Tail wagging the dog?

Using investment in facilities to support and encourage new clinical models

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Overview

- **Declaration**
- **Queensland in context**
- **What worked well**
- **What didn't work**
- **What we learned from this**
- **What we do next**

For comparison

Qld context for health services

- **Geography**
- **Population**
- **Demography**
- **Indigenous**
- **Rural and remote**
- **Chronic disease**
- **Technology**
- **Workforce**
- **Epidemics**

What worked well

- Strategic overview
- Telehealth
- Cardiac services
- PACS

What didn't work

- EMR by 2000
- Constrained hospital bed numbers
- Closure of non viable facilities

What did we learn

- Strategic
- Tactical
- Operational
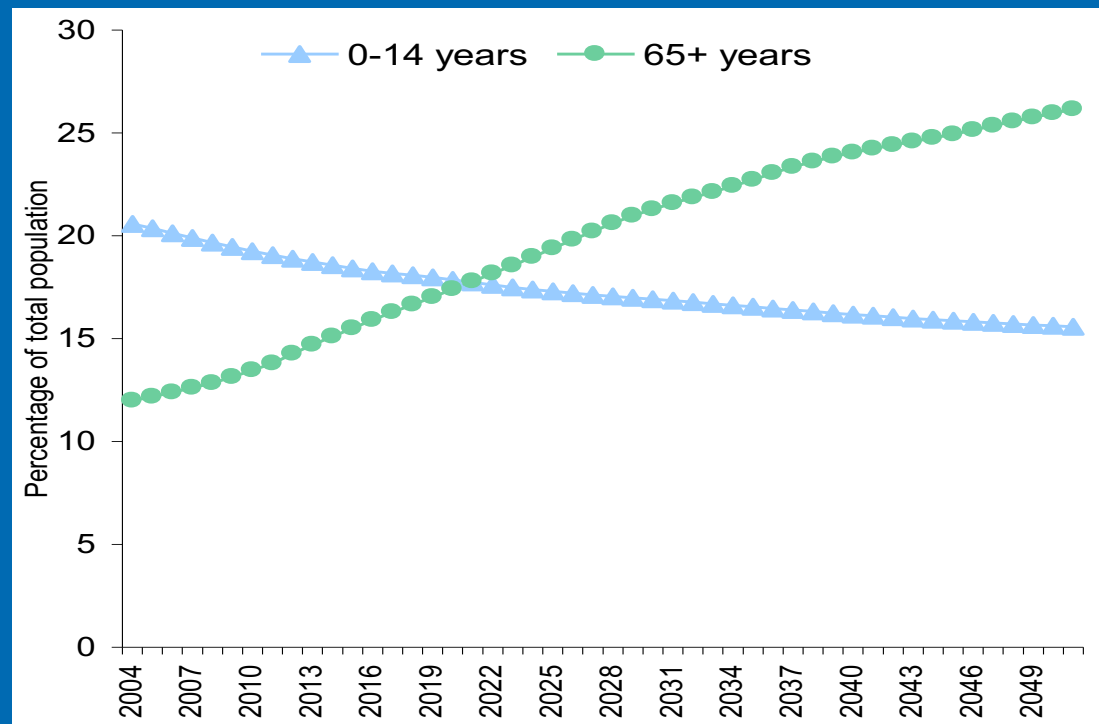- People focus
- communication

What do from here

- Those to fail to learn the lessons of history are condemned to repeat the mistakes of the past
- Lets try and make some new mistakes

Queensland – Ageing State

The proportion of older people in Queensland is projected to exceed the proportion of children by 2021.
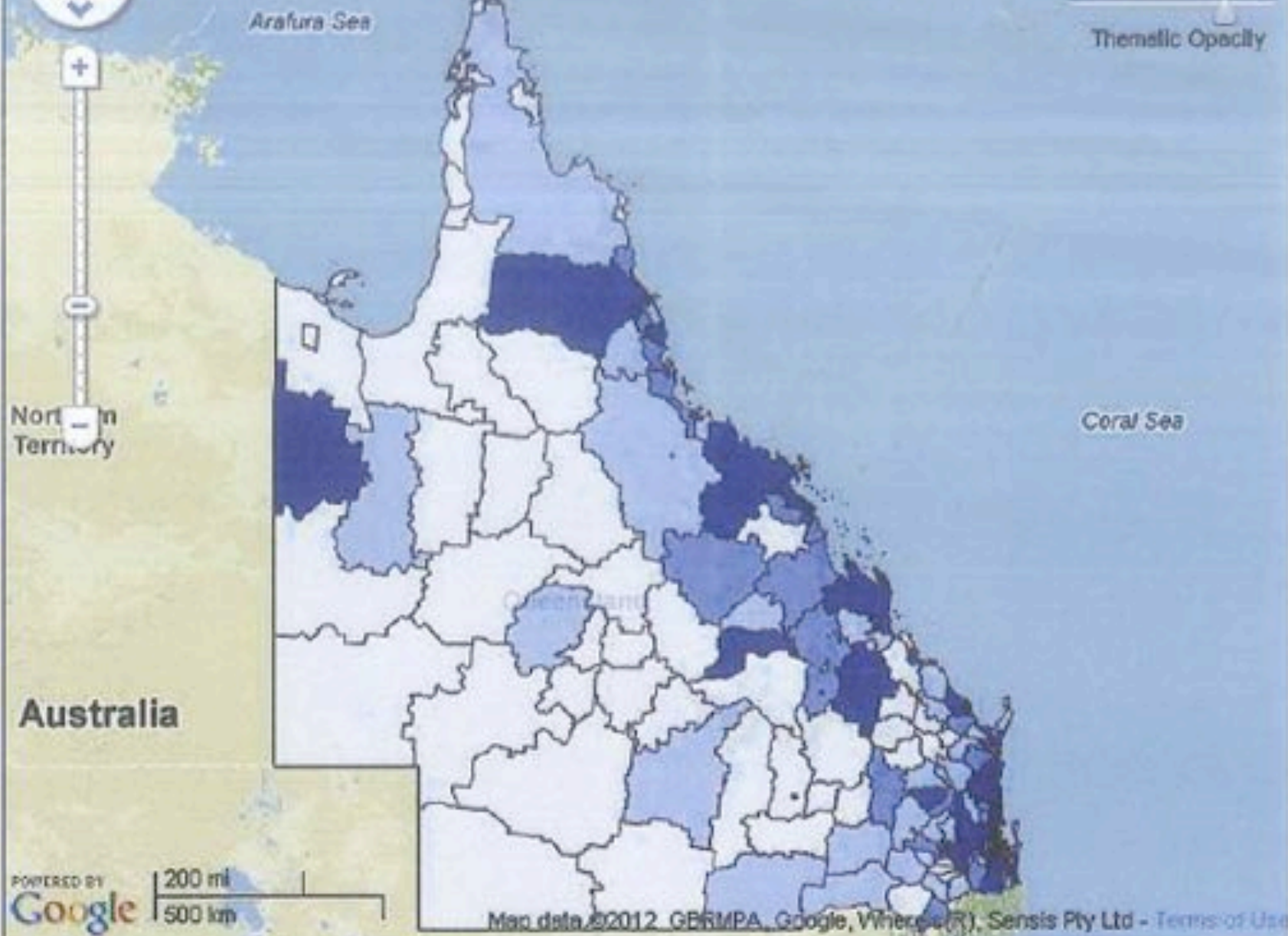
Queensland

- 1.27 million km2
- 4.3 million people
- ~ 2400 km long
- Highly Decentralised
- High index of Rurality
- > rate of injury States
- Trauma; High death/admission rate
- Equity of Access to Specialist Care

Queensland Emergency Medical System, Coordination Centre.

- Centralised statewide access point for all aeromedical requests (pre-hospital and interfacility, RW & FW)

- Medical advice/oversight, determination of retrieval team, aircraft asset and destination facility

- Total 19,493 referrals to QCC during 10/11 (Av 50/24hr)

- 26% of tasks require retrieval physician

All aeromedical tasks in Queensland are authorised, tasked and tracked via QCC.

Retrieval Services Qld

Clinical Coordination Challenges

- Resource availability
- Multiple patients
- Conflicting tasks
- Political and interpersonal issues
- Critical Care bed availability
- Fluidity of information
- Maintenance of Communication
- Multiple players

Balancing distances involved,
time criticality and available resources

Looking after the patient is the easy part.

Retrieval Services Qld

QCC Telehealth System

- Evolved from a trial in 2005
- Two fixed cameras within resuscitation room of each Facility
- Overhead Room Microphone
- Left on at all times at referring site
- QCC has activation and remote control of cameras
- 110 sites connected to QCC
- DOCTOR PROOF!

Retrieval Services Queensland
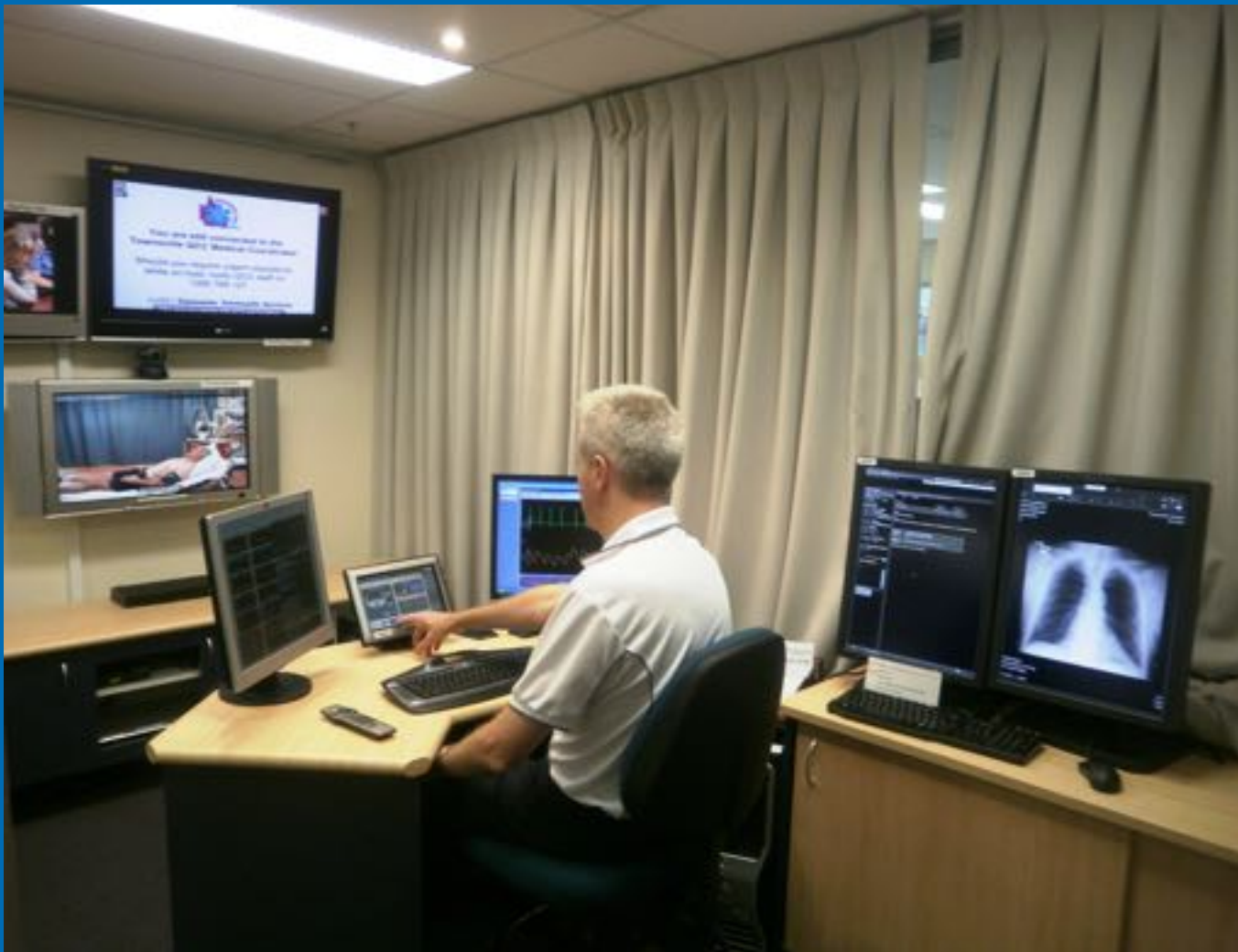
- 110 Resuscitation Rooms connected to QCC; 6 sites at once
- QH Network with Video bridging capability

Retrieval Services Queensland

QCC Telehealth Summary

- Telehealth augments Retrieval Systems
- Accepted component of RSQ Retrieval System
- Positive Benefits well demonstrated for;
  - Patient Care
  - Equity of access to specialist consultation
  - Staff and Patient Safety
  - Efficient resource allocation
  - Rural Staff Clinical Support, Education and Training
  - Whole of Government cost savings
- Significant future potential across EMS
  - Reduces overall risk
  - Enhances EMS Effectiveness
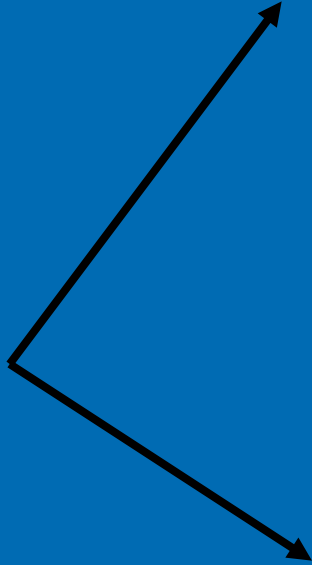
Telehealth

- 20% of Queensland's population lives in rural or remote locations

- Distance can be the biggest barrier to access to health services.

- Statewide Telehealth Services – largest telehealth network in Australia, 965 videoconference systems

CaSS | Statewide Telehealth Services
A CLINICAL AND STATEWIDE SERVICE

Videoconference Site Map

SEE INSET

Queensland Government

December 2009

Queensland Health

Telehealth - benefits

- Improve patient access to health care
- Provide clinical staff access to peer support and education
- Reduce travel costs and inconvenience for clinicians, managers, patients and carers
- Reduced need for patients and families to take extended time off work
- Reduced time away from home
- No additional patient costs for telehealth consultations

Paediatric Services

Centre for Online Health
University of Queensland Aust

The Centre for Online Health, together with Royal Children's Hospital Brisbane and support from Xstrata, is enabling access to specialist paediatric services across Queensland.
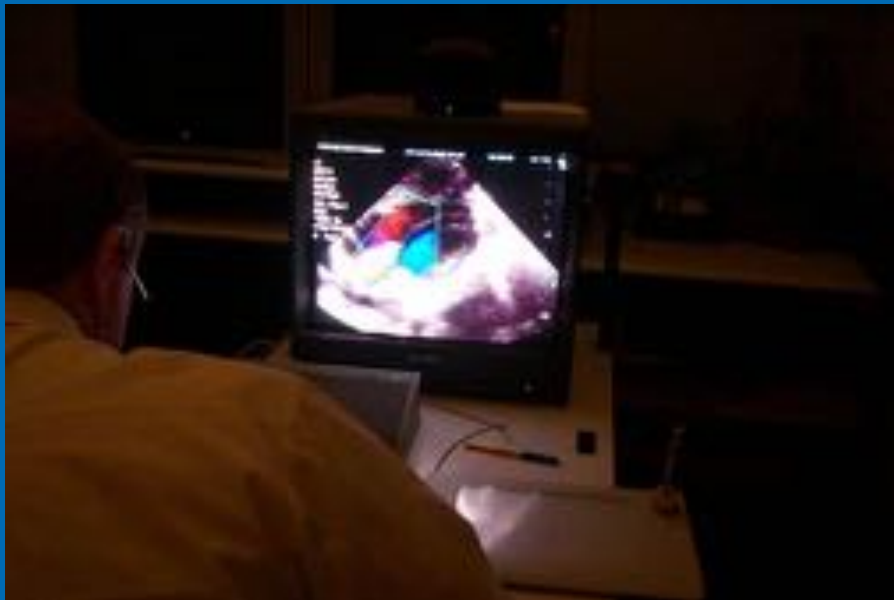
Telehealth – key utilisation

- Diabetes
- Ear Nose Throat
- Emergency Retrieval
- Geriatric
- Heart Failure
- Intensive Care
- Mental Health
- Offender Health

- Ophthalmology
- Oncology
- Paediatrics
- Pharmacy
- Pre-admission
- Radiology
- Rehabilitation
- Renal Services

Centre for Online Health
University of Queensland Aust

Neurology

Cardiology

Mobile NICU

Centre for Online Health
University of Queensland Aust

Indigenous Health

- 3% of Australian population (85% in Torres)
- Many live in rural or remote locations
- Access to acute health care services via PHCC, Royal Flying Doctor Service and Retrieval Services Qld
- Low utilisation of primary care or preventative services
- Significant gap in health status
- Significant gap in mortality

Far End Control

Capital Delivery Program Locations

**Isisford Primary Health Centre
completed November 2011**

Winton MultiPurpose Health Service – completed August 2011

Mt Isa Health Campus

Thursday Island – New Helipad completed December 2010

Strategic Planning Framework

- **Patient and family centred care – family space in rooms and on wards**
- **Lean Thinking – process flows - efficiency**
- **Evidence based design - increased focus**
- **Environmentally Sustainable Design**
- **Improved links and integration with primary care and community based services**
- **Shift of ambulatory based services from hospital to community environment**
- **Increased provision of single rooms**

Delivering health infrastructure

- **Value adding through the project phases**
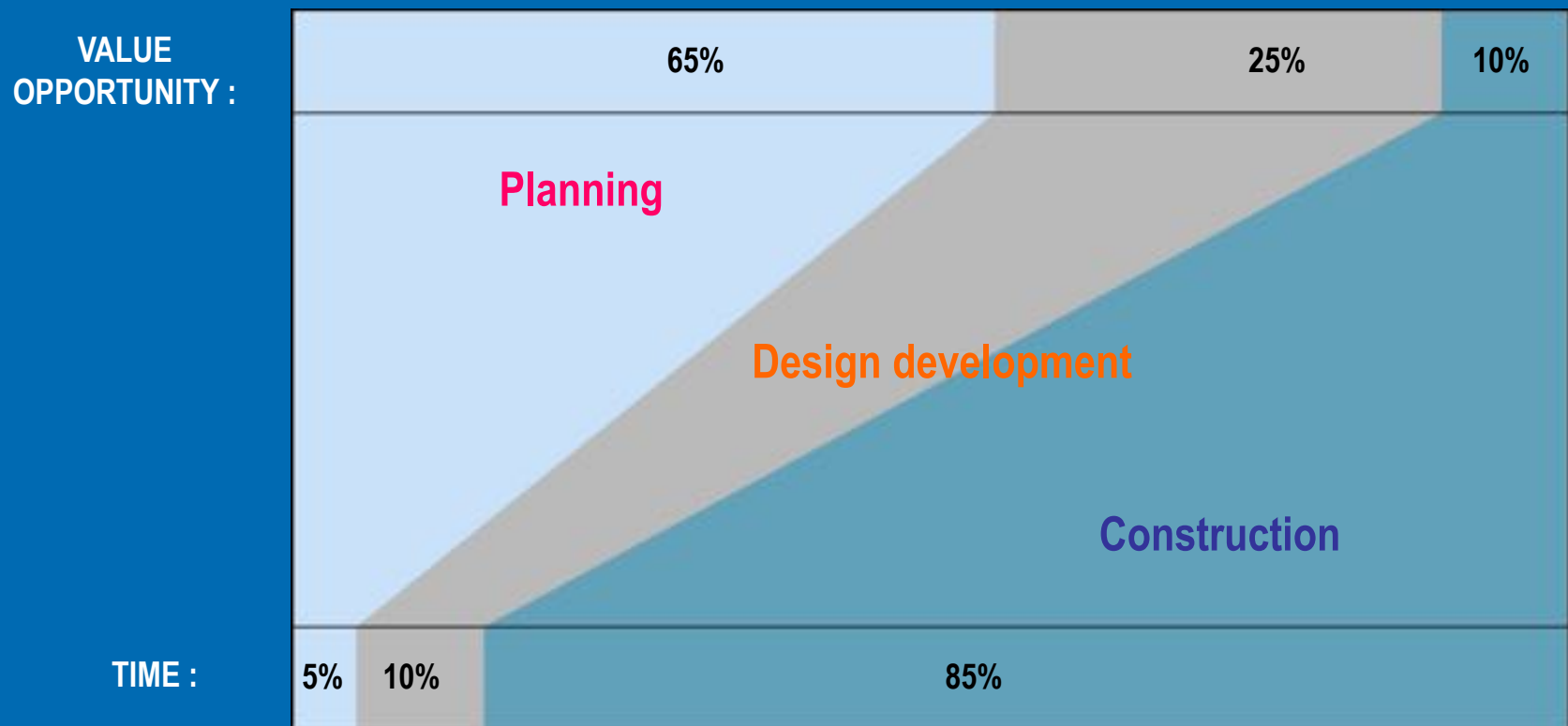
Cairns Base Hospital – Emergency Department expansion – March 2011

Cairns Base Hospital – Block E – Liz Plummer Cancer Centre completed June 2011

Tier 1 projects

- **Gold Coast University Hospital – 750 beds, due for completion end 2012**

- **Queensland Children's Hospital – 400 beds, due for completion end 2014**

- **Sunshine Coast University Hospital – 450 to 650 beds, due for completion end 2016**

Gold Coast University Hospital – completion planned December 2012

Queensland Children's Hospital – completion 2014

Sunshine Coast University Hospital

Completion due 2016

Tier 2 Projects

- **Cairns Base Hospital Redevelopment – increase of 168 beds, completion 2015**

- **Townsville Hospital Redevelopment – increase of 168 beds, completion 2014**

- **Mackay Base Hospital Redevelopment – increase of 168 beds, completion 2014**

- **Rockhampton Hospital – increase 110 beds, completion 2014**

Cairns Base Hospital Redevelopment

- $454 million redevelopment
- Plus expansion of Emergency Department
- New clinical services block in 2013
- Increase by 168 beds (to 531 beds)
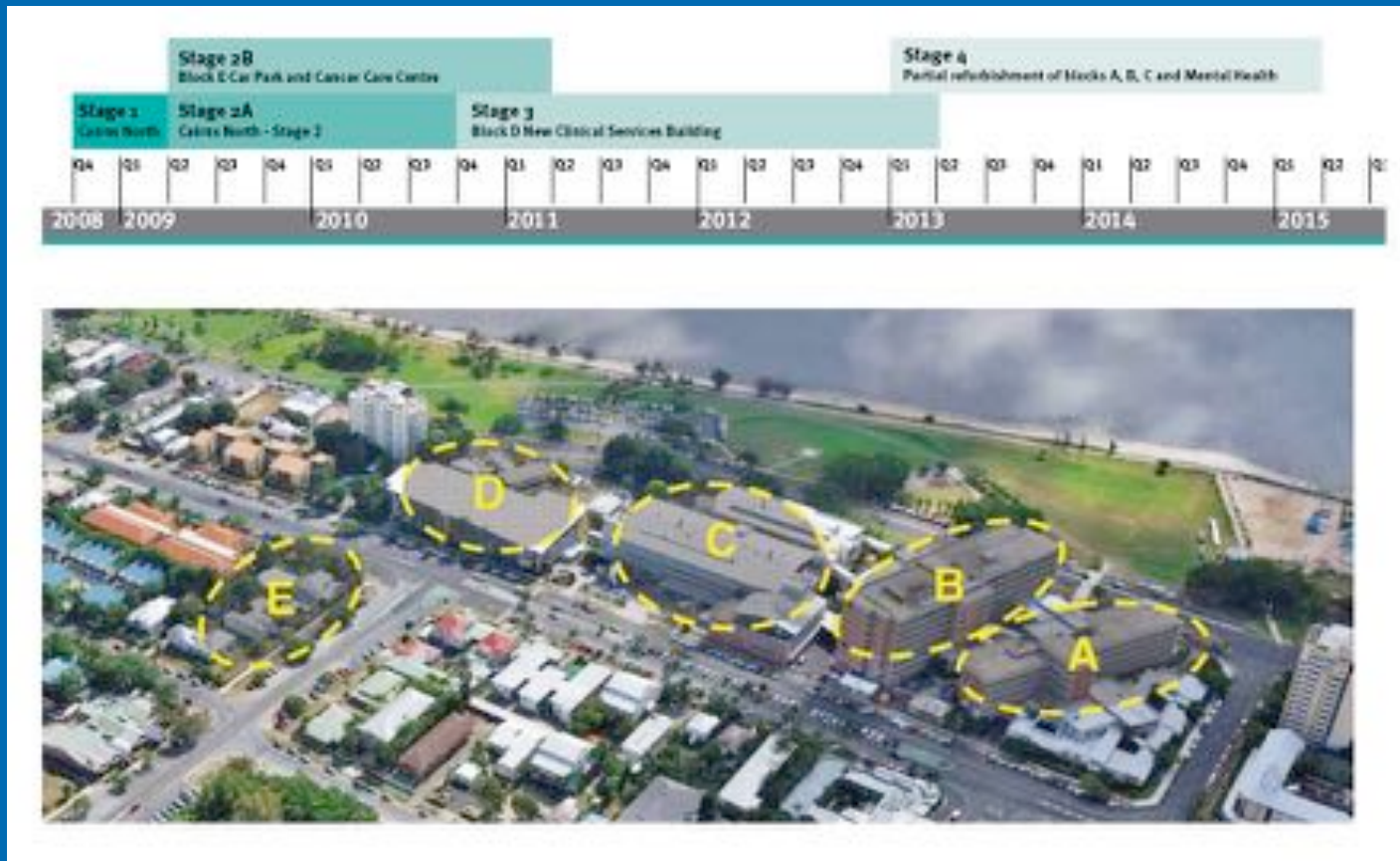
Cairns Base Hospital Redevelopment – due for completion 2015

Townsville Hospital Redevelopment

$437M redevelopment

4 stages to 2014

North Block completed July 2011

Stage 3 commences November 2011

Townsville Hospital Redevelopment – completion 2014

Mackay Base Hospital Redevelopment

- $408 million redevelopment
- new hospital on the existing site
- Three stages over 3.5 years
- Increase beds by 168 to 318
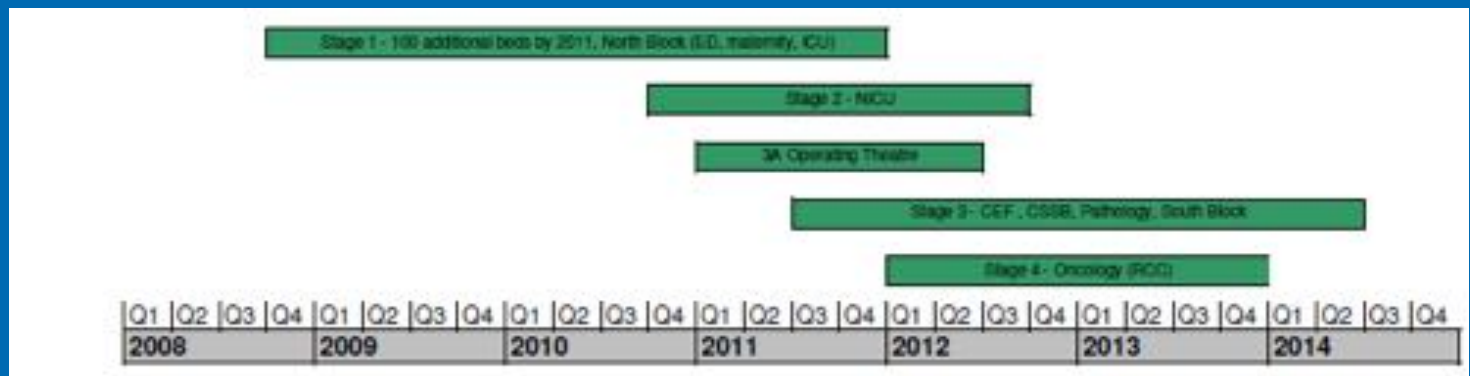
Mackay Base Hospital

Mackay Base Hospital Redevelopment – completion 2013

Rockhampton Hospital Expansion
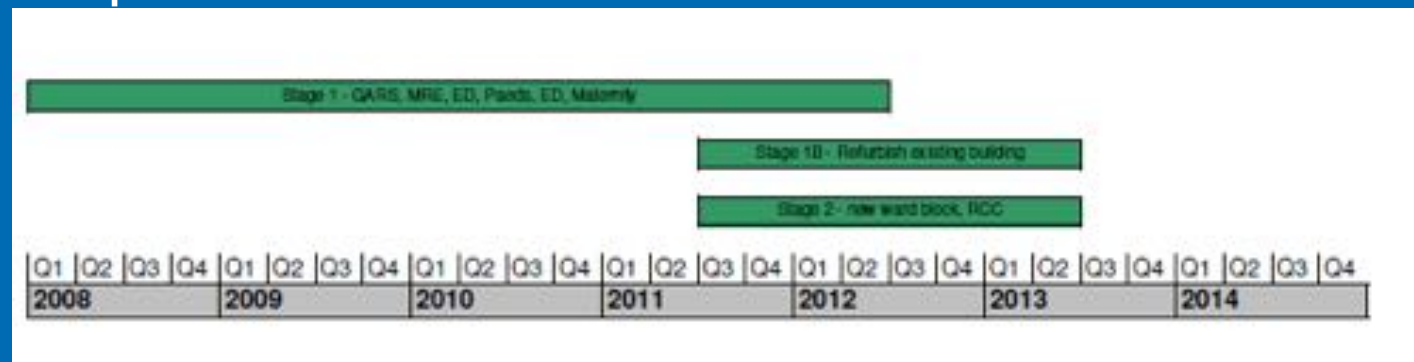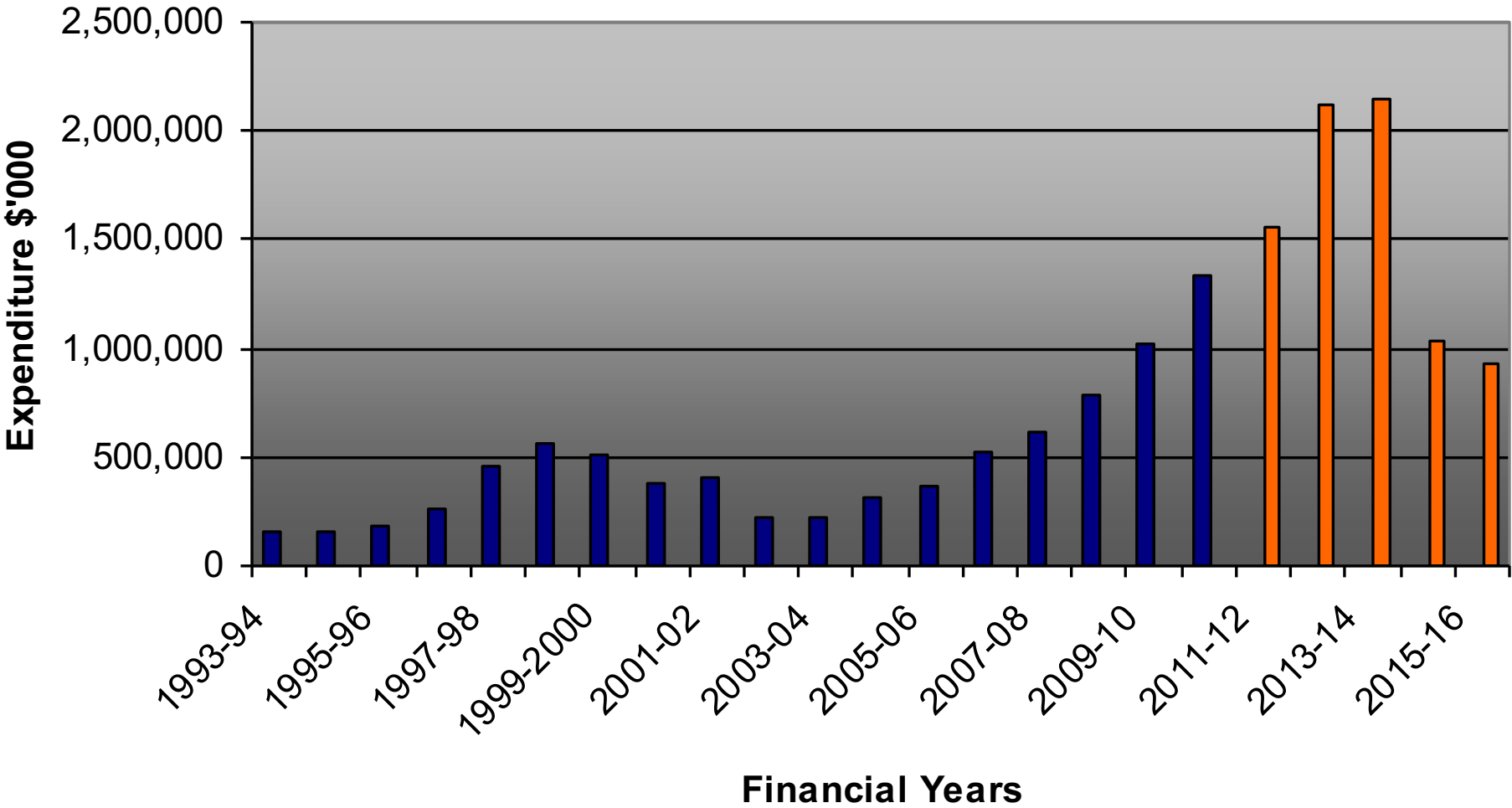
- $244 million redevelopment of the existing hospital

- expansion of ED

- new clinical ward block including regional cancer centre in 2014

- increasing beds
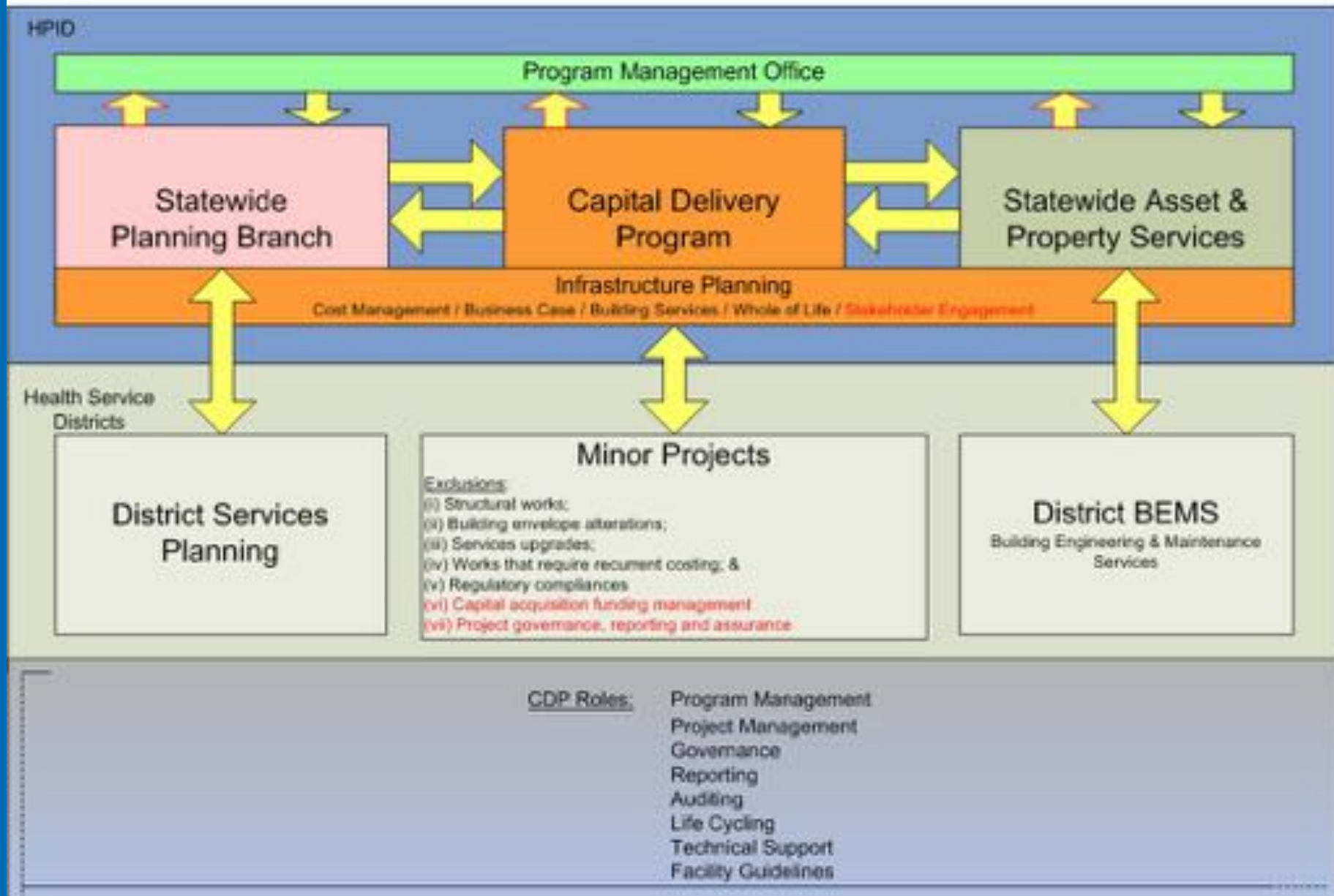
- future flexibility built into redevelopment

Capital Delivery Program Historical and Forecast Cashflows

Financial Years

Actual Expenditure $'000 ■ Forecast Expenditure $'000

Future Delivery Model for Capital Projects
Roles, Relationships & Responsibilities

HPID

Program Management Office

Statewide Planning Branch	Capital Delivery Program	Statewide Asset & Property Services

Infrastructure Planning
Cost Management / Business Case / Building Services / Whole of Life / Stakeholder Engagement

Health Service Districts

District Services Planning

Minor Projects

Exclusions:
(i) Structural works;
(ii) Building envelope alterations;
(iii) Services upgrades;
(iv) Works that require recurrent costing; &
(v) Regulatory compliances
(vi) Capital acquisition funding management
(vii) Project governance, reporting and assurance

District BEMS
Building Engineering & Maintenance Services

CDP Roles:
- Program Management
- Project Management
- Governance
- Reporting
- Auditing
- Life Cycling
- Technical Support
- Facility Guidelines

Building Performance Evaluation

- replaces traditional POE approach

- performance **monitoring and evaluation** tool

- integrates principles of evidence-based design with practices of **pre, mid & post evaluations**

- **standardised methodology** throughout the life cycle of a project to promote accountability

- methodology and framework supporting **purposeful evaluations & valuable outcomes**

BPE Approach

- **balanced approach**: service, functional, physical and financial dimensions

- links to the overall **vision and strategy** of organisation

- evaluate at **various points** of a project lifecycle (not just post)

- **feed forward loop -** encourages continuous process of improvement & promote alternative ideas, innovations and evidenced based design.

BPE: Emergency Department

Improved understanding of how:

- built environment supports **patient flow**
- zoning of the department supports **patient journey & delivering care** more effectively
- department layout assists **workforce to operate efficiently**

BPE: Multipurpose Health Service

BPE to improve understanding of:

- clinical staff operation over **multiple clinical environments**

- effective and efficient sharing of support areas and **multipurpose** spaces

- suitable **resident/patient environment**

- design features offering **flexibility** to implement future Models of Care

Health Facility Design Guidelines

- **Lessons learned from BPE** inform guideline review & development

- **Queensland specific guidelines** developed as required

- Support **Capital Infrastructure Minimum Requirements** (CIMR): mandatory for infrastructure assessment, planning and design

Questions?

Queensland Emergency Medical System, Coordination Centre (QCC)