Rise of the super nurse

Health editor, Adam Cresswell
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THEY used to run hospital wards with ruthless efficiency, make beds with hospital corners and provide the fodder for saucy jokes in Carry On films.

But if those stereotypes aren't quite dead yet, they soon will be – certainly if the 165 nurses meeting in Sydney today have anything to do with it.

They are in the NSW capital for a two-day conference to discuss how nurses, working in teams with other health professionals, can help tackle heart failure – a chronic disease estimated to affect over 500,000 Australians, particularly the elderly.

And one of the nurses’ poster girls is Libby Birchmore – the vanguard of a new force in Australia’s health system.

Birchmore is one of Australia’s two nurse practitioners in heart failure management: a nurse who can manage the day-to-day treatment of patients, which means assessing their condition, adjusting their medications, and even one day soon prescribing some drugs themselves.

Birchmore is already trained to prescribe drugs, and expects to begin doing so once the South Australian Government makes necessary legislative amendments.

But extending this right into other states...
right into other states is squarely in the sights of Simon Stewart, professor of health research at the University of Queensland's school of nursing.

Australia's only other nurse practitioner in heart failure – James McVeigh in Sydney – will be at today's conference with Stewart and Birchmore.

Stewart says that while Victoria and NSW have done well by implementing limited versions of heart failure treatment programs, Queensland is only starting to develop a plan, and other states "are way behind".

But as far as Stewart is concerned, heart failure – triggered by the heart failing to pump blood properly, causing a number of problems such as shortness of breath, fluid retention and palpitations – is just the start when it comes to expanding nurses' roles.

"One of the things we will talk about (at the conference) is that this is a new model for nursing beyond heart failure," says Stewart, who is also professor of cardio-vascular nursing at the University of South Australia.

Heart failure is a big enough area to start with.

In a study last year in the journal *Heart Lung and Circulation* (2004;13:266-273), Stewart and others warned Australia was "in the midst of a heart failure epidemic" that was already causing 1.4 millions days of hospitalisation a year at a cost of over $1 billion.

Those with heart failure have a poor prognosis. The National Institute of Clinical Studies says only 50 per cent of patients survive 12 months in severe cases, and even of those without any symptoms only 50 per cent survive five years.

And here's a stark statistic: heart failure patients are three times more likely to die within three years than patients diagnosed with breast cancer.

Symptoms of the disease can be unpleasant: patients often have difficulty sleeping because when they lie down, their lungs start to fill up with fluid.

In 2003, the NICS declared heart failure one of its clinical priority areas because of evidence suggesting many sufferers were not receiving appropriate treatment.
Under the model of nursing care for heart failure as practised by Birchmore, she usually makes contact with heart failure patients once they are admitted to Adelaide's Queen Elizabeth Hospital where she works.

At that stage she plans what care might be needed, and goes to visit patients in their homes within two weeks of discharge, except for a minority of younger patients who might be well enough to come into a treatment clinic.

"I do a physical assessment, looking at all the clinical markers of heart failure – such as listening to the chest to make sure there's no fluid, look at the jugular venous pressure," Birchmore says.

"But this is a nursing assessment, so it incorporates all the other traditional nursing things like bowel and bladder function, the patient's general physical state, their hygiene and whether they need some assistance.

"It's still using the nursing philosophy – it's looking at the total person, not just the specific cardiac issue."

The model means patients can be taught in their own home how to manage their condition themselves, rather than wait until they have to return to hospital.

This means following dietary guidelines, such as avoiding salt and alcohol, daily weigh-ins to check for fluid build-up, and knowing when to use their diuretic medication, which reduces fluids.

And evidence suggests this model brings dramatic improvements. Birchmore is now completing an audit of her services in 2004, which shows a sharp drop in the percentage of her patients who have to be readmitted to hospital compared to other heart failure patients.

While 30 to 50 per cent of conventionally treated patients are readmitted within six months of discharge, among Birchmore's patients it was 20 per cent within three months and just 11.4 per cent at six and 12 months.

"I haven't costed that out, but it's a substantial financial saving," Birchmore says.

Those of her patients who were readmitted also had shorter stays (four to five days on average) than normal patients (seven to eight days).

But nurses may not win a bigger role without friction from doctors' groups.

In a position statement drawn up in 1994 and still in force, the AMA insists that primary health care is the role of general practitioners.
AMA warns that "primary healthcare is the role of general medical practitioners".

The association is particularly opposed to moves that would allow nurses to diagnose illnesses or prescribe drugs, except under the direct supervision of a doctor, or in rural areas too remote to support a GP.

However, governments may find the prospect of financial savings from the nursing model too compelling to resist.

In another paper by Stewart about to be published in the European Journal of Heart Failure, he said previous studies suggested that in many developed nations treating heart failure by conventional methods was likely to soak up 1 to 2 per cent of total health care expenditure.

Hospital treatment accounted for the lion's share – over 66 per cent – of this cost, Stewart's paper said, promising big savings from any program that would reduce the need for patients to go back into hospital.

Birchmore says that once a nurse is in the patient's home, it's much easier to assess how they really live and what other health services – such as podiatry or physiotherapy they might need, and to organise it for them.

She can also check out what medications they are taking and ensure there are no dangerous interactions, or drugs being taken twice because they are different brand names.

"This is an ideal chronic disease management program,"

Birchmore enthuses, saying it could work equally well for diabetes, respiratory illnesses and musculo-skeletal complaints.

"All this is being done in an environment where the GP is under tremendous pressure. The AMA feared we would be in competition with the GP, but we will be working with GPs to enhance outcomes."

Work is already under way to see what other areas could benefit from nursing roles.

Stewart is currently doing work for the National Health and Medical Research Council to explore how nurses could help treat other chronic cardiac conditions, such as atrial fibrillation (chaotic heartbeat, often associated with stroke) and chronic angina.

"We have done some piloting work that shows nursing management of atrial fibrillation does make a difference and we are undertaking a large randomised control trial," Stewart says.

"But heart failure is the hot topic, the one we think we will get most funding from state and federal government for.
"Programs like this cost money, but it reduces hospitalisations and pays for itself.

"We have had a patchy response – we are way behind the rest of the world in identifying heart failure as a problem, and coming in with solutions. It's a downright embarrassment."