics (‘Drop In’ clinic) at both Gosford and Wyong hospitals for early follow up of respiratory patients referred from ED, APAC or community and chronic care programs, or their GP.

172 Develop appropriate care pathways for respiratory patients in MAU.

173 Expand community and home based chronic care and rehabilitation assessment and treatment programs (with an initial focus on COPD) including: Respiratory Physician, Respiratory CNC and additional APAC resources and training, additional community nursing and allied health resources.

174 Increase availability of equipment (including home oxygen, CPAP equipment, non-invasive ventilators) in the equipment loan pool (ELP) to avoid delayed discharges while sourcing equipment through Enable NSW.

175 Review Pulmonary Rehabilitation Programs to consider: centralised intake; increased frequency of programs to bi-weekly, expansion to include program provision at Woy Woy Hospital, and transport for clients.

176 Develop tertiary and specialist services and clinics at Gosford Hospital including: interstitial lung disease and pulmonary hypertension clinic, respiratory failure clinic for obesity-hypoventilation, neuromuscular conditions, multidisciplinary lung cancer clinic, and local access to thoracic surgical
support.

177 Expand ward based capabilities and capacity (beyond the current two beds) to accommodate additional patients requiring non-invasive ventilation. Develop in partnership with ICU.

178 Improve onsite access to diagnostic techniques including ventilation perfusion scanning, endoscopic bronchial ultrasonography (EBUS) for evaluation of lung cancer, ward based ultrasonography, and nasopharyngoscopy.

179 Modify and expand the Respiratory Investigation Unit at Wyong Hospital by 2015.

180 Replace ageing equipment in the Respiratory Investigation Unit at Gosford Hospital Unit by 2015.

181 Develop a non-ventilation sleep clinic (for insomnia, parasomnia etc.) with access to a sleep psychologist.

182 Increase capacity (number of rooms) in the Sleep Investigation Unit at Gosford Hospital.
8 Cancer and Clinical Haematology

The cancer care service incorporates: Medical Oncology, Haematology, Research and Clinical Trials, and the Cancer Care Centres at Gosford and Wyong hospitals. Inpatient oncology and haematology services are currently provided within a 30 bed ward at Gosford Hospital. Medical Oncology and clinical haematology is provided as both inpatient and outpatient services.

Ambulatory care services and chemotherapy chairs are located at Gosford Hospital (10 chemotherapy chairs) and Wyong Hospital (8 chemotherapy chairs), an additional 5 chemotherapy chairs (3 at Gosford and 2 at Wyong) will be commissioned as part of the Regional Cancer Centre project. The existing ambulatory centres operate 5 days/week at Gosford Hospital (Monday to Friday) and 4 days/week at Wyong Hospital (Tuesday to Friday).

A major capital expansion of the Cancer Care Centres at Gosford and Wyong hospitals is underway with development of the Regional Cancer Service which includes the construction of a radiation oncology service incorporating two linear accelerators on the Gosford Hospital site with space for a third to accommodate future growth. These works are due for completion in 2012 and will commence patient treatments in early 2013.

There are also currently two privately operated linear accelerators on the Central Coast and 8-10 private chemotherapy chairs.

The significant population increase skewed towards older patients occurring at the northern end of the CCLHD over the next decade will lead to increasing demand for cancer treatment services at Wyong Hospital including the need for an inpatient unit. An inpatient unit at Wyong Hospital is not considered necessary in the timeframe for this Plan but it will be required early in the following 10 year planning cycle. A significant expansion of outpatient and community oncology services with an effective specialist consultation service will be required with particular emphasis on those centred on the Wyong Cancer Centre. In the interim introduction of an inpatient consultation service at Wyong Hospital is required.

8.1.1 Strategic Directions

Cancer and Clinical Haematology

183 Develop a business case detailing the service development requirements for the Cancer and Clinical Haematology service to include: provision of a comprehensive consultation service at Wyong Hospital; capacity for care coordination for all core tumour groups; support services for adolescent and young people with cancer and for cancer survivors; Haematology Nurse Practitioner; Cancer Clinical Nurse Consultant, and additional medical workforce.

184 Develop a business case detailing the proposed model of care and requirements (including extended hours) to support the establishment of a Haematology Acute Assessment Unit (with 2 to 4 dedicated beds) as part of the Haematology Oncology Clinic initially at Gosford Hospital followed by Wyong Hospital.

185 Expand the Community Oncology Service to provide 7 day a week phone support and 6 day a week home visits.

186 Review the Therapeutic Apheresis service to identify the resource requirements to support the increasing demand for both cancer and non-cancer therapies.

187 Develop an implementation plan for the staged increase in chemotherapy and ambulatory care capacity at both Gosford and Wyong hospitals with 16 additional chairs required at each site by 2022 to accommodate increasing demand.

188 Establish a familial cancer genetics service.

189 Enhance and expand the multidisciplinary Lymphoedema service.
190 Develop a proposal to establish high acuity beds within the haematology oncology ward to manage patients requiring low dose vasopressor support in partnership with ICU services.

191 Review future oncology and clinical haematology inpatient bed requirements to accommodate the projected increase in demand for cancer services.

192 Relocate inpatient and ambulatory care resources to a location in proximity to the Regional Cancer Centre on the Gosford site to provide a comprehensive and consolidated cancer care service.
9 Aged and Sub-Acute Care

The Aged and Sub-Acute Care encompasses both acute and sub-acute aged care services as well as general and aged care rehabilitation. Services are provided across the acute hospital sites, sub-acute sites and into the community which includes home based and outreach services to residential aged care facilities (RACFs). Services are provided through the Aged Care Sub-Acute and Complex Care Division (ASACC) which is part of the Children’s, Aged and Community Health (CACH) Directorate.

9.1 Acute Aged Care

The ageing population will have a significant impact on the demand for aged care services into the future. In 2011 there were 41,906 people aged 70 years or over representing 13.2% of the population on the Central Coast. This population is projected to increase by 28% by 2021 to 53,549 people (15.1% population). To put this in perspective on the Central Coast the highest projected population growth to 2021 will be in the 70 years and over age group which will represent 31% of the population growth for the LHD. The largest growth is projected to occur in the Wyong North East SLA.

Older patients are more likely to be complex having concomitant and interrelated medical, functional and psychosocial issues. In 2010/11 48.3% of acute inpatient separations and 62.9% of bed days across both Gosford and Wyong hospitals were aged over 70 years. By 2022 this is projected to increase to 53.7% of separations and 68% of bed days. The proportion of older patients is higher at Wyong Hospital than Gosford Hospital with 53.3% of separations and 57.7% of bed days in 2010/11 utilised by people aged over 70 years and is projected to increase to 67.5% of separations and 72.4% of bed days by 2022. By 2022 it is estimated that one in four inpatient beds will be occupied by patients aged 85 years or more. This has big implications for how older patients are managed both within the inpatient setting and the community/ home based setting.

In the 2006 census it was estimated that about 22% of Central Coast residents aged over 70 years lived alone (20% aged 70-84 years and 29.8% aged 85+ years), it can be expected that this will increase as the population in this age group grows. The proportion of this population living alone has implications for the health system and the type of support required for patients in the home setting.

The focus of the aged care services is to manage health issues related to: physical disability, mental disability, bereavement, quality of life issues, continuing care (including accommodation and support), multiple medical problems and poly-pharmacy. Aged care services can also assist a small number of younger adults with disability and high support needs for whom there are no specific services.

9.1.1 Current services, resources and organisation

There are two Acute Care of the Elderly (ACE) Units located at Gosford (32 beds) and Wyong (30 beds) hospitals. Patients in these units are under the care of the geriatricians. The Geriatric Medicine service also undertakes inpatient consultation to other inpatient areas across all four facilities (Gosford, Wyong, Woy Woy and Long Jetty). As part of the aged care service the following in-reach assessment, outpatient, community and home based services are provided:

Multidisciplinary assessments and care planning are completed by the Aged Care Services in Emergency Team (ASET) which offers three services:

- ASET ED - based in the Emergency Department to undertake assessment of patients aged over 65 years
- ASET Outreach - provides assessment of residents in Residential Aged Care Facilities (RACF) to minimise avoidable presentations to ED; and provide follow-up assessment post discharge, facilitating earlier discharge from hospital
- ASET BA - undertakes Behavioural Assessment of patients experiencing moderate to severe behavioural and psychological symptoms of dementia (BPSD). These assessments and follow-up can
occur in hospital and/or in the community. The aim is to improve management in hospital, improve transition to RACF or home, and to minimise avoidable presentations to ED.

The Aged Care Assessment Team (ACAT) is a multidisciplinary team providing assessment services to the frail and aged in both the community and inpatient setting. The team formulates care plans and undertakes assessments for placement in a RACF.

Geriatric outpatient clinics are conducted at Gosford and Wyong hospitals, home based assessment can be undertaken for patients who are unable or too frail to attend the outpatient clinic. A memory and dementia screening clinic is operated at Wyong Hospital, this clinic would be enhanced by inclusion of a neuropsychologist three hours per week. There is also a memory and dementia screening clinic at Gosford Hospital conducted in collaboration with the Neurology Department.

Dementia care services are provided as well as dementia day therapy programs which are provided at Long Jetty Health Service and Kincumber Community Health Centre.

Key clinical relationships exist between these services and the emergency departments; rehabilitation medicine; sub-acute aged care services; other medical sub-specialties; surgical service; orthopaedic surgery; liaison psychiatry, psychogeriatric and Specialised Mental Health Services for Older People (SMHSOP); general practitioners; acute post-acute care (APAC); community nursing; ongoing and complex care programs; transition care; palliative care; RACFs and will be further developed with the Central Coast NSW Medicare Local.

**9.1.2 Issues, challenges and opportunities**

In addition to the growth in the older population there are a number of factors which are contributing to the increasing demand for acute aged care / geriatric medicine:

- Increasing patient complexity with the presence of multi morbidities particularly chronic disease, combined with functional and frequently psychosocial issues
- The shift toward increasing sub-specialisation in conjunction with decreasing numbers of general physicians has placed increased pressure on the geriatrician workforce to fill this void. There is a need for increasing adoption and use of shared-care models between specialties for the management of these patients such as an ortho-geriatric model.
- There is increasing demand for geriatric consultation across the acute facilities as well as inpatient management in the acute aged care units.

As demand for acute inpatient beds has grown there is increasing pressure on the individual services to reduce the number of admissions (particularly through ED) and also the subsequent length of stay:

- Older patients occupy the majority of acute inpatient beds, represent the highest proportion of unplanned medical admissions and generally have longer lengths of stay in both ED and the inpatient wards
- Improved and expanded community-based services with outreach to RACFs and access to rapid review clinics may reduce the numbers of admissions and provide an alternative to inpatient management
- Improved access to sub-acute beds will also assist patient throughput from the acute inpatient sites
- Access to onsite patient assessment and review, and support for minor treatments, as well as access to mobile diagnostics such as X-Ray and Pathology has the potential to reduce the numbers of transfers from RACF to ED to access these services.

Workforce is a significant issue across all the disciplines in particular the medical workforce, this impacts on their capacity to provide inpatient consultation, outpatient clinics, out-reach to the community as well as providing coverage at the sub-acute sites.
9.1.3 Strategic Directions

A key objective for the CCLHD will be to improve its response to inpatient demand and the length of stay for elderly patients. This will be a major challenge given the projected growth in the elderly population (particularly those aged over 85 years) and the increasing complexity of these patients who frequently have multi-morbidities.

Growth in acute aged care services both inpatient and non-inpatient services will be required to accommodate the projected increase in demand. This growth will require increases in the workforce (across all disciplines) and capital expansion.

The overall approach will focus on a multi-disciplinary team involving geriatricians, nursing and allied health providing a comprehensive range of assessment and management services for older people in a range of settings. They will encompass the continuum of care (inpatient, outpatient, community and domiciliary) and all aspects of care (prevention, acute care, rehabilitation and maintenance care) with a view to reducing the number of ED presentations through improved management and support of elderly patients in the community including residential aged care facilities. It will also require networking and links with other agencies, NGOs and community groups who provide services for the aged population.

### Acute Aged Care

193 Review the aged care medical workforce at both Gosford and Wyong hospitals to identify the gaps in current workforce and achievable and sustainable staffing models. This will include consideration of specialist, registrar and junior medical workforce requirements to support increased inpatient consultative role, services to the sub-acute facilities and outreach services; and, proposed staged implementation.

194 Develop a Multidisciplinary Outreach Assessment and Review service to provide services into the community including RACF and home-based assessment services as an enhancement to the current community-based and outreach services.

195 Establish Acute Evaluation of the Elderly outpatient clinics at Gosford and Wyong hospitals with rapid access and direct referral.

196 Introduce an inpatient short stay model of care with dedicated beds either within the MAU or acute aged care units at both Gosford and Wyong hospitals.

197 In collaboration with AS&ICU Division and the orthopaedic service fully implement the orthogeriatric model of care as described by the NSW Agency for Clinical Innovation at both Gosford and Wyong Hospital. (cross reference AS&ICU Division strategies).

198 Review the current outpatient clinics provided and identify additional or enhanced outpatient services and clinics (orthopaedics, osteoporosis, syncope, cardiology) to address current gaps in service.

199 Review community-based aged care services to identify any gaps in services and additional services which could be provided (e.g. nutrition assessment services, care packages etc.) which would support transition to home and ongoing care at home. Identify areas of overlap or duplication with services provided through other programs or Divisions.

200 Explore options for the introduction of a mobile diagnostic services (X-Ray and pathology) which can provide services to RACF and the sub-acute facilities (Cross Reference Medical Imaging strategies).

201 Develop a comprehensive falls service including: multidisciplinary mobility and falls assessment team; a falls clinic; and a falls service with links to an osteoporosis service, primary care, ED and outpatients. (Cross Reference with Medicine – Endocrinology strategies).

202 Expand the volunteer companion and feeding program to all inpatient areas.
9.2 Sub-Acute Aged Care and Rehabilitation

The Sub-Acute Services encompass inpatient and community-based rehabilitation and sub-acute aged care services across CCLHD. There are several categories and levels of sub-acute care which cater for different patient groups. Each of these categories is funded through separate sources (Commonwealth and State) and there are specific patient criteria for each of the programs. The sub-acute streams are:

- **General rehabilitation**
  - Rehabilitation aims to assist people to recover function or abilities and achieve the highest possible level of independence following the onset of disease or injury. This is achieved through a goal-directed, multidisciplinary approach involving medical, nursing and allied health staff. Patients will be under the care of a rehabilitation specialist.

- **Sub-acute geriatric rehabilitation (also referred to as Geriatric Evaluation and Management or GEM)**
  - This patient group no longer require acute inpatient management but still require ongoing geriatrician and multi-disciplinary assessment and management of complex medical, psychological, social and/or functional conditions and needs, rehabilitation is part of this program. Patients will be under the care of a geriatrician.

- **Maintenance (slow stream, step-down or restorative care)**
  - Maintenance Care is provided for patients who are non-weight bearing and awaiting fractures to heal prior to rehabilitation, patients awaiting placement, guardianship are also placed in this stream.

Five sub-acute inpatient beds at both Woy Woy and Long Jetty are identified for patients requiring end of life care (‘non-specialist’ palliative care). These patients remain under the care of their GP or a CMO with consultative support from the Palliative Care Service as required.

There is also a specific non-acute Transitional Care program, distinct from the sub-acute programs, funded through the Commonwealth Department of Health. Transitional Care is provided as a 12 week program either in a Transitional Care Unit or as a home-based package. Transitional Care Units (TCU) are located on-site at Woy Woy and Long Jetty.

The Central Coast sub-acute bed capacity is:

- 90 rehabilitation beds - 30 public general rehabilitation beds located at Wyong Hospital plus 60 rehabilitation beds located in private facilities
- 63 sub-acute beds - during 2013 the sub-acute built capacity will increase to 93 built beds (83 with identified recurrent funding) through a combination of COAG capital and recurrent funding for 20 beds and NSW Government election commitment which provided capital funds to construct 10 beds.
  - The breakdown of these beds will be: 53 GEM beds (28 Wyong, 25 Woy Woy); 20 Maintenance (7 at Long Jetty, 13 at Woy Woy); 10 beds have been identified for use as end of life beds (non-specialist palliative care) (5 at Woy Woy; 5 at Long Jetty). On completion of the new unit at Woy Woy Hospital and transfer of ten beds from the existing ward there will be 10 built beds (currently used for GEM) available which could be utilised depending on availability of recurrent funding.
- 32 Transitional Care beds - 20 bed Transitional Care Unit located on the Woy Woy Hospital site, and a 12 bed unit located on the Long Jetty site.
Table 19: Central Coast LHD Current and Planned Sub Acute and Non Acute Bed Capacity by bed type

<table>
<thead>
<tr>
<th>Facility</th>
<th>2010-11</th>
<th>Mid 2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-Acute Beds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gosford*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Woy Woy – Sub Acute - Total</td>
<td>23</td>
<td>23</td>
<td>53 (43 funded beds)**</td>
</tr>
<tr>
<td></td>
<td>GEM</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>End of Life</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Not funded</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wyong – Rehabilitation</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Wyong – Sub Acute - GEM</td>
<td>10</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Long Jetty - Sub Acute</td>
<td>30</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>GEM</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>End of Life</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Total Sub Acute</td>
<td>93</td>
<td>93</td>
<td>123** (113 funded)**</td>
</tr>
<tr>
<td></td>
<td>Rehabilitation</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>GEM</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>End of Life</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Not funded</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Private - Rehabilitation</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

# includes: 10 non-specialist palliative care beds (5 at Woy Woy and 5 at Long Jetty)

*in 2010/11 - 16-18 bed equivalent of patients classified sub -acute in Gosford Hospital

** refers to inpatient beds with recurrent funding

<table>
<thead>
<tr>
<th>Transition Care Beds</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Woy Woy</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Long Jetty</td>
<td>-</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Total Transitional</td>
<td>20</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

The capital development of the new sub-acute unit due for completion in 2013 at Woy Woy Hospital will increase the available sub-acute beds by 20 (and increase the built capacity by 30 beds). This increased capacity provides an opportunity to reconfigure services and implement new models of care to maximise the effective utilisation of services with flow-on benefits to acute inpatient services. However, geriatric medical workforce shortages, as well as shortages across other disciplines, have an adverse impact on the capacity to expand and enhance services.

In 2013 on completion of the new unit at Woy Woy Hospital the configuration of sub-acute beds will be:

- **Wyong Hospital**
  - 58 beds - 30 beds general rehabilitation; 28 beds geriatric rehabilitation/GEM
- **Long Jetty Health Facility**
  - 12 beds – 7 maintenance/restorative care and 5 end of life (sub-acute palliative care) beds
- **Woy Woy Hospital – built capacity 53 beds**
  - 25 beds – geriatric rehabilitation/GEM
  - 5 beds - end of life (sub-acute palliative care) beds
  - 13 beds – maintenance/restorative care plus built capacity for 10 beds within the maintenance unit operation of these beds will be reliant on availability and allocation of recurrent funding.
9.2.1 Current services, resources and organisation

Wyong Hospital
- Rehabilitation facilities include 30 general rehabilitation beds, a gymnasium, hydrotherapy pool and outdoor exercise facility. Patients with cognitive impairments or more than two medical problems are not accepted by the rehabilitation team.
- 28-bed sub-acute aged care rehabilitation unit opened in March 2012 (comprised of 10 existing GEM beds at Wyong plus 18 beds transferred from Long Jetty) this unit provides rehabilitative care for patients aged over 65 years who are medically stable but require further inpatient care. Patients are under the care of the geriatric medicine team and receive allied health involvement as per the GEM funding model. The unit does not have a gymnasium or outdoor exercise area and is located some distance from the gym facilities in the rehabilitation unit.

Woy Woy Hospital
- Operates a 23 bed sub-acute medical ward – patients are admitted by a GP VMO for multidisciplinary step-down or restorative care (maintenance care) under the management of a CMO and includes patients who are non-weight bearing and awaiting fractures to heal prior to rehabilitation as well as patients awaiting placement and guardianship. The patients typically require a longer hospital stay for slow stream management of orthopaedic, gait/mobility, dementia and other medical conditions. Most patients are transferred from Gosford Hospital.
- Ten of these beds will transition to the GEM model of care and be moved into the sub-acute unit when it is completed in 2013, the remaining 13 beds will continue to operate as slow-stream rehabilitation/maintenance beds. Following transfer of ten beds to the new unit this built capacity could be utilised if additional recurrent funding is available however the unit will require refurbishment.
- A 30 bed sub-acute care unit is due for completion in mid-2013. These patients will be sub-acute geriatric rehabilitation patients under the care of the geriatric medicine team.
- A 20 bed Transitional Care Unit provides services to patients assessed by ACAT who require more time to improve their ability to carry out everyday activities to be able to return home or be at their best in residential care. It is a short term, goal oriented, multidisciplinary program. Patients may remain in transitional care for a maximum of 12 weeks, under the medical care of a General Practitioner.

Long Jetty Health Facility
- 12 sub-acute beds for Maintenance Care (slow stream, step-down or restorative care) for patients awaiting placement, guardianship and patients who are non-weight bearing and awaiting fractures to heal prior to rehabilitation and end of life care. Most patients are transferred from Wyong or Gosford hospitals and admitted under the care of GP VMOs with support from a resident medical officer and a geriatric consultation service. Five of these beds can be used for end of life (non-specialist palliative care) patients
- Following completion of the capital works at Wyong Hospital in 2012 refurbishment of the existing ward area to create a 12 bed Transitional Care Unit (TCU) occurred. This Unit operates on the same model as the TCU at Woy Woy Hospital.

Rehabilitation Service
- This service admits to the general rehabilitation unit at Wyong Hospital which provides multidisciplinary inpatient rehabilitation care. The service also provides a consultation service to the acute inpatient units at Gosford Hospital with the rehabilitation provided by the allied health staff allocated to that unit. There are limited outpatient rehabilitation clinics provided at Wyong and Woy Woy hospitals.

Ambulatory Care
- Community based rehabilitation on the Central Coast is currently confined to the specialist programs of cardiac and pulmonary rehabilitation and hand therapy. Cardiac and pulmonary rehabilitation are provided on-site at Gosford, Wyong and Long Jetty (pulmonary only) hospitals through the CACH
Directorate. There is an occupational therapy led hand therapy service at Gosford and Wyong Hospitals.

Current outpatient clinics
- Outpatient services include geriatric clinic at Gosford Hospital; rehabilitation, geriatric and amputee clinics at Wyong Hospital; rehabilitation and an amputee clinic at Woy Woy Hospital. There are also occupational therapy led clinics for general rehabilitation, Lymphoedema, and chronic pain located at Gosford Hospital. Memory and dementia assessment clinics are conducted at both Gosford (with Neurology) and Wyong hospitals.

Specialist outreach services
- A neurological rehabilitation community outreach team (CORT) and a stroke support service (Community Neurological Support Service (CNSS)) operate on the Central Coast. Hydrotherapy is offered at Woy Woy and Wyong Hospitals. There is also a respiratory home-based rehabilitation service – Home Education and Respiratory Rehabilitation Service (HERRS).

Home-based rehabilitation
- Home-based rehabilitation services provide intensive, short duration rehabilitation for a range of conditions to clients in their home environment. CCLHD has home-based rehabilitation programs for neurological (CORT and CNSS) and respiratory patients (HERRS) there are no general rehabilitation programs.

Orthotics
- There is a single orthotist linked to the rehabilitation and aged care services based on the Gosford Hospital site, which provides a limited service to Gosford, Wyong, Woy Woy and Long Jetty Hospitals, including some outpatient clinics.

9.2.2 Demand for Rehabilitation and Sub-Acute Aged Care services

The key issues driving demand for acute inpatient services across the Central Coast are felt all the more strongly for sub-acute services, they include: an ageing population compounding the significant population rise; increasing patient complexity associated with an older patient population who are more likely to have multi-morbidities and chronic conditions; and, low levels of private health insurance.

Table 20: Sub-Acute Inpatient Overnight Activity 2010/11 (includes inflows)

<table>
<thead>
<tr>
<th>Facility</th>
<th>Service Category</th>
<th>Data</th>
<th>Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>16-44</td>
<td>45-69</td>
<td>70-84</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>GEM</td>
<td>Seps</td>
<td>14</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed Days</td>
<td>228</td>
<td>2,904</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beds*</td>
<td>0.7</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALOS</td>
<td>16.3</td>
<td>21.7</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>Seps</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed Days</td>
<td>34</td>
<td>935</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beds*</td>
<td>0.1</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALOS</td>
<td>8.5</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td>Rehabilitation</td>
<td>Seps</td>
<td>29</td>
<td>184</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed Days</td>
<td>454</td>
<td>3,026</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beds*</td>
<td>1.4</td>
<td>9.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALOS</td>
<td>15.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Private</td>
<td>Rehabilitation</td>
<td>Seps</td>
<td>15</td>
<td>239</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed Days</td>
<td>321</td>
<td>3,441</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beds*</td>
<td>1.0</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALOS</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Total Activity</td>
<td></td>
<td>Seps</td>
<td>62</td>
<td>607</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed Days</td>
<td>1,037</td>
<td>10,306</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beds*</td>
<td>3.2</td>
<td>31.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALOS</td>
<td>16.7</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: FlowInfo v11.2 * using 90% occupancy Excludes palliative care and psychogeriatric data
Analysis of 2010/11 data indicates that:

- Overnight inpatient sub-acute activity was equivalent to 165 beds, there were 148 beds available (88 public sub-acute beds and 60 private rehabilitation beds):
  - General rehabilitation activity was equivalent to 93 overnight beds - there are 90 general rehabilitation beds available (30 public and 60 private)
  - GEM activity was equivalent to 56 beds - there are 38 beds GEM beds available (28 at Wyong and 10 at Woy Woy). The number of GEM beds will increase by 15 at Woy Woy in 2013 increasing the number of GEM beds to 53.
  - Inpatient activity classified as Maintenance was the equivalent to 17 beds, there are 20 beds available (13 at Woy Woy and 7 at Long Jetty)
- The majority of general rehabilitation activity is delivered through private facilities (66.3%). There are currently 60 private rehabilitation beds on the Central Coast
- Patients 70 years and older accounted for 77.4% of private overnight rehabilitation separations (81.4% bed days) and 79.4% of public separations (84% of GEM and 74.2% rehabilitation) and 76.9% bed days (82.9% of GEM and 66.1% rehabilitation bed days)
- There is a significant overlap in age in GEM and rehabilitation patients, but with more older patients in GEM.

In 2010/11 the number of type changed patients classified as sub-acute and non-acute patients in acute beds at Gosford Hospital was equivalent to 16 beds (at 90% occupancy) eight of these beds were for patients awaiting inpatient rehabilitation.

Table 21: CC Inpatient Overnight Rehabilitation Activity by Hospital and Payment Status 2010/11

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Non-Chargeable Bed Days</th>
<th>Private Bed Days</th>
<th>DVA Bed Days</th>
<th>Other Bed Days</th>
<th>Total Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford</td>
<td>250 1,606</td>
<td>84 515</td>
<td>28 151</td>
<td>11 79</td>
<td>373 2,351</td>
</tr>
<tr>
<td>Woy Woy</td>
<td>3 16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3 16</td>
</tr>
<tr>
<td>Wyong</td>
<td>353 6,221</td>
<td>75 1,341</td>
<td>17 243</td>
<td>6 96</td>
<td>451 7,901</td>
</tr>
<tr>
<td>Private</td>
<td>1 18</td>
<td>797 14,099</td>
<td>294 5,522</td>
<td>34 601</td>
<td>1,126 20,240</td>
</tr>
<tr>
<td>Total</td>
<td>307 7,861</td>
<td>956 15,955</td>
<td>339 5,916</td>
<td>51 776</td>
<td>1,953 30,508</td>
</tr>
</tbody>
</table>

Source: FlowInfo v11.2

- 88.4% of bed days for privately insured patients for rehabilitation are in private facilities
- 86.7% of overnight separations (93.3% bed days) for DVA entitled patients are in private facilities.
- DVA entitled patients represent 26% of admissions and 27.3% of rehabilitation bed days in private facilities. The equivalent of 17 inpatient beds (using 90% occupancy).
- 98.9% of bed days for DVA entitled patients are aged 70 years or older (68.5% by patients aged 85 years and 30.4% aged 70-84 years).

As the number of DVA clients decreases there is likely to be a decline in demand for private rehabilitation services with a potential shift to the public system. This may result in a decline in the number of rehabilitation beds in private facilities.

Table 22: CC Sub-acute activity by Hospital and LGA of Residence 2010/11

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Gosford Bed Days</th>
<th>Wyong Bed Days</th>
<th>Lake Macquarie Bed Days</th>
<th>NSLHD Bed Days</th>
<th>Other Bed Days</th>
<th>Total Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford</td>
<td>449 3,636</td>
<td>230 1,344</td>
<td>19 100</td>
<td>5 46</td>
<td>7 61</td>
<td>710 5,187</td>
</tr>
<tr>
<td>Long Jetty</td>
<td>108 2,150</td>
<td>366 7,715</td>
<td>23 457</td>
<td>1 27</td>
<td>7 190</td>
<td>505 10,539</td>
</tr>
<tr>
<td>Woy Woy</td>
<td>316 7,684</td>
<td>5 96</td>
<td>- -</td>
<td>1 6</td>
<td>1 2</td>
<td>323 7,788</td>
</tr>
<tr>
<td>Wyong</td>
<td>160 2,941</td>
<td>552 6,703</td>
<td>87 722</td>
<td>4 33</td>
<td>7 80</td>
<td>810 10,479</td>
</tr>
<tr>
<td>Private</td>
<td>707 12,486</td>
<td>420 7,770</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>1,127 20,256</td>
</tr>
<tr>
<td>Total</td>
<td>1,740 28,897</td>
<td>1,573 23,628</td>
<td>129 1,279</td>
<td>11 112</td>
<td>22 333</td>
<td>3,475 54,249</td>
</tr>
</tbody>
</table>
50% sub-acute overnight separations (53.3% bed days) are residents of Gosford LGA and 45.3% separations (43.6% bed days) are residents of Wyong LGA.

Gosford LGA residents represent 19.8% overnight sub-acute separations and 28.1% bed days at Wyong Hospital

9.2% overnight sub-acute separations and 10.2% bed days for residents of Gosford LGA are in Wyong Hospital

40.6% overnight sub-acute separations and 43.2% bed days for residents of Gosford LGA are in private facilities compared to 26.7% separations and 32.9% bed days for Wyong LGA residents

Inflows account for 162 (4.6%) sub and non-acute separations and 1,724 (3.2%) bed days, the equivalent of 6 inpatient beds (at 90% occupancy).

60% of inflows are to Wyong Hospital with the majority of inflows (79.6%) from Lake Macquarie LGA.

Inflow separations are fairly evenly distributed between GEM, Rehabilitation and Maintenance however GEM accounts for 45.5% of inflow bed days and rehabilitation for 34.8% inflow bed days

85.8% of inflow patients are aged 70 years and older.

9.2.3 Issues, challenges and opportunities

COAG Funding

- GEM services and staffing model are funded through COAG, this funding is due to expire in June 2013. This will have implications for the ongoing operation of the GEM inpatient services at Wyong and Woy Woy hospitals as well as the ASET Outreach service.

Inpatient capacity

- In 2010/11 demand for overnight inpatient rehabilitation and GEM was the equivalent to 149 inpatient beds which exceeded the available beds (128 public and private beds) as well as the additional GEM capacity which is due to come online in 2013 (143 beds). This activity also exceeded the SIAM projection to 2017 of 137 beds.
- A contributing factor to the high demand for inpatient rehabilitation (including GEM) may be the lack of public non-inpatient alternatives such as ambulatory/outpatient based services
- Alternative models aimed at reducing demand for inpatient rehabilitation need to be explored including the earlier commencement of rehabilitation during the inpatient length of stay and establishment of ambulatory rehabilitation.

Department of Veterans Affairs (DVA) patients

- A high proportion of DVA entitled patients access rehabilitation in the private facilities
- Almost all DVA entitled patients are aged over 70 years with almost 70% aged over 85 years
- There is likely to be an increase in demand for publicly provided rehabilitation/GEM services as the number of patients with DVA entitlements reduces and is replaced by an ageing, uninsured population
- CCLHD does not have the facilities to accommodate this expected increase in uninsured patients which has the potential to be equivalent to 17 inpatient rehabilitation beds.

Access to rehabilitation

- Access to rehabilitation has been identified as an issue by a number of clinical services specifically: neurology, oncology and surgical services
- 15 rehabilitation beds moved from Woy Woy Hospital to Wyong Hospital in 2008 (in part due to medical workforce shortages at the time), they now form part of the 30 bed rehabilitation ward at Wyong Hospital. Currently there are no public inpatient rehabilitation beds or ambulatory services in the Gosford LGA creating issues with access for residents of the Gosford LGA.
- There are substantial delays in access to inpatient rehabilitation beds at Wyong Hospital for patients at Gosford Hospital resulting in patients being discharged without rehabilitation. The ALOS in Gosford Hospital for patients following type change to rehabilitation is 6.3 days. There are also reported
delays in commencement of rehabilitation in the acute setting while the patient either awaits transfer or discharge (so contributing to bed-block of sub-acute patients in acute beds)

- There is a significant shortfall of specialist rehabilitation staff on the Central Coast which contributes to delays in accessing rehabilitation services
- Patients with cognitive impairment have limited access to rehabilitation
- Not all patients are ready for rehabilitation on discharge and some patients would benefit from the opportunity to attend rehabilitation at a later stage. Improved access to maintenance care may be required for these patients to reduce further loss of function prior to commencing rehabilitation
- Access to specialist rehabilitation for patients with chronic and degenerative diseases on an ongoing or periodic basis (e.g. degenerative neurological conditions) is an issue due to a lack of available ambulatory rehabilitation services and also a lack of capacity within established services
- There are difficulties with providing specialised rehabilitation services for specific groups such as spinal cord injury patients and patients with acute brain injury post discharge from the specialist services.

Changing profile

- As with many other inpatient services patient complexity and acuity is increasing for patients requiring access to rehabilitation services.
- Increasingly these patients will not be suitable for transfer to a sub-acute facility to access rehabilitation which may delay commencement of rehabilitation. Early commencement of rehabilitation has been demonstrated to improve patient outcomes and reduce overall length of stay.

Outpatient/community based demand

- There are limited community based rehabilitation programs (all of which are specialised programs) and access is difficult due to the restricted number of places available
- There is a lack of community based rehabilitation services to provide ongoing rehabilitation (beyond the acute phase) for younger patients, stroke patients, patients with degenerative conditions, chronic pain and for falls prevention
- There is a need to strengthen networks and enhance the care continuum between sub-acute services located in the acute hospitals, geriatric rehabilitation and palliative care services and the outreach, home-based and ambulatory services that support inpatient services
- There is an unmet need for the following services: bladder management, wheelchair assessments, management of spasticity and pressure care.

Workforce

- There is a lack of rehabilitation physicians which contributes to delays in rehabilitation assessment
- There is a shortfall of specialised rehabilitation staffing on the Central Coast compared to the accepted AFRM (Australian Faculty of Rehabilitation Medicine) benchmarks
- Workforce constraints (in part due to a lack of funded positions as well as workforce shortages for some disciplines) across all disciplines has been identified as a significant issue which has a direct impact on the level and type of services able to be provided and the capacity to meet current demand and limits any expansion of services.

Inpatient facilities at Wyong Hospital

- The rehabilitation unit at Wyong Hospital is accommodated in a ward area which was not designed for rehabilitation patients or services, as such it requires refurbishment to improve the functionality and support the rehabilitation model of care. This will require - upgrading the gym area, patient bathrooms and inclusion of a patient dining area
- The recently opened sub-acute GEM Unit would be enhanced through inclusion of a gym area and contained outdoor exercise area for patients.

Woy Woy Hospital

- The existing ward area at Woy Woy Hospital is very old and in need of refurbishment to maintain its suitability for ongoing patient accommodation.
Maintenance Care

- Within maintenance classification there are two groups of patients, those who are non-weight bearing but who will ultimately be suitable for rehabilitation and those awaiting guardianship determination and/or nursing home placement.
- Some of these patients particularly those awaiting guardianship and placement can have extended inpatient stay which reduces patient throughput.
- With the ageing of the population and increased patient frailty, there are increasing numbers of patients requiring maintenance/restorative care prior to commencement of rehabilitation. Ideally these patients should receive therapy to maintain their level of function and improve their physical condition for when they commence rehabilitation potentially reducing their rehabilitation length of stay and improving their outcomes.

9.2.4 Projected GEM and Rehabilitation Bed Requirements

The usual approach to estimating sub-acute bed requirements using SiAM (Sub-Acute Inpatient Activity Model) is problematic for the Central Coast as sub-acute activity currently in Woy Woy and Long Jetty Hospitals has not been included in the projection model. However, applying SiAM (v1.3) statewide current and future age stratified rehabilitation activity rates to the Central Coast population suggests that a total of 137 GEM and general rehabilitation beds would be required in 2017 and 156 in 2022 (excludes maintenance and palliative care). As a comparison using guidelines published by the Australian Faculty of Rehabilitation Medicine which propose 45 rehabilitation (general/geriatric) beds (public and private) per 100,000 population, projections indicate a need for 150 beds by 2017 and 160 beds by 2022. Recently released version of SiAM 2012 indicates that 180 GEM and rehabilitation beds will be required on the Central Coast by 2022.

2010/11 activity indicated demand for 149 GEM and rehabilitation beds on the Central Coast. There were 128 beds available - 90 general rehabilitation beds (30 public and 60 private) and 38 GEM (28 at Wyong and 10 beds at Woy Woy). The high inpatient demand may reflect the lack of ambulatory or community-based rehabilitation services as an alternative option.

In 2013 there will be 143 public and private rehabilitation and GEM beds on the Central Coast (includes the 15 additional GEM beds at Woy Woy Hospital due to be opened in 2013) while this is consistent with the AFRM estimate of 144 beds the 2010/11 activity exceeded the expanded bed base by 6 beds and the AFRM estimate by 5 beds. There are an additional 10 built beds located in the existing ward at Woy Woy Hospital which could be utilised to accommodate these patients if additional recurrent funding becomes available to operate the beds.

Based on the AFRM estimates an additional 17 GEM and rehabilitation beds will be required on the Central Coast by 2022. SiAM 2012 indicates that 180 GEM and rehabilitation beds will be required by 2022 and increase of 27 beds.

It is unknown what the situation with private rehabilitation beds will be to 2022 however it is estimated that the number of private rehabilitation beds is likely to decline as the demand from DVA patients declines combined with the low levels of private health insurance on the Central Coast resulting in a shift back to the public system. In 2010/11 DVA accounted for 17 private inpatient beds.

Based on this assumption and combined with the current numbers of sub-acute patients (equivalent to 16 -18 inpatient beds) in Gosford Hospital waiting to access sub-acute beds supports the need for establishment of an additional 28-30 bed rehabilitation unit to be located in the Gosford LGA.

The preferred location for inpatient rehabilitation services is on the Gosford Hospital site where it will be collocated with acute services, which is consistent with the NSW Health Rehabilitation Model of Care.
9.2.5 Strategic Directions – Rehabilitation Services

An integrated model for both generalist and aged care rehabilitation is proposed, providing services within each sector (north and south) including inpatient, ambulatory and home based rehabilitation for the adult population. This is consistent with both the NSW Health Rehabilitation Model of Care and the recommendations from the AFRM.

It is proposed that any future inpatient rehabilitation unit is collocated with acute inpatient services reflecting the increasing acuity and complexity of patients accessing rehabilitation, and reduce the need for patient transfers between acute and sub-acute facilities. It has been found that assessment and transfer of patients to rehabilitation is slower where rehabilitation services are offsite such as at Gosford Hospital.

It is proposed that any future inpatient rehabilitation unit should be located on the Gosford Hospital campus to reduce delays in commencement of rehabilitation and to facilitate access to:
- Consultation from sub-specialty medical and surgical teams
- Diagnostic services, and
- Acute/emergency medical assistance for patients who experience deterioration in their condition.

As recommended by both NSW Health Rehabilitation Model of Care and the AFRM rehabilitation services there will be a shift toward providing services 7 days/week to improve patient outcomes and reduce length of stay.

It is proposed to establish two community based rehabilitation facilities located in the north and south of the LHD that can cater for a broad range of generalist and specialist rehabilitation therapies. Ideally these would be located in the community rather than an acute hospital site. Locations should be considered as part of the planning for community health infrastructure.

In addition to generalist and aged care rehabilitation the specific rehabilitation needs of the following groups will be included:
- Orthopaedics/fractures
- Neurological (Stroke/Parkinson's Disease/other degenerative diseases)
- Amputee
- Cardiac, Heart Failure and Pulmonary Rehabilitation programs (in conjunction with program providers)
- Young people
- Patients with cognitive impairment
- Deconditioning /general debility
- Existing chronic disease rehabilitation programs.

**Rehabilitation**

203 Develop a business case and service model to support the expansion of the inpatient rehabilitation services (both beds and staffing) across the LHD to include: the range of generalist, specialist and geriatric rehabilitation services which will be required; the most appropriate setting (inpatient, ambulatory, home-based), identifying gaps in services, changes to services, enhancement and new service requirements as well as the interface with existing specialist and chronic care rehabilitation programs.

204 Identify the service requirements to enable provision of inpatient rehabilitation services 7 days/week

205 Refurbish the general rehabilitation unit at Wyong Hospital to improve functionality as a Rehabilitation Unit and support the rehabilitation model of care this will require modification to the patient accommodation including - bathrooms; the gym and inclusion of a patient dining area.

206 Expansion and enhancement of the Geriatric Rehabilitation/GEM Unit at Wyong Hospital to
accommodate a gymnasium and a contained outdoor exercise area.

207 Develop two community-based rehabilitation facilities located in the north and south of the Central Coast that can cater for a broad range of generalist and specialist rehabilitation therapies. Suitable locations for these facilities to be included as part of the master planning for community based services (cross reference to ASACH capital strategies)

208 Develop a model of care and business case for the community-based rehabilitation concept which is consistent with the NSW Health Rehabilitation Model of Care that identifies: patient selection and suitability criteria; hours of operations; opportunities for collocation of other related services; resource requirements both capital and recurrent; and business rules. Identify options for implementing this service in the intervening period prior to completion of capital development.

209 Expand the cardiac and pulmonary specialist rehabilitation programs - review the need for these services to be provided on-site at an acute hospital and identify alternative locations, review demand for the programs including waiting lists, delays in access and unmet demand (cross reference to PCAH strategies)

210 Review transition process and ongoing service provision for Central Coast residents returning post discharge from statewide services (such as spinal cord injury and acquired brain injury).

**Improve access to inpatient rehabilitation services at Gosford Hospital**

211 Develop a general rehabilitation unit onsite at Gosford Hospital with 30 beds equipped with a gymnasium, hydrotherapy pool and outdoor exercise facility with scope for future expansion of the unit to accommodate increased demand.

212 Develop a service model for the provision of an inpatient rehabilitation service at Gosford Hospital which can be implemented in the absence of the capital development. The service model should include provision of general and specialist rehabilitation for patients including aged care patients, identification of the resources required including workforce requirements and staffing models and any facility or equipment requirements.

**Sub-Acute Aged Care**

213 Establish clear business rules around access and use of sub-acute facilities and beds. Introduce a sub-acute liaison nurse role.

214 Refurbishment of the existing inpatient unit at Woy Woy Hospital to maintain its suitability for ongoing patient accommodation.

215 Review medical staffing models at the sub-acute facilities.

216 Improve access to mobile diagnostic services (medical imaging and pathology) and pharmacy services.

**9.3 Dementia care**

The prevalence of dementia on the Central Coast is projected to increase significantly, in 2009 Gosford, Wyong and The Entrance ranked within the top 10 state electorates for the prevalence of dementia. It has been projected that in the prevalence of dementia will increase by 380% in the Wyong LGA and 204% in Gosford by 2050.

Existing services include the ASET-BA, an inpatient delirium/ dementia CNC (works across both Gosford and Wyong Hospitals), a community dementia team, and the Specialised Mental Health Services for Older People (SMHSOP) Behavioural Assessment Intervention Service (BASIS). All these services are currently operating at capacity.
Enhancement of these services has the potential to prevent hospital admissions through providing a rapid response for patients with moderate to severe behavioural and psychological symptoms of dementia who live in the community or residential aged care facilities. Ideally developing behaviour management strategies in consultation with the carer and/or RACF early and throughout the course of the illness reducing reliance on medications which can have other adverse effects on these clients.

A memory and dementia screening clinic is operated at Wyong Hospital, this clinic would be enhanced by inclusion of a neuropsychologist three hours per week. There is also a memory and dementia screening clinic at Gosford Hospital conducted in collaboration with the Neurology Department.

Dementia Day Care is provided at both Long Jetty and Kincumber Community Health Centres.

### 9.3.1 Strategic Directions

A key objective is improving links with and development of a service model between mental health and aged care services to provide a more comprehensive coordinated service for patients with dementia and challenging behaviour that fall outside the scope for SMHSOP.

<table>
<thead>
<tr>
<th><strong>Dementia Care</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>217</td>
</tr>
<tr>
<td>218</td>
</tr>
<tr>
<td>219</td>
</tr>
<tr>
<td>220</td>
</tr>
<tr>
<td>221</td>
</tr>
<tr>
<td>222</td>
</tr>
</tbody>
</table>
10 Women’s, Children’s and Family Health

The Division of Central Coast Kids and Families encompasses:
- Maternity and neonatal services
- Acute paediatrics
- Genetic counselling
- Family Health Services (captured in Chapter 12 Primary, Community and Allied Health)

These services are provided at both Gosford and Wyong hospitals, although the complexity, scope and role delineation differs between the sites.

10.1 Maternity and Neonatal Services

Maternity services encompass antenatal and postnatal care, birthing services, special care nursery and gynaecology services. Women may also require the support of other services including Safe Start program for vulnerable or at-risk families, perinatal mental health, and/or drug and alcohol services. Women are routinely referred to the Early Childhood Health Service on discharge for ongoing support in the care and development of their baby.

Maternity services are provided by midwives and obstetricians, and are supported by a number of other medical specialists including anaesthetists for pain management, medical imaging for ultrasound, pathology for maternal and foetal testing, and allied health professionals including physiotherapists and social workers.

10.1.1 Current services, resources and organisation

Antenatal and Postnatal Care
- Obstetric-led antenatal care is provided through outpatient clinics at Gosford Hospital and on an outreach basis to Wyong Hospital
- Midwife-led antenatal care is provided through outpatient clinics at Gosford and Wyong Hospitals in addition to satellite clinics at Erina and Woy Woy community health centres
- Early Pregnancy Assessment Service (EPAS) based at Gosford Hospital provides outpatient assessment and ongoing management for women with threatened miscarriage prior to 20 weeks gestation or ectopic and molar pregnancies. There were approximately 500 referrals to EPAS in 2010 and almost 700 referrals in 2011.
- Most day only antenatal care is provided at Gosford Hospital through the four-bed Day Assessment Unit located within the inpatient maternity ward
- Overnight antenatal and postnatal inpatient care is provided in the 28 bed maternity ward at Gosford Hospital
- A Pregnancy and Early Parenting Education (PEPE) program is provided in community health centres
- The Genetic Counselling service assesses and reviews approximately 100-150 referrals per annum. A geneticist provides a visiting service once a month from the service based at Royal North Shore Hospital. (The Genetic Counselling service does not currently offer counselling for familial cancer inquiries although this is a significant growth area and demand would expect to increase with the development of the Regional Cancer Centre at Gosford Hospital.)

Birthing Services
- Birthing services at Gosford Hospital cater for women across all risk profiles with eight birthing rooms for labour and delivery and one collocated pregnancy loss room
- Elective and emergency caesarean sections are managed in the main operating theatre suite. Obstetricians are either onsite or able to attend the unit within 30 minutes for emergencies, with registrars rostered and available on-site 24 hours/day.
Clinical Services Plan 2012-2022

- The midwife-led birthing models at Gosford Hospital are provided from the same ward and birthing rooms. This arrangement provides excellent access to obstetric services when complications arise during delivery although it may influence intervention rates in otherwise normal or low risk births.
- Only one of the eight birthing rooms has a bath limiting opportunities to use water immersion in labour and birth as a form of pain management.
- The midwife-led birthing centre at Wyong Hospital has three delivery rooms and caters for women with normal or low risk pregnancies and births. 168 normal deliveries occurred at the Wyong birthing centre in 2010/11.

Neonatal Care
- A ten cot (including two additional cots funded during the 2011/12 budget cycle) special care nursery (SCN) is provided at Gosford Hospital. The SCN will increase to 11 cots in the 2012/13 budget cycle.
- The SCN is in close proximity to the birthing suite and maternity ward and provides a mix of high dependency care and lower dependency general SCN service for babies.
- The SCN provides care for babies born at 34 weeks or more who require additional support due to low birth weight or other problems.
- The SCN provides a ‘rooming in’ service wherever possible to support the transition of babies from the high tech environment of NICU and SCN where care is managed for long periods by medical and nursing staff to home where parents resume care.
- Almost 21.5% of babies born in Central Coast hospitals spend some time in the SCN at Gosford Hospital, for between less than four hours to more than 10 days.
- SCN occupancy was high in 2010/11 with 604 separations and 3,856 bed days with an average length of stay of 6.4 days. Transfers back from distant NICU/SCN can be delayed at times of high cot demand.
- Planning is underway to remodel the physical layout of the SCN to facilitate better use of the available space and support the provision of best practice models of care.

Perinatal Mental Health
- About 10-15% of women experience perinatal depression (PND). 11% of women presenting to the CCLHD maternity service were classified at risk of PND and 30% identified with anxiety.
- The Safe Start program provides a framework for the promotion, prevention, early intervention and treatment for vulnerable or at risk mothers, infants and their families. The program receives an estimated 760 referrals per year from maternity services (in 2008/09 this represented 19% of total CC LHD resident demand or 29% of women managed at Gosford and Wyong hospitals).
- Most women with mild to moderate PND are managed in the community with a combination of perinatal mental health services and General Practice.
- Referral to services such as Mental Health, Drug and Alcohol, Child Protection and Aboriginal Family Health workers can be arranged but there is limited psychiatry or other referral options.
- Typical treatments include biological, psychological, mother-crafting, parenting education and support, couple therapy and supportive counselling. Other key supportive services include the Tresillian and Karitane family care organisations in metropolitan Sydney.
- Demand for inpatient care is low, with only 31 inpatient episodes for Central Coast residents between 2005 and 2010. Three women with major PND were admitted to the Gosford inpatient mental health unit in the two years from 2009 to 2011. The Gosford Hospital mental health inpatient unit is not suitable for the accommodation of babies with their mothers.

Gynaecology Services
- Gynaecology services are provided predominantly (83% of supply) in Gosford Hospital’s Surgical Assessment Centre (GSAC).
- In 2010/11 Gosford Hospital had 681 day only and 651 overnight separations with an average length of stay of 2.3 days, utilising 1,486 bed days or the equivalent of 5 overnight beds at 80% occupancy.
For the same period Wyong Hospital had 172 day only and 102 overnight separations with a slightly longer length of stay at 2.7 days utilising 277 bed days or the equivalent of 1 overnight bed at 80% occupancy

This activity includes breast surgery, plastic and reconstructive surgery on breast as well as gynaecology. More than 50% of Central Coast resident demand is managed in the private sector.

10.1.2 Issues, challenges and opportunities

Complex health needs

More complex health needs in pregnancy and in the postnatal period are associated with teen pregnancy, increasing maternal age, higher levels of obesity, high rates of smoking, misuse of drugs, high-risk alcohol consumption and Aboriginality. Analysis of the health profile of Central Coast residents in the 2009 NSW Mothers and Babies Report shows:

- Slightly higher than state average for births to teenage mothers (CCLHD 4.4%, NSW 3.5%). Approximately 5.9% or 157 births at Gosford and Wyong hospitals were to teenage mothers in 2010/11
- 14.1% smoked during the second half of their pregnancy (10% across NSW).

Policy Directives and Developments

Two policy directives released in 2010 will potentially affect the provision of maternity services in CCLHD: the NSW Health policy Towards Normal Birth in NSW and the National Maternity Services Plan. Key service targets arising from these policies to be achieved by 2015 include:

- 35% of women to have access to the midwifery continuity-of-carer program, including postnatal care at home for at least two weeks after the baby is born
- 80% of women deliver vaginally with 70% of labours and deliveries being spontaneous (i.e. the number of women who embark on labour and/or go into labour spontaneously needs to increase and the number of labour interventions needs to decrease)
- 60% of women who have had one previous pregnancy delivered by caesarean section will have a vaginal birth for a second or subsequent baby (vaginal birth after caesarean VBAC); an interim target of 30% will be achieved by 2012 and 60% by 2015

The policy also notes an international trend towards the use of multifunction delivery rooms which enable women to labour, deliver, recover and receive post-natal care prior to returning home and without using a specific maternity bed.

Anticipated demand for obstetric/maternity services

In 2008-09, a total of 3,898 babies were born to Central Coast residents, with 24% born in private hospitals and 6.8% born in tertiary centres. 2,628 babies were born in CCLHD hospitals (2,436 at Gosford Hospital and 192 at Wyong Hospital).

By 2021/22 Central Coast resident demand is projected to reach 4,189 babies, with the CCLHD maternity service expecting to deliver up to 3,109 babies.

Activity projections also need to consider the impact of the lower private health insurance rate in the Wyong LGA, where much of the population growth is projected to occur, along with the likelihood of reversing some of current outflows to other hospitals associated with any new capital development of the maternity service.

Gosford Hospital has very high occupancy (110%) of the birthing rooms and maternity ward beds. Demand has been managed within the available capacity through flexible use of bed types and a steady reduction in length of stay.

Capacity at Wyong Hospital is significantly under-utilised with many women being referred with identified risks or choosing to access birthing services at Gosford Hospital where comprehensive back up services are available. On average only 1-2 of the three available birthing rooms are utilised.
By 2021/22 Central Coast will require an estimated 36 overnight beds (a mix of antenatal, postnatal, confinement and high dependency beds), and 9-12 birthing rooms to meet demand. The larger capacity may be required to accommodate the splitting of activity across two or more locations or models (e.g. obstetric unit and midwifery led birthing centre).

Stand-alone birthing centres
- The NSW Ministry of Health supports the provision of maternity services in stand-alone, low-technology primary care centres although it is recommended that wherever possible such centres should be located close to a 24 hour obstetric facility. There are three stand-alone units in NSW at Wyong, Belmont and Ryde.
- The stand-alone birthing service at Wyong Hospital does not have the on-site support of a 24 hour obstetric service. It operates under a range of safety controls and processes including maternal risk assessment, strict exclusion criteria, consultation and referral guidelines and networked arrangements with Gosford Hospital to ensure the maintenance of clinical skills and to mitigate the risks associated with the provision of a low volume birthing service.
- Despite continued efforts over the last decade the service has experienced considerable and ongoing difficulties in the recruitment of suitably trained and experienced staff; on occasions there have been issues of service continuity. This has limited opportunities to develop the service further or to increase utilisation to provide a larger critical mass of activity.
- It does not seem likely that there will be any significant change in circumstances in the short to medium term. The CCLHD will continue to support the provision of safe low risk, normal birthing services at Wyong Hospital and will regularly review the current arrangements and opportunities over the life of the Clinical Services Plan.
- The establishment of a collocated birthing centre on the Gosford Hospital site will complement the service provided at Wyong Hospital and will afford the opportunity to provide a low technology midwife-led birthing centre for women with low risk pregnancies alongside and supported by a comprehensive obstetrician-led service for women with moderate to high risk pregnancies. The development of this birthing centre, with ready access to on-site obstetric support, will play an important role in achieving targets set out in the NSW Health Towards Normal Birth policy, particularly increasing the number of women who access midwifery continuity of care programs, increasing the number of normal births and decreasing the number of labour interventions.

Sustainable local services
- The provision of antenatal and postnatal services as close to home as possible is considered a high priority when planning services for the future. It is proposed to maintain and develop outpatient services at both Gosford and Wyong hospitals while expanding the number of community health centres where satellite clinics will be offered.
- In determining the configuration of birthing services consideration has been given to balancing the need to provide choice and access to safe women-centred care and the importance of sustaining the comprehensive level 5 maternity service and level 4 special care nursery for the Central Coast. The development of a second maternity service at Wyong Hospital and a consequent reduction in the number of babies born at Gosford Hospital would have significant impact on the clinical capabilities of the services currently provided at Gosford Hospital. The expertise required to manage higher risk pregnancies and babies born at 32-34 weeks who require additional support due to low birth weight or other problems would be diminished and result in increased referrals and transfers to John Hunter and Royal North Shore hospitals.
- To ensure that comprehensive services for mothers and babies are maintained and enhanced on the Central Coast a full obstetric service will be provided at Gosford Hospital. The midwifery led birthing service will continue to be provided at Wyong Hospital.

High caesarean section rate
- In 2010/11 the caesarean section rate across CCLHD hospitals was 31.6% and in Gosford Hospital 33.1%. The statewide rate reported in 2009 was 30.2% and the average caesarean section rate at
NSW level 5 maternity services was 27.3%. NSW Health policy recommends a caesarean section rate of less than 20% by 2015.

- Factors influencing the caesarean section rate include a move away from birth in the community to birth occurring predominantly in a hospital setting; increased use of technology reducing the confidence of midwives and obstetricians in caring for women experiencing normal labour and birth; and fear of litigation.
- Mitigating strategies include increasing the number of women accessing midwifery models, increasing the number of women delivering their baby in a stand-alone birthing suite, availability and use of water immersion for pain relief during labour and delivery, and continuing training and education for staff in the management of normal births.

Access to specialised obstetric medical imaging services
- There is no specialised obstetric medical imaging service available at Gosford or Wyong hospitals. 90% of ultrasounds are outsourced to commercial companies.
- Women who require amniocentesis or chorionic villus sampling (CVS) to test for genetic abnormalities, often need to travel some distance or experience time critical delays in access to these services.
- With the concentration of services for women with high risk pregnancies or where complications arise, consideration will need to be given to the development of in-house expertise or improved access to support services at Gosford Hospital.

Workforce
- An increasing number of GPs are ceasing practice in obstetrics and gynaecology and fewer GPs provide a bulk billed services for pregnancy care or participate in shared care programs. This creates access problems for women who wish to access primary care for their pregnancy.
- Allied health services are unable to meet current demand within existing resources.
- There is a national and international shortage of midwives and obstetricians.
- Obstetricians need to be available within 30 minutes outside the hours of specialist presence on the birthing unit. This has implications for the location of birthing units where obstetricians need to have rapid access to attend emergencies.
- The collocation of the paediatric and neonatal services is critical to the provision of 24 hour paediatric registrar cover for the SCN, paediatric ward and ED services.

Neonatal Services
- To run at 75% occupancy the unit currently requires 14 cots (aIM2010) although it manages the patient demand within the available 10 bed capacity with a very high throughput. aIM2010 projections indicate a need for 18.7 cots at 75% occupancy by 2021/22.
- With improvements in technology, therapies and clinical practice the SCN will increasingly care for babies (within its scope of practice and capabilities) born at less than 34 weeks. Some additional capacity may be required to accommodate these babies not currently managed within the unit and to manage an increasing number of babies that may be back transferred from level 5/6 units earlier than current practice.
- To ensure sufficient capacity in the level 4 SCN to manage the demand for babies born at 34 weeks (and an increasing number of babies born at less than 34 weeks) along with babies back transferred from level 5 and 6 SCN/NICU any redevelopment of the unit should accommodate up to 19-20 cots with an appropriate mix of ventilator and non-ventilator capabilities (eg 10 low and 10 high dependency).

10.1.3 Strategic Directions
The CCLHD maternity service is currently operating with very high occupancy rates and considerable pressure on available resources. The special care nursery is operating under similar circumstances
although recent enhancements and planning for the reconfiguration of the physical space will relieve pressure temporarily.

The following short and long term strategic actions will guide the development of maternity, neonatal and gynaecology services to 2021/22.

**Maternity Services**

Provide better access to local services for women with normal risk pregnancies

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>223</td>
<td>Review provision of antenatal clinics to maximise local access.</td>
</tr>
</tbody>
</table>

Provide a ‘one-stop shop’ service for women with complex antenatal health needs

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>224</td>
<td>Develop a coordinated multidisciplinary ambulatory care service for higher risk pregnancies at Gosford Hospital including: high risk antenatal clinics, antenatal day assessment unit (with four spaces), early pregnancy assessment service, genetic counselling services.</td>
</tr>
<tr>
<td>225</td>
<td>Develop in-house medical imaging and ultrasound expertise and associated pathology.</td>
</tr>
<tr>
<td>226</td>
<td>Increase physiotherapy involvement in antenatal education and referral, inpatient post natal care and follow-up outpatient clinic for women with anal sphincter tears.</td>
</tr>
<tr>
<td>227</td>
<td>Employ a full time Maternity Services Safe Start Coordinator (5 days per week) to coordinate and plan care for women with identified vulnerabilities.</td>
</tr>
</tbody>
</table>

Reduce intervention rates in normal pregnancy and labour and improve birthing experience

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>228</td>
<td>Enhance birthing services on the Gosford Hospital site with: Expansion and upgrade of the birthing suite to 6-8 multifunction birthing rooms with baths (including a 1st stage assessment room); 2 bed high dependency room for women who require close monitoring during drug or transfusion therapies; larger room or suite for women and their partners experiencing stillbirth or neonatal death.</td>
</tr>
<tr>
<td>229</td>
<td>Expand and reconfigure inpatient ward accommodation with up to 36 multipurpose beds (with capacity to provide collocated mother and baby SCN type care) in 1-2 bed rooms.</td>
</tr>
<tr>
<td>230</td>
<td>Develop a birthing centre collocated on the Gosford Hospital site with 3-4 rooms with baths providing women with more birthing options and onsite access to obstetric support.</td>
</tr>
<tr>
<td>231</td>
<td>Examine option of developing a Women’s Health Centre encompassing: Outpatient services for obstetrics, gynaecology and urology sub-specialties. This will require consulting and procedure rooms suitable for colposcopy, hysteroscopy and the conduct of uro-dynamic studies; short stay accommodation.</td>
</tr>
<tr>
<td>232</td>
<td>Examine future options with NSW Ministry of Health in collaboration with neighbouring LHDs to establish the need for a regional mother and baby inpatient mental health service.</td>
</tr>
<tr>
<td>233</td>
<td>Develop the Midwifery Support Program to provide midwifery support to mothers at home for two weeks after the baby is born and for babies with specific needs following discharge from the SCN.</td>
</tr>
</tbody>
</table>

**Neonatal Services**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>234</td>
<td>Refurbish existing available SCN space to accommodate 14 cots.</td>
</tr>
<tr>
<td>235</td>
<td>Redevelop the SCN (as part of major capital project) to accommodate: 19-20 cots (10 low and 10 high dependency) at level 4 role delineation; Resuscitation bay large enough to accommodate twins; Mother stay unit with bathroom and kitchenette; Accommodation for the Midwifery Support Program.</td>
</tr>
</tbody>
</table>
10.2 Paediatric Services

Paediatric services focus on the acute care of children and adolescents from 0-16 years of age. In practice exceptions to the age limit occur depending on the nature of the diagnosis or planned procedure, maturity level of the patient and the wishes of the patient and family.

Paediatric services encompass acute medical and surgical care in the EDs at Gosford and Wyong hospitals, ambulatory care in the Wyong Paediatric Assessment Unit (WyPAU), inpatient care and some ambulatory care in the Gosford Hospital paediatric ward, and outpatient clinics.

Key service links include the Division of Anaesthetic, Surgery and ICU for paediatric surgery, the Directorate of Primary, Allied and Community Health, specifically Child and Family, and Youth Health Services, and the Division of Mental Health for Children and Young Persons Mental Health Service (CYPMHS).

There are also critical links with maternity and neonatal services. Babies in the Special Care Nursery (SCN) at Gosford Hospital are managed by paediatricians who work across both the SCN and the paediatric services. To ensure appropriate clinical care for both patient cohorts these services need to be collocated and provided in close proximity.

Paediatric services are linked with the specialist children’s hospitals and NSW Kids and Families through the Western Child Health Network (WCHN).

10.2.1 Current services, resources and organisation

Gosford Hospital ED has a 7 bed paediatric pod (one 6 bed bay and a single room). The pod is separate from the adult space but is not a secure area.

Wyong Hospital ED has a 5 bed paediatric pod.

A See and Treat – Better Emergency Care for Kids pilot project commenced in Wyong Hospital ED in January 2011 with the aim of improving timely access to high quality paediatric care in the ED. The project provides additional paediatric medical and nursing staff in the ED during the busy evening shift.

Wyong Paediatric Assessment Unit (WyPAU) improves access to acute paediatric services, provides care for children who would otherwise require hospital admission, and provides care to families as close to home as possible. It has reduced the number of children transferred to the inpatient children’s ward at Gosford Hospital and has reduced the need for some children to attend the ED.

Children who present to the Wyong Hospital ED or WyPAU and who require surgical services are transferred or referred to Gosford Hospital.

The Children’s Ward at Gosford Hospital is a 38-bed inpatient unit accommodating children who require overnight or day only admission for medical or surgical conditions. Beds are located in single, dual and multiple occupancy rooms to facilitate age and gender separation; a single room is available for at risk mental health admissions or for other children who require isolation. Adolescents can be accommodated in rooms distant from babies and infants.

Inpatient services have consistently utilised 26-28 of the available beds over the last five years. More recently some ambulatory care services have been provided from the inpatient ward and there are opportunities to convert part of the ward space to a more formal paediatric ambulatory care service.

Medical outpatient clinics are held in general outpatient department alongside adult services. Other outpatient or ambulatory type clinics and services are provided in the WyPAU and Gosford children’s ward.

Shared care programs have been developed with the specialist children’s hospitals for severe burn injury and oncology patients reducing the need to travel and increase capacity to receive care locally.
10.2.2 Issues, challenges and opportunities

Population growth
- The 0-15 years age group will experience significant growth over the next decade across the CCLHD. Growth will be strongest in the Wyong North-East SLA (23.4% or 4,155 additional residents).

Growth in ED presentations
- In 2010/11 a total of 23,927 children aged less than 16 years presented to Central Coast EDs (annual growth rate of 3.1%). The largest growth is in triage 5 presentations, particularly at Wyong Hospital where it is estimated to be growing at 16.3% annually. Triage 5 presentations have grown at Gosford ED by 8.6% annually.
- Paediatric admission rates from Wyong ED have reduced by approximately 4% per annum since the introduction of the WyPAU in 2006. Admission rates from Gosford ED have remained relatively static over the same period.
- ‘Did not wait’ for treatment at Gosford Emergency Departments has increased significantly over the past 4 years (16.8% annually) with a significant growth (33.2%) between 2009/10 and 2010/11
- The number and rate of presentations that “Did not wait” for treatment at Wyong Hospital have reduced considerably (minus 5.8% annually) since the development of the WyPAU and the initiation of the ‘See and Treat” pilot program in the ED.

Development of Ambulatory Care models
- The development of the WyPAU has had a significant impact on the management of children with ambulatory care sensitive conditions locally, avoiding the need for extended stays in the ED or admission to the inpatient unit at Gosford Hospital. The WyPAU will need to further expand and develop its services to improve care.
- The Children’s ward at Gosford Hospital currently accommodates a significant number of children with lengths of stay less than 24 hours (37.1% of medical separations and 46.9% of surgical/interventional separations). A further cohort has lengths of stay between 24-48 hours.
- The Children’s ward at Gosford Hospital also accommodates an increasing number of non-admitted patients for short stays although there is no funding or billing option to cover this. The development of a dedicated ambulatory care unit (within the existing confines of the Children’s ward) would address many of these and associated issues.

Inpatient services
- Marginally more than 1,000 patients per annum have lengths of stay in the children’s ward in excess of 48 hours. In keeping with the objective of minimising the need for inpatient admission and shortening lengths of stay where admission is unavoidable it is unlikely that the demand for inpatient stays will grow significantly over the next decade.
- The health needs of the Central Coast paediatric population will be best served through the development of ambulatory care services at both Gosford and Wyong and the retention of a single inpatient ward at Gosford Hospital to care and treat the sickest children on the Central Coast.

Allied Health support
- There is limited access to outpatient allied health services to follow up children who present to ED or post-discharge from the acute inpatient unit. This is particularly evident in the Wyong LGA where the WyPAU service has developed without any commensurate growth in allied health support.

Mental Health Services
- Adolescents who present to ED with a mental health illness are often accommodated in the PECC in the absence of any other suitable inpatient beds, and some adolescents are admitted to the Children’s Ward. Better access to Child and Adolescent Mental Health inpatient services, not available on the Central Coast, is required to meet the growing service demands.
Clinical Services Plan 2012-2022

- There are minimal mental health services for children under 12 years due to capacity limitations of the existing services. An increasing number of mental health issues are manifesting or identified earlier in younger children and the EDs and Children’s Ward become the default providers of care.

Other issues
- An increasing number of adult patients have been admitted to the Children’s ward due to high demand on the inpatient bed capacity at Gosford Hospital. While patients are carefully selected based on gender and reasons for admission along with the preference of the individual patient, it remains an unsatisfactory arrangement.
- Development of an integrated information management system across inpatient, outpatient, ambulatory and community or outreach services is needed to support the delivery of services across multiple sites and in patients’ homes.

10.2.3 Strategic Directions

The Paediatric Service will provide the majority of care through ambulatory type services based at both Gosford and Wyong hospitals while retaining a single acute inpatient ward at Gosford Hospital.

The acute inpatient ward at Gosford Hospital will remain closely linked with the obstetric/neonatal service so that both can be appropriately supported by senior paediatricians including 24/7 access to experienced onsite paediatric registrars and on-call specialist support.

Paediatric surgery will continue to be concentrated on the Gosford Hospital site where paediatrician expertise is available 24/7 to support sub-specialist surgeons in the management of children in the post-operative period. Wyong will develop its capacity to manage some minor procedures in selected patients to reduce delays in treatment and avoid the need for transfer to Gosford Hospital. The provision of more comprehensive elective surgery for children over 2 years and emergency surgery for over 12 year olds at Wyong Hospital is proposed by general and sub-speciality surgeons (with child-appropriate pre- and post-operative accommodation); key infrastructure at Wyong Hospital will need to be configured so that it could accommodate an increased role in paediatric surgery if required.

To further enhance the paediatric services currently provided at Wyong Hospital it is proposed to develop a paediatric emergency medicine and paediatric acute care (PEMPAC) service. The PEMPAC model builds on the current ED “see and treat” service and the WyPAU service locating both services together in the one unit. The PEMPAC would be either collocated or located in close proximity to the ED. Paediatric patients presenting to ED with an acute medical condition (triage category 3, 4 or 5) would be triaged direct to the PEMPAC for assessment and ongoing management, the hours of operation would be from 07.00-24.00.

Development of the PEMPAC would require relocation of the existing (non-acute) WyPAU. The benefit of the PEMPAC service would be the effective and efficient utilisation of the specialist paediatric staff across both the ED and non-acute area and provide a more comprehensive service for paediatric patients including the capacity to undertake minor procedures.

Paediatric Services

Gosford Hospital

236   Implement the “See and Treat” model of care at Gosford ED.

237   Establish a paediatric ambulatory care unit within the Gosford Children’s ward incorporating: acute review clinics, outpatient clinics, shared care clinics, short stay beds and home based care services.
## Wyong Hospital

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>238</td>
<td>Continue &quot;See and Treat&quot; model of care at Wyong ED.</td>
</tr>
<tr>
<td>239</td>
<td>Develop a paediatric emergency medicine and paediatric acute care (PEMPAC) service at Wyong Hospital including minor procedures.</td>
</tr>
<tr>
<td>240</td>
<td>Redevelop paediatric services (as part of major capital project) to collocate WyPAU and PEMPAC services in close proximity to ED, accommodating: 8 short stay beds, 2 procedure rooms, 6 interview/examination rooms, and a waiting room.</td>
</tr>
</tbody>
</table>
11 Mental Health

11.1 Service Scope

The Division of Mental Health is comprised of the following services:

- Adult services (acute inpatient and community)
- Children and Young People’s Mental Health (CYPMH)
- Specialist Mental Health Services for Older People (SMHSOP).

Acuity of mental illness is increasing in all developed nations. While the causes of this are not known it is clear that levels of psychiatric distress and disability in the community are rising. Central Coast demographic factors including low levels of education, high unemployment, high levels of psychological distress, low levels of physical activity and low numbers of GPs contribute to both increasing rates of presentation for mental health services and increasing complexity of presentations. Rapid population growth particularly in youth and elderly age groups also pose major challenges for the provision of Mental Health Services (MHS).

MHS across CCLHD currently provide both acute inpatient services and community-based services. The community based services span acute and crisis interventions, and longer term non-acute and maintenance services. Both Wyong and Gosford Mental Health Services are delineated at level 4 for inpatient adult mental health services while Wyong Hospital is also delineated at level 5 for community adult mental health services.

The emphasis and trend in MHS provision is generally towards increased management of clients in the community, reducing the need for inpatient management. This is facilitated by recovery oriented rehabilitation and a range of community based treatment and support programs focusing on prevention and early intervention. This model is reliant on service integration within MHS (‘One Service’) as well as across divisions within CCLHD, and on the inclusion and involvement of other service providers such as General Practitioners (GPs), non-government organisations (NGOs), community and consumer groups and other government agencies. Clear partnership agreements with other health providers as well as clear and well communicated referral pathways into MHS ensure continuity of care and best practice that is focused on the client journey.

CCLHD currently operates 84 mental health beds. Wyong Hospital has 54 beds: 35 adult acute, 15 SMHSOP and 4 Psychiatric Emergency Care Centre (PECC) beds. Gosford Hospital has 30 adult acute mental health inpatient beds. Mental Health Intensive Care (MHICU), non-acute and long stay beds are located and currently accessed through Northern Sydney LHD.

There are no planned Child and Adolescent Mental Health Service (CAMHS) beds on the Central Coast. There is limited access for young people requiring inpatient admission under 18 years outside CCLHD and consequently there are some admissions of young people under 18 years to the Wyong PECC. While being the best option available (preferable to children’s ward or adult acute inpatient units), admitting young people into an adult unit remains unsatisfactory.

There will be a 12 bed CAMHS unit built at Hornsby Hospital in 2014. CCLHD will be part of the catchment for this unit and will have access to beds once the facility is complete. In the interim there is limited access to specialist regional CAMHS beds across the Hunter and Sydney Metropolitan areas.

The SMHSOP Unit is currently operating at capacity (i.e. 4,928 bed days equating to 15 beds at 90% occupancy).

There are no non-acute mental health beds on the Central Coast and only limited access to these and the long-stay beds at Macquarie Hospital operated by Northern Sydney LHD. Currently there are 61 Housing and Accommodation Support Initiative (HASI) places available on the Central Coast. Mental Health population, activity and projection data indicate there was a need for 108 places in 2011 and 117 places will be required by 2022. This is a current shortfall of about 50 places.
11.1.1 Current service model

The increase in both the number and complexity of presentations for mental illness over recent years has resulted in public mental health services focusing on acute assessment and management. On the Central Coast this can be seen in the rapid expansion of the acute inpatient units and a shift to ED-based assessments as a strategy to manage workload and to relieve pressure on ED staff.

The Acute Assessment Teams (AAT) at both Gosford and Wyong Hospitals are based in ED where the majority of assessments are conducted. Due to the high volume of presentations to ED the AAT is unable to conduct assessments in the community within existing resources.

Clients who require an acute response, or who contact the service outside office hours through the 24 hour Mental Health Telephone Access Line (MHTAL) are directed to ED for support. Clients of specialist CYPMH and SMHSOP are also directed to ED if services are required after hours. Due to the nature of mental health issues (exacerbated by stress and conflict) many presentations occur out of office hours.

The current model of care is unsatisfactory as it further exacerbates pressure on the ED and results in less efficient assessments due to specialist client groups being seen by generalist adult teams. There are high rates of avoidable hospital admissions, particularly in the SMHSOP population due to co-morbidity, and inappropriate hospital admissions, especially in young people.

11.1.2 Preferred service model

Acute interventions are only one aspect of the mental health service spectrum and in order to address the overall impact of severe mental illness a rehabilitation model that is guided by a recovery focus as per the NSW Community Mental Health Strategy 2007-2012 is required.

The NSW Community Mental Health Strategy 2007-2012 notes that community based mental health care is as clinically effective as inpatient care, but more cost effective and more acceptable to consumers than inpatient care. Community mental health services can support inpatient units by preventing delays in discharge and reducing the frequency and length of acute admissions, reducing avoidable readmissions, improving functioning and supporting clients to transition to community based services.

The Strategy notes that a balanced model of care is needed including community, emergency, acute inpatient, non-acute inpatient and community support services. A service with a rehabilitation focus must consider specialist mental health services such as acute assessment, case management, rehabilitation, accommodation as well as improved service coordination and partnerships with other key services to enable clients to live independently in the community.

At this time CCLHD is not able to offer the full spectrum of care along a recovery model due to the capacity restrictions within existing community based teams, the lack of non-acute beds and the demands placed on all aspects of the service as a whole due to population growth. Transition of clients from acute to non-acute and community phases of care on the continuum is limited by available capacity, particularly in the non-acute community teams which provide the rehabilitation component of the continuum of care.

Mental health activity and projection data indicate that, while the number of acute inpatient beds will adequately meet the needs of the Central Coast for the next ten years there is a pressing need for non-acute inpatient beds, community based programs and support services to be enhanced. Emphasis is placed on service models that promote continuity of care within MHS (‘One Service’) with other CCLHD Divisions and improved partnerships with key agencies.
11.2 Adult Mental Health Services

11.2.1 Current services, resources and organisation

Services for adults aged 18 to 64 years include acute assessment and short-term intensive treatment, intensive case management and care coordination for complex clients, and continuing care including care coordination for the long term and non-acute clients. Access into adult mental health services is generally via the Mental Health Telephone Access Line (MHTAL) based at Gosford Hospital, through referral by a psychiatrist, the community team or by presentation to the EDs.

Acute adult inpatient services are provided at Gosford and Wyong hospitals.

Multi-disciplinary community based teams, catering for patients who present with moderate to severe mental health issues, include:

- **Acute teams based at Wyong and Gosford hospitals**:
  - Acute Assessment Team (AAT) operates 24/7 providing assessment predominantly in ED
  - Home Based Treatment Team (HBTT) provides intensive short-term follow-up of acute clients including recent discharges from the acute units
  - Consultation Liaison (CL) – consultation service for inpatients in the general hospital wards.

- **Non-acute teams**:
  - Continuing Care Team - provides 6-24 months rehabilitation to clients. Operates out of Community Health Centres (CHCs) and in clients’ homes
  - Assertive Outreach Team (AOT) - provides up to 6 months of intensive rehabilitation. Majority by home visits and some at CHCs
  - Therapy Team – CHC-based provides individual and group therapy for clients experiencing anxiety, depression, trauma, social phobias and personality disorder.

The AAT will cater for clients outside of the adult age brackets (i.e. children, young people and older people) who present out of hours requiring assistance, until a more appropriate referral can be made. Clients who present with mild-moderate mental health issues are cared for by GPs, private allied health providers and NGOs.

Clozapine Clinics are conducted onsite at both Wyong and Gosford hospitals. The clinics are staffed by nursing and medical staff. As the use of Clozapine has increased demand on the clinics has increased with both clinics now struggling to accommodate demand.

There is an Aboriginal Mental Health Team which provides support for mental health clients on the Central Coast. The service has strong linkages and operates in close partnership with the Eleanor Duncan Aboriginal Health Service, Mingaletta Community Organisation and Bungree Aboriginal Association, as well as the LHD operated service Nunyara and the Aboriginal Health Service provided through the Medicare Local. The team is comprised of an Aboriginal Liaison Officer (non-clinical position), mental health registrar and part-time psychiatrist there is also an Aboriginal trainee position. The service has a client base of about 60-70 clients however there is high demand for this service which exceeds the number of clients which can be managed within the current staffing. The service would benefit from expansion to include an indigenous nursing position.

In recent years the emphasis within mental health has been on acute assessment and management. There has been rapid expansion of the acute inpatient units and a shift to ED-based assessments. Enhancement funding, when available, has been directed to the acute end of service delivery and both EDs now have an extended hours specialist MH team on site and Wyong Hospital has a PECC.

In order to implement an effective community model a major expansion of the non-acute community based teams is required. This will provide extended monitoring and care to vulnerable consumers at high risk of relapse and an after-hours service across seven days. There has been no funding enhancement for community services since 2003 and the non-acute community teams have operated with waiting lists...
Clinical Services Plan 2012-2022

for over 2 years. An expansion of community services will not only support ED and the acute assessment teams but also enable the implementation of a recovery focused rehabilitation model of care spanning the full spectrum of care including: health promotion, evidence based treatment, early intervention, continuing care and relapse prevention.

Currently CCLHD is not able to offer the full spectrum of care in the recovery model due to the capacity limitations on existing community based teams and the absence of non-acute beds. These service gaps need to be addressed along with an emphasis on continuity of care within MHS ('One Service') and with other Divisions, and an emphasis on partnerships with key agencies.

11.2.2 Issues, challenges and opportunities

Service Model
- Currently all acute and semi acute clients are directed to the ED (particularly out of hours). It has been recognised that some clients could be managed in the community rather than through hospital based services.
- The current model of care was designed some time ago around less inpatient beds and higher readmission rates. Review of the model is required for currency and best practice. There is a need for improved integration between inpatient and community based mental health services and acute and non-acute services with resources directed to the gaps in service.

Community mental health services and accommodation
- Since 2004 there has been a rapid expansion of the number of acute mental health beds on the Central Coast (from 25 to 84) however this has not been supported by corresponding increases in community mental health services to meet the increasing demand and need for step-down services and follow-up care in the community.
- There has been an increase in the number of high risk and forensic mental health clients (including an increasing number who have recently been released from jail) under the care of the mental health service. These clients have specific needs and are more likely to exhibit aggressive behaviour which places additional work and risk on already stretched community teams and often results in inpatient admission to manage these clients. This client group requires management by a team of expert experienced clinicians.
- Community non-acute teams currently hold over 100 long term (>2 years) clients who require ongoing support. These clients require significant resources which then prevents those teams accepting new referrals.
- The inadequate number of HASI packages (about 50 below what is indicated by MH-CCP) delays discharge from non-acute community services. This affects the capacity to accept new clients from acute inpatient and community services resulting in a backlog of patients.
- Difficulties accessing community based services results in delays in discharge from the inpatient units.
- Provision of acute and non-acute community-based services is limited by staffing numbers, available clinic and office space and travel time. Services are operating either at, or very close to capacity, limiting the number of new clients that can be accepted. This directly impacts hospital admissions and lengths of stay with slower or delayed discharge from acute and non-acute care, and higher rates of presentation to ED for crisis management following exacerbation of symptoms.
- Hours of operation for a number of the services (particularly the specialist services) are limited to office hours due to capacity constraints. This means that clients who could otherwise be assessed and managed in the community are directed to ED for assessment outside office hours. This often results in increased admissions particularly for older and complex clients.
- There is insufficient space within the Community Health Centres to accommodate the existing community based teams. Facilities are also inadequate for current models of care. These needs will be considered in a review of mental health services CHC usage and requirements.
Lack of non-acute mental health services on the Central Coast

- Non-acute inpatient care sits on a continuum of care between acute inpatient care and community care but overlaps both of these. It provides rehabilitation and recovery focused interventions for consumers with complex, recurring or ongoing mental illness or disorders.
- The national standards for MHS developed by the federal government in 2010 recommends that clients should have access to the least restrictive care that is available within the local community (Australian Government Mental Health Strategy 2010). While there has been a rapid expansion of acute inpatient beds on the Central Coast there are no non-acute mental health beds located in the area.
- Currently non-acute inpatient beds are accessed at Macquarie Hospital, however waiting times can be in excess of 12 months
- The lack of non-acute beds locally and delays in accessing these beds at Macquarie Hospital result in patients remaining in the acute inpatient units for extended periods
- Relocating clients away from their local community and support networks to access non-acute beds conflicts with the NSW Community Mental Health Strategy 2007-2012 of maintaining current supports, and necessitates significant effort at discharge to reintegrate the client back into their local community. Extended waiting lists for public housing also exacerbate difficulties for clients wanting to return to the Central Coast following non-acute admission.
- MH-CCP (2010) identifies a need for 10 non-acute and 15 very long stay beds (VLS) in 2012 this will increase to 11 non-acute beds and 27 VLS beds to service the local population to 2022.
- There is clear data supporting the need for non-acute beds for the Central Coast. Analysis of lengths of stay within acute inpatient units indicates that these beds would be justified on the basis of the number of patients who remain in acute beds over 30 days alone.
- The preferred recovery model of care cannot be fully implemented without non-acute beds and programs to offer more specific recovery and rehabilitation programs. The non-acute community teams are currently blocked with long term clients who require ongoing support. The provision of non-acute and VLS beds as well as increased numbers of HASI support packages (particularly high need packages) would enable these teams to have a discharge point for these clients with ongoing mental illness.
- Expansion of the non-acute community based services may reduce the need for non-acute beds and also provide a discharge pathway for these clients

HASI and supported accommodation

- The NSW Community Mental Health Strategy 2007-2012 in reviewing HASI found that joint service delivery between MHS and specialist NGOs can reduce adult inpatient admissions, improve community participation, improve physical and mental health, increase sustainability of tenancy and improve life skills
- Currently there are 61 HASI places available on the Central Coast. Data projections indicated the need for 108 places in 2011 and a requirement for 117 places by 2022. There is a current shortfall of 47 places increasing to 56 by 2022.
- There is a shortage of suitable accommodation and difficulty getting access to suitable public housing in the volume required. There are long waiting lists. The priority waiting lists are highly competitive and the private rental market is expensive and competitive.
- Clients who are admitted to a non-acute bed at Macquarie Hospital are required to surrender their public housing tenancy and reapply on discharge. Given the long wait lists for the Central Coast area this effectively forces clients out of public housing.
- The flow-on effect of these shortages is that clients need to remain in hospital or under the long term care of community teams until suitable accommodation (and support services) becomes available
- The expansion of high need HASI packages would support vulnerable clients to retain their tenancies, as well as enabling early identification of any exacerbation of their symptoms ensuring timely intervention from MHS
• As well as an increase in the number of HASI packages, a review of the HASI program on the Central Coast is required to ensure that it is meeting the needs of all parties i.e. the clients, NGOs delivering the program and MHS.

Clozapine Clinic
• There has been a rapid increase in the use of Clozapine over recent years with the result the current clinics are operating beyond capacity which has had an impact on the level of services which can be provided. Expansion of the clinics is required to accommodate the increasing demand.

Psychiatric Emergency Care Centres (PECC)
• The PECC service provides people presenting to ED with timely access to specialised mental health care in a safe environment for consumers, service providers and the general public
• PECCs enable rapid access to mental health assessments by specialist mental health staff 24/7 for people with acute mental health illness, with or at risk of behavioural disturbance, and/or with substance abuse comorbidity. The PECC also provides observation and immediate care for mental health presentations who would benefit from a short stay in the ED of up to 48 hours. Discharge planning from PECC is commenced upon admission.
• Establishment of a PECC in all major hospitals which operate an ED was a recommendation of the Special Commission of Inquiry: Acute Care Services in NSW Public Hospitals, 2008 (Garling Inquiry)
• Gosford ED requires a four to six bed PECC to accommodate and provide care for suitable clients and to support discharge/transfer from ED within the four hour national emergency access target
• The PECC at Wyong Hospital is currently not fully utilised due to a range of issues which are being addressed. They include the use of the PECC beds to accommodate short stay adolescents due to the lack of other alternatives to accommodate this patient group.
• PECCs at both sites require clear and jointly agreed and endorsed local work processes and lines of responsibility between MHS and ED to ensure that the facilities are utilised as intended

Perinatal Mental Health services
• The Safe Start program, delivered through the Central Coast Kids and Families Division, provides a framework for the promotion, prevention, early intervention and treatment for vulnerable or at risk mothers, infants and their families
• Most women with mild to moderate perinatal depression are managed in the community with a combination of perinatal mental health services and General Practice
• Demand for inpatient care is low however neither CCLHD maternity services nor MHS have suitable accommodation to provide care for mothers with their babies together in the same unit. Given the low numbers of cases and the highly specialised needs of these clients it is likely that specialist inpatient services will need to be provided regionally.

Health and wellbeing of mental health clients
• Mental health clients frequently have poorer health; higher prevalence of chronic disease often secondary to lifestyle factors such as smoking, poor diet, low levels of exercise and their medications; and are less likely to access medical services for their physical health. Improved integration between mental health services and other health services in particular primary medical services such as GPs, chronic disease programs is required, as is access to appropriate health education and lifestyle programs.

Workforce
• The mental health workforce is rapidly ageing both recruitment and retention of staff particularly experienced staff is a major issue.

11.2.3 Strategic Directions
Services need to be developed and delivered that support the recovery focused rehabilitation model of mental health service delivery across the spectrum of care as required by NSW Health. This will require expansion of community-based services and access to non-acute and VLS inpatient beds locally, with the
goal of reducing relapse rates and a consequent reduction in presentations to ED and admissions into the acute inpatient units.

Increased focus on development of partnerships with key agencies will ensure the recovery/community focused model of care can be fully implemented. Partnerships between MHS and other health services, government agencies and NGOs are essential to ensure all consumers can link to the full range of services on offer and integrate into the community.

All services within MHS have identified the need to increase consumer and carer participation in their services and to develop plans for promoting mental health and addressing early identification and prevention of mental health problems. Current high workloads have led to staff prioritising acute response to the community rather than focusing attention in these areas.

### Adult Mental Health Services

#### Acute and non-acute inpatient services

241 Develop a 6 bed PECC at Gosford to manage short term admissions.

242 Develop a 38 bed non-acute and VLS inpatient ward at Wyong Hospital (11 non-acute & 27 VLS)

#### Psychiatric Liaison Team

243 Enhance psychiatric consultation liaison team at Wyong Hospital with additional medical and nursing staff.

244 Enhance psychiatric consultation liaison team at Gosford Hospital with additional specialist medical staff i.e. psychogeriatrician and child and adolescent psychiatrist to improve acute assessment services. (Specialist medical support will be shared across Psychiatric Liaison, CAMHS and SMHSOP teams.)

#### Community mental health services

245 Expand the Assertive Outreach Team (AOT) to provide extended hours (8am to 8pm, 7 days per week) and capacity to conduct assessments in community health centres and clients' homes. Expansion will require staffing enhancement within a multidisciplinary team as well as cars, phones etc. Accommodation will be required in a minimum of four Community Health Centres.

246 Expand the Continuing Care Team with staffing enhancement (operating during standard business hours Monday-Friday).

247 Expand the medical and nursing staffing FTE and capacity of the clozapine clinic located on the acute hospital sites.

248 Introduce a multidisciplinary High Risk Team with 4 FTE including a specialist forensic psychiatrist, collocated with the inpatient units and operating Monday to Friday, specifically catering for the high risk and forensic clients with needs beyond the expertise of existing adult mental health teams/staff.

249 Review the current mix and demand for HASI packages and develop an appropriate HASI program for the Central Coast with the Ministry of Health Mental Health Drug and Alcohol Office.

#### Community Health facilities and accommodation

250 Participate in the LHD review of CHCs to ensure best use of available staff and client interview and assessment areas and determine future locations and facility needs to support expanded and contemporary models of mental health care. Develop community-based services using a hub and spoke model with collocation of complementary services, suitably equipped to provide extended operating hours in a safe and secure environment, and a flexible design that can meet the needs of mental health clients and allow adaptation as models of care evolve.
11.3 Children and Young People’s Mental Health Service (CYPMH)

11.3.1 Current services, resources and organisation

CYPMH is a multidisciplinary youth specific mobile specialist service for young people aged 0-24 years presenting with moderate to severe mental health issues. It is collocated with ‘headspace’ and other government and NGO services in ‘ycentral’ at the Gateway Building in Gosford. CYPMH provides support to the community including schools, EDs, community health centres and the home. Based on the best available evidence, the preferred model is assertive outreach covering the Central Coast. The rising demand for services and the time commitment required for staff to travel to see clients, particularly at the northern end of the LHD, means that some of their services are becoming increasingly centre-based.

The service includes:
- ‘ypage’ – a telephone access line that operates weekdays 8.30am-5pm with clinicians providing consultation, initial mental health assessment and direction to the appropriate team and/or service
- Brief Intervention Team – assertive outreach and short term follow up
- Case Management Teams – one for clients 18 years and under and another for clients 18 to 24 years combined with the Young People and Early Psychosis Team
- Perinatal and Infant Mental Health Team
- Keep Them Safe Whole Family Team (funded to 2014)
- headspace Central Coast - a Commonwealth-funded program providing specialist services for young people aged 12-25 with mild to moderate mental health issues (funded until 2015)
- Prevention, Promotion and Early Intervention (includes School Link, Children of Parents with a Mental Illness (COPMI), Parenting, Research and Data, eYMH, Workforce Development and OH&S).

CYPMH report over 3,000 referrals to the ycentral site each year with approximately half of these directed to headspace. Young people presenting with mental health issues receive treatment at ycentral either through headspace if they are suffering mild-moderate mental health issues, or through CYPMH if their symptoms are moderate-severe.

Most referrals into headspace come directly to ycentral from the community with self-referrals (31%), and family and friends (38%) making up the majority of the referrals.

CYPMH referrals come through the established Mental Health Telephone Access Line (MHTAL) and include: GPs, community mental health services and families (48%); EDs (28%), CCLHD inpatient units including paediatric and medical wards (13%) and headspace (10%).

The referral rates from the Gosford and Wyong LGA to ycentral is fairly evenly split (53% Wyong, 47% Gosford). Demand for CYPMH services currently exceeds their capacity and will increase in the future due to population growth in their catchment age group. In order to meet this increase in demand services will need to expand – both staffing and accommodation.

11.3.2 Issues, Challenges and Opportunities

Lack of specialist beds
- In 2010/11 there were 156 mental health admissions for patients aged less than 18 years, of these 113 (74.3%) were admitted within CCLHD with an average length of stay of 2.7 days; these patients are most commonly admitted to the Wyong PECC and managed through the CYPMH Team
- The use of the PECC to manage these patients is suboptimal and also limits access to the PECC for other patient groups normally admitted to PECC
- When adolescents are admitted to the paediatric ward or the adult acute mental health unit they receive 1:1 care.
- There is a need for locally available short stay (up to 72 hours) CAMHS beds for short term assessment and crisis intervention. This client group has been identified as unsuitable for treatment within the inpatient paediatric unit and it is inappropriate to manage them within an acute adult mental
health inpatient unit. Beds would need to be located close to services and support provided by the paediatric inpatient unit and other specialists. Two potential options for accommodate this client group include:

- A refurbished pod suitable for young persons in the vulnerable persons unit within the Gosford Mental Health inpatient unit or
- A young persons’ extension to the proposed PECC to be located at Gosford Hospital.

- Children and young people requiring longer term mental health inpatient management will be referred to the new CAMHS unit at Hornsby Hospital. While CCLHD is to have access to beds within that unit there is concern that ready access will not be assured requiring that these patients will need to be accommodated on the Central Coast until a bed becomes available. Currently the options for accommodating these patients locally is limited.

- MH-CCP 2010 identifies the requirement for 4 acute and 3 non-acute beds in 2012 and 4 acute and 4 non-acute beds in 2022 for Children and Adolescents – negotiating access to this number of beds at Hornsby will be required to meet the needs of the Central Coast community.

**Integration of CAMHS with broader child, youth and family services**

- Services that cater for the mental health needs of children, youth and families on the Central Coast are located across two within CCLHD (Youth Health and Child and Family Health (CC Kids and Families) and CYPMH (Mental Health Division)). Historically services for specific programs and client groups have been funded and developed through different governments and government agencies, with the result that they can be poorly coordinated and integrated, leading to service gaps, duplication of services, as well as pathways of care that are complicated, unclear and difficult to navigate for patients and clinicians alike.

**Services for children under twelve years of age**

- A gap in service has been identified for children less than 12 years with minimal service provision for this patient group. CYPMH caters for young people aged 0-24, however their main focus is on young people aged 12-18 years who are experiencing moderate to severe mental health issues. Young people under 12 can access urgent assessment and short term follow up following a mental health ‘crisis’ (generally self-harm) however this age group is most usually serviced by teams within Child and Family Health or private providers.

- Services that are provided, including CAMHS and the Family Assessment Consultation Education and Therapy Services (FACETS, part of Child and Family Services in CC Kids and Families Division), are under severe strain due to capacity restrictions and extended wait times.

- Presentations of young people are becoming increasingly complex with children under 12 presenting with adolescent-type behaviours. Youth services aimed at the adolescent age group are often unsuitable for young children, and while the paediatric service environment is safe and appropriate, staff may not possess the required skill set to manage the behaviours exhibited by this group of children.

**Accommodation and location of services – ycentral**

- ycentral is a unique multidisciplinary youth friendly site that has become well recognised in the community and is well engaged with other local services. ycentral is located in rental premises with limited room for expansion. Although ycentral is located immediately opposite the Gosford railway station and transport hub, this may still be a barrier for young people residing in the north east Wyong area (which is where the highest growth is projected to occur) or the Woy Woy peninsula to access these services.

**11.3.3 Strategic Directions**

**CYPMH**

251 Establish a multidisciplinary Assertive Community CAMHS Team operating 7 days per week, to provide assessment and follow up in the community and consultation liaison with other hospital
services, for young people presenting with acute mental illness. (Specialist medical support will be shared across CAMHS, Psychiatric Consultation Liaison and SMHSOP teams).

252 Participate in the development of an integrated plan for local services. Key aims include improving integration and coordination between services and service providers with particular emphasis on the mental health needs of under 12 year olds, development of new models of care and addressing service duplications or gaps.

253 Develop CYPMH-specific access to short term (up to 72 hours) inpatient services for crisis intervention and management for children and adolescents. (Children and adolescents needing longer term specialised care will be referred to the proposed CAMHS Unit at Hornsby Hospital).

254 Expand Community CYPMH teams to meet projected growth and demand, to provide extended hours services and speciality services including extended follow-up/case management, and services for under 12 year olds, adolescents and children with behavioural disorders.

255 Develop two additional service locations, one in Wyong LGA and one on the Woy Woy peninsula, based on the ycentral model with a youth focused design and range of services.

11.4 Specialist Mental Health Services for Older People (SMHSOP)

Using a person centred evidence based approach Central Coast SMHSOP provides assessment and mental health management of older people aged 65 and over experiencing cognitive decline, mental illness and/or behavioural and psychological symptoms of dementia (BPSD). Consumers under 65 years can access services if they are Aboriginal or Torres Strait Islander or they have complex medical needs causing significant functional disability that would benefit from SMHSOP intervention.

SMHSOP provides acute and community based services and work in partnership with a range of care providers such as aged care, community support services, community residential services and residential aged care services. The service also accepts referrals of dementia patients if there are co-morbid psychiatric issues.

SMHSOP offers community services primarily at levels 5-7 of the Brodaty 7 tiered model of service delivery (dementia with severe to extreme BPSD) through the Behavioural Assessment and Intervention Service (BASIS) and Dementia Behaviour Management Advisory Service (DBMAS). Community SMHSOP offers tiers 3-4 if psychological issues are present (dementia and/or mental illness with mild-moderate BPSD/BPS-MI).

11.4.1 Current services, resources and organisation

- **Acute services - 15-bed acute psychogeriatric (SMHSOP) inpatient unit at Wyong Hospital (Mir Mir)**
- **Non-acute services based at Wyong Hospital and adjacent to Gosford Hospital:**
  - The Community Team – case management of clients with mood, psychotic or anxiety disorders, and moderate to severe BPSD
  - Specialist Behavioural Services - work to prevent hospital admissions
    - BASIS provides assessment and behaviour intervention strategies/plans for clients with moderate-severe and persistent BPSD and/or BPS-MI, as well as providing education to residential aged care facilities, carers and other NGOs on BPSD/BPS-MI
    - DBMAS provides assessment and behaviour intervention strategies/plans for clients with moderate-severe and persistent BPSD and/or BPS-MI, as well as providing education to residential aged care facilities, carers and other NGOs on the management of BPSD/BPS-MI for consumers who access Commonwealth funded services or are wanting to access Commonwealth funded services but are unable to do so due to BPSD/BPS-MI.
11.4.2 Issues, challenges and opportunities

- Significant population growth for the over 65 age group and particularly over 85 years means that by 2022 an estimated 1 in 4 acute beds at both Wyong and Gosford hospitals will be occupied by patients over 85 years. The prevalence of dementia on the Central Coast is significant and the growth is projected to be extremely high.

- There is currently no appropriate inpatient accommodation on the Central Coast for older people with dementia and extreme behavioural disorders. Patients with BPSD frequently present from residential aged care facilities and are admitted into medical inpatient wards with support from ASACC or MHS specials. These patients are often admitted due to the consequences of over-sedation used to manage BPSD/BPS-MI. They are not accepted into Miri Miri due to the impact of the challenging behaviour on other older frail patients. Since the closure of the CADE unit at Long Jetty there has been no specialist inpatient service or appropriate facilities to manage this complex and challenging group of patients.

- The SMHSOP service operates during office hours Monday to Friday and out-of-hours coverage is provided by adult Acute Assessment Team who do not necessarily have expertise in assessing or managing this complex client group.

- The 15 bed older persons acute SMHSOP unit at Wyong Hospital is operating at 90% occupancy. MH-CCP 2010 indicates an additional 7 acute inpatient beds will be required for the 65 and over age group by 2022. Given the ageing population on the Central Coast it is proposed that these patients will be more appropriate to an acute SMHSOP unit than the general acute inpatient unit.

- The Transitional-BASIS (T-BASIS) initiative was developed under the NSW Service Plan for SMHSOP 2005-2015 (NSW Health) to improve mental health service responses to the needs of older people with severe and persistently challenging behavioural and psychological symptoms of dementia (BPSD) and/or mental illness. The initiative, consistent with best practice models and non-acute SMHSOP inpatient service models, aims to reduce unnecessary admissions to EDs and acute hospitals by providing an alternative, interim specialist assessment and treatment model of care.

- T-BASIS units are short-medium stay transitional/non-acute inpatient services. They provide multidisciplinary clinical assessment, care planning and intensive treatment (including medication planning, psychosocial interventions and environmental approaches rather than a medication driven focus) with a length of stay of about three months. There is an expectation that patients will be discharged into the community or residential aged care facilities with SMHSOP and ASACC support including education of staff and carers on behaviour management techniques. The service is also suitable for some patients who can not return to residential aged care facilities.

- MH-CCP 2010 indicates the need for 12 beds for non-acute SMHSOP and T-BASIS and 9 very long stay beds by 2022 for management of this patient group.

- For the Central Coast a non-acute SMHSOP and T-BASIS unit would most appropriately be located at Wyong Hospital to ensure medical support (including after hours), mental health expertise and hospital security service for support with particularly challenging behaviours. The service budget will need to include funding for comprehensive training so that staff can acquire the specific skill set for this client group that does not currently exist within the community.

11.4.3 Strategic Directions

SMHSOP

256 Establish a multidisciplinary SMHSOP-specific Acute Assessment Team operating during business hours 7 days per week, to provide assessment and follow-up in the community and consultation and liaison with other hospital services for older people presenting with behavioural and psychological symptoms of dementia or mental illness (BPSD-MI). (Specialist medical support will be shared across CAMHS, Psychiatric Liaison and SMHSOP teams).

257 Increase the acute SMHSOP beds by 7 and develop a 21 bed T-BASIS and non-acute SMHSOP unit (12 beds) including 9 VLS beds at Wyong Hospital in a secure area with specialist staff.
Expand the community based teams (SMHSOP, BASIS, DBMAS, and ASET-BA in conjunction with ASACC) to meet projected growth and demand, to provide specialist mental health assessment and case management for older people with psychiatric issues or BPSD/BPS-MI, and rapid response support to residential aged care facilities.
12 Primary, Community and Allied Health Services

Primary and Community Care is where most people receive most of their health care, most of the time. The sector includes private services such as general practitioners, local pharmacies and allied health providers, as well as the public sector community health services provided by CCLHD. These services are provided as part of the Children’s, Aged and Community Health Directorate.

12.1 Service Scope

Primary and Community Health are significant and growing components of health service provision. Services are provided in a range of settings including outpatient clinics, community health centres and in the home. Community Health Services have played an increasingly important role in the acute health care system through prevention, substitution and post-acute care in the community.

Most Allied Health service delivery occurs in acute and sub-acute inpatient settings. Service is also delivered in other settings in CCLHD including outpatient, community-based and in patient’s homes. Increasingly the disciplines within Allied Health are seen as critical in service delivery across the care continuum and multidisciplinary models of care. Adequate and appropriate Allied Health in both acute and community settings can support diagnosis, treatment and timely discharge of patients from hospital; can facilitate early discharge from hospital; and can contribute to hospital avoidance, early intervention and prevention.

CCLHD community health services maintain an important interface with primary care, in particular General Practice, promoting a seamless continuum of care for patients that extends beyond acute inpatient services. The link is supported by effective two way communication including sharing of care plans and discharge and transfer of care processes. These models of care will require continual improvement and strengthening.

Projected increases in the Central Coast population, particularly new mothers and older people, will require services that are well integrated across the care continuum, mobile and available for extended hours. Chronic disease management models require an increased range of services that are well linked with general practice, inpatient care and rehabilitation programs.

The Children’s, Aged and Community Health Directorate (CACH) has responsibility for services organised in five major clinical streams:

- Child, Youth and Family
  - Child and Family Health
  - Youth Health Services.
- Chronic Care, Aged Care & Rehabilitation
  - Acute Post Acute Care (APAC)
  - Community Nursing
  - Ongoing and Complex Care
  - Palliative Care.
- Drug and Alcohol
- Oral Health
- Priority Populations
  - Aboriginal Health
  - Multicultural Health
  - HIV and Related Programs
  - Sexual Assault Services
  - Women’s Health.
The Directorate is also responsible for Allied Health services including:

- Nutrition
- Occupational Therapy (including the equipment loan pool)
- Physiotherapy
- Podiatry
- Psychology
- Social Work/Child Protection
- Speech Pathology.

Support services managed within the Directorate include Community Health Centres Management and the GP Collaboration Unit.

A range of other community based services, while not managed by CACH, are also delivered from Community Health facilities and other locations including:

- Aged Care, Sub-Acute and Complex Care services - Aged Care Assessment Team (ACAT), Dementia Care Service, Dementia Day Care and Memory Clinic
- Mental Health Services - Children and Young Persons Mental Health (CYPMH), Continuing Care, Assertive Outreach, and Therapy Teams
- Central Coast Kids and Families - Midwife antenatal clinics and group antenatal care
- Medicine - Satellite Dialysis Units (Lakehaven)
- Non-Government Organisation (NGO) services - Aged Day Care.

**12.2 Current services, resources and organisation**

Community health services are provided from a large number of buildings in 14 separate locations (which includes nine community health centres (CHC)):

**Gosford Hospital and CBD**

- Multiple small cottages around the perimeter of the hospital campus and the Health Services Building
- Leased premises in town centre: Gateway in Gosford CBD and Citigate in North Gosford

**Woy Woy Hospital**

- Services are run in the Community Health Centre and the (separate) Family Care Cottage

**Woy Woy Hospital**

- Most services run through the Community Health Centre on campus

**Long Jetty Health Care Facility**

- A number of ageing cottages located on campus

Community Health Centres located in:

- Gosford LGA – Erina, Kincumber and Mangrove Mountain
- Wyong LGA – Wyong Central, Toukley and Lake Haven

Child Oral Health services located at:

- East Gosford Public School
- The Entrance Public School.

Specific services provided at each Community Health Centre can be seen in Appendix F.
12.3 Issues, challenges and opportunities

National Health Reform

- Implementation of the National Health Reforms will see a fundamental shift in the way health care is funded and delivered. Part of this reform includes the establishment of Medicare Locals.
- The Central Coast NSW Medicare Local was formed on 1 July 2012, and has the responsibility of improving the patient journey through better coordination and integration of services, identifying the health needs and service gaps for local communities, and working in partnership to meet these needs. It will have a key role in further integrating services between CCLHD and primary care and improving coordination of services across the primary, community and inpatient health sectors. The strategic objectives for the Central Coast NSW Medicare Local include:
  - Improving the patient journey through developing integrated and coordinated services.
  - Provide support to clinicians and service providers to improve patient care.
  - Identification of the health needs of local areas and development of locally focused and responsive services.
  - Facilitation of the implementation and successful performance of primary health care initiatives and programs.
  - Be efficient and accountable with strong governance and effective management.

- The impact and implications of ABF on community based and allied health services are as yet unknown.

Changing models of care

- Increasing emphasis on the care continuum and integration between primary, community and inpatient services.
- Increasing pressure on inpatient beds has placed greater emphasis on hospital avoidance and factors that can reduce inpatient length of stay through community health programs and services.

Population factors

- An ageing and growing population will continue to create pressures on the acute care system; this will further drive the development of hospital avoidance and early discharge strategies that keep people in the community and minimise the need for inpatient care.

Community Health infrastructure

- Many of the buildings are ageing and in poor condition; are not well located to service areas of population growth; are poorly designed and have inadequate treatment space to support contemporary models of care; are operating at capacity and have little space available for service expansion. A number of the community based facilities require better design to improve security.
- Two services operate from leased premises - Citigate at North Gosford and Gateway in Gosford CBD. The lease agreements limit the capacity and flexibility to deliver effective community health from these sites. The lease rental costs are met from the recurrent budget reducing the funding available for service provision.
- The majority of the Community Health facilities are poorly equipped for networked telecommunications, are not designed to facilitate interaction between services and have limited parking for patients, staff and fleet vehicles.
- There are limited community health facilities/centres located in the population growth areas in Wyong North East.

Service Integration

- Current facility design, placement and capacity of Community Health buildings have restricted opportunities for partnerships, collaboration or collocation with other CACH services or other private, NGO and community services. An example of a partnership is the Bridges After Hours Medical Service which is hosted at the Erina Community Health Centre.
- Links between primary, community and inpatient services need to be strengthened to reduce duplication, address gaps in services and ensure appropriate services across the care continuum.
Increasing emphasis on community based models of care requires development of staff capabilities and confidence, and processes to increase engagement and communication with General Practice. Effective communication and links with General Practice, as well as recognition of the GP as the primary care provider, are needed to support effective continuums of care.

Workforce

- Insufficient funded positions and the application of short term program funding has a direct impact on the level and types of services that can be provided, the capacity to meet current demand, and the ability to implement changes or expand services.
- Workforce constraints have limited the capacity of senior staff to provide clinical supervision, professional development and ability to support student placements.

Transport

- Access to timely and effective public transport continues to be an issue. Development of new community health facilities will need to consider transport access and provision of adequate and secure parking for patients and staff who are required to travel between sites and to patients’ homes.

Information Management and Technology

- At present there is no comprehensive, shared electronic medical record available in community settings. CCLHD is a pilot site for the development of the Community Health and Outpatient Care Program (CHOC) as part of eMR in 2012/13. This program will develop a shared medical record accessible by community health service providers across a wide range of settings.
- With increasing community and home based service delivery a range of mobile technologies will be required so that patient records can be readily accessed while out of the office and to minimise time required for office based tasks.

12.4 Strategic Directions

To meet the current and projected health needs of the Central Coast population significant capital and recurrent investment in community based health services will be required.

Services delivered in community health settings will operate through a hub and spoke model. Key hubs will be established for Child, Youth and Family Services, Chronic Disease Management, and Rehabilitation Services. For services that require wide distribution and easy local access (e.g. community nursing, early childhood health, mental health and drug and alcohol), outreach services will be offered at all sites (spokes). Key features of all sites will include:

- Facility design that meets the sometimes conflicting needs of different patient populations (e.g. Early Childhood Health and Drug and Alcohol clients)
- Sufficient and secure parking for patients, staff and fleet vehicles with easy access for people with a disability
- Office space design that encourages cross team interactions
- Design that maximises security for staff and patients
- Location close to major transport hubs where possible and to other community services e.g. shopping centres
- Opportunities to enable collocation with other non-CCLHD health or associated services
- Compliance with the NSW Disability Service Standards and the CCLHD Disability Action Plan.

Service and Facility Development

259 Undertake Master Planning for Community Health facilities to inform future capital decisions for the refurbishment, expansion or replacement of existing stock and identify potential sites for facilities in the population growth areas in the northern area of the LHD.

260 Ensure all capital development of CHCs provides sufficient space for the provision of a wide range of spoke services including early childhood, youth health, needle and syringe program,
mental health and drug and alcohol and others as required.

261 Ensure all capital development of CHCs provides adequate space to accommodate existing and future staffing numbers.

262 Review allocation and utilisation of CHC accommodation including stocktake of current services, unmet needs, options for more efficient and effective use of space, extension of opening hours and access to eMR.

263 Refurbish, redesign and expand Woy Woy CHC as a hub for chronic disease management including rehabilitation programs (e.g. respiratory and cardiac), community nursing and aged care services, and capacity to accommodate a range of spoke services.

264 Review accommodation options for community health services at Gosford (including alternatives to leasing). Establish a hub for Child, Youth and Family Services, Oral Health and Family Care Cottage, and capacity to accommodate a range of spoke services.

265 Relinquish current leased premises at Citigate and provide alternative accommodation in a new Gosford community health hub for ASACC and Mental Health services.

266 Explore options for increasing capacity at Erina and Lake Haven CHCs for the provision of a wide range of spoke services.

267 Investigate ongoing viability (in terms of access, building maintenance and design) of Toukley and Kincumber CHCs and consider options for the relocation of spoke services currently operating from these sites.

268 Consolidate the range of services operating from multiple buildings at Long Jetty into one multipurpose facility, enabling development of a hub for chronic disease management including rehabilitation programs (e.g. respiratory and cardiac), community nursing, aged care and Palliative Care, and capacity to accommodate a range of spoke services.

269 Refurbish and expand Wyong Hospital CHC, or consider potential for relocation to an alternative site.

270 Develop a new CHC, possibly at Tuggerah, to accommodate services currently operating at Wyong Central CHC. Establish a hub for Child, Youth and Family Services, Oral Health and Family Care Cottage, and capacity to accommodate a range of spoke services.

271 Develop cross-Directorate processes for reviewing all funding opportunities to ensure evaluation of fit with current services and capacity, and opportunities for pooling of funds to allow most effective outcomes. Seek clarification regarding inclusion of corporate services covered by administrative levy applied to program funding.

**Workforce Development**

272 Establish a CACH Clinical Leadership Group to review, develop and implement best practice, clinical guidelines and models of care, undertake service reviews, participate in research, and promote change.

273 Review the coordination of student placements across the Directorate, including the effectiveness of the Clin Connect trial, to determine support required to sustain teaching activities.

274 Explore options for ongoing staff development, support and education across all clinical disciplines including arrangements for formal worker exchanges with other CCLHD services and external organisations.
12.5 Allied Health

12.5.1 Current services, resources and organisation

Most Allied Health service delivery occurs in acute and sub-acute inpatient settings. Service is also delivered in other settings in CCLHD including outpatient, community-based and in patient’s homes.

12.5.2 Issues, challenges and opportunities

- Staffing levels vary across settings and disciplines, but in all disciplines Allied Health has insufficient staffing to cover current demands
- Problems with staffing levels have compounded over time as the increase in bed numbers has not been associated with concomitant funding to expand the Allied Health workforce. Low staff numbers has resulted in:
  - limited or no weekend or after hours service provision
  - reduced capacity to supervise junior staff and students
  - significant gaps in some service streams affecting length of stay and patient outcomes
  - limited community-based programs for post discharge follow up or continued rehabilitation
- Accommodation for Allied Health staff, at all sites, is restricted and at capacity
- The Equipment Loan Pool for the Central Coast operates from a single site located at West Gosford. The service reports through Occupational Therapy services and is staffed by one manager. The delivery service is provided by a group of volunteers. The equipment is loaned to patients with health needs who are unable to access equipment through private means which is crucial in the discharge from the acute setting. The issues include:
  - Operation of the service from a single site, that is at a distant location from all hospital and CHC sites, is problematic as it creates access issues for patients and staff and increases security risks
  - The service is dependent upon an ageing volunteer workforce for deliveries due to budget constraints
  - There is no budget for replacement of ageing equipment, ongoing maintenance or to purchase new equipment to meet growing population needs
  - Capacity to purchase, store and transport bariatric equipment is limited.

12.5.3 Strategic Directions

<table>
<thead>
<tr>
<th>Allied Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>275 Review Allied Health workforce including existing capacity and shortfall in: meeting current demands; workforce required to provide 7-day cover in essential areas of care; to provide leave cover across all disciplines; to meet projected growth in demand across all settings, and define use, scope of practice and settings for Allied Health Assistants.</td>
</tr>
<tr>
<td>276 Increase Allied Health supply in community settings to deliver services required both within existing programs (for adult and paediatric services) and proposed Community-based Rehabilitation Centres (cross reference ASACC strategies).</td>
</tr>
<tr>
<td>277 Develop inpatient inreach model of care to manage medical and surgical outliers and to commence rehabilitation for appropriate patients. (cross reference ASACC and Medicine strategies).</td>
</tr>
<tr>
<td>278 Increase the capacity of the Clinical Psychology service to meet growing demands in inpatient and community settings.</td>
</tr>
<tr>
<td>279 Undertake a needs assessment for the provision of general psychology services (counselling and consultation liaison) including identification current and future needs, service gaps, paediatric requirements, and opportunities related to Medicare funded Allied Health services.</td>
</tr>
</tbody>
</table>
280 Improve the identification of patients with, or at risk of, malnutrition in the inpatient setting including measurement of height and weight at admission and at regular intervals during hospital stay, and include a clinical nutrition plan in the discharge summary for at risk patients.

281 Undertake a needs assessment for selected speciality patients including those with brain and spinal cord injury and amputees to determine current and future community and primary care needs and resourced required.

282 Establish High Risk Foot Clinic at Gosford Hospital based on the Wyong Hospital model of care. (cross reference Medicine – Endocrine and Diabetes strategies).

283 Review the Equipment Loan Pool and its ability to meet current and projected demand, including location(s), staffing, maintenance, replacement and purchasing of new equipment, and meeting specialised equipment needs e.g. bariatric patients.
12.6 Child, Youth and Family

Child, Youth and Family services include Child and Family Health and the Youth Health Services. A range of complementary specialised child services in the community health setting are provided by the Social Work department.

Child, Youth and Family Services have close links with a number of other child based services including Maternity, Paediatric Ambulatory Care, Children's Ward and Children's and Young People’s Mental Health (CYPMH).

12.6.1 Child and Family Health Services

12.6.1.1 Current services, resources and organisation

Child and Family Health provide primary, secondary and tertiary services to children and their families. Primary care is provided through Early Childhood Health services including universal home health visiting to parents of all new babies, follow up home visiting where required, and clinics at all CHCs. Secondary and tertiary services are located at the central hub at Gosford Gateway with outreach to a number of CHCs.

The components of the service are:
- Early Childhood Services
- Sustained Home Health Visiting (currently provided in Wyong LGA only)
- Multidisciplinary teams
- Allied Health
- Community Paediatrician
- Family Care Cottages, one located at Gosford Gateway and the other onsite at Wyong Hospital.

12.6.1.2 Issues, challenges and opportunities

- The Child and Family Health hub at Gosford Gateway operates from leased premises. The site does not allow collocation of other services and families from the Wyong LGA can find it difficult to access services.
- Significant communication and collaboration problems exist between the three main Child, Youth and Family services: Child and Family Health, Youth Health Service, and CYPMH. There are significant gaps as well as some overlaps between the three services.
- Clients of Child and Family Health are presenting with increasingly complex health issues, including younger children displaying significant risk behaviour, and children and families with increased mental health, drug and alcohol, domestic violence and child protection issues. Increasing complexity requires increased service delivery, particularly counselling services.
- Programs for vulnerable children and families are limited to specific geographic areas e.g. Sustained Home Health visiting in Wyong LGA, and some services are currently under-funded e.g. health checks for children in Out of Home Care
- There are difficulties referring children and families for specialised care in areas such as Mental Health, Drug & Alcohol and domestic violence
- The two Family Care Cottages are operating from poorly designed facilities.

12.6.2 Youth Health Service

12.6.2.1 Current services, resources and organisation

The Youth Health Service operates from a hub located at Wyong Central with outreach to other CHCs. The service focuses on marginalised and at risk young people, in particular those who are Aboriginal, homeless, have mild disabilities, are living with chronic disease, have unplanned pregnancies, are same
sex-attracted and/or are socially isolated. Referrals are not required for admission to the service. The components of the service are:

- GP and Nurse Practitioner Youth Health Clinic at Wyong Central
- GP clinics at youth health centres
- Intake and advice line
- Counselling services operating from a number of CHCs
- Health promotion and capacity building through Homeless Outreach Worker and Aboriginal Youth Worker
- Eating Disorders service at Wyong Central
- Emergency Department Liaison through both Gosford Hospital and Wyong Hospital EDs.

12.6.2.2 Issues, challenges and opportunities

- Increasing complexity of presentations and difficulty referring to or collaborating with specialist services such as Mental Health and Drug and Alcohol
- Poor access to primary and allied health care (GPs and other private providers) for young people affecting their long-term health outcomes and increasing likelihood of presentations to both EDs
- Increasing rates of chronic disease including diabetes and obesity in young people
- Some young people living with health issues such as mild developmental delay, autism or Asperger’s Syndrome may not be able to access other services
- Services to assist in the transition from paediatric or adolescent services to adult services are poorly resourced
- Access to specialist Adolescent Medicine services and all specialist services is limited
- The Wyong Central facility, while close to transport, is not an attractive venue for young people
- Space for staff accommodation is close to capacity.

12.6.3 Other children’s services

A range of other child focused services are managed through the Social Work Department including:

- Child Protection Family Counselling provides intensive family counselling for high risk children and families referred by Community Services. The service operates from a base at Erina CHC and provides outreach to Wyong Hospital and home visits as required.
- Child Protection Liaison operates at both Gosford and Wyong hospitals and provides an acute inpatient consultancy service for high risk child protection presentations and case management for children who are already clients of Community Services.

12.6.4 Strategic Directions

**Child and Family Health Services**

284 Develop and implement an integrated plan for CCLHD health services for children and young people.

285 Establish Central Coast Kids Network with membership from key CCLHD services to review the organisation and provision of children's services, and identify opportunities for improving the care of children and families with Mental Health and Drug and Alcohol issues.

286 Review services available for children and young people living with complex conditions across both hospital and community based services including referrals pathways, service duplications and gaps, adequacy of clinical support, links with General Practice, coordination and access, transition from paediatric to adult services, utilisation of and access to diagnostic and allied health services, and options for colocation of services.

287 Review community based children and young people mental health services and develop a single plan across CCLHD services to support patients with acute mental health illness.
### Youth Health Services

288 Develop a model of care for pre-adolescents displaying problematic sexualised behaviours or risky adolescent behaviours.

289 Enhance services to support children and families experiencing violence and abuse.

290 Review and determine the most appropriate location across CACH Directorate and the CC Kids & Families Division for small clinical teams e.g. Antenatal Education and Community Paediatric team.

<table>
<thead>
<tr>
<th>Youth Health Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>291 Establish a Youth Health Service team to reduce young people's avoidable presentations to ED.</td>
</tr>
<tr>
<td>292 Enhance capacity and strategies for engaging marginalised young people including increasing outreach services, improving access, and increasing support for young people with chronic illness.</td>
</tr>
<tr>
<td>293 Investigate the need and options for expansion of the Eating Disorders Early Intervention Outpatient Service to address eating disorders related to both under and over nutrition and provide an inpatient consultation service.</td>
</tr>
<tr>
<td>294 Establish a staff specialist position in Adolescent Medicine.</td>
</tr>
<tr>
<td>295 Develop and implement additional strategies to target marginalised groups in the community in partnership with internal and external service providers. Replicate models currently in place such as Youth Booth and NAIDOC screening days for at risk groups.</td>
</tr>
</tbody>
</table>

### Other Children's Services

12.7 Chronic Care, Aged Care and Rehabilitation

Chronic Care, Aged Care and Rehabilitation services include Community Nursing, Acute Post Acute Care (APAC), Ongoing and Complex Care, and Palliative Care. These have close links with other services including acute rehabilitation and aged care services, acute medicine, and more broadly with General Practice.

12.7.1 Community nursing and APAC services

12.7.1.1 Current services, resources and organisation

Both Community Nursing and Acute Post-Acute Care (APAC) play a significant role in hospital avoidance and facilitation of discharge from the acute inpatient setting. They also accept referrals directly from other providers in community settings.

Community Nursing provides a range of generalist and specialist nursing services in the person’s home, or a clinic setting, enabling the patient to live independently and avoid premature admission to residential care. The service runs three teams across the CCLHD, operates during business hours, has a centralised intake system, and includes home visits and clinics at all CHCs. Service components include:
- General community nursing services
- Wound Care
- Continence Nursing
- Stomal Therapy
- Help Program which assists in transport and settling of patients at home following hospital discharge.

The multidisciplinary APAC service provides short term acute care substitution and post-acute care to patients in their home, residential aged care facility or clinic as an alternative to inpatient care. It operates two clinics located at Gosford and Wyong hospitals as an alternative to home visits for suitable patients. Operating hours are from 7am to 8:30pm, 7 days/week. The service includes both nursing and allied health staffing. Medical management of patients is essential to the model of care. Service components include:
- Senior specialised allied health and nursing reviews and therapy
- Specialised breast care, intravenous access, venepuncture and respiratory care.

12.7.1.2 Issues, challenges and opportunities

- The delineation of roles between the two services is not clear, with both gaps and overlaps in service delivery
- Linkages with the Ongoing and Complex Care (OCC) program are not strong and require further development
- Medical management of patients is essential to both models of care; usually this is the responsibility of the patient’s GP. Difficulties providing care can be experienced with the general shortage of GPs.
- Lack of funded positions in both services limits capacity to meet demand, hours of operation and, for community nursing, can result in significant delays to commencement of treatment for non-urgent cases
- Both services are transitioning to a more clinic focused model, based on patient ability to attend a clinic, rather than focusing solely on home based service delivery.

12.7.1.3 Strategic Directions

**Community Nursing and APAC**

Review community services including Community Nursing, APAC, Aged Care, ASET and OCC to determine appropriate delineation of roles, identify duplication and gaps in service, links and referral pathways to other key services including General Practice, management of deteriorating
patients in community settings, utilisation of and access to diagnostic and allied health services and ideal staffing skill mix, options for extended service hours, increased frequency of visits and appropriate settings for care delivery including clinic home based options.

298 Establish a group of lead clinicians to regularly review conditions that can be safely managed in the community either by APAC or Community Nursing.

299 Investigate options for extending the scope of practice and capacity of community based wound management services including closer links with General Practice, clinic based minor surgery, potential for telehealth and teaching opportunities.

12.7.2 Ongoing and Complex Care

12.7.2.1 Current services, resources and organisation

The Ongoing and Complex Care Program encompasses the range of services that provide continuing management in the community for people living with chronic and complex health conditions. Services are offered across a range of settings including on hospital campuses, within CHCs and in patients’ homes.

Workforce includes a mix of nursing and allied health disciplines, often with specialisation in specific disease areas. Partnerships with General Practice are an important part of patient management. The majority of programs focus on a specific disease or illness. Service components include:

- Cardiac rehabilitation
- Heart failure rehabilitation
- Pulmonary rehabilitation
- Diabetes services
- Community Outreach and Therapy Service (COATS, acute and chronic neurological services)
- Complex Care Coordination: a nurse run care coordination service for people with high needs related to their chronic disease
- Chronic Pain Service
- Self-Management Support Service.

12.7.2.2 Issues, challenges and opportunities

- Increasing incidence and prevalence of chronic disease associated with the growing and ageing population, socio-economically disadvantaged subgroups, and low GP to patient ratios will require significant Ongoing and Complex Care program and service expansion
- The number of Aboriginal residents is also expected to increase; the higher prevalence of chronic disease in this population group will place additional demand on programs and services. However, engaging Aboriginal people living with chronic disease to participate in programs is often challenging.
- There is a lack of primary prevention activities in the broader community
- Lack of funded positions and physical space has limited the capacity of the Ongoing and Complex Care Program to meet current demand
- Current Ongoing and Complex Care program facilities are poorly located and suited to the provision of care, and would benefit from collocation with other related services
- Need to meet targets including the Sustainable Access Program KPIs (Aged and Chronic Disease NSW) relating to the uptake of respiratory and cardiac rehabilitation programs by eligible, recently discharged patients
- KPIs attached to the Connecting Care program focus resources on the most complex group of patients; less complex patients are unable to access services and programs to prevent progression to severe disease
- The Ongoing and Complex Care Program has multiple entry points which can be confusing for patients, GPs and other service providers to navigate
- Lack of in-reach to identify patients while in inpatient settings and enhance uptake of community programs post discharge.
12.7.2.3 Strategic Directions

**Ongoing and Complex Care**

300 Explore options for community health inreach/hospital liaison to identify patients who could be discharged early with appropriate support or who will require post discharge follow up e.g. disease specific rehabilitation programs, Complex Care Coordination or Community-based Rehabilitation Centres.

301 Implement funded single access point for referral to all Community Nursing and some OCC services.

302 Enhance community rehabilitation (pulmonary, cardiac and heart failure) programs and diabetes services to provide cover across both Gosford and Wyong LGAs including options for extended hour services. (cross reference Medicine and ASACC strategies).

303 Continue to develop interventions and support for people with less severe chronic and complex health issues including disease specific support groups, generic maintenance exercise groups, self-management programs and education.

12.7.3 Palliative Care

12.7.3.1 Current services, resources and organisation

The Central Coast Specialist Palliative Care Service provides clinical advice, support and intervention for people with complex symptom and end of life related care needs. It supports and supplements the clinical management provided by medical care teams in acute inpatient settings through a consultation model. General Practitioners and primary care/aged care nurses providing end of life care in community settings and residential aged care facilities are also supported through the consultation model.

The model provides 24/7 specialist nursing advice for registered palliative care patients at home; inpatient consultation is provided during business hours. Service components include:

- Palliative Care Medical Specialists – includes specialists, registrars and advanced trainee
- Palliative Care Nursing Specialists – includes a Nurse Practitioner and CNC
- Allied Health – Social Work and Occupational Therapy
- Bereavement Counselling – service is not limited to palliative care
- Administration support
- Volunteers.

Palliative care nursing in the home is provided by the Community Nursing service.

12.7.3.2 Issues, challenges and opportunities

- Rapid increase in demand for services with associated increased patient complexity. The number of referrals for clinical consultation has increased by 21% between 2007 and 2011. Demand for palliative care services is associated with an ageing population and is linked to increases in total cancer diagnosis and non-cancer diseases with end stage phases.
- The Palliative Care Service’s activity in 2011 (1,061 cases) was 27% higher than that projected using the Palliative Care Australia (PCA) Palliative Care Service Provision Planning Guide (2003) and has also exceeded the projected activity to 2021 of 930 cases
- The establishment of the Regional Cancer Centre and radiotherapy service is expected to generate increased demand for palliative care services due to the increased numbers of patients who will be able to access cancer services locally and as a high proportion of cancer radiotherapy is palliative
- At present approximately 80% of referrals are cancer related. The Palliative Care Australia Planning Guidelines (2003) estimated the proportions to be 64% cancer related and 36% non-cancer. It is anticipated that the numbers of non-cancer related referrals will increase.
The inpatient consultation service at both Gosford and Wyong hospitals is limited due to workforce constraints and only available during business hours Monday to Friday with no on-call support or capacity for direct care admissions for acute episodes.

Recruitment of Palliative Medicine workforce for the Central Coast has been difficult. There is a national and international shortage of palliative care medical specialists. Development of training opportunities including advanced medical trainees may help to address this.

Uncertainty surrounding an ongoing funding source for workforce positions funded through COAG until June 2013. Withdrawal of this funding will have a significant effect on the community palliative care services.

Palliative care patients are admitted to acute facilities for extended periods due in part to the limitations of the palliative care consultation service and the absence of capacity to provide direct inpatient care, or outpatient and ambulatory treatment options; as well as difficulties accessing alternative appropriate inpatient (‘end of life’) accommodation in sub-acute or other alternative settings. There is a continuous population of these patients in the acute facilities which places additional pressure on limited acute inpatient capacity.

Sub-acute non-specialist palliative care (‘end of life’) beds have been included in the Woy Woy Hospital site redevelopment (five beds) which is due for completion in 2013. Once open care will be managed by a primary non-specialist palliative care provider i.e. CMO or GP with consultative support from Palliative Care Service as required.

There are also five beds available at Long Jetty within the sub-acute unit for sub-acute non-specialist palliative care (‘end of life’), however there are no single rooms available in the sub-acute unit so are sub-optimal for end of life care.

Both the Palliative Care Service and Bereavement Counselling Service are currently operating at capacity.

12.7.3.3 Strategic Directions

The Palliative Care Service will continue to provide services through a consultative and supportive care model working in collaboration with inpatient teams and primary care providers. The distribution and availability of services needs to ensure equitable access across the LHD. The existing model which provides twenty four hour access to specialist nursing advice and support at home for registered palliative care patients will continue.

Future service development will include enhanced inpatient consultation services to accommodate the increasing demand (including the expected increase secondary to commencement of radiotherapy and the Regional Cancer Centre); enable extended hours of availability including capacity for on-call cover, direct care admissions at Gosford and Wyong hospitals and the provision of outpatient clinics and ambulatory services for symptom management, an advanced care planning clinic, and access to minor procedures and treatments on an ambulatory basis. However this will require additional resources to achieve.

Access to a range of suitable palliative care beds in the acute, sub-acute, aged care and potentially private facilities will increase the available options for patients and their families for ‘end of life care’ or as their care needs change. Patients will remain under the care of their GP or a CMO with access to consultative support from the Palliative Care Service and provide an opportunity for specialist nurse led palliative care models.

Palliative Care Services

304 Develop a business case identifying the workforce enhancements required to support an expanded
inpatient consultation service including capacity to: meet increased referrals (as well as the expected increase secondary to the commencement of radiation oncology services), provide extended hours coverage including on-call, direct care inpatient admission to the acute facilities, and outpatient clinics.

305 Expand the Palliative Care Service to promote and support quality 'End of Life Care' in home settings (includes RACF) including consultative and education support for GPs, RACFs and other providers of palliative care.

306 Develop a proposal for provision of direct care admissions to Gosford and Wyong hospitals for episodes requiring acute management including access to beds within preferred wards and resource requirements to support this service.

307 Explore opportunities for outpatient clinics and ambulatory treatment where patients can access specialist review, treatment and minor procedures as part of their care pathway including the potential for an advanced care planning clinic (cross Reference to LHD Ambulatory and Outpatient strategies).

308 Review the bereavement counselling service to identify future service requirements including options for the most appropriate model and providers of this service.

309 Investigate options to access additional sub-acute inpatient beds for management of 'end of life' care. Include consideration of non-LHD facilities such as RACF and private facilities. Identify opportunity for alternative model of care and support for GP services using Nurse Practitioners.

310 Explore options for modification and/or refurbishment of the Long Jetty sub-acute unit to include single rooms to accommodate end of life care beds.

311 Promote 'Dying Friendly Hospitals' through supporting wider uptake of end of life care pathways across LHD facilities and promote improved referral pathways to Palliative Care Services.
12.8 Drug and Alcohol Services

12.8.1 Current services, resources and organisation
The CCLHD Drug and Alcohol Service aims to improve the health and well-being of people affected by the use of alcohol and other substances. The focus is on the acute end of care. The Drug and Alcohol Service operates an inpatient withdrawal service as well as a range of services through CHCs. Service components include:

- Inpatient Detoxification Unit at Wyong Hospital (15 beds) offering both alcohol and drug detoxification
- Opioid Treatment Programs (OTP) through Gosford and Wyong hospitals
- Counselling services in CHCs
- Magistrates Early Referral into Treatment (MERIT) covering Gosford, Wyong and Woy Woy courts
- Inpatient consultancy
- Aboriginal Consultancy Team
- Cannabis Clinics in CHCs
- Dual diagnosis (drug & alcohol and mental health) assertive follow up service
- Staff allocated to Aboriginal Infant and Maternal Health Service.

12.8.2 Issues, challenges and opportunities
- The community detoxification service was suspended in September 2009. The lack of a community detoxification team impacts on the quality of service and the ability to provide specialist aftercare and outreach services to consumers and GPs.
- Sections of the service are severely oversubscribed:
  - OTP is funded for 396 patients but in December 2011 the service managed 563 patients
  - The Counselling service received 1,570 referrals in 2010/11 but was only able to commence 1,014 people into treatment
- The lack of a GP/pharmacy liaison position impacts on the capacity for community delivered OTP, placing extra demand on the Drug and Alcohol Service.
- The majority of Drug and Alcohol facilities require refurbishment or redevelopment.
- Consultation Liaison with inpatient facilities, ED and Mental Health requires strengthening.
- There is increasing demand for drug and alcohol services, particularly in the Wyong LGA; specific subgroups are young people, Aboriginal people and peri-natal women.

12.8.3 Strategic Directions

<table>
<thead>
<tr>
<th>Drug and Alcohol Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>312 Re-establish the Community Detoxification Team.</td>
</tr>
<tr>
<td>313 Re-establish Drug and Alcohol GP/Pharmacy Liaison position.</td>
</tr>
<tr>
<td>314 Continue to work with services both within CCLHD and the broader community to implement prevention activities with a primary focus on risk alcohol consumption.</td>
</tr>
<tr>
<td>315 Review gaps in Drug and Alcohol services and prioritise services to be funded when funding opportunities arise e.g. consultation liaison, cannabis clinic, prevention and early intervention, alcohol outpatient clinics, family drug and alcohol clinics.</td>
</tr>
<tr>
<td>316 Enhance workforce to service current demand, particularly in the areas of counselling and OTP.</td>
</tr>
</tbody>
</table>
12.9 Oral Health

12.9.1 Current services, resources and organisation

Oral Health Services are responsible for the provision of acute and non-acute oral health care to eligible people within the CCLHD catchment area. Eligible consumers include:

- Children and adolescents (less than 18 years) who have a Medicare card
- Adult residents of CCLHD who have a Healthcare card, Pensioner Concession card or Commonwealth Seniors Health card issued by the Australian government.

Services are delivered according to the priorities identified by the NSW Health Oral Health Priority Program. Oral Health Services are provided through a hub and spoke arrangement – laboratories, prosthetic services and clinics are located at hubs at Gosford (4 chairs) and Wyong hospitals (11 chairs) and additional clinics operate from Woy Woy Hospital (5 chairs) and two school sites at East Gosford and The Entrance (2 chairs at each).

In 2010/11 the number of Weighted Occasions of Service (WOOS) for adults across all sites was 84,027 (in 2009/10 WOOS were 101,995). For children the number of WOOS was 47,502 (in 2009/10 WOOS were 43,240), giving a total of 131,529 WOOS across all sites.

12.9.2 Issues, challenges and opportunities

- Population factors, including significant socioeconomic disadvantage and age profiles (peaks at younger and older ends of the age spectrum) mean that the number of people who meet the eligibility criteria is high. Demand is expected to grow particularly in the Wyong LGA.
- There has been increasing recognition of the link between oral health and chronic disease and the importance of access to dental health services. This is highlighted for population groups such as the Aboriginal population who have higher rates of oral health issues and also chronic disease.
- Current high demand impacts on ability to deliver pain relief within an acceptable time, limits capacity to provide other core services, increases delay to treatment for other patients and narrows the scope of practice for all clinicians. This is also directly influenced by the ongoing workforce shortages.
- Oral health services are provided across five sites, consideration of the ongoing sustainability of this number of sites and the potential to consolidate services in particular the two school-based dental clinics into the existing clinics requires further consideration.
- Attracting and retaining skilled workforce, particularly dentists, is problematic. This creates a significant and ongoing workforce shortfall and impacts on the ability to provide quality training for dental students. This situation is likely to be exacerbated by the growing demand for demand for student clinical and graduate placements.
- Changes in the scope of practice for Oral Health Therapists which will impact on both workforce requirements and models of care will require further consideration.
- There is a risk of significantly increased demand if the Medicare Chronic Disease Dental Scheme ceases.

12.9.3 Strategic Directions

**Oral Health**

317 Review current oral health models of care to determine the most effective utilisation of clinical expertise, to maximise service delivery, and determine the most appropriate locations for services.

318 Review capacity required to meet current and future demand for oral health services including additional chairs, clinical service locations and efficiencies related to consolidation of sites, strategies to enhance workforce recruitment and retention. Include consideration of private Fee-for-Service Voucher Scheme providers, and formulate strategies to manage the roll out of the Federal...
Clinical Services Plan 2012-2022


319 Maintain an active role in oral health promotion and prevention, including working with a range of CCLHD and community based services.

12.10 Aboriginal Health Service

12.10.1 Current services, resources and organisation

The Aboriginal Health Service, known as Nunyara, is based in a cottage at Gosford Hospital. The service liaises with service providers and provides advice on matters in relation to improving the health and well-being of the Aboriginal community. Service components include:

- Hospital Liaison
- Chronic Care
- 48 Hour Follow Up.

The LHD provides a number of other community based services specifically focussed on the Aboriginal community, these include: an Aboriginal Sexual Health Education Officer; Women's Health Clinic at Mingaletta; Drug and Alcohol Aboriginal Consultancy Team; Aboriginal Maternal and Infant Health and Building Strong Foundations health teams; Aboriginal Oral Health Clinics for adults and children (Koori Kids); Young, Black and Ready for School program; NAIDOC Day health assessments; Aboriginal Youth Health Worker and the Mental Health Aboriginal Consultation and Liaison Team Service. A number of these services are provided in collaboration with the Aboriginal Health Services.

The Aboriginal Health Service maintains strong partnerships with other Aboriginal service providers in the area including:

- Eleanor Duncan Aboriginal Health Centre (EDAHC), provides a range of primary health services. EDAHC operates under the auspices of the Yerin Aboriginal Health Service
- Aboriginal Health Service at Central Coast NSW Medicare Local, which provides care coordination for Aboriginal people living with chronic disease and promotes the needs of Aboriginal people to General Practice.
- Mingaletta community organisation, which hosts outreach services on the Woy Woy peninsula
- Bungree Aboriginal Association an NGO based in Toukley providing community care packages, community transport, housing and respite care to the Aboriginal community
- Ngaimpe Aboriginal Corporation (also known as The Glen) located in the Wyong LGA at Chittaway Point which offers residential alcohol and drug rehabilitation services for men (both Aboriginal and non-aboriginal).

12.10.2 Issues, challenges and opportunities

- Aboriginal people experience poorer health compared to non-Aboriginal people, higher prevalence of chronic disease and a lower life expectancy; creating greater demand for health services
- There are higher levels of health risk factors within the Aboriginal population such as smoking, drug and alcohol, poor diet, oral health disease as well as higher rates of teenage pregnancy and poor access of antenatal care
- Current and projected population profile of Aboriginal people on the Central Coast is young (40% aged less than 15 years of age)
- Continuing need for strong partnerships with other Aboriginal services in the area
- Decreased access of health services by Aboriginal people
- Poor identification of Aboriginal people with complex health needs and coordination of care
- Access to Aged Care services, including RACFs, by Aboriginal people is low
- The Hospital Liaison service is not able to meet demand across both Gosford and Wyong hospitals
- Lack of cultural awareness training for CCLHD staff
• Younger population profile means continued emphasis on programs targeting high risk behaviours, as well as health promotion, prevention and early intervention approaches is required.

12.10.3 Strategic Directions

Aboriginal Health

320 Improve referral skills and increase the uptake of community based programs among Aboriginal people living with chronic disease. Enhance workforce e.g. hospital liaison, aboriginal chronic care.

321 Develop an Aboriginal Health Action Plan in partnership with Eleanor Duncan Aboriginal Medical Service, Central Coast NSW Medicare Local and other relevant providers.

322 Develop an Aboriginal Health Council with representation from key community based organisations to provide strategic direction for health services.

323 Increase delivery of Aboriginal specific cultural awareness training for CCLHD staff.

324 Continue to conduct Aboriginal focused health promotion and early intervention programs, in particular for adolescents and those at risk of chronic disease, in partnership with other health services and community based organisations.

325 Consider future accommodation and location options at Gosford and Wyong hospitals that will provide a more visible profile for the Aboriginal Health Service.

12.11 Multicultural Health Service

12.11.1 Current services, resources and organisation

• The Multicultural Health Service (MCHS) works with clinical staff, community members and other agencies to improve accessibility and appropriateness of health services for people from diverse cultural and linguistic backgrounds. The MCHS provides information and referral services to priority groups in addition to cultural diversity training for CCLHD staff.

• The MCHS focuses on those Culturally and Linguistically Diverse (CALD) communities with most disadvantage including: communities with identified patterns of health conditions; are small and emerging; are newly arrived or have a high proportion of frail elderly or children.

12.11.2 Issues, challenges and opportunities

• CALD populations on the Central Coast are currently relatively small both in size and proportion compared to NSW

• Projected growth in CALD populations on Central Coast particularly in the Wyong LGA

• CALD populations will experience increase in health needs due to ageing and increased incidence of chronic disease among some CALD populations

• Low levels of understanding of CALD population needs amongst CCLHD staff

• Low use of interpreter services by CCLHD staff due to little knowledge of the availability and the process for accessing interpreter services.

12.11.3 Strategic Directions

Multicultural Health

326 Increase awareness and use of interpreter services.

327 Increase delivery of cultural awareness training for CCLHD staff.

328 Develop and deliver culturally appropriate targeted health promotion programs for vulnerable CALD groups.
12.12 HIV and Related Programs (HARP)

12.12.1 Current services, resources and organisation

The HARP service has three arms:
- Sexual Health Clinic (SHC) - operating at Gosford Hospital with a range of specialised medical, nursing and counselling services
- Needle Syringe Program (NSP) – operating manned services at Gosford, Woy Woy, Long Jetty and Wyong hospitals and a range of secondary outlets and vending machines across the LHD
- Health Promotion Team.

Key target groups for the service include men who have sex with men, people living with HIV/AIDS, people who inject drugs, sex industry workers, Aboriginal people, heterosexuals with regular partner change and at risk youth.

12.12.2 Issues, challenges and opportunities

- NSW annual surveillance data indicate that Central Coast has high rates of chlamydia infection and medium rates of HIV, hepatitis B and hepatitis C compared with other LHDs.
- The National Centre in HIV Epidemiology and Clinical Research (NCHECR) estimated that the numbers of people living with HIV in Gosford-Wyong will increase from 296 in 2010 to 380 people in 2020 an increase of 28%
- There is no identified space for a SHC in the Wyong LGA.
- SHC accommodation at Gosford Hospital has inadequate staff accommodation and is inappropriately located in close proximity to the Needle Syringe Program.
- Increasing complexity of people living with HIV attending SHC including comorbidities associated with ageing.
- Changes in drug use patterns leading to increased social and behavioural issues among clients including aggression which present additional staff, facility and other patient security risks.
- Insufficient outlet sites for NSP, predominantly secondary and vending machines.
- NSP clients not accessing Primary Health services.

12.12.3 Strategic Directions

HIV and Related Programs

329 Establish a Sexual Health Clinic in Wyong LGA and determine the most appropriate service location (consider Wyong Hospital and CHC options).

330 Develop a chronic model of care and case management for people living with HIV including access to specialist consultation and development of shared care models and treatment plans in collaboration with GPs.

331 Review the HARP services and service models to reflect: strengthened population-based HIV and STI planning, health promotion and integrated care at the local level; rapid expansion of access to HIV and STI testing to screen those most at risk; improved access to and uptake of treatment for patients with HIV including Antiretroviral Treatment (ART) which are consistent with HIV treatment guidelines; engagement with GPs and other primary care providers including Aboriginal Medical Services to take a more active role in HIV and STI prevention and treatment.

332 Develop primary health care model for people accessing the Needle and Syringe Program.
12.13 Sexual Assault Service

12.13.1 Current services, resources and organisation
The Sexual Assault Service provides counselling for people who have experienced recent sexual assault or previous incest sexual assault. It caters for both children and adults and provides an acute response in hospital emergency departments when required. It operates from a hub located in a cottage at Gosford Hospital and provides both an Allied Health and GP staffed after-hours service, with outreach to Wyong Hospital and Lake Haven CHC.

12.13.2 Issues, challenges and opportunities
- Maintaining sufficient medical workforce, currently provided by local GPs, to enable operation of an after-hours roster.
- Explore options for recruiting Sexual Assault Nurse Examiners (SANE) as a strategy to overcome difficulties with maintaining medical workforce coverage.
- Access to a forensic medical area utilised only for sexual assault examinations in proximity to ED.

12.13.3 Strategic Directions

<table>
<thead>
<tr>
<th>Sexual Assault Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>333 Recruitment of Sexual Assault Nurse Examiners (SANE) to supplement workforce. Continue to engage with the current GP workforce to maintain a viable after hours roster, including recruitment of additional GPs to the service as required.</td>
</tr>
<tr>
<td>334 Allocate a forensic medical area at Gosford Hospital in close proximity to the Emergency Department.</td>
</tr>
</tbody>
</table>

12.14 Women’s Health

12.14.1 Current services, resources and organisation
- The Women’s Health service responds to the health needs of women and prioritises disadvantaged groups of women with the poorest health outcomes including women who experience violence, are Aboriginal or are from culturally and linguistically diverse (CALD) backgrounds, have a disability or are of low socio-economic status.
- The service is based at Gosford Hospital; Outreach Well Women Clinics operate at Woy Woy, Lake Haven CHC and Long Jetty. Women’s Health Nurses provide services related to menstruation, menopause, pregnancy and contraception, domestic violence, routine screening and clinical services including pap tests, as well as making referrals where required.

12.14.2 Issues, challenges and opportunities
- Workforce limits capacity of the service due to unfilled vacancies, lack of role definition and lack of specialised roles e.g. CALD worker, Nurse Practitioner.
- Unmet need within the population includes cardiovascular health prevention program for women and lack of access by CALD women to mainstream services.

12.14.3 Strategic Directions

<table>
<thead>
<tr>
<th>Women’s Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>335 Review staffing mix and current sites of operation to develop more comprehensive service delivery.</td>
</tr>
<tr>
<td>336 Develop strategies, in partnership with other services, to meet needs of vulnerable populations.</td>
</tr>
</tbody>
</table>
13 Population Health Services

13.1 Health Promotion

The importance of promotion, prevention and early intervention and the need to refocus the health system toward illness prevention and health improvement especially for populations at greatest risk is well recognised.

Just a few factors account for most of the preventable death and chronic disease in Australia. Tobacco smoking, physical inactivity, obesity, alcohol, lack of fruit and vegetables, fall injury risks among older people, communicable diseases, and illicit drugs are among the main challenges. Many chronic diseases are largely preventable such as type 2 diabetes, cardiovascular disease and COPD. Specific sub-populations are known to have higher levels of risk behaviours and poorer health, these include Aboriginal people, some CALD groups, carers and people with mental health illnesses and disorders. There is also a correlation between lower socioeconomic status and higher prevalence of the lifestyle risk factors already mentioned. Traditionally these groups are more difficult to target and are less receptive to mainstream health promotion techniques.

Health Promotion activities occur at a population or individual level. The CCLHD Health Promotion Service focuses on population level action; operating within the WHO Ottawa Charter framework of community action, healthy environments, healthy public policy, personal skills, and changing health service focus; while individual services and service providers provide more targeted programs aimed at individuals including education programs, monitoring, treatment and rehabilitation. Programs evolve and change constantly and specific projects target identified local issues. The majority of the CCLHD’s Health Promotion Service activities are anchored in four state-wide priorities:

- Tobacco control
- Obesity and overweight initiatives
- Healthy active ageing
- Risky alcohol consumption.

13.1.1 Issues, challenges and opportunities

- Growth in Central Coast population, particularly among vulnerable populations and those with socioeconomic disadvantage and associated risk factors will mean future health promotion programs will need to respond to the needs of these groups
- Adequate recognition and resourcing of prevention, promotion and early intervention as integral parts of service provision is required, including areas beyond the four state-wide priorities
- Within individual services the majority of funding is directed toward delivery of clinical services leaving little available for prevention and promotion
- Improved collaboration and alignment between the broad population approach of the Health Promotion Service and more targeted activities of individual services and service providers is desirable, with scope to address specific local health issues
- Health Promotion strategies need to be pertinent to and reach high risk groups and communities such as those with lower socioeconomic status, lower education levels, people with a mental health illness or disorder, Aboriginal population, those with cultural and language barriers and other marginalised groups
- The Health Promotion Service currently operates from premises leased from Newcastle University at Ourimbah, this lease agreement will expire within the next three years. Consideration of ideal future location for the service is required.
13.1.2 Strategic Directions

Health Promotion

337 Continue to work with CCLHD services and other agencies and service partners (government and non-government) to provide integrated programs which target existing and emerging community needs, and address factors which contribute to health disadvantage.

338 Innovate, develop, implement and evaluate a range of population based Health Promotion programs addressing tobacco, alcohol, unhealthy weight and healthy active ageing.

339 Work with key partners to develop and deliver targeted programs to identified high risk communities including Aboriginal, some CALD groups, carers, mental health as well as other disadvantaged and marginalised groups.

340 Continue to support CCLHD services in their delivery of services to prevent illness, promote health, and identify illness early.

341 Work with Central Coast NSW Medicare Local to plan, deliver and develop healthy communities.

342 Work with local government to build healthier communities including, for example, access to safe exercise space for the elderly, supervised skateboard parks for young people, bike and walking tracks etc.

343 Review accommodation needs for the Health Promotion service including possible location within Wyong LGA, collocation with Public Health and opportunities for placement with other community health services.

13.2 Public Health

The Central Coast Public Health Unit provides services for environmental health issues, infectious disease surveillance and control, immunisation and the public health component of the Local Health District response to emergencies. The Unit also participates in descriptive and interventional studies concerning state priority and local health issues in the community setting. It is a partner investigator in research on the impact of water supply fluoridation in primary school children’s oral health, and in research on healthy lifestyles of older people living in retirement villages and the general community.

The Public Health Unit works with a wide range of stakeholders and key partners (both government and non-government) to achieve public health outcomes. These include General Practice, schools, child care centres, local councils and RACFs. The Unit also works closely with other CCLHD services including Health Promotion, Child and Family Health and Infection Control. The Public Health Unit is part of a state-wide network of Public Health Units.

13.2.1 Issues, challenges and opportunities

- High immunisation rates are currently achieved within the school immunisation programs on the Central Coast, these rates will need to be maintained into the future
- Influenza vaccination rates, particularly for vulnerable groups, could be improved
- Central Coast has substantial areas of ongoing development, particularly within the northern part of the area. The public health implications of these developments need to be considered to achieve healthy urban development for the area.
- The Unit has an ongoing commitment to research regarding the ongoing health of the Central Coast community
- The Unit currently operates from premises leased from Newcastle University at Ourimbah, with the lease due to expire within the next three years. Relocation to a suitable site will be required, ideally located with the Health Promotion Unit.
13.2.2 Strategic Directions

Public Health

344 Continue to respond to notifications of infectious disease following NSW Ministry of Health protocols, using state-wide database.

345 Work with Child and Family Health to maintain high participation rates in school immunisation programs.

346 Work with General Practices and Central Coast NSW Medicare Local to improve and maintain vaccination rates for all ages, with an initial focus on influenza.

347 Work with NSW Public Health Network to more effectively respond to environmental health risks – initially, standardising the health response to proposed coal mine developments.

348 Review the effectiveness of the Public Health Unit responses and interaction with local government and Planning NSW, particularly in relation to large developments and the objective of healthy urban development.

349 Continue to participate in research projects relevant to the health needs of the Central Coast population including oral health of children, health in retirement and cardiovascular risk factors.

350 Promote a population health approach to service delivery on the NSW Central Coast, initial projects to include a lead role in developing an Aboriginal Health Services Plan and dissemination of information and reports on the Community Health Survey 2010.

351 Strengthen Public Health Unit relationships with key stakeholders in relation to human and animal infectious diseases, and emerging infectious diseases, initially establishing a Human and Animal Diseases Advisory Group for the Public Health Unit.

352 Further develop the Public Health Unit response to emerging and emergency issues.

353 Advocate for and develop approaches to environmental sustainability in the Central Coast LHD and Central Coast community settings including leading the development of a CCLHD Environmental Sustainability Strategy.

354 Review future accommodation needs for the Public Health Unit considering collocation with Health Promotion, the need for a presence on hospital site and benefits of colocation with other CCLHD services.
14 Clinical Support Services

There are a range of clinical support services provided across the LHD and include medical imaging, pathology, pharmacy, clinical technology services, sterilising services, venous access team (VAT) and the infection prevention and control services (IPAC) as well as a number of others such as the transit lounge.

The main focus of this Clinical Services Plan is on the larger clinical support services (medical imaging, pharmacy and pathology) while many of the other clinical support services are not specifically addressed. However growth in direct patient services in acute, ambulatory and community health settings will require commensurate growth in the clinical support services including those that are not specifically included in this Plan, this will include ensuring the service is accommodated in appropriate facilities which support the service provided and are of flexible design to accommodate equipment changes.

The clinical support services of Medical Imaging, Pharmacy and Pathology have been included in this Plan as they have specific capital requirements.

14.1 Medical Imaging

Medical Imaging operates at both Gosford and Wyong hospitals, with satellite services located in proximity to ED at both sites. Both inpatient and outpatient services are provided. Medical Imaging utilises a PACS-RIS digital radiology information system with images and reports available within the EMR. With appropriate access off-site reporting on images is achievable with arrangements with the Terra Recon group and LHD owned workstations in many staff radiologist and private radiology group offices.

14.1.1 Issues, challenges and opportunities

Growth in services
- Imaging and interventional services are currently growing at above average rates due to additional patient testing that relates to the more demanding expectations on quality of patient care and due to more sensitive equipment. The growth in diagnostic imaging services necessitates the exploration of new models of teleradiology and outsourcing arrangements.

Workforce
- Sub-specialisation within the radiology workforce with MRI and interventional radiology; difficulty in retaining skilled staff who expect continuous investment in the advanced diagnostic techniques; and the evolution of radiographers and ultra-sonographers into diagnostic practitioners that add value in diagnosis within acute and emergency medicine necessitates re-examination of recruitment strategies in each of these areas.

Evolving models of care
- New techniques within interventional radiology and vascular endoluminal surgery are responsible for shifting referral patterns that require additional equipment and provide less invasive options to patients in a widely divergent range of conditions. This requires ongoing and rigorous discussion between specialty groups surrounding scope of practice, and with hospital administration in relation to admitting rights for interventional radiologists, new technology assessment and capital expenditure.

Equipment Needs
- The CT scanner located in the main department at Gosford Hospital outpatients is poorly utilised as it has no operational budget. Much of the remainder of the departmental equipment is more than ten years of age requiring planning about its retirement and replacement in order to maximise revenue generation through Medicare and maximise treatment options. Limited equipment capacity favours inpatient activity over outpatient activity impacting on access for patient groups unable to access private providers and revenue streams.
Public-Private Partnerships

- CCLHD currently has formal agreements with private practices to supply nuclear medicine services, after hours reporting and the outsourcing of plain film reporting. Less formal agreement exists in relation to PET scanning. The offsite location of PET scanning, nuclear medicine and interventional radiology means acutely ill patients are unable to access these services.

Space requirements

- Growth of service is limited by access to space including bed bays, pre and post procedure recovery space and reporting rooms.

14.1.2 Strategic Directions

Medical Imaging

355 Increase after-hours access to MRI scanning services at Gosford Hospital.

356 Provide MRI service at Wyong Hospital.

357 Upgrade CT scanner at Wyong Hospital to include perfusion scanning capabilities and install a second CT scanner.

358 Investigate opportunities and benefits of including cardiac CT capabilities at both Gosford and Wyong Hospital to support the proposed chest pain assessment service (Cross reference with Cardiology Strategies).

359 Improve medical imaging support to sub-specialty services where diagnostic ultrasound is undertaken (e.g. emergency medicine, gastroenterology, obstetrics, and intensive care medicine).

360 Investigate opportunities to provide nuclear medicine services at Gosford Hospital with both diagnostic and therapeutic capabilities, a two camera system (a gamma camera and a SPECT CT), hot laboratory and eventually a PET scanner at Gosford Hospital (cross reference to Cancer and Clinical Haematology strategies).

361 Investigate the most appropriate model for a mobile x-ray service for the Central Coast to support continuing care in RACFs or patient's home.

362 Develop a staged implementation plan for the expansion of interventional radiology, interventional cardiology and acute endoluminal vascular surgery including consideration of scope of practice across specialty craft groups, future partnerships with other specialities (e.g. vascular surgery and renal medicine), the provision of separate on-call rosters for septic intervention and acute vascular endoluminal intervention, and the development of a hybrid operating theatre-interventional suite. Include consideration of potential synergies between the services such as interventional and imaging equipment and labs, pre and post-procedure care, day only patient access to interventional techniques, and staffing. (cross reference with Cardiology, AS&ICU and Vascular Surgery)

363 Develop strategies to attract and retain skilled workforce including: options for offsite reporting, and opportunities for on the job training in developing areas such as interventional radiology and collegial and training relationships with JHH and RNSH.

364 Develop processes for regular equipment review and purchasing to replace ageing equipment.

365 Review of space requirements for Medical Imaging including location of new equipment and sufficient recovery, bed bays and reporting rooms within the main departments at Gosford and Wyong hospitals, and the Satellite CT area in Gosford Hospital.
14.2 Pharmacy

On-site pharmaceutical services are located at Gosford and Wyong hospitals. Pharmacy services for Woy Woy and Long Jetty hospitals are provided through the pharmacy services at Gosford Hospital. The core services provided include drug therapy monitoring, patient education, drug information, acquisition, inventory management, education and training, policy management and quality activities. Clinical advice to staff, clinical governance, academic and research roles in pharmacy are increasingly important in the delivery of patient care. The preparation of cytotoxic drugs is undertaken at Gosford Hospital.

14.2.1 Issues, challenges and opportunities

Hospital pharmacy services are central for safe efficient and cost-effective delivery of healthcare with key roles including the sourcing and distribution of about $40M in medication per annum, plus the quality use of medication in clinical areas through ward-based pharmacy services. There are increasing numbers of high cost drugs in infectious diseases, cancer care and immunology with an expectation of acceleration in this trend due to the rapid shift in research within the biotechnology industry over the last decade.

The role of the pharmacist in patient management and ensuring the safe and cost-effective use of medications is becoming increasingly important as patient complexity and the use of poly-pharmacy grows; as are the expectations and demands on pharmacy staff in relation to quality programs including implementation of the Australian Council for Safety and Quality in Healthcare (ACSQC) Standards in particular their role in antibiotic stewardship.

Pharmaceutical spend is one of the fastest growth segments of health costs (5-10% pa within CCLHD) and is a cost pressure that can be better controlled with sufficient investment (purchasing, inventory and cost-effective/efficient supply).

14.2.2 Strategic Directions

The following investments are required in pharmacy technology and workforce to improve efficiency, cost effectiveness and maintain quality/safety of drug utilisation:

<table>
<thead>
<tr>
<th>Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>366</td>
</tr>
<tr>
<td>367</td>
</tr>
<tr>
<td>368</td>
</tr>
<tr>
<td>369</td>
</tr>
</tbody>
</table>
14.3 Pathology

Pathology services are provided through NSW Health Pathology. Planning and governance of pathology services is now undertaken on a State wide basis. Services are available onsite 24 hours at both Gosford and Wyong hospitals. Core services (biochemistry, haematology, coagulation, blood bank services are provided from both sites. Microbiology and histology services (including frozen section) are provided at Gosford Hospital. A collection service is provided for Woy Woy Hospital and Long Jetty Health Service, a domiciliary service is provided as part of APAC. Samples requiring specialised testing such as serology and toxicology are sent to specialised labs for testing.

Growth in pathology services is driven by advances in pathology technology/ testing and generalised increases in the volume and types of tests ordered.

While the pathology services are responsible for provision of the testing equipment the LHD is responsible for providing the facilities to accommodate the service.

14.3.1 Issues, challenges and opportunities

- The current accommodation at Gosford Hospital is inadequate both in terms of space and functionality for the current level of service and will limit future service expansion or development.
- The information system and technology is out-dated which has a direct impact on the delivery of laboratory results and the reporting of KPIs.
- A number of clinical services are investing in Point of Care Testing, it has been identified that frequently these units are not always well maintained and also have differences in the testing technology resulting in inconsistencies in results compared with those undertaken in the laboratory.

14.3.2 Strategic Directions

<table>
<thead>
<tr>
<th>Pathology</th>
</tr>
</thead>
<tbody>
<tr>
<td>370  Expand and provide purpose built accommodation as part of capital development on the Gosford Hospital site. In the interim explore options for accommodation to improve functionality until capital development can occur or alternative suitable accommodation becomes available.</td>
</tr>
<tr>
<td>371  Upgrade the pathology information system.</td>
</tr>
<tr>
<td>372  Coordinate the acquisition of Point of Care (POC) systems ensuring compatibility with laboratory based testing and adequate maintenance ensuring accuracy of results.</td>
</tr>
</tbody>
</table>
15 Other Support Services

With the projected growth in activity across CCLHD over the next ten years services that support clinical service delivery will require significant expansion in terms of both workforce and physical space. Services include:

- Clinical Products
- Patient Support
- Health Information Services (formerly Medical Records)
- Clinical Information Services/Information Management and Technology.

Other services that provide support across the facilities will also require expansion and growth to meet the needs of increased activity. These include:

- Engineering
- Environmental Services
- Food and Hotel Services
- Security
- Supply
- Fleet Services.

15.1 Clinical Information Services

Health services are heavily reliant on the availability of comparable patient and organisational information that supports the management and monitoring of patient care, service delivery, research and evidence based practice. Sharing of relevant patient information across disciplines and settings improves patient outcomes, reduces variation or duplication and enhances an effective continuum of care. In addition IM&T systems can enhance integration with relevant service providers outside CCLHD such as GPs, community pharmacies, RACFs and NGOs.

Recent activity in CCLHD has focused on the installation and ongoing implementation of hardware and software to support an Electronic Medical Record (eMR) using the Cerner Millennium software and associated modules for ordering tests, reviewing results, generating discharge summaries and supporting patient journeys through the acute care system. CCLHD has also implemented a digital radiology information system (PACS/RIS) with images and reports available within eMR.

Enhancement of the eMR system will progress to a full electronic medical record. At present community health services do not have a universal record system; the range of systems used includes the locally developed Integrated Clinical Information System (ICIS). The use of different systems in different settings result in the need for double data entry at the point of care delivery and limited access to patient records in community health settings.

In 2012/13 CCLHD will be a pilot site for the state wide roll out of the Community Health and Outpatient Care Program (CHOC) as part of the eMR.

Continued emphasis on delivery of care in the primary and community health settings requires information management solutions to enhance communication with General Practice and other community based services e.g. pharmacies, RACFs and other providers. Currently a system for secure messaging of discharge summaries to GPs is in place. Growth in this capability to enable two way secure messaging and therefore allowing exchange of information including referrals, communication to ED and sharing of care plans will need to be developed.
APPENDICES
Appendix A: CCLHD Planning Framework

- NSW State Plan
- NSW State Health Plan
- CCLHD Strategic Plan

CCLHD Clinical Services Plan
(forecasts, delineation, strategic issues and solutions)

- Medicine
- Rehabilitation and Aged Care
- Community and Allied Health
- Anaesthetics, Surgery, and ICU
- Women’s and Children’s Health
- Mental Health

Clinical Service Implementation Plans
- Clinical Support
- Health Promotion
- Public Health
- Paediatric
- Maternity
- Surgery
- Renal
- Aged Care
- Sub-acute
- Community
- Emergency
- ICU
- Chronic disease

Support or Enabling Plans
- Corporate Governance & Corporate Services
- Financial Management
- Workforce Management & Planning
- Equity Management
- Teaching & Research Strategies
- Risk Management

Clinical Governance, Quality & Patient Safety
- Performance Management
- Asset Management & Strategic Planning
- Information and Communications Strategy
- Community Engagement Strategy
- Disaster Management

Annual Operational Plan
Implementation Schedule
90 Day Plans
Performance & Progress Report
Appendix B: Mapping of Clinical Groups to NSW Health ESRGs

Enhanced Service Related Groups
Cardiology: 111 Chest Pain, 112 Unstable Angina, 113 Heart Failure and Shock, 114 Non-Major Arrhythmia and Conduction Disorders, 115 AMI W/O Invasive Cardiac Inves Proc, 119 Other Interventional Cardiology
Interventional Cardiology: 121 Invasive Cardiac Inves Proc, 122 Percutaneous Coronary Angioplasty, 129 Other Interventional Cardiology
Cardiothoracic Surgery: 421 Coronary Bypass, 429 Other Cardiothoracic Surgery
Respiratory: 241 Bronchitis and Asthma, 242 Chronic Obstructive Airways Disease, 243 Respiratory Infections/Inflammations, 244 Respiratory System OR Procedures, 249 Other Respiratory Medicine
Neurology: 211 Stroke, 212 TIA, 213 Seizures, 219 Other Neurology
Neurosurgery: 462 Craniotomy, 463 Neurosurgery - Non-procedural, 469 Other Neurosurgery
Gastroenterology: 151 Oesophagitis, Gastroent and Misc Digestive System Disorders, 152 Gastroscopy, 153 ERCP, 159 Other Gastroenterology, 161 Other Colonoscopy, 162 Other Gastroscopy
Cancer: 172 Lymphoma and Non-Acute Leukaemia, 179 Other Haematology, 191 Respiratory Neoplasms, 192 Digestive Malignancy, 199 Other Medical Oncology
Endocrinology: 141 Diabetes, 149 Other Endocrinology
Renal: 221 Renal Failure, 229 Other Renal Medicine
Other Medicine: 131 Dermatology, 182 Septicaemia, Viral and Other Infectious Diseases, 183 HIV, 251 Rheumatology, 261 Pain Management, 271 Kidney and Urinary Tract Infections, 273 Syncope and Collapse, 279 Other Non-Subspecialty Medicine
Drug and Alcohol: 811 Drug and Alcohol
Orthopaedics: 491 Injuries to limbs – Medical, 492 Wrist and Hand Procedures incl Carpal Tunnel, 493 Hip and Knee Replacement, 494 Knee Procedures, 495 Other Orthopaedics – Surgical, 499 Other Orthopaedics - Non-Surgical, 519 Other Plastic and Reconstructive Surgery
General Surgery: 181 Cellulitis, 411 Breast Surgery, 431 Major S and L Bowel Procs incl Rectal Resection, 439 Other Colorectal Surgery, 441 Cholecystectomy, 442 Disorders of Biliary Tract and Pancreas, 449 Other Upper GIT Surgery, 451 Thyroid Procedures, 511 Microvascular Tissue Transfer or Skin Grafts, 512 Skin, Subcutaneous Tissue and Breast Procedures, 514 Burns – Medical, 541 Injuries - Non-surgical, 542 Abdominal Pain, 543 Appendicectomy, 544 Digestive System Diagnoses incl GI Obstruction, 545 Inguinal and Femoral Hernia Procedures Age>0, 546 Post-operative Infections and Sequela of Treatment, 549 Other Non-specialty Surgery, 621 Extensive Burns
Urology: 521 Cystourethroscopy, 522 Urinary Stones and Obstruction, 523 TURP, 524 Other Non-procedural Urology, 525 Male Sterilisation, 529 Other Urological Procedures
Vascular Surgery: 531 Vein Ligation and Stripping, 532 Non-procedural Vascular Surgery incl Skin Ulcers, 539 Other Vascular Surgery Procedures
ENT: 459 Other Head and Neck Surgery, 481 Tonsillectomy or Adenoidectomy, 482 Myringotomy W Tube Insertion, 483 Non-Procedural ENT, 489 Other Procedural ENT
FMS-Dental: 471 Dental Extractions and Restorations, 513 Maxillo-Facial Surgery, 515 Dental and Oral Disease excl extractions
Ophthalmology: 502 Non-procedural Ophthalmology, 503 Glaucoma and Lens Procedures, 509 Other Eye Procedures
Gynaecology: 711 Abortion W DandC, Aspiration Curettage or Hysterotomy, 712 Endoscopic Procedures for Female Reproductive System, 713 Conisation, Vagina, Cervix and Vulva Procedures, 714 Diagnostic Curettage or Diagnostic Hysteroscopy, 715 Hysterectomy, 716 Other Gynaecological Surgery, 717 Non-procedural Gynaecology
Remainder: 611 Transplantation, 631 Tracheostomy or Ventilation >95 hours, 821 Schizophrenia, 822 Major Affective Disorders, 829 Other Psychiatry, 841 Rehabilitation, 861 Palliative Care, 871 Maintenance, 999 Unallocated
### Appendix C: Current and Projected Resident Demand

**Central Coast Resident Demand 2008-09 to 2010-11 and Projected to 2021-2022 (Separations)**

<table>
<thead>
<tr>
<th>Clinical Group</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
<th>Change 08/09 to10/11</th>
<th>Expected Change</th>
<th>2010/11 separations</th>
<th>Private % of total Separations</th>
<th>aIM2010 Projection of Change 08/09 to 21/22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No. separations % change</td>
</tr>
<tr>
<td>Cardiology</td>
<td>3,745</td>
<td>3,840</td>
<td>3,971</td>
<td>6.0%</td>
<td>3.3%</td>
<td>1,780</td>
<td>1,451</td>
<td>210</td>
</tr>
<tr>
<td>Interventional</td>
<td>2,093</td>
<td>2,034</td>
<td>2,238</td>
<td>6.9%</td>
<td>4.3%</td>
<td>425</td>
<td>25</td>
<td>180</td>
</tr>
<tr>
<td>Cardiology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiothoracic Surgery</td>
<td>477</td>
<td>412</td>
<td>442</td>
<td>(7.3%)</td>
<td>2.1%</td>
<td>35</td>
<td>-</td>
<td>160</td>
</tr>
<tr>
<td>Sub Total Cardiac</td>
<td>6,315</td>
<td>6,286</td>
<td>6,651</td>
<td>5.3%</td>
<td>3.6%</td>
<td>2,240</td>
<td>1,476</td>
<td>380</td>
</tr>
<tr>
<td>Respiratory</td>
<td>3,675</td>
<td>3,750</td>
<td>3,947</td>
<td>7.4%</td>
<td>3.6%</td>
<td>1,658</td>
<td>1,462</td>
<td>31</td>
</tr>
<tr>
<td>Neurology</td>
<td>2,186</td>
<td>2,295</td>
<td>2,338</td>
<td>7.0%</td>
<td>2.7%</td>
<td>1,318</td>
<td>550</td>
<td>55</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>1,451</td>
<td>1,582</td>
<td>1,567</td>
<td>8.0%</td>
<td>0.9%</td>
<td>226</td>
<td>163</td>
<td>235</td>
</tr>
<tr>
<td>Sub Total</td>
<td>3,637</td>
<td>3,877</td>
<td>3,905</td>
<td>7.4%</td>
<td>2.0%</td>
<td>1,544</td>
<td>713</td>
<td>290</td>
</tr>
<tr>
<td>Neuroscience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>11,295</td>
<td>11,833</td>
<td>12,496</td>
<td>10.6%</td>
<td>3.1%</td>
<td>2,286</td>
<td>1,874</td>
<td>38</td>
</tr>
<tr>
<td>Cancer</td>
<td>2,164</td>
<td>2,189</td>
<td>1,883</td>
<td>(13.0%)</td>
<td>3.7%</td>
<td>767</td>
<td>244</td>
<td>89</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>687</td>
<td>682</td>
<td>615</td>
<td>(10.5%)</td>
<td>4.7%</td>
<td>344</td>
<td>136</td>
<td>25</td>
</tr>
<tr>
<td>Renal</td>
<td>718</td>
<td>827</td>
<td>1,047</td>
<td>45.8%</td>
<td>2.2%</td>
<td>803</td>
<td>108</td>
<td>6</td>
</tr>
<tr>
<td>Other Medicine</td>
<td>5,866</td>
<td>5,901</td>
<td>6,200</td>
<td>5.7%</td>
<td>4.8%</td>
<td>2,021</td>
<td>1,134</td>
<td>104</td>
</tr>
<tr>
<td>Drug &amp; Alcohol</td>
<td>740</td>
<td>888</td>
<td>839</td>
<td>13.4%</td>
<td>0.6%</td>
<td>120</td>
<td>638</td>
<td>20</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>8,645</td>
<td>8,752</td>
<td>8,724</td>
<td>0.9%</td>
<td>2.3%</td>
<td>2,771</td>
<td>733</td>
<td>181</td>
</tr>
<tr>
<td>General Surgery</td>
<td>10,940</td>
<td>11,617</td>
<td>11,844</td>
<td>8.3%</td>
<td>2.9%</td>
<td>3,952</td>
<td>2,210</td>
<td>281</td>
</tr>
<tr>
<td>Urology</td>
<td>3,471</td>
<td>3,714</td>
<td>3,773</td>
<td>8.7%</td>
<td>2.9%</td>
<td>1,340</td>
<td>453</td>
<td>16</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>1,306</td>
<td>1,271</td>
<td>1,340</td>
<td>2.6%</td>
<td>2.3%</td>
<td>507</td>
<td>225</td>
<td>19</td>
</tr>
<tr>
<td>ENT</td>
<td>1,676</td>
<td>1,804</td>
<td>1,831</td>
<td>9.2%</td>
<td>0.5%</td>
<td>622</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>FMS – Dental</td>
<td>1,303</td>
<td>1,376</td>
<td>1,166</td>
<td>(10.5%)</td>
<td>2.4%</td>
<td>243</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>5,330</td>
<td>5,484</td>
<td>5,304</td>
<td>(0.5%)</td>
<td>5.6%</td>
<td>433</td>
<td>1,157</td>
<td>23</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>3,692</td>
<td>3,785</td>
<td>3,751</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1,056</td>
<td>194</td>
<td>67</td>
</tr>
<tr>
<td>Remainder</td>
<td>1,073</td>
<td>1,415</td>
<td>821</td>
<td>(23.5%)</td>
<td>0.0%</td>
<td>266</td>
<td>80</td>
<td>69</td>
</tr>
<tr>
<td>Grand Total</td>
<td>72,533</td>
<td>75,451</td>
<td>76,137</td>
<td>5.0%</td>
<td>3.1%</td>
<td>22,973</td>
<td>12,885</td>
<td>1,664</td>
</tr>
</tbody>
</table>

* as projected in aIM2010
## Impact on 2021/22 Adult Acute Inpatient Projections of Limiting Total Wyong LGA Activity at Gosford Hospital to 30%

<table>
<thead>
<tr>
<th>LGA</th>
<th>Hospital</th>
<th>Category</th>
<th>Base Case</th>
<th>Scenario</th>
<th>Base Case Minus Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Seps</td>
<td>Beddays</td>
<td>Seps</td>
</tr>
<tr>
<td>Gosford</td>
<td>Medical Intervention</td>
<td></td>
<td>9,945</td>
<td>64,981</td>
<td>96.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6,237</td>
<td>26,553</td>
<td>91.9%</td>
</tr>
<tr>
<td>Gosford</td>
<td>Medical Intervention</td>
<td></td>
<td>16,182</td>
<td>91,534</td>
<td>94.4%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>400</td>
<td>2,208</td>
<td>3.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>552</td>
<td>872</td>
<td>8.1%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>952</td>
<td>3,080</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gosford</td>
<td>Medical Intervention</td>
<td></td>
<td>4,909</td>
<td>29,632</td>
<td>36.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4,740</td>
<td>19,625</td>
<td>52.1%</td>
</tr>
<tr>
<td>Gosford</td>
<td>Medical Intervention</td>
<td></td>
<td>9,644</td>
<td>49,256</td>
<td>42.4%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>8,723</td>
<td>51,882</td>
<td>64.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4,353</td>
<td>9,870</td>
<td>47.9%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>13,076</td>
<td>61,752</td>
<td>57.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Medical Intervention</td>
<td></td>
<td>816</td>
<td>4,644</td>
<td>57.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>657</td>
<td>3171</td>
<td>31.7%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>1,631</td>
<td>3,862</td>
<td>3.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>416</td>
<td>1,093</td>
<td>1.1%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>2,047</td>
<td>10,955</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Medical Intervention</td>
<td></td>
<td>15,666</td>
<td>99,256</td>
<td>39.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11,634</td>
<td>49,349</td>
<td>51.5%</td>
</tr>
<tr>
<td>Gosford</td>
<td>Medical Intervention</td>
<td></td>
<td>27,299</td>
<td>148,605</td>
<td>25.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14,266</td>
<td>90,773</td>
<td>54.5%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>10,754</td>
<td>63,952</td>
<td>36.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5,321</td>
<td>11,834</td>
<td>11.8%</td>
</tr>
<tr>
<td>Wyong</td>
<td>Medical Intervention</td>
<td></td>
<td>16,075</td>
<td>75,786</td>
<td>47.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix D: Role Delineation – Current and Proposed Levels

<table>
<thead>
<tr>
<th>For higher level support networked with</th>
<th>Gosford</th>
<th>Wyong</th>
<th>Long Jetty</th>
<th>Woy Woy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Support Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathology</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Diagnostic Imaging</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Anaesthetics</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Intensive Care</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Coronary Care</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Operating Suites</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Core Services – Medical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>General Medicine</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Cardiology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Dermatology</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Haematology - Clinical</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Immunology</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Neurology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Oncology - Medical</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Oncology - Radiation</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Renal Medicine</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Respiratory Medicine</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Core Services - Surgical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Surgery</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Burns</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Thoracic/Cardiothoracic Surgery</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Day Surgery</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ENT</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Urology</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Maternal &amp; Child Health Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Neonatal</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Paediatric Medicine</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Child &amp; Family Health</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
## Clinical Services Plan 2012-2022

### For higher level support networked with

<table>
<thead>
<tr>
<th>For higher level support networked with</th>
<th>Gosford</th>
<th>Wyong</th>
<th>Long Jetty</th>
<th>Woy Woy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrated Community &amp; Hospital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Health</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Adult Mental Health (Inpatient)</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Adult Mental Health (Community)*</td>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Child/Adolescent Mental Health (Inpatient)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Child/Adolescent Mental Health (Community)**</td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Older Adult Mental Health (Inpatient)</td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Older Adult Mental Health (Community)</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Child Protection Services (PANOC)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Drug &amp; Alcohol Services</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Palliative Care</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Sexual Assault Services</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Community Based Health Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal/Indigenous Health</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Community Health – General*</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Community Nursing*</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Genetics</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Multicultural Health</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Oral Health</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sexual Health Services</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Women’s Health Services**</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

# Services not located at Gosford and Wyong hospitals but provided across a number of community health centres. Mental Health Community Services administration located onsite at Wyong Hospital

## Services located in community health centres not onsite at Wyong Hospital

*At Woy Woy the proposed level 4 Geriatric and Rehabilitation service will include Geriatric Evaluation and Management (GEM) and Maintenance and Restorative care only

**At Long Jetty level 3 Rehabilitation services will include Maintenance and Restorative care only

+ It is proposed that community health services are consolidated and provided from 2-3 community health hubs located in the community away from acute hospital campus. Community Health will be provided at Level 5
### Appendix E: Central Coast LHD Functional Units Summary

<table>
<thead>
<tr>
<th>Gosford Hospital</th>
<th>Wyong Hospital</th>
<th>Woy Woy</th>
<th>Long Jetty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td><strong>Proposed</strong></td>
<td><strong>Current</strong></td>
<td><strong>Proposed</strong></td>
</tr>
<tr>
<td><strong>Emergency Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Bays</td>
<td>30</td>
<td>47 (↑17)</td>
<td>25</td>
</tr>
<tr>
<td>Resuscitation Bays</td>
<td>3</td>
<td>5 (↑12)</td>
<td>3</td>
</tr>
<tr>
<td>UCC</td>
<td>-</td>
<td>TBC</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>33</strong></td>
<td><strong>52 (↑19)</strong></td>
<td><strong>28</strong></td>
</tr>
<tr>
<td><strong>Interventional Rooms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac Catheter Labs</td>
<td>1</td>
<td>2 (↑1)</td>
<td>1</td>
</tr>
<tr>
<td>Angiography Rooms</td>
<td>8</td>
<td>10 (↑12)</td>
<td>4</td>
</tr>
<tr>
<td>Operating Rooms</td>
<td>2</td>
<td>2 (↑12)</td>
<td>2</td>
</tr>
<tr>
<td>Procedure</td>
<td>9</td>
<td>24 (↑15)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>33</strong></td>
<td><strong>45 (↑19)</strong></td>
<td><strong>28</strong></td>
</tr>
<tr>
<td><strong>Adult Inpatient</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute beds</td>
<td>338</td>
<td>406 (↑68)</td>
<td>180</td>
</tr>
<tr>
<td>EMU/Short Stay</td>
<td>-</td>
<td>16 (↑16)</td>
<td>-</td>
</tr>
<tr>
<td>ICU/HDU</td>
<td>16</td>
<td>24 (↑18)</td>
<td>8</td>
</tr>
<tr>
<td>Coronary Care</td>
<td>8</td>
<td>8 (↑1)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>362</strong></td>
<td><strong>454 (↑92)</strong></td>
<td><strong>194</strong></td>
</tr>
<tr>
<td><strong>Maternity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity Beds</td>
<td>28</td>
<td>36 (↑8)</td>
<td>10 (↑10)</td>
</tr>
<tr>
<td>Birthing Rooms</td>
<td>8</td>
<td>6 to 8 (↑2 or ↔)</td>
<td>3</td>
</tr>
<tr>
<td>Birthing Centre</td>
<td>-</td>
<td>3 to 4 (↑1 or 4)</td>
<td>3</td>
</tr>
<tr>
<td>Day Assessment Unit</td>
<td>4</td>
<td>4 (↑1)</td>
<td>6</td>
</tr>
<tr>
<td>Newborn Bassinets</td>
<td>32</td>
<td>36 (↑14)</td>
<td>10 (↑10)</td>
</tr>
<tr>
<td>Special Care Nursery</td>
<td>10</td>
<td>20 (↑10)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Paediatrics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatric Beds</td>
<td>38</td>
<td>28 (↑10)</td>
<td>-</td>
</tr>
<tr>
<td>Paediatric Ambulatory Care</td>
<td>-</td>
<td>10 (↑10)</td>
<td>6</td>
</tr>
<tr>
<td>PEMPAC**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Mental Health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Mental Health</td>
<td>30</td>
<td>30 (↑10)</td>
<td>35</td>
</tr>
<tr>
<td>PECC</td>
<td>0</td>
<td>6 (↑16)</td>
<td>4</td>
</tr>
<tr>
<td>Non-Acute Mental Health</td>
<td>-</td>
<td>-</td>
<td>11 (↑11)</td>
</tr>
<tr>
<td>Very Long Stay</td>
<td>-</td>
<td>-</td>
<td>16 (↑16)</td>
</tr>
<tr>
<td>SMHSOP - Acute</td>
<td>15</td>
<td>22 (↑7)</td>
<td>-</td>
</tr>
</tbody>
</table>
# Clinical Services Plan 2012-2022

## Gosford Hospital

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-BASIS/ non-acute SMHSOP</td>
<td>-</td>
<td>12 (↑12)</td>
</tr>
<tr>
<td>Very Long Stay - aged</td>
<td>-</td>
<td>9 (↑9)</td>
</tr>
</tbody>
</table>

## Wyong Hospital

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug &amp; Alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detoxification</td>
<td>15</td>
<td>15 (↔)</td>
</tr>
</tbody>
</table>

## Woy Woy

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation and Aged Care²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehab (General &amp; Aged)</td>
<td>-</td>
<td>30 (↑30)</td>
</tr>
<tr>
<td>Sub-Acute Care (maintenance &amp;</td>
<td>23</td>
<td>28 (↑5)</td>
</tr>
<tr>
<td>non-specialist palliative care)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transitional Care</td>
<td>20</td>
<td>20 (↔)</td>
</tr>
</tbody>
</table>

## Long Jetty

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambulatory Spaces</td>
<td>6</td>
<td>TBC</td>
</tr>
<tr>
<td>Chemotherapy Chairs</td>
<td>10</td>
<td>26 (↑16)</td>
</tr>
<tr>
<td>Dialysis Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-centre</td>
<td>12</td>
<td>12 (↔)</td>
</tr>
<tr>
<td>Satellite</td>
<td>10</td>
<td>10 (↔)</td>
</tr>
<tr>
<td>Home Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Imaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT Scanner</td>
<td>2</td>
<td>2 (↑1)</td>
</tr>
<tr>
<td>MRI Scanner</td>
<td>1</td>
<td>2 (↑1)</td>
</tr>
<tr>
<td>General Radiology Rooms¹</td>
<td>6</td>
<td>TBC</td>
</tr>
<tr>
<td>Screening Rooms</td>
<td>1</td>
<td>TBC</td>
</tr>
<tr>
<td>Ultrasound Rooms</td>
<td>2</td>
<td>TBC</td>
</tr>
<tr>
<td>Mamography Rooms</td>
<td>1</td>
<td>TBC</td>
</tr>
<tr>
<td>Gamma Camera</td>
<td></td>
<td>1 (↑1)</td>
</tr>
<tr>
<td>PET Scanner</td>
<td></td>
<td>1 (↑1)</td>
</tr>
</tbody>
</table>

↑ increase  ↓decrease  ↔ no change

**Note:** Current bed, chair, operating suite and room count refers to built capacity. This can differ from the average available beds and resources attributed to specific services. Proposed resources will be opened progressively according to demand at the time it becomes available.

- a - Operating theatre at Gosford to include 1 hybrid interventional operating theatre
- b – Separate endoscopy suite not required for Wyong Hospital
- c – Midwife led service, inpatient beds/bassinets currently not utilised
- d - PEMPAC: Paediatric Emergency Medicine and Paediatric Acute Care
- e - For acute aged care beds please refer to adult acute bed complement
- f - General Radiology rooms include those in both ED and Radiology Department
**Appendix F: Community Health Facilities and Services**

<table>
<thead>
<tr>
<th>Gosford LGA</th>
<th>Wyong LGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erina ChC</td>
<td>Gosford Hospital</td>
</tr>
<tr>
<td><strong>Community Nursing</strong></td>
<td></td>
</tr>
<tr>
<td>General Community Nursing clinics</td>
<td>x</td>
</tr>
<tr>
<td>Continence Service</td>
<td>x</td>
</tr>
<tr>
<td>Wound Care service</td>
<td>x</td>
</tr>
<tr>
<td><strong>Ongoing and Complex Care</strong></td>
<td></td>
</tr>
<tr>
<td>Cardiac Rehabilitation</td>
<td>x</td>
</tr>
<tr>
<td>Pulmonary Rehabilitation *</td>
<td>x</td>
</tr>
<tr>
<td>Heart Failure Rehabilitation *</td>
<td>x</td>
</tr>
<tr>
<td>Community Outreach and Therapy Team (neurological) *</td>
<td>x</td>
</tr>
<tr>
<td>Diabetes</td>
<td>x</td>
</tr>
<tr>
<td>Palliative Care *</td>
<td></td>
</tr>
<tr>
<td><strong>Allied Health</strong></td>
<td></td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>x</td>
</tr>
<tr>
<td>Podiatry</td>
<td>x</td>
</tr>
<tr>
<td>Occupational Therapy *</td>
<td>x</td>
</tr>
<tr>
<td>Speech Pathology</td>
<td>X child</td>
</tr>
<tr>
<td>Psychology</td>
<td>x</td>
</tr>
<tr>
<td>Nutrition</td>
<td>x</td>
</tr>
<tr>
<td><strong>Rehabilitation and Aged Care</strong></td>
<td></td>
</tr>
<tr>
<td>Aged Care Consultancy Service</td>
<td></td>
</tr>
<tr>
<td>Transitional Aged Care Program</td>
<td></td>
</tr>
<tr>
<td>Aged Care Assessment Team *</td>
<td></td>
</tr>
<tr>
<td>Commonwealth Respite and Carelink Centre</td>
<td></td>
</tr>
<tr>
<td>Dementia Care Services</td>
<td></td>
</tr>
<tr>
<td>Dementia Day Care</td>
<td></td>
</tr>
<tr>
<td>Aged Day Care (NGO)</td>
<td></td>
</tr>
<tr>
<td>Memory Clinic *</td>
<td></td>
</tr>
<tr>
<td>Aged Care Emergency Team (ASET) outreach/behavioural *</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>Acute Post-Acute Care (APAC) *</td>
<td></td>
</tr>
<tr>
<td>Dialysis</td>
<td>x</td>
</tr>
</tbody>
</table>
### Clinical Services Plan 2012-2022

#### Gosford LGA

<table>
<thead>
<tr>
<th>Service</th>
<th>Erina CHC</th>
<th>Gosford Hospital</th>
<th>Gateway</th>
<th>Kincumber CHC</th>
<th>Mangrove Mountain</th>
<th>Citigate</th>
<th>Woy Woy</th>
<th>Lake Haven</th>
<th>Long Jetty</th>
<th>Toukley CHC</th>
<th>Wyong Central</th>
<th>Wyong Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child and Family Health</strong></td>
<td>x</td>
<td></td>
<td>x x</td>
<td>x</td>
<td>(also Kariong)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Childhood Services *</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary and Tertiary Child Services</td>
<td>x</td>
<td></td>
<td>x x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Care Cottages</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Health Service</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating Disorders Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity Services</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Protection Counselling *</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Assault</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug and Alcohol</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Opioid Treatment Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselling Team</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magistrates Early Referral into Treatment (MERIT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td><strong>Mental Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children and Young Peoples Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Care</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assertive Outreach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Therapy Team</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM-ISOP *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Admin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Health – Child* and Adult</td>
<td>X (Adult only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV and Related Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Health Clinic</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle Syringe Program *</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP Collaboration Unit</td>
<td>Admin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal Health</td>
<td>Admin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multicultural Health</td>
<td>Admin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Wyong LGA

* Services offered in the home
# clinics for children also at East Gosford and the Entrance Public School
Appendix G: CCLHD Governance

CCLHD Board

The Central Coast Local Health District Board is chaired by Mr Paul Tonkin and comprises a further nine Board Members who jointly bring a wealth of experience and local knowledge to the management of the LHD:

- Mr Paul Tonkin (Chair)
- Professor Maree Gleeson
- Dr Phil Godden
- Dr Phillip Hayes
- Dr June Heinrich AM
- Dr Sean Kelly
- Conjoint Professor Margaret McMillan OAM
- Mr Neal O'Callaghan
- Mr Phillip Peterson
- Mr Graham McGuinness OAM

The Local Health District Board and Chief Executive are responsible for:

- Improving local patient outcomes and responding to issues that arise throughout the Local Health District
- Monitoring performance against measures in the Local Health District Service Agreement
- Delivering services and performance standards within an agreed budget, based on annual strategic and operating plans
- Ensuring services are provided efficiently and accountably. Production of Annual Reports that are subject to state financial accountability and audit frameworks
- Maintaining effective communication with local and state public health stakeholders.

CCLHD Executive

The CCLHD executive team is led by Chief Executive Matt Hanrahan and comprises:

- Tim Free Director Clinical Operations
- Kerry Stevenson Director Clinical Operations, Children’s, Aged & Community Health
- Dr Bruce Sanderson Director Clinical Governance
- Dr Alison Latta Director Medical Services
- Jan Tweedie Director of Nursing and Midwifery
- Rob Wright Director Finance.
- Belinda Collier Director Workforce.

The executive team works with the CCLHD Board, local clinicians and the community to provide the best possible health care to the people of the Central Coast.
## Appendix H: Health Service Planning Reference Groups

### Medicine Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Roberts</td>
<td>Divisional Manager</td>
</tr>
<tr>
<td>Dr Campbell Tiley</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Dr Alison Latta</td>
<td>Director Medical Services</td>
</tr>
<tr>
<td>Dr Bruce Sanderson</td>
<td>Executive Sponsor</td>
</tr>
<tr>
<td>Jeff King</td>
<td>Operational Nurse Manager</td>
</tr>
<tr>
<td>Nicole Mangone</td>
<td>Clinical Nurse Consultant</td>
</tr>
<tr>
<td>Dr Cecily Forsyth</td>
<td>General Physician (Wyong)</td>
</tr>
<tr>
<td>Dr Kate Porges</td>
<td>Emergency Physician</td>
</tr>
<tr>
<td>Dr Glenn Hawken</td>
<td>Gastroenterologist, Director</td>
</tr>
<tr>
<td>Dr Sunil Gupta</td>
<td>RACS Representative</td>
</tr>
<tr>
<td>Audrey Jago</td>
<td>RACS Representative</td>
</tr>
<tr>
<td>Mary Trebble</td>
<td>PCAH Representative</td>
</tr>
<tr>
<td>Nicole McDonald</td>
<td>PCAH Representative</td>
</tr>
</tbody>
</table>

### Anaesthetics, Surgery & ICU Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louise Waymouth</td>
<td>A/Divisional Manager</td>
</tr>
<tr>
<td>Dr Bill Meldrum-Hanna</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Dr Alison Latta</td>
<td>Director Medical Services</td>
</tr>
<tr>
<td>Martin Malone</td>
<td>Executive Sponsor</td>
</tr>
<tr>
<td>Julieanne Angel</td>
<td>Operational Nurse Manager</td>
</tr>
<tr>
<td>Marilyn Cochrane</td>
<td>Clinical Nurse Consultant</td>
</tr>
<tr>
<td>Dr Scott Fortey</td>
<td>Anaesthetics</td>
</tr>
<tr>
<td>Louise Vincent</td>
<td>Nurse Unit Manager</td>
</tr>
<tr>
<td>Dr Adrian Cohen</td>
<td>Surgeon (Wyong)</td>
</tr>
<tr>
<td>Dr Bill Munro</td>
<td>Surgeon (Gosford)</td>
</tr>
<tr>
<td>Dr Sean Kelly</td>
<td>Critical Care</td>
</tr>
<tr>
<td>Dr Sunil Gupta</td>
<td>RACS Representative</td>
</tr>
<tr>
<td>Audrey Jago</td>
<td>RACS Representative</td>
</tr>
</tbody>
</table>

### Women’s Children’s & Family Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angela Monger</td>
<td>Divisional Manager</td>
</tr>
<tr>
<td>Dr John Erikson</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Dr Alison Latta</td>
<td>Director Medical Services</td>
</tr>
<tr>
<td>Jan Tweedie</td>
<td>Executive Sponsor</td>
</tr>
<tr>
<td>Dr Mutayyab Shah</td>
<td>Obstetrics and Gynaecology</td>
</tr>
<tr>
<td>Dr Stephen Pryde</td>
<td>Paediatric Assessment Unit</td>
</tr>
<tr>
<td>Trish White</td>
<td>Clinical Midwife Consultant</td>
</tr>
<tr>
<td>Lyndall Mollart</td>
<td>Clinical Midwife Consultant</td>
</tr>
<tr>
<td>Karen Stevenson</td>
<td>Paediatric Clinical Nurse Consultant</td>
</tr>
<tr>
<td>Dr Philip Watt</td>
<td>PCAH Representative</td>
</tr>
</tbody>
</table>

### Rehabilitation & Aged Care Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audrey Jago</td>
<td>A/Divisional Manager</td>
</tr>
<tr>
<td>Dr Sunil Gupta</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Dr Alison Latta</td>
<td>Director Medical Services</td>
</tr>
<tr>
<td>Kerry Stevenson</td>
<td>Executive Sponsor</td>
</tr>
<tr>
<td>Gillian Isaac</td>
<td>Manager Caring Networks</td>
</tr>
<tr>
<td>Melissa Pickering</td>
<td>Nurse Manager Woy Woy</td>
</tr>
<tr>
<td>Leanne McLaren</td>
<td>Nurse Manager Long Jetty</td>
</tr>
<tr>
<td>Dr Stephen Chung</td>
<td>Rehabilitation Specialist</td>
</tr>
<tr>
<td>William McClean</td>
<td>Manager Aged Care Assessment Team (ACAT)</td>
</tr>
<tr>
<td>Nicole McDonald</td>
<td>PCAH Representative</td>
</tr>
<tr>
<td>Raichel Green</td>
<td>Mental Health Representative</td>
</tr>
</tbody>
</table>

### Mental Health Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Thompson</td>
<td>Divisional Manager</td>
</tr>
<tr>
<td>Dr Neil Mclean</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Dr Alison Latta</td>
<td>Director Medical Services</td>
</tr>
<tr>
<td>Martin Malone</td>
<td>Executive Sponsor</td>
</tr>
<tr>
<td>Deb Howe</td>
<td>Clinical Director CAMHS</td>
</tr>
<tr>
<td>Dr John Dobrohotoff</td>
<td>Clinical Director SMHSOP</td>
</tr>
<tr>
<td>Raichel Green</td>
<td>Manager SMHSOP</td>
</tr>
<tr>
<td>Mario Fantini</td>
<td>Manager Inpatient Services</td>
</tr>
<tr>
<td>Simon Hill</td>
<td>Manager Community and Emergency and ED</td>
</tr>
</tbody>
</table>

### Primary, Community & Allied Health Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerry Stevenson</td>
<td>Director</td>
</tr>
<tr>
<td>Dr Philip Watt</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Tim MacLean</td>
<td>Podiatry</td>
</tr>
<tr>
<td>Mark Spierings</td>
<td>Oral Health/Drug and Alcohol</td>
</tr>
<tr>
<td>Kate Baker</td>
<td>Social Work</td>
</tr>
<tr>
<td>Gillian Isaac</td>
<td>Caring Networks</td>
</tr>
<tr>
<td>Kelli Ward</td>
<td>Aboriginal Health/HARP</td>
</tr>
<tr>
<td>Sally Mecham</td>
<td>Community Nursing</td>
</tr>
<tr>
<td>Rhonda Sherman</td>
<td>Business Manager</td>
</tr>
</tbody>
</table>
Appendix I: CCLHD Clinical Council and HSP Steering Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glen Auld</td>
<td>Allied Health Representative</td>
</tr>
<tr>
<td>Dr Chantelle Badawy</td>
<td>RMO Representative</td>
</tr>
<tr>
<td>Kate Baker</td>
<td>Allied Health Representative</td>
</tr>
<tr>
<td>Dr Ian Chaussivert</td>
<td>Clinical Director Drug and Alcohol</td>
</tr>
<tr>
<td>Belinda Collier</td>
<td>Director Workforce Strategy</td>
</tr>
<tr>
<td>Dr John Erikson</td>
<td>Clinical Director Women’s, Children’s and Family Health (WC&amp;FH)</td>
</tr>
<tr>
<td>Suzann Evans</td>
<td>Director of Nursing Wyong Hospital</td>
</tr>
<tr>
<td>Dr Scott Fortey</td>
<td>Department Head Anaesthetics</td>
</tr>
<tr>
<td>Dr Sunil Gupta</td>
<td>Clinical Director Rehabilitation and Aged Care Services (RACS)</td>
</tr>
<tr>
<td>Matt Hanrahan</td>
<td>Chief Executive Central Coast Local Health District</td>
</tr>
<tr>
<td>Terry Hayes</td>
<td>Manager Corporate Communications</td>
</tr>
<tr>
<td>Dr Alison Latta</td>
<td>Director Medical Services</td>
</tr>
<tr>
<td>Martin Malone</td>
<td>A/Director Acute Services</td>
</tr>
<tr>
<td>Graeme Liston</td>
<td>Manager Case Mix and Funding</td>
</tr>
<tr>
<td>Dr Bill Meldrum-Hanna</td>
<td>Clinical Director Anaesthetics, Surgery and Intensive Care (AS&amp;ICU)</td>
</tr>
<tr>
<td>Liz Mitchell</td>
<td>Director of Nursing Gosford Hospital</td>
</tr>
<tr>
<td>Dr Bruce Sanderson</td>
<td>Director Clinical Governance</td>
</tr>
<tr>
<td>Wendy Scott</td>
<td>Nurse Unit Manager Wyong Medical Assessment Unit (MAU)</td>
</tr>
<tr>
<td>Kerry Stevenson</td>
<td>Director Clinical Operations, Children’s, Aged &amp; Community Health</td>
</tr>
<tr>
<td>Charles Thompson</td>
<td>Divisional Manager Mental Health</td>
</tr>
<tr>
<td>Dr Campbell Tiley</td>
<td>Clinical Director Medicine (Chair)</td>
</tr>
<tr>
<td>Jan-Maree Tweedie</td>
<td>Director of Nursing and Midwifery</td>
</tr>
<tr>
<td>Dr Martin Veysey</td>
<td>Department Head Gastroenterology</td>
</tr>
<tr>
<td>Craig Walsh</td>
<td>Manager Corporate Services</td>
</tr>
<tr>
<td>Robert Wright</td>
<td>Director of Finance</td>
</tr>
</tbody>
</table>