

Harm-free care

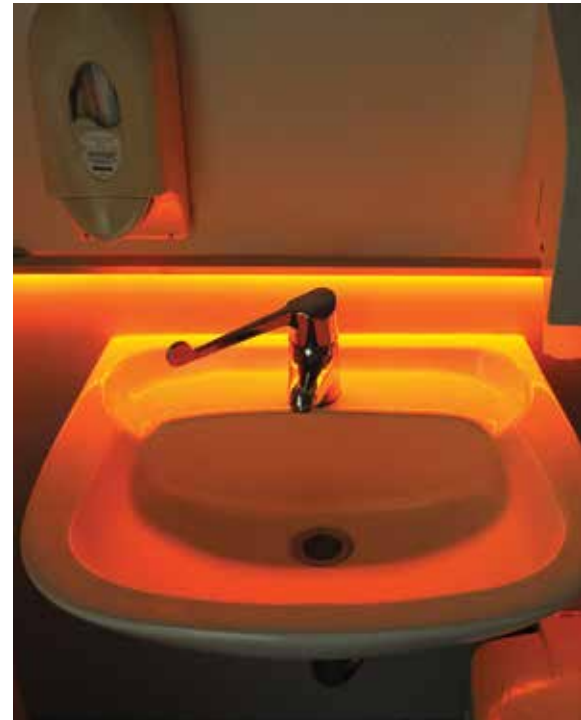




HARM-FREE
CARE

Lighting the way to fewer falls

Getting a good night's sleep is very important, and even more so while you are trying to recover from illness in hospital.



Above: The new night lighting scheme provides just the right amount of low-output lighting in key locations.

Keeping the environment dark is one important way of supporting sleep. However, as staff often need to leave some lights on for patient safety, it can be challenging to maintain a dark sleep environment in hospital wards.

To tackle this challenge, Metro North Hospital and Health Service trialed a new night lighting scheme that allows wards to be kept relatively dark while providing just the right amount of low-output lighting in key locations within patient rooms and toilet.

The lighting was designed based on best available research on vision, balance and stability in the elderly in low-level light and the physiological impacts of specific wavelengths of light.

Patient feedback during the trial was positive. Most patients thought the lighting would help them sleep better and move about more safely at night. One elderly patient commented that he was 'impressed how much of a difference' the new lighting made to the sleep environment."

Another elderly patient commented that having such lighting in wards would be 'brilliant' and that she would be talking to her husband about considering such lighting at home as well.

The trial involved 10 wards across the Royal Brisbane and Women's Hospital, the Prince Charles Hospital and Redcliffe Hospital. Results highlighted the potential value of this lighting

system to be a non-disruptive and low-cost strategy for reducing falls at night.

Following the success of the trial, the lighting system is being installed in six wards at the Royal Brisbane and Women's Hospital as part of world first clinical research evaluating the effects of such lighting on the rates of inpatient falls over time.

Metro North Hospital and Health Service will seek to introduce the lighting scheme into hospital wards gradually, as they are refurbished.



Above: Clinical Nurse Kelly Wells (left) with Clinical Nurse Consultant Jodie Gordon.

Paying attention to wound management

Effective wound management is important for helping patients on the road to recovery, particularly when a wound is hard to heal.

At Redcliffe Hospital, a specially trained team is working closely with medical, nursing and allied health staff across the hospital to get the best wound management results for patients.

The Wound Management Stomal Therapy team assists when a patient has a wound that is taking longer than usual to heal or requires management of a stoma (a surgically formed opening to the skin from the inside of an organ).

According to the team's Clinical Nurse Consultant, Jodie Gordon, education, good partnerships and tailored treatment are key ingredients for achieving the best healing results.

"Wound healing is complex and influenced by many factors, particularly for the elderly or the more vulnerable in our society," Jodie said.

"When a patient is referred to our service we work closely with their treating team to determine the best care options for their particular circumstance.

"We then continue to work with allied health, nursing and medical staff to make sure patients have access to the treatment, support and education they need to keep their skin healthy and help them heal."

Maintaining skin integrity is a key focus for the Wound Management Stomal Therapy team. When skin is damaged it can be a costly and painful process to restore the health of the skin and heal the wound. Every patient referred to the team is assessed for skin integrity on admission, and wound treatment options include consideration of the most appropriate type of wound dressing.

“ “ When a patient is referred to our service we work closely with their treating team to determine the best care options for their particular circumstance. ” ”

Jodie said this is particularly important for older patients.

"Older skin is fragile, can be injured easily and can take longer to heal. There are many different types of dressing and it is important to use one that does not irritate a patient's skin and slow down the healing process," she said.

Maintaining healthy skin is also important for patients with a stoma as the skin around the stoma should be clean, dry and intact to limit the risk of irritation or infection."

The Redcliffe Hospital Wound Management Stomal Therapy team sees more than 200 patients per month. Through effective and timely assessment, intervention and partnership this team is making sure these patients receive the care that is essential for their healing process.



Medical ‘superglue’ research may provide simple solution to major hospital problems

A simple dab of medical superglue may be the solution to a multi-billion dollar problem plaguing hospitals around the world.

A team of Queensland researchers are investigating the benefits of medical grade superglue in securing vital intravascular devices (IV lines) into patients compared to the standard medical dressings used by hospitals.

Lead researcher Professor John Fraser, who is Director of the Critical Care Research Group (CCRG) based at The Prince Charles Hospital, said “IV lines are used in almost every aspect of the patient’s care in hospital - to administer vital fluids, blood, medications, and nutrients.

“Hospitals around the world experience problems securing IV lines into patients using standard medical dressings,” Professor Fraser said.

The idea grew from some of the ground breaking basic science work being conducted by the CCRG, the largest critical care research group in Australia.

“We realised that superglue was incredibly effective at keeping drips in. On further reading, we realised that it also killed bacteria, which can frequently invade drip sites and cause huge clinical problems, as well as greatly increased length of stay and cost of health care,” he said.

“One of our collaborators, Professor Rickard, is at the forefront of research around drips, so we suggested we should do a human study.”

Second lead research Professor Claire Rickard, from Griffith University, said normally around one third of IV lines

get blocked, are pulled or fall out, and when this happens, there are significant implications for patient care.

“Urgent medical care can be interrupted due to leakage of the IV line, and patients may experience pain when the IV line has to be reinserted,” Professor Rickard said.

“There is also significant potential for life threatening infections and illness to develop in the patient.

“The cost to hospitals also increases due to greater amount of disposable equipment, time for specialist clinical staff to reinsert the IV line and staff exposure to needle stick injuries.”

Professor Fraser said every department in the hospital can benefit from this type of research.

“We have teamed up with world leading nurse researchers in this field, Professor Claire Rickard, our colleagues from anaesthesia, emergency medicine and ICU.

“We hope to also extend the research to the ambulance service and paramedics, who frequently have the least controlled situations, where the stability and bug killing properties of medical superglue are ideal.”

Professor Fraser said the research trial has great potential help make patient care in the hospital setting much safer and result in significant cost savings for the health system.

“By holding IV catheters securely in place with a small dab of glue, the potential benefits to patient care are immense,” he said.

“The patient will need replacement and painful needle jabs less often, risk of infection goes down, and the potential savings are significant.

“This research has the potential to improve patient care and increase hospital safety throughout Australia and internationally.”

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Left: Members of research team with The Honourable Lawrence Springborg Minister for Health.

Team-based nutrition care improves outcomes for hip fracture patients

A research project to improve the health outcomes of hip fracture patients at The Prince Charles Hospital (TPCH) has been recognised at a national health innovation forum.



Above: TPCH researcher Jack Bell.
Opposite: Dietitians help ensure patients' recovery is aided through adequate nutrition.

The research titled 'Multidisciplinary action research improves nutrition outcomes in acute hip fracture patients' was presented at the 2013 National Health Roundtable Innovation Awards, winning the stream 'Rescuing the Stranded Patient.'

The winning research highlighted the successful work of TPCH's Fractured Neck of Femur (NOF) Service, which innovatively combines the expertise of orthopaedic surgeons, geriatric medicine specialists and allied health professionals to provide dedicated and comprehensive care for patients with a broken hip.

TPCH key researcher and dietician, Jack Bell, who is also a PhD candidate at the University of Queensland Centre for Dietetics Research, said that multidisciplinary care for patients with a fractured neck of femur (broken hip) is essential due to the complexity and high risk nature of the patient group.

"Patients admitted to the TPCH Fractured NOF ward average an age of 83 and typically have five other co-existing medical conditions such as dementia, ischaemic heart disease and chronic obstructive pulmonary disease," Jack said.

"These factors all create significant challenges for the individual patient and health professionals before, during and following surgery."

Research shows that approximately one in two patients admitted are malnourished and 30 per cent have been diagnosed with dementia on admission.

"Our research showed that these patients experience barriers which can impact on their nutritional state," Jack said.

"Barriers are numerous and varied and may include medical or physiological problems such as cognitive and communication impairment, issues with fine gross motor skills, or gastrointestinal issues.

"Patients can also be affected by a range of psycho-social barriers including depression, disordered eating patterns, fear, social isolation and loss of dignity."

These are just some of the barriers that result in many patients having an inadequate nutritional intake.

Identifying barriers and ways to improve nutritional intake is important as we know that malnutrition affects a patient's ability to recover after hip fracture surgery.

Patients who are malnourished are more likely to have more complications including reduced mobility and increased chances of developing pressure injuries or bed sores.

Malnourished patients are also more likely to have an unplanned hospital readmission, be placed into long term care, or die within 12 months.

"The move to a multidisciplinary team Fractured NOF Service combining the expertise of many health professionals helped us identify and address many of the nutrition problems faced by patients," Jack said.



“Through a variety of research methods, we were able to show that getting the team and patients involved in identifying barriers to nutritional care engaged the patients and staff.

“Early results from this study show that implementing recommended improvements from a range of health professionals results in patients significantly increasing their protein and energy intakes, reduces the likelihood of patients becoming malnourished in hospital, and improves home discharge rates.

The Fractured NOF Service has significantly improved not only the nutritional outcomes but the overall health outcomes of patients with fractured neck of femurs (broken hips).

“Since the Fractured NOF Service started in 2010, we have seen major improvements in patient care delivery including faster and extended access to surgery, and more rapid discharge from hospital.”

“ We were able to show that getting the team and patients involved in identifying barriers to nutritional care engaged the patients and staff. ”



Nation's best performer for infection rates at The Prince Charles Hospital

A report released by the National Health Performance Authority, has highlighted Brisbane's The Prince Charles Hospital (TPCH) as being the nation's best performer in achieving low infection rates among patients.



Above: The Prince Charles Hospital Infection Control and Safety and Quality Teams.

This is the second year running that TPCH has achieved the nation's lowest infection rate among major hospitals.

The report rates the performance of 115 Australian hospitals in relation to health care associated Staphylococcus aureus blood stream infections.

Staphylococcus aureus is a common blood stream infection that patients may develop through the course of medical treatment provided by hospitals.

TPCH was reported as having the nation's lowest rate of infection among major hospitals with most vulnerable patients.

It recorded just 10 cases and a rate of 0.53 cases per 10,000 bed days, two and half times lower than the nation's average.

The National Healthcare Agreement signed in 2011 set a target for no more than two cases per 10,000 bed days for each state and territory.

Hand hygiene is a major factor in helping to reduce infections like Staphylococcus aureus.

The Prince Charles Hospital has a comprehensive hand hygiene program, which is constantly promoted to staff, patients and visitors.

The hospital has systems in place to regularly monitor and evaluate staff in both clinical and non-clinical areas to ensure good hand hygiene practices, and identify areas in need of improvement.

Achieving low infection rates is also about diligent clinical practice and staff training, particularly for staff that care for patients who are at greater risk of infection.

TPCH has a strong level of support from senior management to ensure that safety and quality remains a priority for the hospital.

The excellent achievement has positioned TPCH as a leader in safety and quality within Australia.