

Teaching hospital planning: a case study and the need for reform

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Across the world, the best health systems have academic health science centres at their heart.¹ Australia's academic teaching hospitals play a vital role in advancing health care by combining research, service delivery and education.² Australian governments can ensure this by investing in new academic hospital infrastructure to best meet the needs of patients and the public.

The McKinsey report on tertiary paediatric services for Ireland noted that providing a critical mass of subspecialist care at a single site co-located with an adult teaching hospital is the most important factor in delivering the best outcomes for patients, and this should support a network of primary and secondary services.³ In the United Kingdom, the Bristol inquiry into paediatric cardiac services recommended that where concentration of services improved quality and safety, this "should prevail over considerations of ease of access".⁴ Volume–outcome correlation is not necessarily consistent,⁵ and the magnitude of the relationship varies for individual procedures and conditions.⁶ In 2008, the Garling inquiry recommended consideration of a single merged quaternary and tertiary children's hospital in New South Wales.⁷ NSW Health subsequently proposed retaining Sydney's two major paediatric teaching hospitals within a merged organisational structure.⁸

Aiming to improve health care performance and outcomes, the federal government has committed to system-wide reform, including increased transparency and accountability.⁹ Clinicians have a duty to engage in creating "the right organisational environment", despite this being "one of the most difficult challenges they face in the modern era".¹⁰ A culture of secrecy, professional protectionism, defensiveness, and deference to authority is central to major failures. Preventing future failures depends on cultural as much as structural change in health care systems and organisations.¹¹

Case study

On 29 March 2006, the Mellis report on paediatric cardiac services in Queensland recommended that the then three providers of Brisbane's fragmented tertiary paediatric services — Royal Children's Hospital (RCH) on the University of Queensland's Herston campus, Mater Children's Hospital (MCH) and the Prince Charles Hospital's paediatric cardiac surgery service — be merged to form a single new hospital.¹² It proposed that the new facility be situated next to a major adult teaching hospital providing all medical and surgical specialties, and close to a major obstetric unit. In practice, only the RCH and MCH sites met these co-location criteria. The report called for the ideal site to be determined by a local committee of key Queensland stakeholders, engaging "as many stakeholders as possible to ensure their buy-in" and with "a fully credible, transparent plan".

On 30 March 2006, following the tabling of the Mellis report, the Queensland Premier informed Parliament: "We will never close the Mater Children's Hospital. It would be over my dead body. We will never do it. Let us get that on the record right now."¹³ A one-hour debate followed, in which the government used its numbers to carry a motion to this effect.¹³ There was no parliamentary

ABSTRACT

- Academic teaching hospitals and their networks can best serve patients and other stakeholders by achieving critical mass and scope of clinical services, teaching and research.
- Successful hospital reconfigurations are associated with a convincing case and majority clinician buy-in.
- The inscrutable political decision to relocate services away from a major teaching hospital campus and into a merged Queensland Children's Hospital was determined without broad stakeholder consultation or a transparent and accountable business case.
- This compromised process poses a significant and enduring risk to patient care and Queensland's paediatric, perinatal, adolescent and obstetric academic teaching hospital services.
- As the proposed major stakeholder in Australia's public hospitals and medical workforce training, the federal government should review this decision using an effective methodology incorporating relevant criteria.
- National guidelines are needed to ensure best practice in the future planning and auditing of major health care projects.
- The medical profession is responsible for ensuring that health care policy complies with reliable evidence and good practice.

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review of the decision, due to the absence of an upper house in the Queensland Parliament.¹⁴

In line with the Mellis report, a Queensland Health paediatric cardiac services taskforce was formed to consider a "service delivery model that would ensure that the children of Queensland receive the optimal standard of paediatric cardiac care" and "how a preferred model might be implemented and its implications for tertiary paediatric services as a whole".¹⁵ The criteria used by the taskforce in evaluating potential sites for a single tertiary facility did not include teaching and research considerations, reflecting the concern that "the importance of research and its supporting frameworks have dropped below the bureaucratic radar".¹⁶

The taskforce report of 6 August 2006 recommended a single tertiary hospital co-located with established adult and maternity services.¹⁵ The two sites considered suitable were the Herston campus (RCH and the Royal Brisbane and Women's Hospital) and the Mater site (MCH and Mater Adult, Mothers' and Private hospitals). The report noted that the RCH was already an established centre of excellence, with "proven capacity to attract and train specialist staff based on its medical school (University of Queensland), research capacity [Queensland Institute of Medical Research], clinical rotations and nature of the services it provides". It also observed that the Mater attracted clinical expertise because it offered private hospital facilities to specialists on the same site as their public service commitment.

The taskforce report included brief statements on construction feasibility and costs, but these were neither attributed nor referenced, and called for “further detailed analysis of sites and budget implications”. The report recognised that “further service planning and the development of a robust business case is essential to determine the actual capital and recurrent costs associated with the building of a new children’s hospital in Queensland”, and that the planning should involve “extensive consultation and collaboration with other stakeholders, parents and patients”. It did not acknowledge the government’s decision of 30 March 2006.

Three weeks after the release of the report, and without apparent compliance with the Mellis and taskforce recommendations, the Premier announced that a \$760 million hospital, the Queensland Children’s Hospital (QCH), “the largest and most advanced children’s hospital in Australia”, would open on the Mater Hospital campus by 2011, and be managed in conjunction with Mater Health Services.¹⁷ The announcement claimed the decision was based on “exhaustive investigation and review by doctors”, and cited the role of co-located private facilities in helping to attract clinical specialists. The need to create a research capability was flagged as part of the development.

The Queensland Branch of the Australian Medical Association (AMA Queensland) responded with a media release, stating that the QCH site selection “should be based on good health policy, with clinician input” and ultimately represent “the best possible option for Queensland’s sickest children”.¹⁸ The Paediatric Society of Queensland surveyed its members shortly after the announcement, receiving 87 responses. Of these, 16% indicated they had been consulted before the announcement and 86% called for more consultation. Of the 97% who supported a single tertiary hospital, 60% wanted this at the existing RCH site, 17% at the Mater, and 23% were undecided (Stephen Withers, Paediatrician and Clinical Geneticist, Gold Coast Paediatrics, personal communication).

In July 2008, an external review commissioned by the QCH project team highlighted concerns that the benefits of creating the QCH had not been clearly defined or benchmarked, and that there had been questionable decision making with no clear governance structure.¹⁹ The implicit risks to patients and the future of tertiary paediatric services in Queensland led AMA Queensland to request a joint forum with Queensland Health, which occurred on 6 September 2008.²⁰ The 137 predominantly medical attendees ranked the alternative sites. The Herston site was superior for 10 of the 14 “service quality components”. The Mater site rated higher for three out of the five location components, such as cost and construction, although the non-availability of expert data for the Herston site limited some of these evaluations.

On 14 September 2008, the government confirmed its ongoing commitment to the Mater site, expressing the need to “maintain momentum”, and claiming construction and geographic site advantages as well as additional costs and delays if the site were to be changed.²¹ The Premier referred to “very fruitful discussions” with the Prime Minister to obtain federal government funding for a research facility at the Mater site. This did not materialise in the 2009 federal budget, although \$55 million was allocated to the Queensland Institute for Medical Research on the Herston campus.²² Subsequently, the 2009 Queensland budget allocated \$80 million for a research institute and \$1.2 billion for the QCH.²³

AMA Queensland Branch Council responded to the forum outcome and subsequent government announcement with the following policy statement:

That the AMA Queensland Branch Council acknowledges the strength of a major tertiary/quaternary paediatric hospital in Brisbane providing the children of Queensland with comprehensive surgical and medical services with a well resourced research and teaching focus, operating within a well coordinated state-wide paediatric, maternity and neonatal plan. The site for this facility must be chosen using a process that is evidence-based, open and transparent. It would be ideal to have it as part of a women’s and children’s facility.²⁴

In June 2009, the Queensland Auditor-General reported fundamental weaknesses in current practices.²⁵ These included “inconsistent use of frameworks and guidance material”, “no clear linkage between service plans” and the failure of most plans to identify the funding allocation process and resourcing implications. The report did not specifically address the QCH project, despite a prior request from AMA Queensland.²⁶

Discussion

The 2005 Davies inquiry into incidents in Queensland’s public hospitals identified a culture of concealment that “started at the top with successive governments misusing the Freedom of Information Act 1992 to enable potentially embarrassing information to be concealed from the public”.²⁷ In response, the Editor of the *MJA* called for changes to Queensland’s health structures to make them open, transparent and, “most importantly, connected to local communities and to clinicians empowered to make decisions about health care delivery”.²⁸

In 2005, an independent review of Queensland’s hospital systems (the Forster report) called for significant reform and improvement in many areas, including the planning of Queensland Health’s capital works.²⁹ It noted funding pressures caused by poor project budget definition, a lack of transparency surrounding decision making for the allocation of capital funds, and failure to receive best value for money. Recommendation 11.4 stated:

Queensland Health [should] base all future decisions regarding the location of health facilities on a transparent, patient focused process that ensures wide community and stakeholder involvement together with relevant advice from technical experts. All decisions should be supported by full documentation, to enable independent review and ensure accountability and probity of decisions.

It would be appropriate that the Queensland Auditor-General have regard to asset planning and infrastructure decisions in undertaking the annual audit of Queensland Health.²⁹

The Forster, Mellis and taskforce reports all recommended facilitated workshops as an effective way of helping stakeholders ensure transparency, document rationale, and develop a shared understanding through the evaluation process.

In 2008, a Commerce Queensland submission on Australia’s future infrastructure requirements stated that “there needs to be an open and transparent process for Government infrastructure investment”.³⁰ A submission by the Australian Council of Trade Unions also called for Australia to secure the quality and quantity of physical and social infrastructure it sorely needs in ways that are transparent, accountable and of real long-term value to citizens and government.³¹

The literature on hospital mergers shows that as many as 75% are unsuccessful when issues surrounding corporate culture are ignored, while successful mergers are characterised by critical

elements that include clear goals, a convincing case, and the way the process itself is managed and communicated.³² A major review of UK National Health Service (NHS) mergers noted that important drivers that are not stated publicly have implications for the process and impact of mergers.³³ Drucker has argued the necessity for alternatives where there is the high possibility of a wrong decision.³⁴

The World Health Organization has noted that when health ministries fail to protect the public interest, stewardship is subverted, trusteeship is abandoned, and institutional corruption sets in.³⁵ The WHO further identifies the need for information and reliable evidence “to build a constituency of public support for health policy, and thus a defence against incompetent or corrupt practice by interest groups in the health system”.

The UK NHS Independent Reconfiguration Panel (IRP) was established in 2003 to advise the Secretary of State for Health on contested proposals for health service change. The IRP operates in a wholly independent and transparent manner and to date all of its recommendations in every report have been accepted. Its second report³⁶ identifies that engagement with local stakeholders from the outset, with an obligation to take appropriate account of the views that emerge, is a highly desirable and effective means of smoothing the future path for reconfiguring services. Public involvement and consultation is also a legal requirement under section 242 of the National Health Service Act 2006 (UK). The IRP cautions that pressure to make a quick decision should be resisted.

Six of the 16 full IRP reviews have been about the reconfiguration of maternity, obstetric and/or paediatric services. The IRP has noted the inadequate assessment of the wider implications of moving paediatric services from a hospital. It has twice rejected proposals in which emphasis on clinical staffing requirements has been given precedence over patient access and choice, and has instead recommended exploring innovative solutions to staffing needs and training. The IRP experience is that “reconfiguring services, and in particular relocating them, is *not always* the right answer”.

Australia would seemingly benefit from a system that allows independent review of contentious public health care reconfigurations, particularly where there is an apparent absence of due diligence and the risk to stakeholders may be significant and enduring. In the QCH case in particular, a hasty and inscrutable political process that ignored and effectively negated key expert recommendations has created a critical need for review. The absence of proper evaluation of alternatives is a denial of the opportunity to obtain the best outcomes for all those who might benefit from this significant investment (Box).

As the proposed major funder of public hospitals, the federal government should immediately commission a review of the QCH decision, engaging all key stakeholders in genuine and transparent consultation. The review should be guided by those factors that will deliver optimal ongoing patient outcomes based on excellence in clinical service, teaching and research,³⁷ and critically examine financial and all other drivers (stated and unstated) in the initial decision. For, as Socrates noted: “Wealth does not bring about excellence, but excellence makes wealth and everything else good for people, both individually and collectively.”³⁸ This case study is a reminder that the medical profession must ensure that health policy complies with reliable evidence and good practice.

Problems

- Necessary stakeholder consultation pre-empted by an inscrutable political intervention.
- Lack of stakeholder “buy-in” associated with project failure.
- Decision made before business case, with high risk of compromising patient services.
- Missed opportunity to use available critical mass and scope of patient services, teaching and research.
- Absence of transparency and accountability not in the public interest.

Solutions

- Broad stakeholder engagement.
- Agreement on valid decision-making criteria.
- Access to robust technical expertise on site issues, such as access and construction feasibility.
- Majority decision that best serves patients and the future of academic paediatric teaching hospital services, underpinned by a transparent and accountable business case.
- Recommendations for future planning and audit of similar projects. ◆

Competing interests

None identified.

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References

- 1 Smith S. The value of Academic Health Science Centres for UK medicine. *Lancet* 2009; 373: 1056-1058.
- 2 Penington DG. Rediscovering university teaching hospitals for Australia. *Med J Aust* 2008; 189: 332-335.
- 3 McKinsey and Company. Children's health first. International best practice in tertiary paediatric services. Strategic organisation of tertiary paediatric services for Ireland. Dublin: Health Service Executive, 2006. <http://www.lenus.ie/hse/bitstream/10147/42911/1/2634.pdf> (accessed Jun 2010).
- 4 Kennedy I (chair). Learning from Bristol: the report of the public inquiry into children's heart surgery at the Bristol Royal Infirmary 1984-1995. Norwich, UK: The Stationery Office, 2001. http://www.bristol-inquiry.org.uk/final_report/the_report.pdf (accessed Jun 2010).
- 5 Gauvreau K. Reevaluation of the volume-outcome relationship for pediatric cardiac surgery. *Circulation* 2007; 115: 2599-2601.
- 6 Halm EA, Lee C, Chassin MR. Is volume related to outcome in health care? A systematic review and methodologic critique of the literature. *Ann Intern Med* 2002; 137: 511-520.
- 7 Garling P. Final report of the Special Commission of Inquiry. Acute care services in NSW public hospitals — Volume 1. Sydney: NSW Government, 27 Nov 2008. [http://lawlink.nsw.gov.au/Lawlink/Corporate/II_corporate.nsf/vwFiles/E_Volume1.pdf/\\$file/E_Volume1.pdf](http://lawlink.nsw.gov.au/Lawlink/Corporate/II_corporate.nsf/vwFiles/E_Volume1.pdf/$file/E_Volume1.pdf) (accessed Jun 2010).
- 8 NSW Health. Caring together: NSW kids — a discussion paper, January 2010. Sydney: NSW Department of Health, 2010. http://healthactionplan.nsw.gov.au/files/CT_NSWKids_DP.pdf (accessed Jun 2010).
- 9 Australian Government Department of Health and Ageing. A National Health and Hospitals Network for Australia's future. Canberra: Common-

- wealth of Australia, 2010. [http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nhnh-report-toc/\\$FILE/NHHN%20-%20Full%20report.pdf](http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nhnh-report-toc/$FILE/NHHN%20-%20Full%20report.pdf) (accessed Jun 2010).
- 10 Royal College of Physicians. Doctors in society: medical professionalism in a changing world. Report of a Working Party of the Royal College of Physicians of London. London: RCP, 2005.
 - 11 Walshe K, Shortell SM. When things go wrong: how health care organizations deal with major failures. *Health Aff (Millwood)* 2004; 23: 103-111.
 - 12 Mellis C (chair). Review of paediatric cardiac services in Queensland (the Mellis Review). Brisbane: Queensland Health, 2006. http://www.health.qld.gov.au/childrenshospital/docs/cardiac_review.pdf (accessed Jun 2010).
 - 13 Queensland Parliament, Legislative Assembly. Record of proceedings (weekly Hansard). Thursday, 30 March 2006: 1039; 1072-1084. http://www.parliament.qld.gov.au/view/legislativeAssembly/hansard/documents/2006.pdf/2006_03_30_WEEKLY.pdf (accessed Jun 2010).
 - 14 Griffith G, Srinivasan S. State upper houses in Australia. NSW Parliamentary Library Research Service Background Paper No. 1/2001. [http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/0/B2066721A7D4053CCA256ECF000B0DC8/\\$File/bg01-01.pdf](http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/0/B2066721A7D4053CCA256ECF000B0DC8/$File/bg01-01.pdf) (accessed Jun 2010).
 - 15 Report of the Taskforce on Paediatric Cardiac Services 6 August 2006. Brisbane: Queensland Health, 2006. http://www.health.qld.gov.au/news/paed_taskforce/paed_card_report.pdf (accessed Jun 2010).
 - 16 Van Der Weyden MB. The viability of Australia's teaching hospitals. *Med J Aust* 2008; 189: 330-331.
 - 17 Queensland Government. New children's hospital for Queensland [media release]. 27 August, 2006. http://cache.zoominfo.com/Cached-Page/?archive_id=0&page_id=1782040949&page_url=%2f%2fwww.teambeattie.com%2f01_cms%2fdetails.asp%3fd%3d379&page_last_updated=5%2f12%2f2007+2%3a55%3a33+PM&firstName=Alan&lastName=Isles (accessed Apr 2010).
 - 18 Australian Medical Association Queensland. New hospital is about politics not children [media release]. 27 August 2006. <http://www.amaq.com.au/index.php?action=view&view=8596> (accessed Jun 2010).
 - 19 Thompson J. Getting it right for the kids. *Doctor Q* 2008; Oct: 12-15. http://www.amaq.com.au/icms_docs/37628_Doctor_Q_October_Getting_it_right_for_the_kids.pdf (accessed Jun 2010).
 - 20 Australian Medical Association Queensland and Queensland Health. Queensland Children's Hospital consultation forum report. 6 September 2008. http://www.amaq.com.au/icms_docs/36683_Joint_Queensland_HealthAMA_Queensland_QCH_Forum_Final_Report.pdf (accessed Jun 2010).
 - 21 Queensland Government. South Brisbane site for children's hospital. Ministerial media statements. 14 September 2008. <http://statements.cabinet.qld.gov.au/MMS/StatementDisplaySingle.aspx?id=60607> (accessed Jun 2010).
 - 22 Association of Australian Medical Research Institutes and Carney Associates. Federal budget 2009-10 — summary. 13 May 2009. http://www.aamri.org/Assets/Files/AAMRI_Carney_Assoc_Budget_summary_v3_13May09.pdf (accessed Jun 2010).
 - 23 Beaton A, Russell L. An analysis of the 2009-10 state and territory health budgets. Menzies Centre for Health Policy, University of Sydney and Australian National University, 2009. http://www.menzieshealthpolicy.edu.au/other_tops/pdfs_pubs/healthbudgetsaug09.pdf (accessed Jun 2010).
 - 24 Australian Medical Association Queensland. Frequently asked questions on paediatric services [internet]. <http://www.amaq.com.au/index.php?action=view&view=45529&pid=> (accessed Jun 2010).
 - 25 Auditor-General of Queensland. Report to Parliament No. 2 for 2009. Health service planning for the future. Brisbane: Queensland Audit Office, 2009. http://www.qao.qld.gov.au/downloadables/publications/auditor_general_reports/2009_Report_No.2.pdf (accessed Jun 2010).
 - 26 Schmitt J. Letter to the editor regarding article in the Courier Mail: Bligh gets the treatment. Australian Medical Association Queensland, 2009. <http://www.amaq.com.au/index.php?action=view&view=44120&pid=44120> (accessed Apr 2010).
 - 27 Queensland Public Hospitals Commission of Inquiry. Davies report. November 2005. http://www.qphci.qld.gov.au/Final_Report.htm (access temporarily disabled Apr 2010 due to current legal proceedings).
 - 28 Van Der Weyden MB. The Bundaberg Hospital scandal: the need for reform in Queensland and beyond. *Med J Aust* 2005; 183: 284-285.
 - 29 Forster P. Queensland Health Systems Review. Final report. September 2005. The Consultancy Bureau, 2005. http://www.health.qld.gov.au/health_sys_review/final/qhsr_final_report.pdf (accessed Jun 2010).
 - 30 Bidwell P, Behrens N. Submission to Infrastructure Australia on Australia's future infrastructure requirements. Brisbane: Commerce Queensland, 2008. http://www.cciq.com.au/docs/0809_submission_Infrastructure_Australia.pdf (accessed Jun 2010).
 - 31 Australian Council of Trade Unions. Infrastructure, public-private partnerships and the need for reform. Submission to Infrastructure Australia. Melbourne: ACTU, 2008. http://www.infrastructureaustralia.gov.au/public_submissions/published/files/461_austriancounciloftradeunions_SUB.pdf (accessed Apr 2010).
 - 32 Garside P. Evidence based mergers? *BMJ* 1999; 318: 345-346.
 - 33 Fulop N, Protosaltis G, Hutchings A. Process and impact of mergers of NHS trusts: multicentre case study and management cost analysis. *BMJ* 2002; 325: 246.
 - 34 Drucker PF. *The effective executive*. Oxford: Butterworth-Heinemann, 2007.
 - 35 World Health Organization. *The world health report 2000. Health systems: improving performance*. Geneva: WHO, 2000.
 - 36 Independent Reconfiguration Panel (UK). *Learning from reviews. An overview*. 2nd ed. London: Independent Reconfiguration Panel, 2009. <http://www.irpanel.org.uk/lib/doc/LearningfromReviews2Report.pdf> (accessed Jun 2010).
 - 37 Penington DG. Does the National Health and Hospitals Reform Commission have a real answer for public hospitals? *Med J Aust* 2009; 191: 446-447.
 - 38 Rowe C. *Plato and the art of philosophical writing*. Cambridge: Cambridge University Press, 2007.

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