Royal Newcastle Hospital: the passing of an icon

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Next year, the Royal Newcastle Hospital (RNH) will effectively cease to exist in its current form. Hospital services will be transferred to the John Hunter Hospital and the buildings will be demolished to make way for apartment blocks. Founded in 1817, Newcastle Hospital (as it was called until 1949) achieved national and indeed international renown by the middle of the 20th century. Inevitably, as with any revolutionary changes, these achievements were accompanied by controversy and criticism.

Early in the 1930s, Ken Starr, a surgeon of high repute, became Medical Superintendent (although he preferred to be called the Surgeon Superintendent) and Christian (Chris) McCaffrey came to Newcastle Hospital as a resident medical officer. He taught himself radiology and became the hospital's radiologist. At the outbreak of World War II, Starr enlisted and never returned to Newcastle, pursuing after the war an illustrious career in Sydney. He later

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ABSTRACT

- From the 1930s to the 1960s, Royal Newcastle Hospital was the centre for innovation in Australian health care. Many of the innovations were driven by a visionary medical superintendent, Chris McCaffrey, and the staff he appointed.
- Among the reforms he introduced were:
  - ➢ an overarching emphasis on efficiency;
  - ➢ the appointment of salaried specialist staff, now widespread;
  - ➢ the unit record system for medical records, now universal;
  - ➢ a domiciliary care service, now established in most of Australia; and
  - ➢ an emphasis on audit and quality studies, now largely abandoned in the form pioneered in Newcastle.
- These innovations were vigorously opposed by organised medicine and barely tolerated by the health bureaucracy. They are unlikely to be replicated in the current environment where hospitals are run by managers in a culture dominated by budgetary considerations.

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Royal Newcastle Hospital. The Nickson Wing overlooking Newcastle Beach was completed in 1950. (Photo courtesy Royal Newcastle Hospital Archive. © The RNH Heritage Committee.)

1 Royal Newcastle Hospital principles

- The welfare of the patient is the first consideration
- There must be a critical and questioning approach to health care
- Health care should be cost effective
- Health care should be safe and efficient
- There must be a genuine concern for the welfare of the staff ◆

became President of the Royal Australasian College of Surgeons and was knighted.

With Starr's departure, McCaffrey took over as Medical Superintendent and ran both the hospital and radiology. The honorary medical staff accepted McCaffrey's offer to represent them at the Board of Directors, and, in one stroke, the hospital was his — he was thus the only link between the Board and the medical staff, a conduit he jealously guarded. And so began a 25-year reign that saw the hospital transformed into a major medical centre and an internationally recognised powerhouse of hospital innovation.

McCaffrey's vision for Newcastle Hospital

As early as 1943, McCaffrey had told the Board of his vision of a hospital with patient care as its highest priority, delivered by salaried specialists, and by the end of the War he had a clear idea of the sort of hospital he wished Newcastle Hospital to be. The hospital would train registrars to become specialists, and eventually he hoped to establish a Newcastle medical school and introduce the training of medical students. He wrote a blueprint on this in 1955.[1]

His vision was based on his extensive reading, particularly of the 1910 Flexner Report on medical education in the United States and Canada,[2] and the 1913 Report of the Haldane Royal Commission on university education in London, which included medical education in London hospitals.[3,4] The Flexner Report lauded the university hospital system at the Johns Hopkins University Hospital in Baltimore, where full-time professors taught the clinical subjects of surgery, medicine and obstetrics. The Johns Hopkins Hospital was the first to provide this training in its medical school. The university also developed a residency training program led by staff specialists.[2]

Realising his vision for the hospital

McCaffrey now made his move. He already had a salaried specialist position in pathology, filled by J R Steele Douglas, and in 1947–48 the Newcastle Hospital Board approved the positions of a full-time physician, an anaesthetist and a clinical pathologist.

A series of appointments followed, which were bitterly opposed by the British Medical Association (New South Wales branch [BMA (NSW)]). McCaffrey appointed mainly young men experienced beyond their years by clinical exposure during the War. Peter Hendry was appointed a clinical pathologist, Ivan Schalit a specialist in anaesthesia, and Ethel Byrne a specialist in thoracic medicine. Subsequently, there were other full-time staff appointments, and all were given a brief by McCaffrey to administer and develop their departments: Gordon Kerridge in orthopaedics, David Moore in psychiatry, Clem Walter in ophthalmology, Bill Hunter in microbiology. All had unprecedented power, a situation unknown elsewhere in Australia. No longer did surgeons tell the theatre sister when they wanted to start; they had to negotiate a time with Ivan Schalit. A few honorary positions were retained.

From around 1950, major innovations were introduced by McCaffrey's appointees in hospital clinical services, in nursing (in collaboration with the matron, Miss Irene Hall) and in clerical and domestic services. These developments were opposed both within the hospital (by honorary medical staff) and outside the hospital (by the BMA [NSW]).

In the 1950s, medical record keeping in public hospitals in NSW was chaotic. McCaffrey introduced the unit record system based on the Mayo Clinic model, in which the medical records of each patient were in one file, a system subsequently adopted throughout Australia.

He instituted a clerical training school which produced young women graduates who were totally competent in clerical tasks anywhere in the hospital. Their time was less costly than that of the specialist medical staff. Edison wax cylinder dictating machines were used in operating theatres, clinics, medical records and radiology, and the stenographers ensured that all patients had a typed record, including their operation details and discharge summaries. Outpatients at Newcastle Hospital had time-spaced booked appointments, a situation practically unknown elsewhere in Australia.

McCaffrey believed that admission to hospital was an event in a continuum in which the hospital had a responsibility to ensure the primacy of patient wellbeing (Box 1). He preached "there are no diseases, only sick people" and stressed the need to prevent or ameliorate illness. This was but one of his numerous maxims (Box 2).

In conjunction with the local steel industry (BHP and Comsteel) and the unions, an outpatient contribution scheme was introduced. Sixpence a week entitled a contributor and his or her family to free outpatient treatment, medication and investigation, a move that created an outpatient system, where patients were seen by staff specialists or trainees who benefited from this clinical experience.

Achievements in early postgraduate training

From around 1950, McCaffrey's attention was directed to junior staff training. Medical graduates were offered a 3-year structured rotation through all disciplines, including clinical pathology and radiology. After these rotations, they were competent to do an appendicectomy, deliver a baby, give an anaesthetic, and cope with standard medical problems. These highly sought-after training positions attracted top graduates; in 1952, all the new resident medical officers at RNH were honours graduates. By now the hospital had purchased a general practice nearby to provide training of general practitioners (but

2 McCaffrey maxims

- "Question everything — but particularly the facts."
- "Le Corbusier said that a house was a machine for living in. Well, a hospital is a machine for the care of sick people. It is not a workshop for the benefit of doctors or nurses or anybody else — never forget that."
- "Don't try to keep on winning arguments; every time you win an argument you make an enemy."
- "If you hear a young man say 'I wonder . . . ', listen very carefully. It may be the beginning of an exciting idea which is a very fragile thing."
- "The objective of war is peace. It is exactly the same in an industrial dispute. Keep remembering that your objective is peace" (quoting von Clausewitz).[5] ◆

for obscure reasons this system failed). After residency, 3-year registrar posts for the various disciplines were available, providing unrivalled hands-on training. This included participation in an innovative quality assurance program supervised by Jack Smyth, Director of Surgery. All wounds were inspected for infection daily, and graphs adorned the back of the surgeons' tea room — wound infection rates, and rates of "lily-white" (not inflamed) excised appendices. All excised tissue had to be sent to pathology!

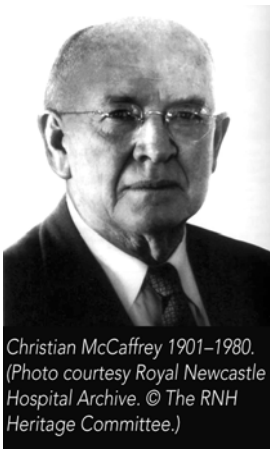
Progress in medicine

In internal medicine, most work was done by salaried specialists and registrars. Here again there were advances. The pathologist, Steele Douglas, demonstrated the ineffectiveness of regular mass miniature radiography for tuberculosis. Roy Mills, appointed staff specialist chest physician in 1953, reached a similar conclusion. Mills doubted the role of surgery for tuberculosis, given the availability of drug therapy. The last resection for pulmonary tuberculosis in Newcastle took place in 1955, at a time when the federal government was underwriting the building of new surgical facilities for tuberculosis in metropolitan areas. Later, Mills pioneered the practice of directly observing the tablets being swallowed, thus avoiding the possibility of the patient not taking the (sometimes unpleasant tasting) medication, giving the tablets to a relative or selling them on the black market. This practice was adopted in principle years later by the World Health Organization.[6]

Meanwhile, Dick Gibson, appointed staff physician in 1953, participated in a survey for the NSW Health Commission on multiple sclerosis in the community. It was evident that there were large numbers of chronically disabled people living in the community with inadequate resources. In 1955, a domiciliary care service was set up. Patients discharged after an illness, such as a stroke, were offered assistance to increase their mobility through the provision of ramps and bathroom modifications by the hospital maintenance workshop. Medical, physiotherapy and occupational therapy services regularly reviewed these patients' needs, and the hospital offered rapid readmission if needed. This was a model for geriatric services later recognised in Australia and internationally.[7]

Obstetric services at RNH were a late addition. Toby Nickson, honorary gynaecologist and obstetrician, urged Jack Elliott to apply for the position of Obstetrics and Gynaecology Registrar, foreshadowing a salaried position in the obstetric unit, which was opened in 1949. *Staphylococcus aureus* outbreaks in obstetric units were common. "Rooming in" for newly delivered mothers and their babes, with demand feeding, reduced the babies' contact with the nursing staff and the danger of cross-infection. In spite of opposition from nurses and grandmothers, a "rooming in" system was introduced, and only one brief *S. aureus* outbreak occurred. (This was due to contamination of the olive oil used to wipe the baby's bottoms.)

McCaffrey: man and administrator



Christian McCaffrey 1901–1980. (Photo courtesy Royal Newcastle Hospital Archive. © The RNH Heritage Committee.)

After a brilliant school career at Christian Brothers College, Waverley, Sydney, McCaffrey matriculated as school captain and a champion athlete and won a university bursary and scholarship to the University of Sydney, graduating in medicine in 1925. He was a resident medical officer at Newcastle Hospital in 1927, became Acting Medical Superintendent in 1935 and Medical Superintendent in 1939. Physically large and intellectually gifted, he created both admirers and enemies, but there is little doubt that in his prime he was an outstanding thinker, leader and team builder. He had the rare gift of being able to put an idea into someone's head, make you believe it was your own idea and then support you as you ran with it. He created linkages with the Newcastle Trades Hall Council and local Members of Parliament, and probably would have been Director General of Health had the federal Labor Party won the 1954 election. However, his dogmatism and antipathy to those who rejected his ideas led to increasing tension. Efficiency tended to be transmogrified into cost-cutting and staff restrictions. In 1960, his wife died tragically, and after that he became more isolated.

In 1962, an unusual young woman, Dr Doreen Birch, was appointed to the position of staff ear, nose and throat surgeon. She insisted on removing lots of tonsils and adenoids, a practice McCaffrey had previously opposed, but he supported her. They married in 1963. Thereafter, his power began to wane. The salaried staff and the Board of Directors split on several issues, hidden antagonisms emerged, the Board was dismissed and an administrator appointed, so that, in 1965, he left precipitously, preceded by his wife and young son, never to visit Newcastle again. He died a lonely death in 1980, his second wife having predeceased him.

During his time at Newcastle, McCaffrey wrote little, made no succession plans and used the Board of Directors as his own tool. His place in Australian medicine remains controversial. That he was dedicated to improving patient care is clear, as was his capacity to select others to help him pursue his aim. He was a duplicitous visionary who was widely regarded as the best hospital administrator Australia has seen, and many would argue that the NSW Health Department at the time tried to ensure that as little as possible of what he taught and created would endure. ◆

3 The previous "cheap labour" role of nurses at Royal Newcastle Hospital and steps taken (☞) to allow them to become health professionals

Nurses were:

Apprentices, with all instruction coming from their Ward Sister
☞ "On-the-job training" became "education" with tutor sisters, a new syllabus and more hours of tuition

Part-time cleaners
☞ Cleaning staff were employed for all hospital cleaning

Part-time food waitresses
☞ All food preparation and delivery was delegated to a food service

Responsible for ordering all ward supplies
☞ Imprest system was introduced. All ward requirements were recorded and allocation made on this basis

Responsible for sterilising equipment
☞ All sterilising was done by the sterilising department managed by a microbiologist

Used to run messages
☞ A courier service was set up for all messages

Nurses became:
Well-trained, health professionals, who were encouraged to do management courses ◆

Influence on nursing

McCaffrey's influence on nursing was immense. Traditionally, nurses were the "cheap labour" available to hospitals — cleaning, feeding patients, running messages and so forth. Matron Irene Hall ruled nursing at Newcastle and followed McCaffrey's insistence on professionalism and modern management techniques, with nurses being encouraged to undertake management courses (Box 3). Linen use was measured so that each ward got its daily supply of a mean and two standard deviations. Boilers and "sterilizers" disappeared from wards, and all sterile supplies came from a central sterilising department managed by a graduate microbiologist. Despite this highly disciplined environment, the time available for patient care increased, as did applicants for nursing training.

Management efficiency

Driving all these endeavours was McCaffrey, with his obsession for management efficiency. Early on, he employed a business efficiency consultant. All hospital paper was standard size A4 bank quality. A request form rather than an order form, half the standard size, did for all requests, from faulty taps to x-rays, and x-ray reports came back the same day typed on the back of the request form. In the outpatient department, the few forms were kept in wells to preserve a clean uncluttered desk surface, and all letters were dictated. The outpatient department also followed the Mayo Clinic pattern of a sequential medical record containing all of the patient's record in one file, a practice not standard at that time. No medical records were ever destroyed and were almost never lost. At least three MD theses and one MS thesis and many other publications were based on analysis of these records.[8-11]

In spite of all this activity, McCaffrey never seemed busy, constantly roaming the hospital, visiting the offices of the senior nurses and the works office daily, and having morning and afternoon tea with medical staff of all ranks, secure in the knowledge that his appointees were working to improve patient care and efficiency. Skilled in the method of Socratic dialogue, he revelled in throwing a discordant thought into a conversation to see how staff reacted. He read *The Lancet* and *Deutsche Medizinische Wochenschrift* weekly (he had mastered German early in his career) and relied on the writings of the pioneers of management theory — Mary Parker Folette and Lyndall Fownes Urwick — and the *Harvard Business Review*.

On a visit to RNH, Malcolm MacEachern, the foremost US hospital administrator, described him as "one of the greatest medical administrators" he had met.

Quality assurance and audits

McCaffrey's ideas on quality assurance were light years ahead of the rest of the world. Although McCaffrey and Smyth are widely identified with the RNH quality movement, its genesis extends further back. Steele Douglas, the pathologist, initiated rigid standards of quality control, and Peter Hendry extended the audit program. By 1953, Hendry led an international study on the variability of results from different laboratories. Around 1950, Steele Douglas set up weekly clinicopathological conferences. He selected two deaths, generally with autopsy results, that had occurred in the previous week. The resident medical officer involved presented the case to the assembled medical staff of all grades. Steele Douglas then opened the discussion: What caused the death?, Could it have been prevented?, Were there any deficiencies in management? The meetings were educational, but, after a decade or so, tended to develop into witch-hunts and were abandoned.

Surgical audits focused on wound infection rates and inappropriate or inadequate surgery revealed by the mandatory histopathological examination of all excised tissues. This was all recorded and the results discussed at a weekly meeting of surgical staff, sometimes leading to policy change. Jack Smyth, a talented, dynamic surgeon, drove the program, which has never been equalled elsewhere.

McCaffrey's legacy

Outside Newcastle, McCaffrey's legacy was limited — his mode of departure, the antagonism of organised medicine, and the reluctance of health bureaucracies to change all contributed. However, some of his innovations have endured — medical records are recognised as important, and salaried specialists are no longer regarded as the vanguards of socialistic medicine. However, his vision of them as leaders and innovators has sometimes mutated into a role more akin to that of senior registrar, with the current trend in many hospitals being to make them subservient to the visiting medical staff as full-timers "minding the shop" and doing the drudge tasks.

The RNH approach to quality assurance studies based on audit and evaluation of the appropriateness and outcome of interventions has been lost. The politicisation of quality studies and the opposition of organised medicine have ensured that they are often little more than token. Efficiency and evaluation have degenerated into a constant battle between fund-holding bureaucrats and medical staff with departmental agendas, with little emphasis on total health care values.

RNH's reputation as a powerhouse of innovation, with outstanding medical teaching, clinical training and patient care, diminished as it was overtaken by conventional medicine, and its groundbreaking contributions to hospital services are in danger of being forgotten.

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