

Moving a hospital – a once in a lifetime experience

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Abstract

It is a hugely complex task to move a 525-bed acute tertiary health facility to a new building whilst continuing to provide services to the public – a task that was undertaken at Brisbane's Princess Alexandra Hospital in March/April 2001. There were complex issues to manage, ranging from clinical unit interdependence across a split campus to the development of detailed plans for transferring telephone extensions/personal computers in a "live environment". The success of the Princess Alexandra exercise is shown by there having been no adverse effects on patients, the lack of negative media attention and the occurrence of only two staff injuries during the move.

Meticulous planning and good communication with staff and stakeholders (other hospitals, general practitioners) supported this success. The decision to reduce clinical services where possible during the shift was helpful. Understanding the complexity and richness of the information technology, the work environment and the human elements on campus was also critical to success.

One major error was the initial decision to schedule the move within weeks of receiving practical completion of the new building. It became all too clear in November 2000 that further time was required to commission the building. The Transition was therefore rescheduled from January to March 2001. This decision was critical to the success of the move.

Transition planning

The new acute block at Princess Alexandra Hospital is a 525-bed acute tertiary facility built within the grounds of the existing Hospital. The Hospital's Change Management Unit managed the shift of equipment, staff and patients and the commissioning of new equipment.

The intention was to undertake a whole-of-hospital move within the shortest possible time, so as to reduce the difficulty of working on a split campus, minimise the disruption to health service delivery and minimise costs associated with a prolonged move.

Extensive consultation was undertaken with the various departments to determine the program of moves. Some departments such as Radiology had extensive equipment transfers and thus needed a long transition time. Most departments, however, could be set up in advance and thus their transition time was minimal.

Clinical moves, along with the infrastructure that would be required to sustain them, were given the highest priority. The key programming factors were the interdependencies between clinical units and the support the units required while in transition. Planning also had to take into account the time required by all to become familiar with the new building. The objective was to ensure that there was a cohort of staff who understood the building and would be available to help and encourage other staff during the move.

The opportunity to test some of the infrastructure such as air-conditioning, technology and lift access was created by making office and support departments the first to move. This strategy proved highly successful.

It allowed refinement of the logistics that were central to ultimate success and created a sense of excitement and confidence early in the process of the move.

Extensive infrastructure was established concurrently with these office moves, including the installation of \$21 million of equipment and furniture. Testing systems and processes in this way gave a sense of encouragement to all.

The final schedule was developed over a period of 18 months. The many iterations of the program, amounting close to 2,200 separate program events, were demanding but necessary. Lack of clarity about what areas of the new facility would be ready, when they would be ready, and what level of health service could be sustained during transition made early stages of the programming difficult. The Change Management Unit promoted discussions between the builder, project director and divisional and department directors so as to clarify details of the completion of the new building.

The critical aspect of this process was the creation of a shared understanding between people with different skills and backgrounds. The language of a builder is different to that of a clinician and the Change Management Unit staff translated between the two.

The other major challenge in creating a sustainable program was establishing an understanding of the enormity of the task. Staff were consistently unable to look beyond their own move, did not comprehend the infrastructure and support requirements and wanted to operate in a “business as usual” mode. Reliable data on what services could be maintained greatly helped to demonstrate the reality of this transition. This included information on meals, portage, technology and clinical support such as radiology and theatre capacity. Divisional leaders provided data on service activity levels. All this information helped to establish a plan for the management of service levels during the transition.

Transition Co-ordinators were appointed from each Department. Department Heads were not usually chosen as Transition Co-ordinators as it was expected that the demands on the Co-ordinators would multiply as the Transition approached. The Change Management Unit co-ordinated monthly meetings with the Transition Co-ordinators, which served as two-way briefing sessions. It proved difficult to maintain the Transition Co-ordinators’ focus until 3 months pre-transition, when the moves were becoming more imminent.

The new facility was handed over on 23 December 2000. The intention had been to begin Transition in January 2001, to take advantage of the seasonal reduction in activity. However, following a risk analysis in early November, it was clear that the implications of “Practical Completion” needed more exploration so that a common understanding of the state of completion of the building could be reached.

Resulting investigations revealed that the readiness of the building to accept relocated departments was less than what would properly sustain the delivery of health services. This was due to a number of factors, not the least lack of good understanding between the Hospital and the project team as to objectives, acceptable standards and the practicalities of risk management. Information that would have helped the organisation to understand these matters was not previously available, and it was only extracted after probing all parties concerned with the redevelopment. Once it was clear that the building and its services would be severely compromised the decision to postpone the transition made itself.

The impact of this postponement was largely positive. Firstly, staff generally realised they had not felt prepared for the move in January. The postponement gave a heightened awareness of the need for involvement in preparation for the Transition. Secondly, there was a milder than expected letdown experienced by those departments who were well prepared and ready to move.

The delay made it vital that the next target for Transition be met, due to the absolute need to be ready to provide full service in the winter months. This in turn intensified efforts to ensure that the facility was truly fit for occupation.

From January 2001, closer working relationships were established between the builder, the Change Management Unit and hospital departments. Transition planning now included a checklist for each department’s readiness for its move. Building changes required to establish a “fit-for-occupation” facility were prioritised according to the program of moves.

With the altered Transition date, arrangements for service support by surrounding metropolitan hospitals were updated.

Transition communication

Good communication is critical for a successful project. Initially poor communication created a strong risk of failure. This was corrected by ensuring everyone involved had all the information relevant to his or her situation. Thereafter, the Transition of over 100 departments, 2500 staff, 380 patients and thousands of items of equipment occurred as planned and without major incident.

Team communication included both internal and external stakeholders. The Change Management Unit worked with the Public Relations Department to develop a communication plan that included the following.

- Media releases.
- Neighbourhood mail drops.
- Briefing letters to other service providers and health facilities.
- New service directory for health service providers.
- Facility tours during construction – at least 2,000 staff were given orientation tours of the building.
- Newsletters, pamphlets and fact sheets. These were critical in dispelling rumours during the highly volatile period preceding the actual Transition.
- Intranet strategies including a Transition Web page, splash screen and extensive use of email. During the 3-month period leading up to and throughout the Transition, close to 300 individual e-mail messages were sent across the hospital to each of the 1,400 e-mail recipients. Daily move splash screens described which departments were moving each day. The Transition web page provided staff with access to decant schedules, design briefs, new system training and “how to move” guides.
- A portfolio describing the new facility gave background to the decisions regarding scope of clinical services and design elements.
- Departmental, Divisional and Hospital wide briefings.
- Signage for the public in the pending Transition event, including poster boards describing the new facility and dates of move. These signs also informed the public how to get from the old facility into the new.

The above ensured that public and staff were briefed with current, accurate and relevant information as it became available. The variety of ways the information was presented helped to make staff aware of the activities involved in Transition. There were no adverse media reports and no complaints received from the public or other health service providers.

Transition of technology

The Transition of information and communication technology to the new facility was a massive undertaking involving:

- establishment of \$1.8 million worth of network infrastructure
- decommissioning and installation of 1,800 PCs and printers
- decommissioning and installation of 4,500 phones, faxes and modems onto a new PBX system
- acquisition & installation of 84 new PC's, 34 flat screen monitors and 18 new printers.

The Transition also included a move to a full electronically managed radiological system (PACS). This \$8.4 million investment was achieved as a seamless move to a filmless hospital environment. It included the rollout of 143 clinical review stations, based on a ratio of 2 stations for each ward and 1 for each theatre plus a number of stations for tutorial and outpatient areas.

The rollout of PACS was integrally linked to the master Transition program. There were many milestones in this element of the project, commencing in June 1998. Trials of the system in selected areas of the old facility commenced in June 2000. A training program for non-radiology clinicians commenced in February 2001. The decision to adopt a web-based program as the clinician interface has proved immensely successful, with few migration problems. This was achieved whilst maintaining existing services and developing new operations. The success of the IT Transition was achieved by dividing the IT Department into a maintenance group (6 staff) and a transition team (14 staff) lead by the Transition Project Officer and the Manager of Information Services.

The IT Transition Team and Change Management Unit staff collaborated closely to ensure that realistic and appropriate service needs were maintained. The processes used by the IT Transition team included the following.

- Establishment of an IT and communications database, which required extensive auditing and testing as it grew.
- Co-ordination of the acquisition and commissioning of 140 new devices including the entire Picture Archival Communication System (PACS) infrastructure.
- Mapping of IT device locations into a new environment, including establishment of new IP addressing protocols and network patching.
- Pre-move meetings with Transition Co-ordinators to fine-tune the move including confirming the number of critical PCs and phones to remain active.
- Transition packs - including checklists for IT staff to decommission and re-commission IT hardware and tracking of assets.
- Decommissioning was scheduled for 24 hours before each unit move, at which time an IT Set-up team would move in to decommission and reconfigure each PC.
- On the day of move, units had at least 1 live (Transition Loan Unit) PC and printer and 2 active phones in their new areas.
- Recommissioning of all unit hardware took place 24 to 48 hours later.
- Loan Units were removed and rolled onto the next area as each unit was recommissioned.
- The IT Transition team included a post-occupancy "Foul-up, Fix-Up" team whose role was to take over from the set-up team when problems were experienced. Such difficulties included failed PCs or network problems. This ensured that no delays were experienced because of a previous unit's problem.

The IT Transition team contributed enormously to the success of Transition. This required a rigorous approach to the prioritisation of IT problems resulting from Transition and routine call-out requests. There was a 30% increase in the IT Department's activity during the peak Transition period. Most non-urgent problems were resolved within 3 weeks.

Substantial challenges were met in seeking to achieve a seamless transition of the Hospital's technology infrastructure and hardware components. The split campus was managed through tie-lines for the duration of the Transition. Nonetheless, many people trying to ring the Princess Alexandra Hospital during the Transition experienced prolonged wait times.

People issues

The Redevelopment project started in 1994. A great deal of effort was spent on encouraging staff to embrace the opportunities that creation of a new hospital would bring. This unfortunately magnified staff's expectations for the new building beyond what would be achieved within its program and budget constraints. This resulted in a number of Requests for Change (RFCs) that had to be prioritised in terms of safety, functionality and efficiency. The Executive Redevelopment Team had the responsibility of classifying RFCs into those to be carried out pre-occupancy or reviewed for action post-occupancy.

Ultimately, staff were required to accept that they were not going to move into a perfect and complete building. The lesson learned from this experience is that the energy needed to create interest in the redevelopment, and then to build the required momentum, can too easily over-reach and build up false expectations.

Staff did acknowledge that a post-occupancy settling-in period would be necessary, and this contributed enormously to the success of the move. Some months after occupation, most staff members are extremely pleased with their new work environment.

Staff were cautious about what the move would mean to them and were generally tired from 4 years of planning. When the moment of Transition arrived, however, the growth in excitement was acute and palpable. To facilitate this peak event in the life of the Redevelopment project, the following were provided.

- Orientation tours throughout the construction period and the time of building commissioning and testing.
- Training programs in various building systems, equipment, department locations and move methodology.

- Pre-move checklists and discussion sessions with co-ordinating Change Management Unit staff.
- “Driver reviver” packs. These were hampers of food and drinks delivered to each large unit on move day.
- Chocolate packs to all units on move day.
- Supplementary water facilities, required as the canteen’s move was later than most.
- PAC Macs (Calico dolls designed to be drawn on or decorated) and Easy Writers (Write-on wipe off boards on display in the new staff dining area). These were devices available to staff to express their thoughts and feelings about the Transition & the new facility.

Finally, the People Transition to the new hospital would not have been the success without the direct involvement of both the Change Management Unit and Executive staff. The walk-the-talk phrase has never had so much meaning as in this context. The success of constant reassurance, support and a point to address complaints and concerns was clear. The Change Management Unit staff were in the areas with each department from the start of each move, supporting and co-ordinating. At times this required discreetly moving some people away from “hot” points and redirecting energy to alternate activities. The District Manager and other executive staff constantly visited areas and provided a sympathetic shoulder as well as acting as team cheerleaders.

Communication strategies have already been described. It was critical to have a cohesive Executive team who understood the complexities of the Transition and who were able to intervene when problems arose.

Clinical, equipment and logistics issues

The physical move was made easier by the establishment of a covered link between the old and new buildings. This was also the only way of accessing the new building at the time of occupation, as the main entry was incomplete. This required careful preparation of delivery schedules and moves so that operational services such as food, linen and supply deliveries were not compromised.

The move to the new building required 8,000 hours of the removalists’ time. The advantage of moving a small distance was that many items did not require packing – they were simply stacked on trolleys. The Change Management Unit and logistics group spent a considerable time planning and briefing each department. Lifts were quarantined for the exclusive use of the removal team and for patient movement teams.

Staff were required to pack and unpack their own boxes (of which there were 3,000 in circulation at any one time). They were instructed not to move any equipment themselves. Training was provided so that occupational health and safety risks were minimised. At times however, the excitement of the move took over and staff could not resist doing so. The only incidents of the entire Transition were 2 staff injuries caused by attempting equipment moves by themselves.

The intensive communication strategies helped to make more palatable some inconvenience to public and staff from long waits for lifts.

Moves were generally carried out Monday to Friday. One major exception was Medical Records, which ran from a Friday afternoon through to a Sunday night. This move involved the orderly shift of 4,000 linear metres of records, with the need to know where particular batches of records were at any given time. Other exceptions were the Oncology Unit whose service activity levels, including day care, could not be decreased and the Surgical Care Unit, which needed to have a seamless service transition for day of surgery activity.

Because of the service reduction strategy all units were operating with some reduction in capacity. Patients who were too ill to withstand the journey were moved to remaining wards in the old Hospital. On most days, two wards were moved – one in the morning and another in the afternoon. A dedicated Transport Team was established which comprised 4 staff, wheelchairs and bed-movers. The schedule for first patient departure and arrival was set and always met. Contingency and support plans were made for most conceivable clinical events. These plans included:

- special arrest plans including transit route defibrillators and air-vivas
- mobile phones for Transport Teams and Transition Co-ordinators
- clinical checklists
- pre-packed medication kits.

Set-up teams facilitated arrival into the new areas. This set-up included:

- provision of beds, reducing the number of beds required to move during peak Transition times
- pre-stocking of clinical consumables, linen and pharmaceuticals – minimising the volume of materials to be transported across the campus
- pre-cleaning and operational fit-out with bins, toilet paper and paper towels.

The days and weeks after each occupation proved a challenge, as the volume of waste generated had been underestimated. A prolonged campaign to rid the organisation of unwanted, unnecessary and hoarded materials had been undertaken. Despite this, removal of unnecessary equipment, furniture and paper waste was a significant task.

Security planning was extensive, with hospital staff being required to develop key plans, room numbering and fire management plans. This was an extensive task, and two project officers were required for 8 months to achieve it. The progressive occupation of the new building presented additional challenges as it is designed in such a way that it is not possible to compartmentalise and lock-down areas. Risks included loss or damage to installed equipment and distress to visitors or patients becoming lost in 3.5 hectares of floor space.

Supplementary signage assisted in redirecting people through the building. The use of an extensive volunteer service was a great help to patients and visitors. This was planned well in advance of the transition. Recruitment of volunteers commenced 6 months prior to the move, resulting in a volunteer crew of 150.

Logistics planning required a substantial program with 1,500 individual tasks. This was condensed into a departmental move document in calendar format and widely distributed across the organisation. Equipment planning was commenced in 1999 and final procurement schedules were endorsed in 2000.

The master schedule contained extensive detail on equipment items and the processes required for commissioning. The Change Management Unit in partnership with Biomedical Engineering Services and Building & Maintenance Services, the builder and major vendors co-ordinated all installations and transfers. Equipment purchases amounted to 3,500 items of minor value (less than \$10,000) and 150 items with a value over \$10,000. The latter included a new CT scanner, cardiac catheter suite and patient monitoring systems in cardiac, intensive care, emergency, respiratory and operating theatre.

Some late purchases were required for the new facility to operate to capacity. These included additional pneumatic tube canisters, the installation of public address systems in selected departments and fixtures for pendant systems supplied in ICU and operating theatres. Most items were required to be kept in use by the hospital until the immediate transition period. The builder was required to ensure that all services were available at time of transfer.

Transition management issues

Meticulous planning and risk management processes supported the entire exercise. The Change Management Unit fostered good communication and a sense of trust between members. This meant that ideas, concerns and failures could be openly shared, resulting in the group developing a capacity to think and respond creatively and as a team.

The assumption was that no single person could manage all aspects of the Transition. Individual members developed confidence in changing details of the program as required. Critical analysis and discussion of and response to planned and emergent issues became a learned response that carried the process through. The creation of this high performance team and its open and honest communication style became a stabilising force during the period leading up to and throughout the Transition.

Normal lines of organisational authority and reference points were largely discarded as Transition became imminent. This was critical, as the Change Management Unit team were the staff with the most intimate knowledge of plans, issues and dependencies. The network of 133 Transition Co-ordinators and direct communication with Executive members enabled the organisation to feel comfortable with this relationship. This style of team management is the opposite of a hierarchical team organisation.

A Transition Control Centre was set up to manage the Transition. This provided a single point of contact for all move-related issues. During the Transition, an average of 200 calls to the Centre were logged each day and 130

emails received. The administrative staff within the Change Management Unit were an integral part of the Transition process and were briefed on all Transition issues. These staff members were skilled in dealing with stressed staff. The Change Management Unit was the point of authorisation for all activities and mediated between user and support staff.

Critical success factors for transition

Throughout this paper we have exposed a number of strategies that were critical to the success of our Transition. We found that an understanding of the workings of an entire organisation or the capacity to elicit such information is fundamental to managing a changing environment. The central change management team must be able to withstand the buffeting of an organisation responding to change and uncertainty and have a shared core purpose. It must have the capacity to communicate processes and desired outcomes. Sound people management and fit-for-purpose, flexible management styles and structures must be used or created during a transitional period.

The above strategies resulted in an organisation that demonstrated trust, commitment to the purpose and provision of adequate resources for the task.

The result of our transition

The occupation of the new facility was a challenge on many fronts. The building itself was still undergoing modification during the move. However, despite this and the enormity of transferring a whole hospital and its equipment, the Transition was a success. Firstly, the safety of patients and staff was never compromised - services were maintained and surgical services commenced on the day of occupation. There were only 2 staff incidents. Secondly, there was no industrial tension associated with the change of work practice and environment, as demonstrated by the lack of grievance and union conflict. Thirdly, there was no adverse media attention.

Our learning from this experience was that planning and re-planning, communication and the establishment of a driving force is essential to create the energy to move a large organisation with its inherent inertia whilst ensuring safety for all concerned.

It is also critical that all parties have a complete and clear understanding of the process, nature and detail of the works and share absolute commitment to common objectives. Each party must understand these objectives and respond with actions appropriate to their own area of operation.

Acknowledgements

We wish to express our appreciation of the support provided by Dr Sim (Project Manager, PACS); IT Department staff and particularly Ms Hornsby (Manager, IT Services), Ms Harrison (IT Transition Project Leader) and Mr Lanza (IT Transition Project Officer); Ms McDonald (HIMS Transition Project Officer); Ms Close (Manager, Waste Management); Mr Ball (Project Officer, Supply Services); Ms Chaffey (Volunteer Services Co-ordinator); Mr Scott (Manager, Building & Maintenance) and Mr Wann (Senior Engineer, BTS); Mr Nitchie (Manager, Operational Services) Mr Kearns (Manager, Fire + Security) and staff; Mr Bright (Manager, Supply Services); Ms Leo (Manager, Public Relations Unit) and staff; Ms Corrie (Manager, Telecommunication Services).