

# Queensland Clinical Senate

*Connecting clinicians to improve care*

## **The clinical imperative for seven-day healthcare delivery**

**26 – 27 March 2015**

**Meeting report**

**Royal on the Park, Brisbane, Queensland**

## Queensland Clinical Senate, Meeting Report

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### Meeting facilitator

Sue Sampson, Transform Developments Pty Ltd

## Summary



There is a growing body of evidence that suggests patients admitted to hospital on weekends and after hours have poorer health outcomes. Internationally, moves are being made to provide consistent access to comprehensive healthcare across the seven-day week. Locally, there are also initiatives underway in many health services to address this issue.

There remain many questions and practicalities around improving patient outcomes, safety, resourcing and efficiencies. The Queensland Clinical Senate has committed to exploring the issues and opportunities associated with a seven-day healthcare delivery system.

'The Clinical Imperative for Seven-Day Healthcare' was the topic of discussion at the 26-27 March 2015 meeting. Members unanimously agreed to the concept that patients should have access to the same level of care regardless of what day of the week they present at hospital. They were then tasked with the challenge of how this could happen.

The objective of the meeting was to agree upon some key initiatives that could be implemented across Queensland, to begin the process of operationalising a comprehensive seven-day a week healthcare system. In a complex environment, such as healthcare, this is not a simple task.

More than 100 clinicians from across a range of health professions and from around the state actively contributed to high-level, rich discussions to determine what is and what could be. This report summarises the key messages from the discussion. You will see the outcomes on the following page, with recommendations on page 2.

Central to any change towards a seven-day system will be active participation from all layers of the health system from General Practice and community health to the acute care settings. And it will involve a number of initiatives. All of which will contribute to better health outcomes for the people of Queensland.

Dr David Rosengren

**Chair**

**Queensland Clinical Senate**

25 May 2015

## Recommendations

Essential services that are available on weekdays should also be available across the seven-day working week. To challenge organisations to prioritise investment and/or redirection of resources the QCS recommends:

- Improving discharge planning and actual discharges at the weekend
  - Drive for more inclusive primary care and community care involvement, i.e., **'critical to integrate'**. For example, primary care providers are contacted prior to discharge.
  - Renew the focus upon timely 'transfer of care' information provision, i.e., **'critical to complete'**. For example, discharge summaries are completed at time of discharge.
  - Aspire to full attainment of General Practitioner access to discharge summaries via the Queensland Health Viewer (a read only web browser that displays summary information from existing Hospital and Health Service systems), i.e., **'critical to communicate'**.
- Improving access to the 'right' senior clinicians across all professions after hours, to enhance decision making, for the 'right' patient groups
  - Assess and address the need for greater onsite specialist presence.
  - Leverage existing opportunities to improve networking of specialists through modalities such as telehealth and telepresence.
  - Refine and adopt validated after hours safety assessment tools.
- Obtaining support from Department of Health and Hospital and Health Services to complete a comprehensive evidence based review:
  - Use a systematic review technique to make recommendations for a suite of meaningful outcome based safety and quality measures for after-hours care, for the purposes of State-wide reporting.
  - Draw upon the existing global literature to identify those conditions that warrant further investigation, using local Queensland data, to characterise where variation in weekend healthcare delivery may be impacting upon clinical outcomes.
  - Identify current service delivery models used in Queensland, and more widely, that could be extended to include an enhanced seven-day healthcare delivery focus model.

Many organisations are implementing local initiatives to provide consistent access to healthcare services throughout the seven-day week. Quality audits and research projects developed in partnership with clinicians are essential to identify local issues and solutions.

## The 'Weekend Effect' – Why consider a seven-day model?

There is a growing body of evidence that morbidity and mortality rates increase for patients admitted to hospital on the weekend. Known as the 'weekend effect', this is a phenomenon being researched both locally and internationally.

### 1.1 Quality and safety research perspectives

- 'Evidence suggests that case mix-adjusted mortality rates are higher for patients admitted electively or as emergencies to hospital 'out-of-hours', with most research focusing on weekends' (Freemantle et al. 2012).
- 'The weekend effect is not a uniform phenomenon but, rather, a complex cluster of different causal pathways, shaping patients with very different diseases presenting at very different clinical services. Not every diagnostic group demonstrates a weekend effect, and those that do are associated with quite different risk profiles, suggestive of different causal pathways. Recognising how these different patterns shape the impact of weekend admissions should lead to more diagnosis- and service-specific analyses and solutions' (Concha et al. 2013).
- 'Of the 100 conditions that caused the most deaths, 23 were associated with significantly higher mortality rates among patients admitted on a weekend than among those admitted on a weekday' (Bell & Redelmeier 2001).
- New evidence on the negative effect of weekend and after-hours hospital operation has made researchers argue about what should be the most cost-effective way of improving outcomes on the weekend. If the cause of the 'weekend effect' is understaffing then the strategy should be to regulate workforce. If, however, the cause is inappropriate treatment (such as delays to surgery) not related to staffing numbers then a more cost-effective strategy could be rewarding good performance on the weekend. Information technology can also help reduce the gap between the 'Monday to Friday' hospital, and the 'weekend' hospital by creating safety nets and providing information for junior doctors when senior staff are not present (Gallego et al. 2015).
- Data from the Health Roundtable shows that the standard mortality rate on the weekend is higher.

***“The key is efficiency in services at the right location and pathway, to care to the right patient in the right place, at the right time.”***



## 1.2 Perspectives on seven-day care

The personal perspectives of clinicians and key stakeholders within the health system in Queensland were identified through a pre-meeting survey of members and guests and a panel discussion. Key points included:

### Consumer perspectives

- Consumers expect to receive the same standard of care irrespective of the day of the week. That doesn't necessarily mean that every service needs to be available every day. Extended services should be targeted to where the greatest need and the greatest benefit can be realised.
- Services that are provided seven days a week need to be beneficial to patients in terms of safe quality care and deliver the same outcomes as those experienced by patients who are admitted during the week.
- Patient convenience and choice – healthcare is consumed in the context of people's lives so access to healthcare services on the weekend would mean less disruption to patients who work or are at school.
- Discharge planning - consider models of care that enable patients to return to their own environments (homes) after hours and on weekends. This may require patient and or carer access to healthcare providers and community services that are not currently provided after hours or on the weekends. This can be particularly problematic in regional and rural areas. Inter-facility transfers (from metropolitan to regional/rural acute care facilities) 'after hours' should be considered if primary and community care services are not available in regional/rural settings after hours.



Meeting facilitator Sue Sampson (left) with panel members Melissa Fox, Tania Hobson, Julie Oliver and Associate Prof Sabe Sabesan.

## Clinician perspectives

The Queensland Clinical Senate pre-meeting survey was distributed to members and meeting delegates. Of the 59 respondents, three per cent identified their professional stream as administrators, 24 per cent as allied health professionals, two per cent as consumers, 34 per cent as medical officers, 29 per cent as nurses, and eight per cent as 'other'. Forty-seven per cent of respondents identified as working primarily in metropolitan areas, 35 per cent in regional settings and 18 per cent in rural areas.

- More than 80 per cent of survey respondents believe that their clinical experience accords with worse weekend clinical outcomes.
- More than 90 percent of survey respondents think existing infrastructure is under-utilised.
- More than 90 per cent of survey respondents believe that community access impacts upon hospital capacity.

Other perspectives voiced at the meeting included:

- Optimising patient flow and access to safe, quality services across the patient journey 'in' and 'out' of hours is critical to delivering improved patient outcomes. Integrated managed care is central to achieving this and requires access to seven-day a week services such as domiciliary nursing and allied health services, Hospital in the Home and other domestic support services.
- Having seven-day services doesn't necessarily mean that weekends are identical to weekdays, or that more staff need to be employed. Opportunities exist to do things smartly and efficiently and targeting the right people to deliver the right service.
- Cost – change generally costs money. It is not known whether seven-day service delivery would lead to higher cost per patient.
- Many local initiatives are already being implemented across Queensland Hospital and Health Services. For example, the introduction of trauma nurse coordinators and geriatric emergency department interventional nurses. Opportunities exist to build on local initiatives.
- Best affordable practice and value for money – it's not necessarily about dollars or resourcing, but how we do it.

***“You need to identify what the need is 7 days - is it X-ray, short stay beds, clinical decision units or is it more overnight beds?”***



## Metropolitan and Regional perspectives – where do we focus our efforts?

### Whole of system, elective, unscheduled and aged care

Meeting participants were grouped and asked to discuss where efforts should be focused. The table below is a summary of the themes that emerged from these discussions.

	Metropolitan	Regional
Whole of system	<ul style="list-style-type: none"> <li>• Integration of care with primary care in the community, including the use of Hospital in the Home</li> <li>• Transfer of care including the transfer of information and clinical handover</li> <li>• Matching of demand to resources using predictive modelling</li> <li>• Access to senior leadership, advice and decision making, including GP access to specialist advice</li> <li>• Right care in the right location at the right time - for example access to respite care, mental health community services, use of criteria-led discharge</li> <li>• Patient transport. For example, the ability to transfer patients back to residential aged care facilities on the weekend</li> <li>• Access to allied health staff on the weekend</li> </ul>	<ul style="list-style-type: none"> <li>• Access to support from larger centres including remote supervision</li> <li>• Senior medical officer rounds as well as increased access to allied health staff and diagnostics (imaging) on the weekends to improve patient flow</li> <li>• Access to administrative staff on the weekends</li> <li>• Transfer of care including the transfer of information and clinical handover</li> </ul>
Unscheduled care	<ul style="list-style-type: none"> <li>• Variation in staffing and communications</li> <li>• Access to resources</li> <li>• Systems/pathways</li> <li>• Staffing models of care – increased seniority</li> <li>• Allied health availability</li> <li>• Quality and flow (bottlenecks) - structure in the system of 'support services'</li> </ul>	<ul style="list-style-type: none"> <li>• Networking and telelinkage</li> <li>• Clinical leadership</li> <li>• Integration of education, training and service delivery so that training opportunities are maximised during weekends and after hours</li> <li>• Safety nurses or critical care coordination</li> </ul>

	Metropolitan	Regional
Elective care	<ul style="list-style-type: none"> <li>• Outpatient departments that are patient focused and flexible to meet the needs of specific patient cohorts (e.g. youth, parent etc.). Evaluate reasons for failure to attend appointments, costs, staff satisfaction and patient satisfaction</li> <li>• Look at high demand services, for example: colonoscopy, ophthalmoscopy, ear nose and throat, orthopaedics</li> <li>• Review the waiting list – conduct case reviews with appropriate allied health services. For example, physiotherapy review prior to orthopaedic appointments</li> </ul>	<ul style="list-style-type: none"> <li>• Culture – leadership, clinicians, involve students (university to remove 9am – 5pm training)</li> <li>• Full access to infrastructure</li> <li>• Change to evening appointments / Saturday</li> <li>• Consumer assessment / feedback</li> <li>• Transport - telehealth as one solution</li> <li>• Staff training</li> </ul>
Aged care	<b>Residential Aged Care Facility + in home care</b> <ul style="list-style-type: none"> <li>• Ability to manage in-house (decrease admissions/presentations) by accessing services such as telehealth, Hospital in the Nursing Home, and up-skilling staff and having the right skill mix, and GP involvement in inpatient care</li> <li>• Facilitate 24/7 discharge (afterhours)</li> <li>• Increased understanding of carer ability to manage afterwards (may be carer preference)</li> <li>• Advanced healthcare planning</li> <li>• 24 hour access to GPs and patient information</li> <li>• Access to allied health care</li> </ul>	

## Changes that would make a difference that we can measure

Local solutions to local issues are already being implemented across Queensland. However, many service gaps exist and there is little evidence that services and models of care are being translated across sites

Having considered areas that might benefit from seven-day healthcare delivery models, meeting participants were asked identify priority areas that would make a difference to patient outcomes. These included:

- Enabling discharge summary completion in an appropriate timeframe with GP access to 'The Viewer'
- Improving access to senior clinicians via increased on-site presence, through the Statewide Clinical Networks or by utilising technology such as telehealth. This includes ensuring GP and other community access to such advice.
- Improving integration with primary care/community care - with access to community nursing, allied health, Hospital in the Home, and reduction in the number of residential care facilities patients admitted to emergency
- Improving patient transport – the ability to transport patients back to residential care facilities, rural facilities and the ability to transport on weekends and after hours
- Promoting advanced care planning
- Establishing links between facilities with low to moderate service level capability to those with moderate to high complex care services.
- Identifying and addressing gaps in access to radiology and pathology
- Measuring performance
- Ensuring demand is matched to capacity
- Reduce time to Aged Care Assessment Team assessments
- Improving the recognition and response to deteriorating patients
- Promoting the use of multidisciplinary management plans and services delivery models/processes, for example, clinical pathways, criteria led discharge
- Improving access to administrative support over the weekends.



Senate members and guests prioritise the changes that can make a difference

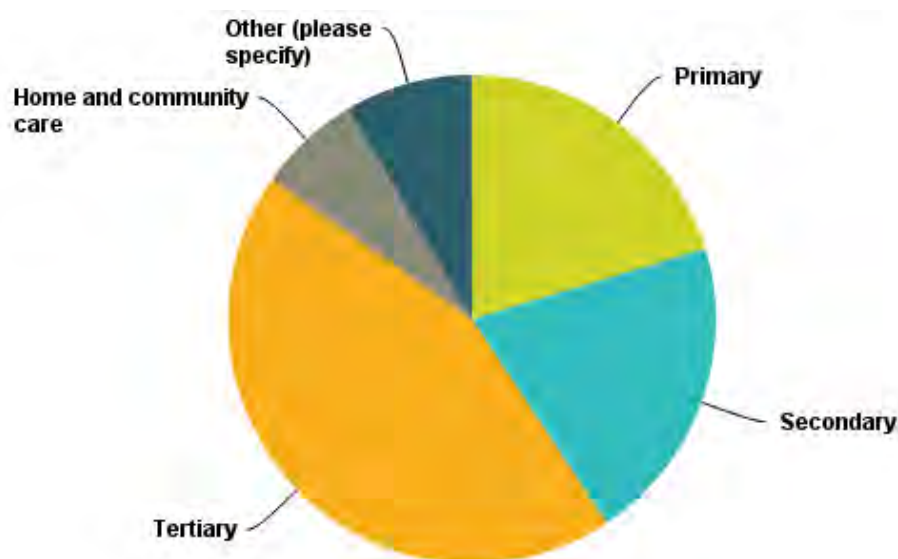
***“Patients always wait on weekend for results (only available on Monday) before they can be discharged. Clinical staff spend time every weekend solving administrative problems without admin support.”***

The views of the QCS membership were ranked and subsequently themed according to participant advice. This feedback formed the basis of QCS recommendations on seven-day healthcare delivery.

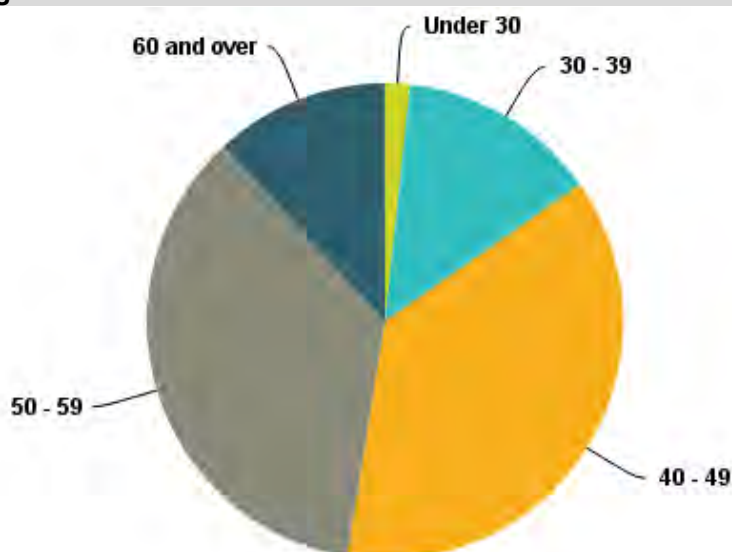
## Appendix 1: Pre QCS workshop survey and summary of findings

Meeting participants were invited to take part in a pre-meeting survey about seven-day healthcare. Below are some of the results.

**In which level of healthcare do you spend the majority of your time working?**

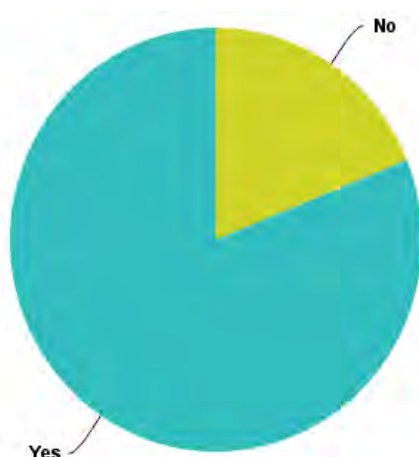


**My current age is**





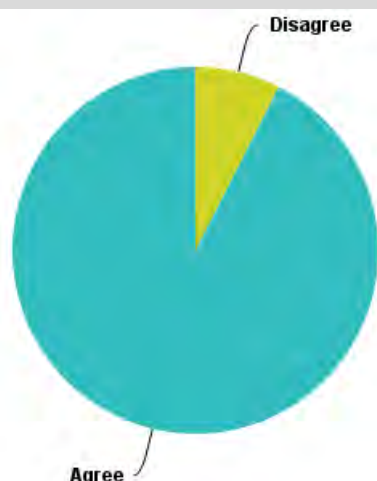
**Evidence suggests that patients admitted on the weekend have worse clinical outcomes than those admitted during the normal working week. Does your experience accord with this?**



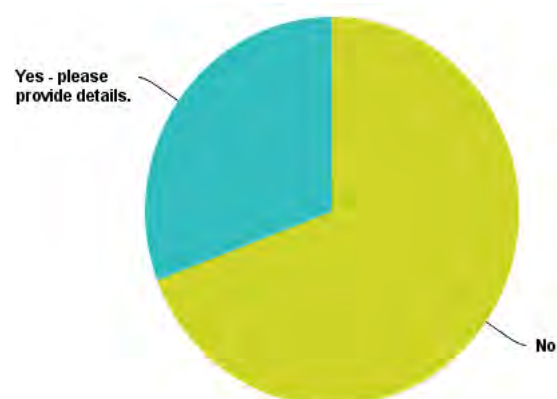
**Evidence suggests that occupancy by patients suitable for care in the community contribute to the lack of acute hospital bed capacity. Does your experience accord with this?**



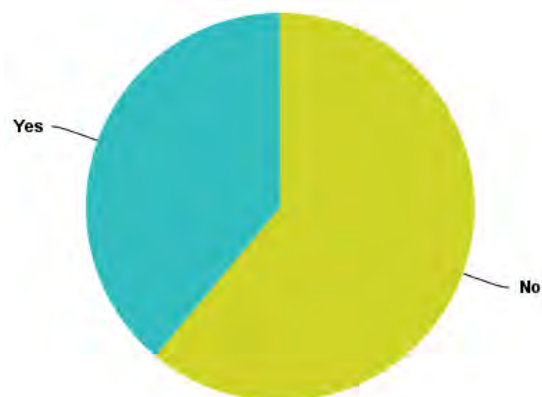
**It may be a more effective use of healthcare budget to provide seven-day healthcare service using existing infrastructure rather than investing in expanded or new facilities which function for only five days of the week. What is your view about this?**



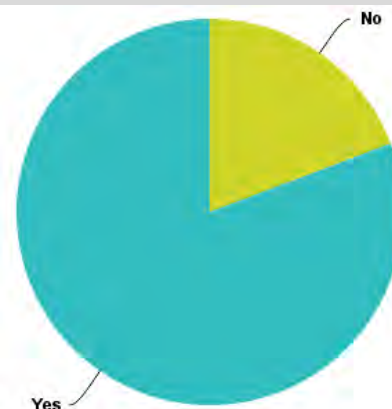
**Are you aware of any methodology to assess the safety of after-hours or weekend service delivery that would inform the need for service extension?**



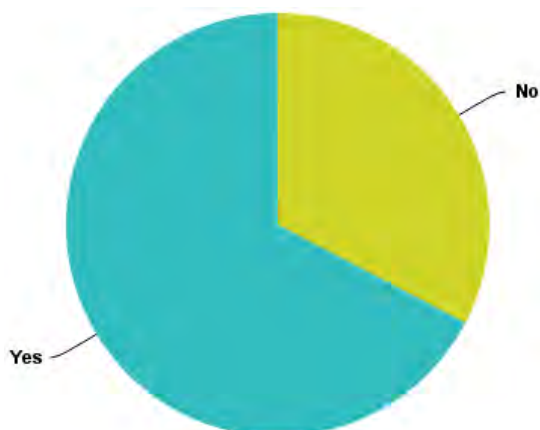
**Do you currently work within a seven-day healthcare model?**



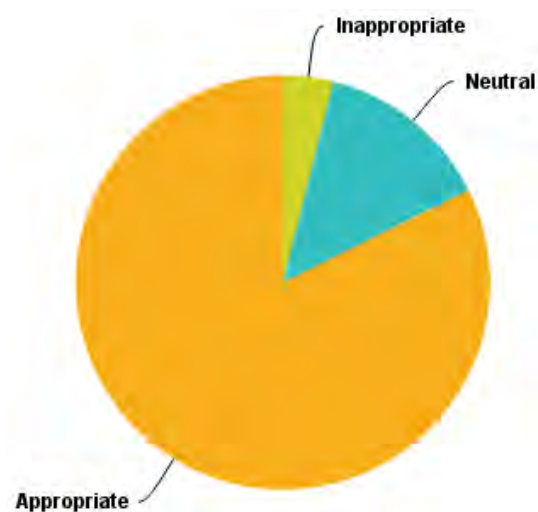
**Would you personally be willing to work within a seven-day healthcare model?**



**Do you think your peers generally would be willing to work within a seven-day healthcare model?**



**On balance, what is your view about moving towards a seven-day healthcare model?**



## Appendix 2: The economic environment for change – Grattan Institute perspective

Stephen Duckett is the Director of the Grattan Institute's Health Program. He spoke to meeting participants on the current economic environment in which healthcare operates. Key points included:

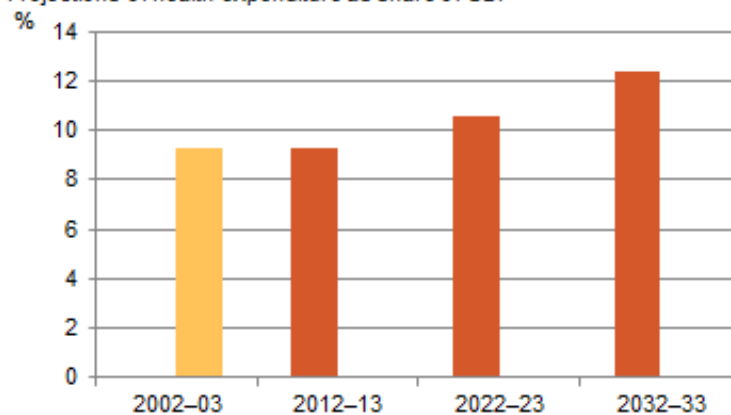
- Health is the single fastest growing area of government expenditure. In fact, health is taking up more than half of the growth over Gross Domestic Product.

Health share of GDP will increase

Unfortunately, it's really slow

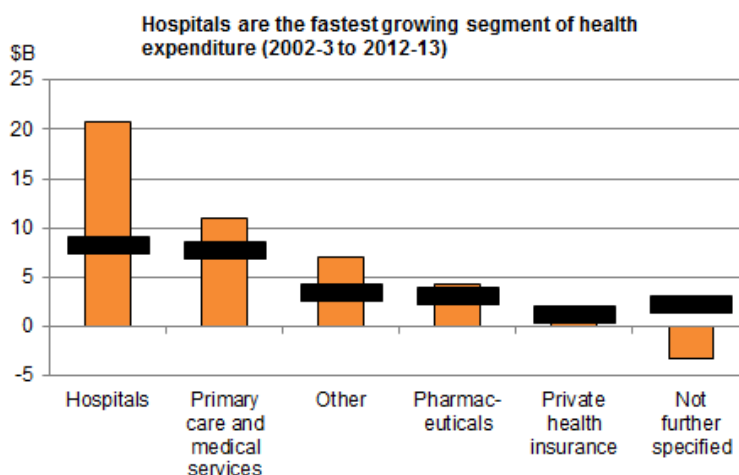
Faster than last decade though

Projections of health expenditure as share of GDP



Source: Goss, J. (2008) Projection of Australian health care expenditure by disease, 2003 to 2033, AIHW

- Commonwealth Government spending is projected to decline, principally driven by cost shifting to the states rather than addressing underlying problems.
- Hospitals are the fastest growing segment of health expenditure, taking up a large share of state government tax revenues.



- What has caused the increase in hospital spending over the years? It relates in part to population growth, an ageing population, health inflation going up faster than Consumer Price Index (CPI) and then there is everything else, for example, technological changes allowing us to do things differently. The 'everything else' category is by far the largest, dwarfing the other explanations.
- There has been an improvement in healthcare associated with the increased spending. People are alive today thanks to changes/ improvements in health care practices (death rate for conditions amenable to health interventions is going down).
- You need to consider cost increases and benefit increases at the same time.
- In terms of sustainability though it doesn't mean you have to fix the problem tomorrow and institute panic solutions.
- Ageing is an inevitability and increasing health expenditure is an inevitability – how are you going to deal with it? You have to think carefully about how to make the system more efficient.
- In 2010–11, there was a 50 per cent variation between the most expensive and least expensive hospitals in Queensland. There is capacity to improve efficiency in some hospital services.
- On average, hospital-acquired diagnoses added about 17 per cent to the total spending on hospital services. Can we reduce costs by addressing adverse events?
- The question we have to ask ourselves is do we have to think totally differently about how we deliver healthcare, or are marginal changes going to cut it? Do we have to rethink how hospitals work, including the potential of seven-day operation?

#### **What does this mean for seven-day working?**

- The current economic environment is very tight - we live in a time of severe budget pressure for state budgets and this is made worse by the Federal budget.
- All spending will be scrutinised.
- Economics is about costs and benefits. So if we increase costs, we need to have quality outcomes for patients.

## Appendix 3: Making the changes to unscheduled care – Case analysis Gold Coast Hospital and Health Service

Professor Martin Connor is the Executive Director of the Centre for Health Innovation at Griffith University. He presented the findings of an analysis of 2014 data relating to the 'unscheduled care' process at the Gold Coast University Hospital (GCUH).

This work has revealed major variations in system behaviours, some of which can be strongly associated with days of the week and/or time of the day.

He went on to argue that if we believe that quality is related to reliability, and reliability requires clarity about the model of standard care, some of this variation may be threatening our ability to deliver sustainable, high quality care.

Key points included:

### **National Emergency Access Targets (NEAT)**

- On some days of the month the GCUH is achieving 30 per cent of NEAT rates (a time based target to address patient safety concerns) of admits and on other days up to 90 per cent.
- It's this swing that could cause a sense of chaos and 'not another week like this' feeling among hospital staff.
- This level of system variation is a difficult environment to work in and deliver high quality care in a reliable way.
- A solution to this is to decide what it is we value and want to stabilise our capacity for and render reliable for Monday to Friday as well as the weekend.
- Some of the things that are not being done are having a knock on affect for the rest of the week and causing higher levels of variation.

### **Discharge rates**

- Hospital data from 2014 found that average weekday discharge rates were not maintained on Saturdays, and fell away further on Sundays.
- Discharge rates before 11am across the seven days made up only a small per cent of these daily discharges.
- Patient discharges before 11am are one of the indicators of whether a hospital can maintain flow.
- This raises the question of whether it is genuine pathology that is driving this discharge scenario or is it the way teams are organised?



### **The Medical Assessment Unit**

- Most patients admitted under medical specialties through the emergency department are admitted through the Medical Assessment Unit (MAU).
- About 50 per cent of patients go home from MAU and the others move on to a ward.
- Discharges from the unit before 11am are also quite low, and this is directly related to the low number of discharges from the wards.
- The hypothesis is that the variation on discharge rates from the wards is quite high, which is driving the backlog in the emergency department.
- Oftentimes the hospital achieves 70-80 per cent of NEAT but its 'bad days' are frequent - and of course the consequences of bad days can last for a number of days.

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