A case study in transformation of a rural hospital: modelling, leadership and effecting change

Theodore Chamberlain, Nicole White
Maleny Soldiers Memorial Hospital, QLD

This paper is a qualitative case study of the transformation of The Maleny Soldiers Memorial Hospital, a hospital in rural Queensland. The paper reports how leadership and community engagement, with an emphasis on vision, staff engagement and the analysis of community needs, can manage change in such a way as to benefit members of the local community.

The Maleny Soldiers Memorial Hospital was founded by the community as a memorial to those who served and made sacrifices in the First World War. It originally served the health needs of an area of significant economic activity involving timber, farming, dairy and beef cattle in the hinterland of the Sunshine coast in Queensland. Over the last century the coastal areas have boomed and The Maleny Soldiers Memorial Hospital now accounts for only 4 to 7 percent of the health work in the Hospital and Health District of which it is a part. It is now the smallest of the four public hospitals in the Sunshine Coast Hospital and Health Service, and the only one in a rural area.

In 2006 the Maleny Soldiers Memorial Hospital was staffed for 10 beds. It had no formal outpatient services but was still providing a 24-hour emergency service. The medical staffing was two Medical Officers with right of private practice (MORPP), an arrangement in which a small stipend is paid to doctors for providing emergency services to the hospital and a daily ward round. The second MORPP position could not be filled for two years.

The primary industry activity in the area has shrunk over time, but its population has grown substantially. Currently the Hospital is staffed to service 24 beds, eight of which form a new Sub Acute Rehabilitation Unit. It provides rehabilitation services to the local community and has also developed expertise in stroke rehabilitation, thus providing a safe and effective service to which local people can ‘step down’ after discharge from a tertiary centre. There are now also four palliative care beds in the hospital. There are expanded outpatient services, with visiting Geriatrician and Rehabilitation Specialists.

Telehealth has become embedded in the hospital for outpatient services, hospital in the home, and specialist consultation on the wards. Innovative public-private partnerships are being used to provide cost-effective allied health and radiological services as well as a hospital in the home program .

There are now outpatient clinics by telehealth in maternity, paediatrics, cardiology, genetics, orthopaedics and palliative care. These provide local access to these more specialised services, thus minimising travel time and inconvenience and the financial cost of the “Patient Transit scheme”.

As a further development of our expertise in neurological rehabilitation a stand-alone multi-disciplinary team Movement Disorder Clinic has been implemented. This provides a one-stop service for the assessment and treatment of Parkinson’s disease both for the local and Sunshine Coast communities and provides a step-down centre of excellence for the Hospital and Health Service district.

We have developed a visiting midwife service aimed at integrating the significant numbers opting for home birth and free birthing into a safe care framework.

All of the hospital’s beds are under the care of its Medical Officers, who have support from appropriate off-site specialists by mobile bedside teleconference. The medical staffing has become more secure with a change in the employment model to Salaried Medical Officers and Junior House Officers. The hospital currently has 1.6 full time equivalent Senior Medical Officers, two part-time MORPPs and three Junior House Officers rotated through from the larger tertiary centres.

The Maleny Soldiers Memorial Hospital has become accredited as a training facility for rural general practice in partnership with the local general practitioners. Currently there are two GP Registrars working at the hospital.

By the beginning of next year we should be accredited for intern training.

We have improved and broadened the skill set of the health care team such that our complexity as measured by Queensland Weighted Activity Units (QWAUs) has increased year after year and is now second only to the tertiary referral hospital in the Sunshine Coast Hospital and Health Service district.

So how did Maleny Soldiers Memorial Hospital get from A to B?

The process was lengthy and was driven by a clear vision, community engagement and novel approaches to the various challenges faced. A rural hospital is a complex system in both theoretical and practical terms. Its circumstances are complicated by the tyranny of distance, under-resourcing and an insufficient and ageing local health workforce.

The first step in successful transformation is becoming aware of the particular characteristics of the local community, its health problems and its related needs.

At the level of the community it is vital to be clear about the transformation to be engaged in. To do this requires clarity about goals, monitoring, resources, sequencing and implementation.

An important step is developing a vision, which incorporates a goal and thus becomes the compass to guide the direction of transformation. Monitoring is crucial to maintaining momentum (especially in iterative processes) and to be able to justify and communicate information about the transformation to stakeholders.

The resources involved in the transformation of a small hospital include not only physical ones like funding, staffing and physical space but also less tangible ones such as community support, motivated champions, and the political and social environment.

In a complex system change involves many steps that run in parallel. Some of those steps are rate-limiting and so need to be addressed before other steps are practicable. Our experience showed us that progress depends on correct decisions with respect to timing, the allocation of resources and generating and using support. Each successful step can generate a momentum of its own.

The process of transformation can be described as process of changing something from one stable state to another. It needs to be guided through clarity of thought, goal and means. The thread that links these is clarity of vision, which acts a guide, a measuring stick, motivator, and an integrating theme of change.

The vision that was developed for the Maleny Soldiers Memorial Hospital was " to be the jewel in the crown of the Sunshine Coast Hospital and Health Service." To be the 'jewel in the crown' was, to the staff, a visual metaphor of excellence that aligned with the values of our workplace. This vision was developed over a period of time with the involvement of all staff at all levels.

The next question asked of the staff was how to achieve the vision. From all of the workshopping it was agreed that to become 'the jewel in the crown' the Maleny Soldiers Memorial Hospital needed to provide 'high quality', 'patient centric health care', 'suitable for the community'. These became three axes of measurement for each step along the way.

This then became the guiding goal of all the transformations undertaken at the Maleny Soldiers Memorial Hospital. The test for any change was will this improve the quality and experience of the patient's care and is it of benefit to the community. We subjectively measured each transformation on these axes with a scale of high, medium, low and neutral in both the positive and negative directions, giving a seven point visual analogue on three axes for the goal of each transformation. This vision also became the measure of whether a change was working and a monitoring tool.

Analysis

Once there is clear vision their needs to be analysis of what is currently present, what is needed and what is achievable. A needs analysis should be looked at from many different angles: the needs of the individual patient, the needs of the community, the needs of the hospital, and the needs of the wider health services at the district, state and national levels.

In many complex transformations with competing levels of needs, the disharmony of the needs can be difficult to balance. However in many ways the health care system is simpler because the ethics are very clear and it is a system in which the needs of the individual patient must have priority over those of the system. By ascribing values according to the goals underlying our vision it was possible to see which interventions matched our goals and therefore had priority.

Prioritisation

In any rural community there will be a large amount of unmet need. To bring about an effective transformation of the hospital, agreed priorities were needed. We found it useful to have a series of lists.

One list was of the transformations that needed to be done in order of risk either to the patient, the community and the health service. The next list was of the steps in the transformation in the order of resources each required. The next was of the steps in the transformation in their order of difficulty in implementation. The next list was of the steps to be taken in order of community desire.

By looking at these lists together it was possible to pick overall priorities by balancing the different levels of sub-priorities. For example, high risk, low resource requirement steps were ranked higher than low risk, high resource requirements even if there was high community support. The steps in the latter category were targeted for community education to shift community expectations to more achievable goals.

Multiple aims

Rural health requires teamwork and flexibility. We applied this principle in prioritising transformation as a separate variable. Changes that achieved multiple aims were ranked higher than changes that only affected one parameter of health.

All aims, priorities and rankings were given a subjective scale of high, medium, low or neutral in both the positive and negative sense, allowing a seven-point scale for each parameter to allow easier comparisons of options.

Reiteration

Given the lack of resources and the complexity of factors in many of the transformations undertaken by the Maleny Soldiers Memorial Hospital, a process of reiteration was followed frequently. A need was identified. A direction of change was identified by reference to goals of the vision of the Hospital. A change was made. The effect of the change was monitored using our subjective scale and another change was made in the direction of the goals until a stable sustainable situation was achieved.

We simplified and communicated this process down to identifying an area of need, identifying a direction of change, making the change in the right direction and adjusting the change closer to the goal.

Relationship to larger health structures

Rural health delivery usual exists in the context of larger, centralised health bureaucracies whose priorities are different from those of individuals working ‘in the field’. It is always better to align the local health service goals with those of the larger organisation if possible. For example, in our health service area there are significant problems with lack of bed capacity in the tertiary referral hospital. By having our smaller hospital take complex care subacute patients from the central hospital, acute beds in the larger hospital were freed up. Reversing the flow of rehab patients to our smaller facility provided us with the critical mass necessary for developing our rehabilitation unit, thus serving the

local population locally. So by providing a small continual benefit to the larger organisation we have been able to introduce and provide a service of much larger benefit to the local community.

From our experience, in terms of the relationship with larger structures, we have found the following principles to be helpful.

Ask for forgiveness, not permission, from all those in the higher organisational structure who would stifle and are averse to change.

Know the official chain of command and then work at the personal level with the organic, natural human relationships that function underneath this chain of command.

Leverage any advantage you have and get the most out of positives.

Take a holistic approach.

Know and engage your community.

Collect and bolster allies and champions.

Continue reiteration to make it work.

Drive from the bottom up.

Know your community

Communities are a dynamic collection of people with culture embedded in a specific geographical and economic environment. To understand a community one must be aware of the historical context of the community, the large scale economic, geographical and climate factors that shaped it, as well as the micro relationships that underpin and maintain it.

Health care is a truly personal thing and to provide it well requires understanding of the big and small scales that drive ill health and health in an individual and the community.

Truly understanding a community requires some form of immersion into the community. This process of individual engagement is an important form of social capital that can be utilised for change.

Know where you are

Look carefully at what you are doing, not just the job but what is being delivered, to whom and how. It is easy to get caught in the rut of working and fail to see the big picture. In the analysis look at both the trees and the forest.

Map out the possible patient journeys and look at the blocks and difficulties that patients face.

Collect and bolster allies

Foster ties with people and groups in the community who have an interest in improving the health of its people.

Within the local hospital and health service, look for people willing to champion change as well as people who have a self interest in achieving good outcomes, for instance in relation to patient safety and quality, or finances..

Decide where you want to go

By incorporating your vision and needs analysis it is possible to look at deficits in local care and analyse these deficits along your various axes. Develop a map of the changes and directions to be perused.

The most important thing is to be committed to improvement emotionally, have a clear direction and then implement change in that direction.

Check and assess how that change is going and modify what is necessary to continue momentum in the right direction to make it work.

Specific examples

The lack of funding for bed numbers was a significant risk and need for the community. Increasing bed numbers scored highly on “quality outcomes”, highly on “patient centric care “ and highly on “community support “ but in terms of resources available and possibility of implementing locally, increasing bed numbers scored highly negatively. The only way to tip this balance was to find an alternative form of resourcing. Various applications were made until a successful application for federal government funding for the development of a subacute service was successful.

Subacute funding for 8 slow stream rehabilitation beds was provided through the Commonwealth Funded National Partnerships Agreement for three years starting in 2011. The onus was then on the Health Service to continue the funding. Excellent results provided by a small dedicated team of allied health professionals and therapy assistants, medical, nursing, administrative and support staff ensured continuation of this funding. This high functioning team was able to provide a level of service which exceeded standards in terms of the intensity of therapy provided.

The Maleny Subacute Rehab Unit’s policy is to accept any patient with appropriate rehabilitation goals, not limited by physical or diagnostic status. In this way the Unit continues to provide inpatient rehabilitation opportunities early in admission to a broad patient group, contributing to patient flow, reduced length of stay in acute beds and reducing bed block in larger primary facilities.

Being a smaller rural facility the Maleny Soldiers Memorial Hospital is block-funded, which means that funding is allocated on the basis of historical activity rather than being tied to activity as measured by National Weighted Activity Units (NWAU)

One of the advantages of block funding over activity based funding is the ability to take complex long stay patients with potentially extended length of stays out of the tertiary facilities where they would be causing a financial loss to the health service into an environment where the costs are fixed and an extended length of stay does not carry a financial penalty.

With SNAPPING using the new FIM’s scoring data, and an increase of 157 sub acute admissions in 2014/15, Maleny Hospital has been able to secure the Rural Incentive grant of over $350,000 this financial year because of an increase of over 10% in its Weighted Activity Units from the previous year.

The Australian Rehabilitation Alliance position statement asks to establish minimum standards of 10-15 hours per week of allied health input for each patient. Within the Maleny hospital facility and with the current levels of staffing, the Maleny service is able to provide 4-6 hours per day, roughly 20-30 hours per week for stroke and neurological patients. This has had a dual function of enhancing the current service to the community and improving patient flow to free beds from the major hub hospital, Nambour General Hospital.

The need to allow flexibility to respond to community need and priorities and workforce availability were the critical factors in the implementation of this plan as opposed to a ‘one size fits all’ model of acute hospital care. Large hospital rehabilitation units develop rigid protocols and work practices, which patients have to fit around. Rural facilities are more patient-focused and flexible, and can therefore tailor the resources to the needs of the patient, thus getting better outcomes.

Other elements that have sustained the model include a consistency of nursing staff who are able to continue rehabilitation therapies on the ward and over the weekend. There is also a reduced risk of re-admission of geriatric patients who, with the increased support of allied health staff such as occupational therapy and social work, are increasingly able to continue in their home environment with community supports in place. These improved functional outcomes for patients have led to a decreased burden on community services post discharge and therefore lower costs to the system. In the first 6 months of 2013 80% of subacute rehabilitation admissions were discharged to their usual place of residence.

The service also has the enthusiasm and support of the hospital auxiliary, the local community, and community service organisations, which have made significant contributions to the development of the service, including facility and equipment, and continue to highly value and support this effective and efficient subacute allied health service.

The Allied Health team has just won the Health Service 'Australia Day Award' for excellence in service provision for patients.

We have leveraged this success by being able to demonstrate the benefits of reverse flow. Traditional patient flow has been from rural areas to a tertiary or urban centre. Reverse flow is the process where patients are referred out of the tertiary centres to rural areas for their health care. This leads to greater patient satisfaction, better outcomes, retention and improvement of rural facilities and better financial outcomes by shifting care to environments of high efficiency.

In the case of the Maleny Soldiers Memorial Hospital, we take patients who require complex subacute care out of the acute care environment and place them into a subacute rehabilitation unit with a high functioning multidisciplinary team and pleasant rural environment. We have proved that this has financial and patient outcome advantages for the whole Health and Hospital service.

Maternity community antenatal nursing

Maleny Soldiers Memorial Hospital has always provided in-hospital antenatal care that has continued despite the end of planned birthing at the Hospital.

Improving maternity services scored highly in "quality outcomes", highly in "Patient centric" and highly in "community support". Resource availability was scored as medium negative for expanding midwife service and highly negative for the reintroduction of birthing. Risk analysis for the community scored high risk because of the large number of home birthing and free birthing in our catchment population.

Maleny Soldiers Memorial Hospital continues to provide antenatal care for patients in the community on a GP share-care basis. The care is in collaboration with Nambour General Hospital antenatal clinic where birthing for public patients generally occurs. Despite valuable relationships being built between midwives and antenatal clients, no routine midwife postnatal care was offered in the Maleny Hinterland and the recent cessation of child health community visits resulted in an escalation of new mothers attending in 'crisis' mode with concerns ranging from breastfeeding problems to routine child health concerns.

The current antenatal clinic at Maleny Hospital was expanded to introduce a new model of midwifery care aimed to offer more comprehensive continuity of postnatal care for six weeks post birth at Maleny Hospital. This service has initially been offered to existing antenatal clients only.

Introducing change in any large organisation with hierarchical structures and entrenched practices is difficult. Rural maternity care should be based on models, innovation and evidence appropriate to the rural environment, rather than the imposition of models that may be successful in urban settings. In relation to birthing services our goal was to implement a gradual improvement and build on an existing service capacity by improving the current integrated service involving rural hub and spoke model and involve existing midwives, General Practitioners and Specialists in locally based care. The imperatives for the project were to develop the capacities and competence of current employees, expand an existing service, and enhance communication with private providers.

Change management and innovation requires the analysis of four factors – people, structure, technology and the physical environment. All of these can be essential to the success of a project. An innovative client-centred midwifery model attracts and retains skilled midwives, produces measurable positive outcomes and reduces stress on medical services, although barriers to innovation may exist in well-entrenched medical model practices, organisational habits, norms and culture.

Summary

The welfare of the individual patient is the primary goal of health care. The individual becomes sick, the individual becomes better or they do not. But the individual does not exist in isolation; they belong to hierarchical structures of family, community, history and environment - all linked in a complex web.

The community is much more than the environment in which the individual resides. It has a collective health of its own which impacts on the risk of disease for the individual, the individual's response to illness and the resources available to the individual. This community interacts with larger scale structures.

The health care delivery system is more than the individual health care provider and definitely more than the bricks and mortar of the physical structure in which it is housed. The individual health care provider works in their own 'community' which again has interactions with larger scale organisations.

At the individual level the causality of a patient's ill health is driven by genetic, social and epidemiological factors; the course of the illness is modified by family, the quality of health care provided and the community. The experience of the illness is dependent on the personality and the culture of the individual.

The structures the patient has to traverse can be marked out in a manner that describes the direction of the patient's flow and how the patient moves from the community to being under the care of health professionals in the community to moving to rural hospital and tertiary facilities. This is the so-called patient journey.

The experience of the Maleny Soldiers Memorial Hospital is that significant positive change can occur in a rural community with the application of good leadership and community engagement.

Mapping the patient journey was a powerful tool for visualising the blocks and deficits of care in the community. Using clear vision that was owned by the staff and community allowed qualitatively measurable goals to be formulated, which guided needs analysis and monitoring of transformations. Seeing health care in a rural setting as a complex web of interactions allowed transformations to be prioritised that maximised the positive outcomes. Qualitative measures of the inputs, outputs and achievements allowed the complex web to model. Reiteration as a philosophy and technique encouraged initiation of change and ongoing monitoring and modification.

The bottom line is significantly improved service delivery and increased resources to a rural community with high staff interest and engagement performing a valuable role - not only to the community but also to the wider health service.

True leadership involves understanding the people, places and possibilities that are present in a community and utilising this knowledge to improve the health of the individuals and the community while providing sustainable long-term health care.

Presenters

Dr Theodore Chamberlain is an overseas born Australian trained rural practitioner of over thirty years standing. Dr Chamberlain currently works as a senior medical superintendent at the Maleny Soldiers Memorial Hospital which is a rural hospital servicing the township of Maleny in the hinterlands of the sunshine coast north of Brisbane in Queensland. Dr Chamberlain completed his medical education at the University of Queensland and has practice continually in rural medicine since then including over thirteen years with Dr Col Owen in Inglewood. He is a fellow of ACCRM and has contributed to the rural health movement through involvement with ACRRM and RDAQ. He has a long interest in telehealth having presented at the first National rural health conference at Toowoomba on this subject in the late eighties Currently he is interested in expanding the role of rural hospitals to fill the needs of their communities and to this end has integrated a rehabilitation unit, palliative care unit and a movement disorders clinic specialising in end stage parkinsonism into a rural hospital to reverse the flow from tertiary centres and to provide a service the community.

Nicole White is the director of nursing at the Maleny Soldiers Memorial hospital on the hinterland of the Sunshine coast in Queensland. Nicole White originally trained at the Royal Brisbane Hospital and did her advanced Midwife training at the Mater Hospital in Brisbane. She continued a career of rural nursing in western Queensland. She has been the Director of Nursing of Surat hospital which was the first hospital to introduce Studer group management principles under her leadership. She has continued to demonstrated Strong leadership skills in her role as director of nursing at the Maleny Soldiers Memorial hospital during a time of great change. She enjoys the challenges of running rural facilities and enjoys the ability to solve problems directly. She has contributed broadly to the nursing profession sitting as a committee member of the Association of Queensland Nurse Leaders in 2006 to 2008. Her leadership potential has been recognised by the hospital and health service whose encouragement has allowed her to advance her professional development through the top 500 Executive leadership program Queensland health, the Public Service Management program through Mathews Flinders University and Health Management Diploma through Queensland Institute of Technology.