Frontline of care

It takes a special type of person to care for Victorian’s sickest patients in The Alfred’s Intensive Care Unit.
Our longer term response is to discover and deliver the next generation of healthcare. The role we play in clinical research helps shape future medical practice, as demonstrated recently by the work of Professor Myles in aspirin. Along with his team, he has settled the long-held debate over the daily use of aspirin for patients at increased risk of heart attack and stroke.

Research also creates greater understanding and awareness around how the community can prevent injury and harm, such as calling attention to the danger of ladder falls or the consequences of poor diets and sedentary lifestyles.

As an important part of Victoria’s healthcare system we see it as our responsibility to encourage our community to live healthier lives and to take an active role in their own health.

Andrew Way, Chief Executive, Alfred Health

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**PREPX research study**

The Victorian Government has announced it will expand access to pre-exposure prophylaxis (‘PrEP’) as part of a new public health research study. PrEP is the use of medication to prevent HIV infection in people who are at high risk. The new study aims to prevent the spread of HIV among Victorians at high risk of infection.

The new study called, PrEPX, will see up to 2,600 people access PrEP medication. It is sponsored by the Victorian Government, Alfred Health and the Victorian AIDS Council. It is being designed to examine the impact of expanding the use of PrEP on the rates of new HIV infections in Victoria.

PrEP will enrol people whose sexual or injecting drug use activities mean that they have a high chance of acquiring HIV infection. The study aims to offer PrEP to up to 2,600 people at high risk of HIV infection.

The study will need to be approved by relevant bodies and it is anticipated that it will start enrolment in mid 2016. If you are interested in the PrEPX study, please register by email prepx@alfred.org.au or call 0429 473 138. All information on the registry will be kept confidential and only available to PrEPX study staff.
The long-held debate over the daily use of aspirin for patients at increased risk of heart attack and stroke has finally been answered; with researchers from The Alfred finally revealing it to be safe before surgery.

Results of the 10-year international study, published recently in the New England Journal of Medicine, show that patients having heart surgery can safely take aspirin right up until the day of their procedure.

Lead author, and Director of Anaesthesia and Perioperative Medicine at The Alfred and Monash University, Prof Paul Myles said the results are significant for the hundreds of thousands of people who undergo open heart surgery around the world each year.

“The message is now simple – for coronary artery surgery, stay on the aspirin,” Prof Myles said.

More than half a million Australians with coronary artery disease take aspirin daily as prevention against heart attack, stroke and death, however there has been mixed practice over the past 15 years when preparing a patient for surgery.

“Some patients are kept on aspirin right up until surgery, while others are stopped on medical advice due to concern it may increase the risk of surgical bleeding,” Prof Myles said.

“Faced with conflicting guidelines from expert professional organisations we needed evidence to determine if the perceived increased risk of surgical bleeding could be outweighed by a beneficial effect of aspirin.

“Our study showed no increased risk of surgical bleeding, or need for blood transfusion so we now have clear evidence that aspirin can be safely continued up to the day of coronary artery surgery.”

More than 2000 patients were enrolled into the study in 21 hospitals across four continents.

The study was supported by a $3.5 million NHMRC grant, together with the support of the Australian and New Zealand College of Anaesthetists.
Frontline of care

It takes a special type of person to care for Victorian’s sickest patients in The Alfred’s Intensive Care Unit. Whether a patient has suffered a life-threatening injury, is fighting a chronic condition or is recovering from a transplant, our exceptional nurses provide expert one-on-one care.

While a patient’s time in the ICU is often back-dropped by deep family concern, our nurses witness a mix of miracles and heartbreak every day.

In such an intense environment where emotions are heightened, ICU nurses tackle their jobs in their own ways though always with empathy and compassion. This is their story.

From the ICU’s trauma pod, critical care nurse Stephanie Panther has a prime position today: overlooking the helipad in one direction and Fawkner Park in the other. But caring for Victoria’s sickest patients doesn’t give her much time to look out the window.

Stephanie has spent two years in The Alfred ICU. While she has cared for some tragic cases where life is cut suddenly short, her mind is a reel of highlights.

“One of my standout patients was a 40-year-old with severe cystic fibrosis who had a lung transplant. I was able to take her outside to have her first breath of fresh air with her new lungs, after wheeling oxygen around for many years. It was an emotional time; the family was so excited.”

In the last week alone, her patients have had a variety of conditions.

“Today I have a neuro patient and last week I cared for a post bilateral lung transplant patient and a patient who was very sick from necrotising fasciitis (a flesh eating disease) and had multi-organ failure.

She says there are many highlights of her sometimes intense job.

“We build rapport with the family from the very beginning.

Care and compassion: Critical care nurse Stephanie Panther.

We build meaningful relationships with family at such a critical time. For some it’s the worst day of their life. We try to support them in the best way we can.

“You’ve also got to have a really good balance for yourself. I focus a lot on personal wellbeing and health.

“Every single day on this job, I go away appreciating every moment of life I have. I see in life and death people come together, there is heartbreak and families in disarray and if I come to work with the smallest issue, I forget about it by the end of the day.”

In the ICU’s cardiac pod, Sonia Throssell agrees she’s not the same person she was when she started ICU nursing 14 years ago. Internally, she’s more resilient now.

It takes a while for this experienced nurse, with 25 years under her belt to admit that she’s upset about a patient today.
“I still get upset, particularly if I have a young person to look after. My patient today was getting stronger and closer to extubation but the team is now talking about re-sedating her to protect her lungs. “There are rewards in this job too, like helping your patient have their first shower for three weeks. I get very excited about seeing a breathing tube pulled out and seeing my patient eat their first meal after many weeks.”

It wasn’t until Year 12 that Francis Dignam learned there was even such a thing as a male nurse. A Deakin Alfred Fellowship saw him spend two student years in the ICU before taking on a graduate year in the unit.

“IT is very difficult being straight out of uni and being exposed to the complexities of these patients. It definitely is confronting and you’re not mature enough to deal with a lot of what you’re presented with,” Francis said.

“You’re I was 21 and talking to a patient’s family about death and dying – they don’t teach you that at uni.”

As a clinical nurse consultant, overseeing the ICU’s general pod of 15 beds, Francis also ensures staff are well supported.

“We slook after our peers as much as patients. Many of our patients take one step forward and then two steps back and if you get too close you ride that emotional journey with them. At the bedside we’re compassionate and have empathy yet it’s also be objective and learn from both the successful and difficult cases,” Francis said.

The Alfred’s ICU had around 3000 admissions last year, with a high number of highly complex patient cases.

Sonia sums up the role of the nurses in caring for Victoria’s sickest of the sick: “Here, we know we are making a difference.”
Stroke survivors and long-term problems

A new study by Caulfield Hospital neuropsychologists will examine whether the way stroke survivors view their own cognitive difficulties affects their success re-integrating into daily life.

Long-term community integration among home-dwelling stroke survivors: the influence of subjective cognitive difficulties was the winner of a $10,000 Caulfield Hospital small research grant.

Chief investigator Sophie Kimonides says many stroke survivors commonly experience long-term neuropsychological impairments that can affect their functioning, independent of physical difficulties. Subjective cognitive difficulties are also common post-stroke and can be a barrier to higher levels of function.

“Subjective difficulties do not always correlate with objective cognitive performance, as measured through clinical tests,” Ms Kimonides explained.

“Patients’ personal experience of cognitive difficulties, however, forms their reality and despite ‘normal’ performance on testing, it can have an adverse effect on employment outcomes and emotional status.

“If we’re able to rate these subjective abilities post-stroke, it could give us an important indicator of patients’ ability to resume normal functioning following rehabilitation. We need more research to determine the nature between subjective cognitive difficulties and functional outcomes, such as employment, community integration, independent living, the ability to maintain relationships and undertake daily activities.”

Study participants will be stroke patients who underwent neurological rehabilitation at Caulfield Hospital and were discharged home.

Participants will be asked to complete questionnaires on cognitive difficulties, functional outcomes, emotional status and physical impairment. Recruitment of 100-150 patients has begun.

“The findings of the study will allow us to better understand the long term outcomes of stroke patients and will inform future decisions about improving service delivery for patients and their families,” Ms Kimonides added.
Alfred surgeon Professor Wendy Brown is the first woman to be the Chair of The Alfred’s Monash University’s Department of Surgery. An Upper GI and General Surgeon, with sub-specialist interests in oesophago-gastric cancer, gastro-oesophageal reflux disease and bariatric surgery, Professor Brown is also the Director of the Monash University Centre for Obesity Research and Education (CORE) and Clinical Lead of the National Bariatric Surgical Registry.

With renewed debate around medical treatments to tackle the obesity epidemic and growing research in the area, Prof Brown is at the forefront of this modern specialty. She has performed more than 1400 Lap-Band™ procedures.

“Bariatric surgery appealed to me as a way of helping people to return to health.”

“Around 27 per cent of the population is now obese, yet still there is a societal stigma toward obese people. Through our research I hope we can stand up for them and work to find better treatments as well as promote the idea that obesity is a disease, not a moral failure.

“Many people don’t have a lot of empathy for obese people and think they should just eat less and walk more, but if it was that easy we wouldn’t have this major health problem in our community.

“While prevention would be the ideal, the fact is that a significant proportion of our population already suffer from this disease. We can now say that bariatric surgery is a viable treatment option for these people. There is significant evidence that all bariatric procedures can help people lose around 50 per cent of their excess weight safely and keep it off with consequent improvements to health and longevity.”

As the new Chair, Prof Brown said she will use the position to promote collaborative research projects between surgeons, scientists, engineers and hospitals around Australia.

“I see this position as a great opportunity to conduct and facilitate surgical research, support surgeons wanting to undertake a higher degree and promote clinical research in how we best deliver surgical care, particularly considering how we incorporate new techniques and new technology.”

Describing her new appointment as a career highlight, Prof Brown says her role as teacher remains her greatest reward.

“In some ways, my students’ progress means more to me than my own achievements. It is a great honour to be given a position that will hopefully allow me to inspire young doctors in the way I was inspired by my mentors at The Alfred.”
Positive change for patients

An innovative program – called Positive Change for Life – highlights Alfred Health’s commitment to caring for patients long after they have recovered from disease or injury.

The program, run by clinical haematologist Dr Sharon Avery, supports patients who have been cured of their blood cancer by stem cell transplantation but now commonly face other health risks including obesity, hypertension, high cholesterol and diabetes.

The Positive Change for Life program was developed to help patients make sustainable changes in nutrition and physical activity to reduce these risks. The 12 month innovative lifestyle modification program provided nutritional advice, individually tailored community-based physical activity, education, and motivational strategies.

“Participants reported improved quality of life, lower fatigue levels, improved nutrition, increased physical activity plus significant and sustained weight loss,” Dr Avery said.

Every day, 31 people in Australia are diagnosed with a blood cancer such as leukaemia, lymphoma or multiple myeloma. A total of 1544 stem cell transplants were performed in Australia in 2013 with 11,847 transplant survivors currently requiring follow-up care in Australia. Of these, 2854 are Victorian residents, and although some will have been treated as children, 92 per cent of survivors are presently adults.

Alfred Health’s Positive Change for Life program was highly commended in the 2015 Minister for Health’s Award for the Excellence in Cancer Care category.

Warm weather brings busy days

The Alfred’s Emergency and Trauma Centre was kept busy over the holiday period, with more than 16,000 patients receiving treatment between November and January.

The centre’s deputy director, Dr Jeremy Stevens said patients needing care sustained in car accidents increased by 15 per cent compared with the same period in the previous year.

“We are still seeing far too many cases of road trauma, from speeding to drink driving,” Dr Stevens said.

“It is important that everyone – including drivers, cyclists and pedestrians - works together to bring the toll down to zero.”

More than 25 per cent of summer presentations related to injuries – 1,500 of those required treatment after a fall.

Three out of five patients who presented to hospital during the warmer months were admitted.

Chest pain was also a common reason for presenting to the emergency department, closely followed by abdominal pain and fainting.
Getting breast cancer was a blessing in a way.
“It came out of the blue. I had a mammogram every two years and you normally get a letter saying it’s all clear, but this time I got a letter saying there’s something there that’s not right and will need further checking.
“At the biopsy one nurse was holding my hand and the other was rubbing my leg saying ‘everything will be ok, you’ll be looked after’. So I assumed it wasn’t good news. And then the specialist told me it was breast cancer, but it wasn’t a nasty one so I was grateful.
“I had surgery in 2009 at The Alfred and then more surgery – a partial mastectomy. The care I received was phenomenal. I remember saying to the nurse that when this is all over, there has to be some way to repay the hospital, so I became a volunteer in 2010 – exactly six years ago.
“If I had not had breast cancer, I wouldn’t have known the extent of the osteoporosis, which is a lot worse than the breast cancer.
“I’m a bugger with medications though – I react to them. One lot of tablets made my eye blow up, another led to blood clots. So when I look at all the possible side effects now, I start from the bottom, looking at the most unlikely ones. This has caused us untold amusement. If you can’t laugh with your family and friends ...that’s what gets you through it. Either that or I have a warped sense of humour.”
Thelma Treller, Volunteer

“I had a pain in my shoulders for a couple of days and it became severe and unbearable. I called the ambulance and was taken to The Alfred. On the following day I was told that I had a viral infection and was given antibiotics by drip. About two or three days later I was told that I had myeloma.

“About the fifth week of my stay, I was asked me to get up for some tests and I collapsed. I was resuscitated and when I regained consciousness, I was told that my heart had stopped for 20 seconds. Thereafter I was kept in the Intensive Care Unit. The doctors told me that if I collapsed again I might end up with brain damage. I was kept in hospital for a further two weeks and then transferred to Caulfield Hospital.

“All in all I enjoyed my stay at The Alfred and always tell my friends that it was like staying in a good hotel.”
M.S. Subramaniam, patient
Burns care and serious injuries

Living in Australia, we all think about the dangers of the sun on our skin and the impact of sunburn. But more serious burns, by fire or chemicals, are what keeps The Victorian Burns Service at The Alfred busy, especially over the hot months.

With expertise developed in burns care since the late Professor John Masterton established a stand-alone burns unit, the most seriously burns cases are treated at The Alfred. On Black Saturday, nine patients required a stay in ICU and two didn’t survive. It was the highest number of burns casualties The Alfred had ever received from a single incident. Typically, The Alfred treats more than 60 burns patients each summer. Last summer, 15 of those needed care in the Intensive Care Unit.

Director of the Victorian Adult Burns Service at The Alfred Heather Cleland says summer is typically a time when we see people who are burnt during recreational activities.

“These often involve the use of accelerants, when people throw petrol on campfires, or when burning off,” Ms Cleland said.

“A severe burn is a life-changing injury that can result in serious disability and disfigurement. It is important that prevention and fire safety are uppermost in everyone’s thoughts at this time of year.”

PROGRESSING BURNS CARE

There has been a huge progression of care for burns patients over the years:

• 1963: Prof John ‘Jock’ Masterton arrives at The Alfred, in a time when typically burns patients were looked after by whoever happened to be on duty at the time. He develops the burns care program, leading to the development of the Victorian Adult Burns Service.

• 1967: Professor Masterton becomes head of The Alfred Burns Unit. At this time there was limited understanding about burns care and surgical treatments were often rudimentary and delayed. Septic deaths were common.

• 1974: ISBI (international Society for Burn Injuries) meet in Argentina and it is determined that Australia and New Zealand should have a Burn Society dedicated to the improvement of care for burn patients and for research to improve that care.

• July 1976: inaugural meeting of the Australian New Zealand Burns Association (ANZBA) hosted by The Alfred.

• 1983: Ash Wednesday - one of Victoria’s greatest disasters. 15 seriously injured patients are sent to The Alfred (mostly from the Dandenongs), some with burns up to 60 per cent of their bodies. All 15 Alfred patients survived their injuries.

• 1993-94: An agreement is reached for the treatment of adult burns patients to be rationalised into a single Victorian Adult Burns Unit located at The Alfred.

• 1997: purpose-built Burns Unit is opened by the Minister for Health, Hon. Rob Knowles.

• October, 2015: Prof Masterton, who was head of the Victorian Adult Burns Service at The Alfred until 1996, and an early advocate of active surgical management of burns passes away, aged 87.
HAZARDS TO MANAGE:

- Barbecues that are not properly maintained. Check gas connections and bottles for deterioration and replaced if unsafe.
- Explosions occurring when boat engines malfunction – this is a cause of serious and life-threatening injuries.
- Firepits and other open fires at social gatherings where alcohol is consumed. Place adequate barriers to ensure people do not trip into these fires.
Old age in her patients is appealing to Dr Amelia Crabtree. After working in multiple medical specialties, including a year of advance training in intensive care, she chose geriatric medicine.

Here, Dr Crabtree doesn’t see elderly patients before her, but interesting people with many a story to tell.

“Old people all have something unique and interesting and in this speciality, you have the opportunity to find out more about them and use that to the patient’s advantage,” she explained.

“At some point as a junior doctor you start to understand that geriatrics is not just about decay. It’s about helping that person return to independence.

“Our patients often have multiple medical problems, so you have a real chance to make a significant difference, find out what they want and care for them holistically. My job is to make their lives better.”

In 2011 Dr Crabtree joined Caulfield Hospital, renowned for its expertise in aged care, particularly in dementia and delirium, falls and continence issues. Here she is one of 11 aged care consultants.

“A lot of my patients have chronic conditions like heart failure, end stage COPD and long term diabetes. As a geriatrician, I say it doesn’t matter how long you live. There is no use living to 130 if you don’t have a good quality of life,” Dr Crabtree said.

“My job is to make sure that with the time they have left, it’s comfortable, safe and they get to experience what’s important to them.

“As you get older you should do what makes you happy.”

In recent years, the geriatric field in Australia has become popular among advanced medical trainees. In Victoria, the specialty has the second most number of advanced trainees after cardiology.

Associate Professor Peter Hunter, Alfred Health’s Director Aged of Care says people are attracted to geriatric medicine because it is interesting, rewarding work.

“Caring for medically complex older people in a holistic way is rewarding. The speciality is increasingly diverse with many different opportunities in community and hospital care,” A/Prof Hunter said.
A 50 per cent increase in same day procedures in the last two years at Sandringham Hospital has led to a new vision. With community support, a Day Procedure Centre will be built next to the existing operating theatres to meet the growing demand.

The new centre will cater for a range of same day procedures, including orthopaedic, general, ophthalmology and gynaecology surgery, allowing thousands of locals to receive best practice care close to home.

Sandringham Hospital Director of Nursing Judy Reeves says same day procedures have grown exponentially to more than 4000 cases a year in recent times.

“Just 18 months after introducing ophthalmology services, we are the third largest cataract service in the state,” Ms Reeves said.

“This success is an example of the strong and growing need for day procedures, which is important for our growing and ageing population.

“Advances in clinical care has made it possible for many surgical procedures to be carried out same day, so that patients can return home shortly after surgery and not require an overnight stay in hospital,” she added.

A capital appeal has been launched to encourage the community to help support this vision. Support has already been received from The Black Rock Sports Auxiliary, Oaks Day lunches at both the Sandringham and Royal Brighton Yacht clubs, the PGR 24 hour bike ride crew, the Bayside Community Hub facebook group, Beta Sigma Phi and the Estate of Florence Jean Beckett.

To donate, visit sandringhamhospitalappeal.org.au or call 03 9076 1000

The plan for the $2.5 million centre:

- large windows to bring in natural light and create a warmer environment
- improved access, with easy drop off and pick up areas
- private areas for patients and families to meet with surgical team and patients – both before and after procedures.
- comfortable surroundings areas where relatives or carers can wait before, during and after procedures.
New admissions unit

The Alfred’s new Admissions and Perioperative Unit, which opened in January, promises to transform care. Acting Chief Operating Officer Paul Butler says the unit has three care principles at its core, which are used successfully in The Alfred Centre.

“These are a focus on the patient journey, a focus on the patient experience, and a standardised approach to care. ‘The new unit will transform the way we provide care and recovery for patients.”

Located on the first floor, Main Ward Block, the unit is servicing The Alfred’s main theatre groups and admit elective surgical patients and those requiring other medical procedures. The new unit, which includes 12 overnight beds and six day spaces, creates a single, central admissions point for patients and their family or carers. It features private spaces for family and carers, and separates pre- and post-operative patients.

Anaesthetist Dr Justin Burke says the unit reflects the changing consumer expectations around public services, particularly around accessibility and comfort.

“Most patients are complimentary when it comes to their experience at The Alfred,” Dr Burke said.

Perioperative service proving a success

The Alfred is leading the way for perioperative quality care in the public hospital system by offering a first-ever targeted follow-up service for high-risk surgical patients.

The unique initiative is led by the Department of Anaesthesia and Perioperative Medicine and the General Medicine unit, who work together alongside surgical units to care for patients after surgery. The aim is to reduce postoperative complications in the highest risk patients, such as those with heart disease, kidney failure, lung problems and other serious health issues.

Anaesthetist Dr Jonny Nicholson says the service was the first of its kind offered in Australia’s public hospital system.

“Our aim is to detect early and then prevent complications to high risk surgical patients resulting in reduced morbidity or even mortality,” Dr Nicholson said.

“We have senior anaesthetists reviewing these complex patients the day after their major operation to achieve earlier return to normal function with fewer complications.”

Almost 60 patients have been treated through the service since it began in September.

“This is another Alfred program highlighting our ability to provide an excellent standard of ward care to patients who do not require Intensive Care or High Dependency Unit admission,” Dr Nicholson said.

He hopes the model will be embraced elsewhere if the success continues.

Director of General Medicine, Associate Professor Harvey Newnham, said the main aim of the service is to return patients home quicker and healthier.

“Patients at high risk of complications and prolonged hospital stay after surgery are now being seen in the early postoperative phase by anaesthetists who follow them from theatre for 24 hours. “The General Medicine physician team then provide ongoing attention to their complex medical issues to help avoid and minimise complications,” A/Prof Newnham said.

From left: Associate Professor Harvey Newnham, Anaesthetist Arvinder Grover and Specialist in General Medicine Vincent D’Intini are some of the staff involved in the perioperative service.
ORGAN DONATION RATES RISE

In an event held at The Alfred recently, Victorian State Medical Director for Organ Donation, Dr Rohit D’Costa announced the strongest-ever result for organ donation in the state’s history.

A record 126 Victorians donated their organs after death in 2015 – giving 406 organs for transplantation and helping to transform the lives of people on the waiting list.

Lead Medical Director for Organ Donation at The Alfred, Dr Josh Ihle recognised the work of staff in what are often extremely difficult and sensitive circumstances.

“The Alfred is a leading hospital for organ donation in Victoria, thanks to a combined effort by the most dedicated team of nurses and doctors, who work together in a supportive and respectful environment,” Dr Ihle said.

“Our culture is one that unanimously supports organ and tissue donation, and strives to give every dying person the opportunity to consider being an organ donor.”

In a statement, the Victorian Minister for Health, Jill Hennessy paid tribute to each of the donors and their families who made the gracious decision to help others.

“I would encourage everyone to register to be an organ and tissue donor and to have this really important conversation with your loved ones so they know your desire to help others,” Minister Hennessy said.

The Alfred together with Royal Melbourne, Austin and Monash coordinated two-thirds of deceased donations in Victoria for 2015.

Sharing stories: Jane Bolle, who knew her auntie supported organ donation, and liver-recipient Ante Kelic who is standing tall thanks to his life-saving surgery.

To register to become an organ and tissue donor visit donatelife.gov.au/decide

Early detection, good outcomes

A new test can detect problems in the lungs before they become too serious.

Professor Bruce Thompson, Head of The Alfred’s Physiology Service, says the breathing test – called the multiple breath nitrogen washout – can detect what is happening at the periphery of the lung.

“It is a particularly good measurement to do on patients who have had a lung transplant,” Prof Thompson said.

“The first six months post-transplant are a very important time for the success of that lung. The holy grail is to have a test that is sensitive and specific enough to detect disease early and now we have that test.”

The test has been developed in conjunction with a respiratory physiologist in Brussels and is now being used in Alfred clinics.

Research on test results on 100 subjects has shown some startling outcomes.

“We have found that if patients have an abnormal breathing test in the first six months after transplant, they are 4.5 times more likely to go into rejection within a four year period than those who have a normal test,” Prof Thompson said.

“If we’re able to detect problems early, we can do something about it and start treatment.”

The breathing test can also be used for asthma control and treatment.

The research is due to be presented at the American Thoracic Society and sent for review for publication shortly.
Alfred doctors are calling on the public to use helmets when climbing ladders, especially the babyboomer population who are at high risk of major injury.

In her study *Danger at every rung: epidemiology and outcomes of ICU-admitted ladder-related trauma*, chief investigator and senior clinical trauma research fellow Helen Ackland says the minor inconvenience of wearing a helmet could prevent catastrophic injury.

“We highly recommend the use of helmets for ladder users in domestic settings,” Dr Ackland said. “This would reduce the chance of severe brain injury.”

“Our five year study showed that 194 major trauma cases were due to ladder falls. Of those, almost one-third required care in the Intensive Care Unit. Severe traumatic brain injury was responsible for the majority of deaths and for poor outcomes in survivors. In-hospital costs attributable to the care of these patients are high, and fewer than half were living independently at home one year after their fall.

“The simple strategy of wearing a helmet has consistently proven to reduce head injury severity in cyclists and is easily adaptable to ladder use,” Dr Ackland said.

“Ladder users should wear a helmet when climbing a step, single or extension ladder, and ladder safety guidelines should be followed.”

The most common tasks being undertaken at the time of ladder fall injury were domestic chores including gutter maintenance, tree pruning, window cleaning and painting.

“With an increase in life expectancy, we’re seeing older patients and being older brings extra complexities,” Dr Ackland explained.

“We see many patients with coronary heart disease, diabetes and osteoporosis amongst the babyboomer generation. All these conditions can lead to complications and possible poor outcomes following a trauma such as a ladder fall.”

The study was published online in the journal of Injury and is due for hard copy publication later this year. Co-authors were Alfred intensivists David Pilcher, Owen Roedenburg and Jamie Cooper, Emergency physician Peter Cameron and Susan McLellan from Monash Critical Care Research Division.

**STUDY RESULTS**

- Of the 5788 major trauma admissions to The Alfred 194 were ladder falls.
- Males accounted for 87% of all ladder fall admissions.
- Seasonal trend - admissions considerably higher from November to January (32% of admissions).
- The median age of the major trauma ladder fall patients was 62 years.
- 58 major trauma ladder falls (30%) admitted to ICU after high falls over one metre from ladders,
- 26% of the seriously injured ladder fall patients died
- The incidence risk for ladder falls increased from 3% to 4.17% over the five year period.