



Transforming Health

Discussion Paper



Transforming Health

South Australians deserve the best-quality healthcare system.

Transforming Health is all about putting quality outcomes first so we can create the best healthcare system for our state.

South Australia has a great health system. As with any quality service there is a need to regularly review what we are doing and how we are doing it. We accepted the opportunity to participate in the Minister for Health's Transforming Health Clinical Advisory Committees because as clinical leaders we are committed to making sure South Australia always strives to improve. We are committed to ensuring South Australia can deliver the best quality healthcare. We have found a compelling case for change and want South Australia to be able to deliver sustainable quality services into the future.

The Clinical Advisory Committees have developed quality principles and standards that we believe will deliver a sustainable quality healthcare system that will meet future healthcare needs.

Our journey has challenged us personally and professionally. As South Australian health clinicians we have committed to:

- Challenge ourselves to always work in the best interests of patients
- Include appropriateness of care as a standard measure
- Benchmark and hold ourselves to account on clinical outcomes
- Deliver multidisciplinary team based care
- Change the way we, as individuals, work to deliver the transformation in health care
- Ensure care is developed and delivered in an equitable, affordable and sustainable way.

It is clear that our hospital services will not meet the agreed principles and standards for best practice healthcare if they continue to operate as they do now. The principles and standards will have implications for the way we deliver hospital based care. But the changes that flow from these principles and standards will mean our health system and local health services can consistently deliver better outcomes, for more people, more often and more effectively.

We invite you to participate in transforming our healthcare system by reading this paper and contributing your ideas. In particular, please help by answering the survey questions on our website:

www.transforminghealth.sa.gov.au



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Foreword

Minister for Health

Over the last decade, the South Australian Government has rebuilt every major hospital in South Australia and our new Royal Adelaide Hospital will be one of the best modern hospitals in the world.

But it's time to make the next great change to our healthcare system.

Because of historic underinvestment in South Australian health, much of the last ten years had to be about bricks and mortar. Hospitals that were built in another era no longer had the design and capacity to cope with today's demands and complexities.

Now we can focus on the way we deliver healthcare in our new and upgraded hospitals; and we can match the design of our delivery with the design of our healthcare centres.

The Government began this process with the decision to relocate the Women's and Children's Hospital to the new Royal Adelaide Hospital site. Doctors, nurses and other health professionals convinced us of the value of having Women's and Children's services alongside an adult intensive care unit, and a wide range of adult specialty services for mothers.

With so many other healthcare changes and challenges ahead, we recognise that more needs to be done. That's why I've engaged our world-class health workforce in this exciting transformation project to help identify the way forward. We are beginning Transforming Health starting with a focus on our metropolitan hospitals.

Once we have our metropolitan system right we will then look to the wider system. This discussion paper provides the case for change and the principles and standards the Clinical Advisory Committees have developed to guide transformation of our metropolitan hospital system.

A serious case for change has been put forward.

I now need to talk to you about the health system South Australia needs for the decades ahead; a system that will provide the quality, efficiency and adaptability that all South Australians expect and deserve. If we agree with the clinicians about the quality principles and standards our system should be based on, we will have to change how and where services are delivered.

We need to make sure we future proof our system so high growth in demand or more Commonwealth funding cuts won't prevent us providing the care that South Australians need.

I want to thank all of the Clinical Advisory Committees for their time and efforts in developing the principles and standards.

This is just the start of the journey. Your input into the level of quality you want to see in your health system is important to me.

I am pleased to release the Transforming Health Discussion Paper to you.



Jack Snelling
Minister for Health

Foreword

Professor Dorothy Keefe

Professor Dorothy Keefe PSM was selected by the Minister for Health to be the Clinical Ambassador for Transforming Health because she demonstrates the commitment to continuous improvement, innovation and leadership required to deliver a transformed health system.

Dorothy is the Service Director of the South Australian Cancer Service, Professor of Cancer Medicine at the University of Adelaide and Senior Medical Oncologist at the Royal Adelaide Hospital Cancer Centre. She sees patients every week and is always concerned about providing the best care possible. She has a long standing interest in ensuring equity of access to best quality cancer care across the state and to ongoing improvements in care that respond to the evidence and innovation being delivered by science and technology.

In 2013 at the Queen's Birthday Honours she was awarded the Public Service Medal for outstanding service in the areas of Public Health, Medical Research and Oncology.

Healthcare is changing rapidly, and healthcare systems have to keep up with advances in medical science, treatment and technology.

We are on a journey to ensure our system is designed for the 21st century; a system driven by quality.

But you can't have healthcare reform if it isn't in real partnership with clinicians who, despite being at the heart of the system, sometimes feel disengaged. From day one of Transforming Health, the Minister for Health engaged clinicians to ensure this process could succeed.

You can't improve quality in our health system by cutting money. But improving quality and providing best care, the first time, will give us a real chance to build one of the world's highest performing and most efficient healthcare systems.

As part of our historic and ground-breaking work, we have analysed the performance data of our metropolitan hospital system. We have found areas of excellent care delivering great health outcomes, and areas where we could be much better. Factors such as the design of our services, working hours and the way we adopt new technologies play a big role in the delivery of quality. We need to do better to ensure

there is high quality everywhere across our system. We need to embrace innovation and stop doing things that are no longer best practice.

In this paper you will see the case for change. Clinicians involved at the request of the Minister have created new standards for healthcare that should underpin our hospital system.

To achieve these standards we will need to restructure our services to provide the high-quality care to which we aspire.

We are excited about the consultation phase of Transforming Health and the chance to redesign our system.

**Best care. First time. Every time.
For all South Australians.**

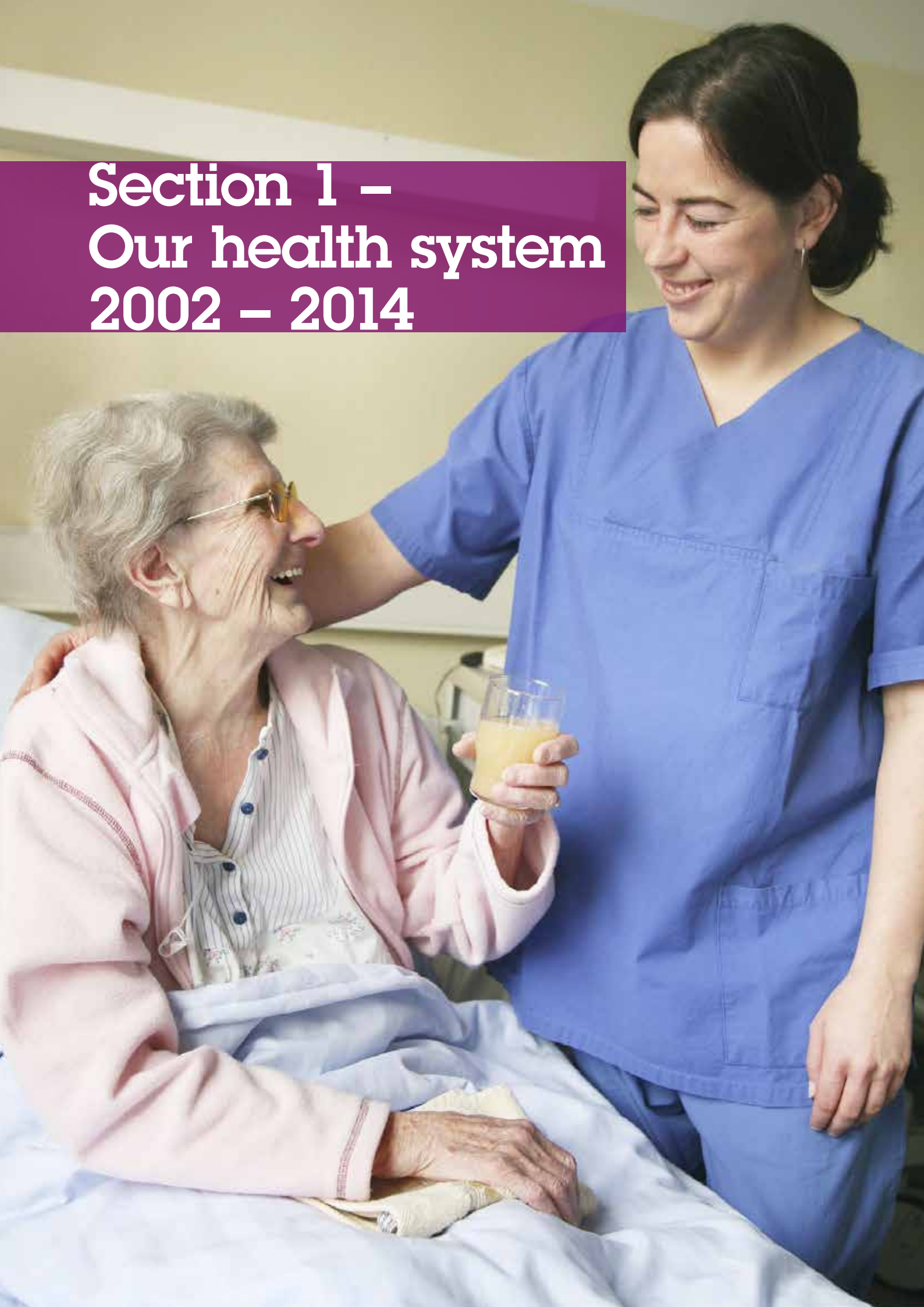


Professor Dorothy Keefe PSM
Clinical Ambassador, Transforming Health

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Section 1 – Our health system 2002 – 2014



In 2002 South Australia had a health system with old infrastructure, and old equipment, struggling to meet service demands. Over the past 12 years we have invested in our health infrastructure to bring our hospitals up to date.

We now have excellent facilities in place and will soon have the most modern hospital in Australia with the opening of the new Royal Adelaide Hospital.

We have many areas of excellence – but our health system does not consistently deliver the quality of care we expect from a modern health system. Transforming Health is about delivering consistent, safe, quality care that meets today's needs and provides for the challenges of the future.

2002

- Outdated equipment
- Old hospitals

2002-
2014

- Investment in infrastructure
- Redevelopment of hospitals

2014

- Some areas of excellence
- Inconsistencies in care
- Different patient outcomes depending on time and place

The
future

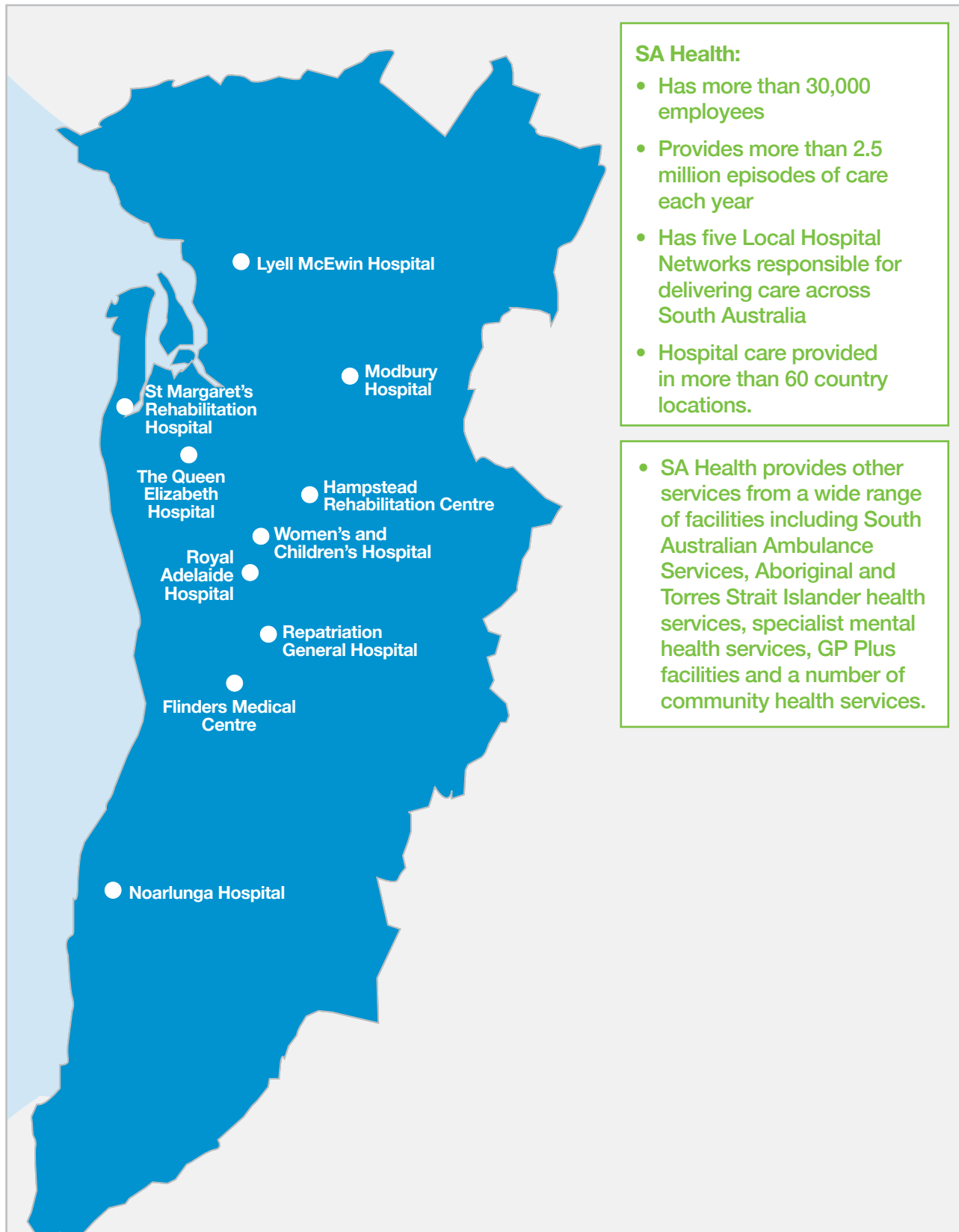
- Consistent, safe, quality care
- High quality patient outcomes regardless of time and place
- Provision for future needs

Section 2 – Our context



What we currently do

Metropolitan Public Hospital sites



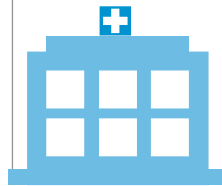


ON ANY DAY

ON AVERAGE
AT SA HEALTH



6 Medstar Retrievals are performed each day



5,027 people are seen in hospital outpatient clinics



728

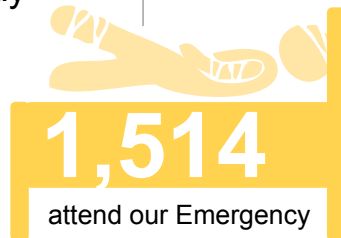
cases are responded to by SA Ambulance Service

> **662** treated or transferred
> **43%** patients whose lives are potentially threatened



31

Ambulances required by our metropolitan public hospitals to respond to discharge requests



1,514

attend our Emergency Departments

> **437** are admitted



56 babies are delivered

1,134

people are admitted to public hospitals



62

of these admissions are Aboriginal and/or Torres Strait Islander people

22

of these admissions are war veterans or war widows



EACH WEEK

ON AVERAGE
AT SA HEALTH



879

South Australians have an elective surgery procedure in a metropolitan public hospital



1412

women are screened for breast cancer

3018

women are screened for cervical cancer



758

people are screened for bowel cancer

SA Health is one part of a much bigger system that includes primary health care, general practice, private specialist services and private hospitals. As well, the wider system of care includes community services, aged care and a broad range of non-government providers whose services are essential.

But we have to make sure our hospital system is functioning in the most effective and efficient way possible.

Meeting the challenges which confront our health system requires us to continually review how we design the services for the people that use them.

Our workforce already looks for continuous quality improvement and there are many examples of some great work delivering improved health outcomes. However, incremental change is no longer enough to deliver the scope and quality of service our communities need.

Our challenges include:

- Delivering appropriate and timely hospital admissions while minimising unnecessary hospital stays
- Ensuring all patients are discharged from hospital in a timely way

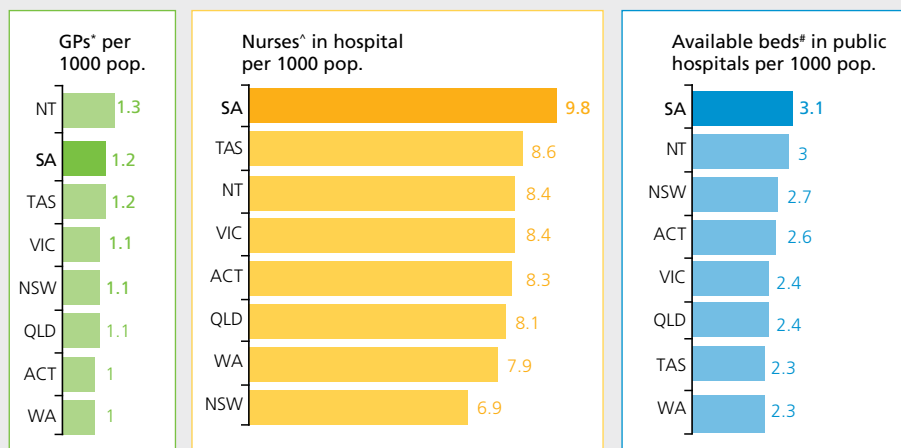
- Ensuring patients are kept in hospital for only as long as their condition demands
- Removing duplication of services/treatment/assessments across care providers
- Using our staff's skills in the best ways throughout the patients' experience, from the point of admission to discharge, including after hours and weekends.

South Australia is highly resourced¹ in healthcare. South Australia has more beds per person than the rest of Australia and Australia has more beds per person than most countries in Europe.

With such comparatively high resourcing, do we have better health outcomes in South Australia?

Although we have higher resources, we don't have better outcomes in all health areas.

South Australia has a high number of GPs, hospital nurses and beds compared to other states



Data source: AIHW Medical Workforce 2011, Nursing and Midwifery Workforce 2011, Australian Hospital Statistics 2009-2011. * GPs in all work settings (for example, hospitals, community, private practice) ^ Includes both registered and enrolled nurses. # Includes overnight and day beds.

¹ Source: AIHW: Medical Workforce 2011; Nursing and Midwifery Workforce 2011; Australian Hospital Statistics 2008-2011 (figures are age adjusted)

Healthcare funding

In 2014-15, \$5.2 billion will be spent on South Australia's health budget. Health spending makes up 31.5 percent of the State Budget. At current growth rates, health spending will approach half of the State Budget over the next fifteen years. This will mean less funding for other important services such as education, police and emergency services.

The State's health budget is growing by an average of 1.5 percent per year but our average growth in spending has been far higher in the past.

We must deliver value in health services, eliminate duplication but make sure our investment continues to provide the best quality healthcare.

Our responsibility to the public is to provide the best value services possible.

We must do more, particularly given the \$655 million of funding cuts (over the next four years) announced by the Federal Government in its 2014-15 Federal Budget.

Half of this funding shortfall has been provided through revenue measures. However, the State Government must cover the remainder.

This decision of the Federal Government is a stark reminder that simple cuts to health budgets will not work. Cuts do not deliver service improvements. Instead, we need to look at better quality across the system. Evidence shows if we deliver quality first time, every time, it will reduce costs.

We will continue to increase our investment in better healthcare, and our State's overall budget for healthcare will never be cut.

Our health system needs to be dynamic and flexible to respond to changes in healthcare and limits to funding growth, without sacrificing the world-class care South Australians deserve.

Hon. Jack Snelling, Minister for Health

Section 3 – Our journey



We provide good healthcare to South Australians but we want to provide the highest quality care possible. We need to understand why, with more resources, we have not been able to deliver consistent quality outcomes across all services and sites.

The people who work in our health system are best placed to know how to improve it and they have been closely involved in this journey to Transform Health.

The Minister for Health appointed three Clinical Advisory Committees to look at our health system, make national and international comparisons and develop principles and quality standards to suit South Australia.

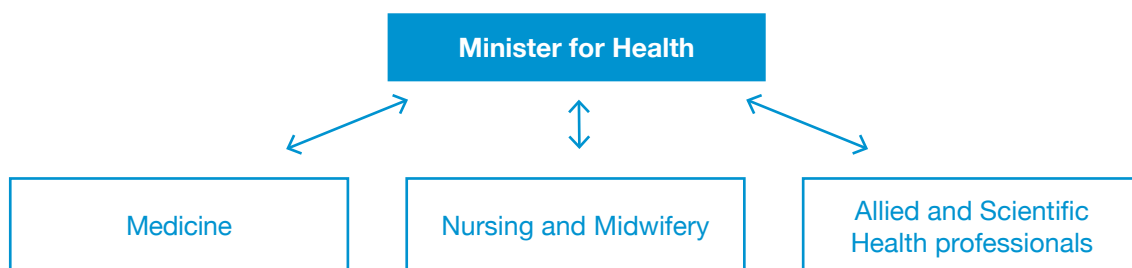
Each group included respected health professionals who looked at what we do well and where we can improve. Using the best available evidence, together

with their own local knowledge, they agreed six quality principles.

The Clinical Advisory Committees also developed specific standards for many aspects of hospital care (Attachment 1). These standards should underpin every part of our hospital system. Some of them are discussed in detail in this paper to show the types of improvements we can make.

If supported through this community consultation, the quality principles and standards will result in changes to our metropolitan hospital system so we can improve health outcomes for all South Australians.

All feedback will be considered as part of determining our Transforming Health priorities.



Six Quality Principles

A quality, world-class health system is:

- | | |
|--------------------|---------------|
| 1. Patient centred | 4. Accessible |
| 2. Safe | 5. Efficient |
| 3. Effective | 6. Equitable |

Best care. First time. Every time.

Source: The six principles were first published in the Committee on Quality of Health Care in America, Institute of Medicine report: Crossing the Quality Chasm: A New Health System for the 21st Century 2001.

Just a note...

Transforming Health starts with our metropolitan hospital system: that's where most services are delivered, speciality services are located (for example burns unit and renal transplantation services) and most of our money is spent.

Metropolitan hospital services don't just deliver to people from the city, 16 percent of overnight hospital admissions in metropolitan hospitals are for country residents.

As we've said, the healthcare system is much bigger than just public hospitals, and it's much bigger than SA Health. It includes primary care, general practice, private specialist services, private hospitals and the full range of private allied and

other health professionals who help us maintain health and wellbeing. It also includes a range of community-based services, and a wealth of services provided by the non-government and aged care sectors amongst others.

We want to get our metropolitan hospitals delivering consistent quality care before we tackle the full spectrum of the health and community sector.

We will also want to see how we can best apply the agreed standards for our country hospitals.

Transforming Health must be a whole-of-system transformation but we have to start where the impact is greatest – our metropolitan hospitals.

Section 4 – What our Clinical Advisory Committees discussed



Our health needs have changed

Historically, hospitals were designed for acute medical crises, such as heart attacks or major accidents. But now, our hospitals manage people who are more likely to have multiple, complex conditions. Chronic diseases such as diabetes have increased dramatically, and people are living longer. Treatments are more specialised and sophisticated.

We need to transform our health system to better treat people with complex, long-term conditions, and make care more consistent, efficient and effective.

Our population profile

South Australia has one of the oldest populations in Australia, with one in six² people over the age of 65. On average, 40 percent³ of patients in our hospitals are between 65 and 85 years of age.

As we age, we are more likely to develop chronic conditions, like heart disease and diabetes, and suffer multiple health problems. This raises new challenges for our health system, and requires co-ordinated input from all our health professionals.

We need to consider how we can provide co-ordinated care that is more responsive and closer to home.

Teams that work in the community can help people manage their conditions at home, with less disruption to their daily lives.

Different population groups experience different levels of health and wellbeing. Aboriginal and Torres Strait Islander people experience the poorest health of any population group in South Australia and encounter particular challenges in accessing appropriate healthcare.



Did you know?

In South Australia in 2013-14 there were 36,589 admissions to hospital for people with chronic conditions that could potentially have been avoided. With more than 40 percent of South Australians living with a chronic condition like asthma, heart failure, diabetes and Chronic Obstructive Pulmonary Disease, it is important our healthcare system supports people to manage their chronic conditions effectively so they can stay healthy. But when they do require hospital care, our hospitals need to be able to manage the increasing complexity of care required.

Data Source: SA Health Data – Health Information Portal (extracted 17/09/2014).

Other populations for whom access to appropriate healthcare can be challenging include:

- The very frail and elderly
- People with mental health needs
- People with a disability
- People who are homeless
- People from culturally and linguistically diverse backgrounds
- Veterans.

Our healthcare system needs to respond to this inequity by ensuring there is appropriate access and services for vulnerable populations.

² ABS 2011 Census data – compiled by Australian Population and Migration Research Centre.

³ SA Health (Data extracted 03/07/2014 from OBI).

Technology has changed

Unprecedented technology and innovation is delivering fantastic improvements in healthcare.

Technology can now:

- Help us to monitor our own health
- Record information and send it electronically to our health professionals
- Help us track and monitor indicators such as our blood sugar levels, heart rate, diet and exercise (for example by using phone 'apps', or applications).

Breakthroughs in medical science have also improved clinical practice and recovery times.



Did you know?

Operations that previously involved a high risk invasive procedure, anaesthesia and many days in hospital can now be performed as a day surgery procedure.

Technology has changed the type of equipment, resources and materials our clinicians need to deliver healthcare.



Did you know?

Clinicians used to have to cut a person open to remove the gall bladder. This required many days in hospital. The operation can now be done using key-hole surgery so a person has a shorter stay in hospital and a faster recovery.

Advances in technology, innovation and practices can also help us deliver the right care first time.

Specialised skills are needed

Medical advances often need highly specialised staff using highly specialised equipment.

Most of us will never need this level of care in our lifetime, but, if we do, we'll want the most experienced and capable health teams to care for and treat us.

Evidence tells us that some speciality services need a minimum number of patients for safe, quality-care standards to be met; basically, staff need to treat enough patients to maintain their skills and advanced expertise. But the technology and resources required to support this care can be expensive, so we need to make sure we use our funding in the most effective way.

Providing the appropriate level of specialist care and expertise can only be provided at a limited number of sites.



Did you know?

A bariatric (that is, weight-loss) surgeon should perform at least 40 procedures per year to maintain a safe level of skill*. In South Australia only one of the five hospitals that provide bariatric surgery reaches the recommended number of procedures per year.

But to ensure that someone having bariatric surgery gets best-quality care and treatment, including before and after the operation, an entire health team is needed. This includes nurses, dietitians, psychologists, exercise physiologists, social workers and others. And they all need to maintain their skills and capabilities.

*British Obesity and Metabolic Surgery Society - Professional Standards document, March 2013.

Delivering consistent quality of care

The Clinical Advisory Committees assessed significant data about the performance of the metropolitan hospital system, which was analysed and presented in different ways. This data showed areas where the South Australian system is performing very well, but it also revealed our system does not always support delivery of high quality care for some services.

We know we are not delivering consistent quality of care. This is clear from differences in:

- **Length of stay** – people with similar conditions and health profiles would be expected to spend a similar number of days in hospital.
- **Mortality rates** – similar populations with similar health interventions should not have large differences in death rates.
- **Procedures** – the number of particular procedures done in South Australia should be similar to the national average once demographic differences are considered.

Length of stay

People can get sick at any time of the day or night. South Australians rightly expect services will be available when they need them. They don't expect to have to stay in hospital longer, just because a particular service in the hospital is not provided on the weekend.

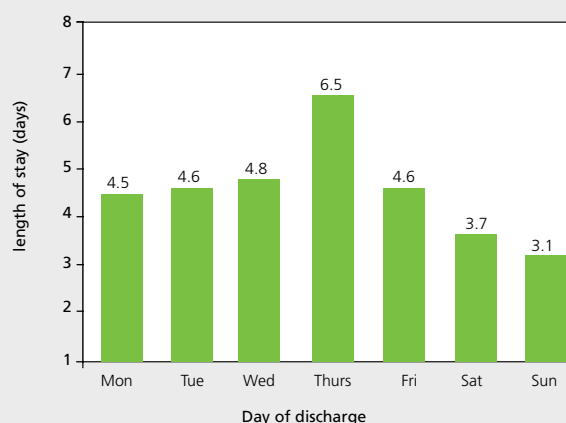
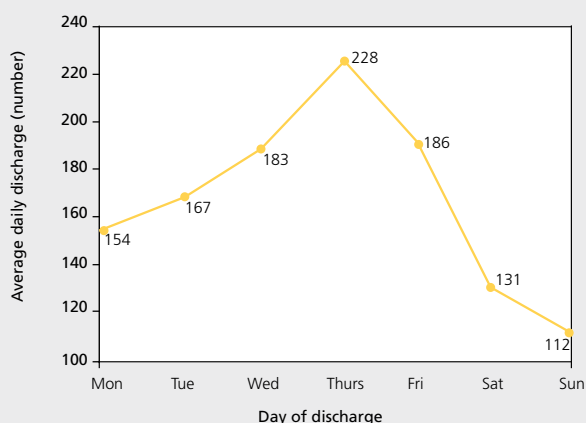


Did you know?

Your length of stay in hospital can vary by up to three days depending on the day of the week you are admitted or discharged. This is because the services you require are not always available through the weekend, causing unnecessary delays which mean you stay in hospital longer than needed.

Unless it is a life-threatening emergency, many tests, plus many allied health and other services, are not available on Saturdays or Sundays. Clinicians with the expertise to make important decisions about your care also are often not available. This means you may wait until Monday for the services you need.

The number of people discharged from hospital varies according to the day of the week



Data source: April - June 2014; Acute sample of emergency department admissions from five major metropolitan hospitals in South Australia.

In effect, people are staying in hospital for different lengths of time for the same condition. Even when complicating factors such as other chronic conditions are taken into account (the 'complexity adjustment'), there are significant differences between hospitals.

An example of this is clear on the graph below which shows the differences in Length of Stay (LOS) for respiratory infection.

If we keep you in hospital any longer than necessary you are at higher risk of falls, infections or mistakes in care and medicines. These risks are known internationally and exist in all hospitals.

So you should not have to stay longer in hospital because structures and systems don't provide the service you need. Delays in decision making, access to tests and test results must be minimised so you can leave as soon as you are well enough.

Many staff already work over a seven day roster, such as nurses and Emergency Department doctors. Patient outcomes would be better, and hospital stays shorter, if more services were available seven days a week.

We must deliver consistent care so people can have similar expectations about their treatment and so all people receive the same quality of care.

Mortality rates

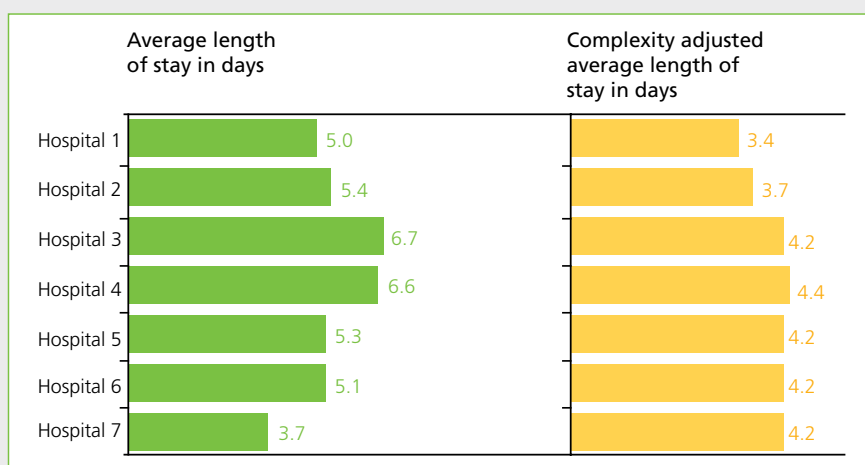
People rightly expect that similar populations with similar health interventions should not have large differences in death rates. The hospital attended, or time of attendance, should not result in significant variations in mortality rates.

Our clinicians have examined the difference in mortality rates for stroke, as an example.

South Australia has a fantastic stroke treatment pathway which is recognised internationally. We have delivered substantial improvements across our stroke services and overall South Australia meets the national average for stroke outcomes.

Despite meeting this average, there are unacceptable variations in death rates from stroke depending on the time or day of admission. We are not delivering consistent quality of care. Clearly, we cannot continue to provide services in the same way when faced with evidence like this.

Average length of stay for respiratory infections varies across metropolitan hospital sites



Source: SA Health. HIP data extracted August 2014; Casemix data.



Did you know?

The most recent National Stroke Foundation audit shows that South Australia leads the nation in thrombolysis therapy – one of the most successful treatments for stroke. Thrombolysis therapy provided to South Australian patients was almost double the national average.

Source: National Stroke Foundation Clinical Services Audit 2013.

Procedures

People assume the number of specialty procedures performed in South Australia is similar to the rest of Australia (once demographic differences such as an older population are considered). This is not the case. Instead, South Australia has one of the highest rates in the nation for some procedures, for example hysterectomies, caesarean sections and knee arthroscopies.



Did you know?

South Australia has some of the highest rates in the nation for some procedures including hysterectomies, caesarean sections and knee arthroscopies.

Australian Commission on Safety and Quality in Health Care and Australian Institute of Health and Welfare. Exploring Healthcare Variation in Australia: Analyses Resulting from an OECD Study. Sydney: ACSQHC, 2014.

There are no obvious reasons for this, which raises questions about our system:

- Are factors other than patients' health needs or preferences driving treatment decisions?
- Are some people having unnecessary tests or treatments, OR are others missing out on necessary interventions?
- Are scarce health resources being put to best use?

If you are interested in knowing more you can access the report on healthcare variations in Australia at: www.safetyandquality.gov.au

Differences in location should not result in different health outcomes. The care we provide must be necessary, represent value and contribute to positively to health and wellbeing.

Meeting the challenges and demands facing our metropolitan hospitals requires us to not only look at our services and facilities but also how we support our health workforce to deliver quality care.

To deliver quality of care we need to make sure our system is able to respond to all the current challenges in the system.



What are your thoughts?

- Do you want better ways to manage your long-term conditions in a community setting and safely avoid frequent visits to hospital?
- Do you expect hospitals services to provide a consistent quality of care?
- Where our staff need to see a minimum number of patients to ensure safety and quality, do you think we should concentrate those services in fewer sites?
- Do you think hospital services should be structured so that services are offered seven days a week for appropriate procedures?
- Do you agree that treatment should be based on best-available evidence that shows a benefit to people's health and wellbeing?

Section 5 – What the clinicians recommend and its implications



The Vision

We can build a world-class health system by adopting and sustaining the best standards of clinical practice across all of our health services. We want a system that embraces medical breakthroughs and new technologies. We want a dynamic system that delivers quality care every time.

Together with our doctors, nurses, midwives, allied and scientific health professionals, we are transforming our healthcare system so the standard of care you receive and the health outcomes you achieve, match the state-of-the-art infrastructure we have invested in over the past decade.

The Clinical Advisory Committees have recommended we use the six principles of quality healthcare to guide how we transform our system.

The Six Quality Principles

1. **Patient centred** means:

- You get the care you need when you need it, first time
- You are treated with respect throughout your healthcare experience
- You are engaged as the central decision maker in all treatment and care decisions
- You feel fully informed and supported to make decisions about your care
- Your health professionals understand your values and unique situation
- You feel you have been heard and understood.

2. **Safe** means:

- We do not cause harm
- Procedures are done only by practitioners with suitable training, experience and supervision
- Health outcomes are consistent, whatever time of day or day of the week you are treated.

3. **Effective** means:

- Healthcare is based on evidence
- Our first priority is achieving the best health outcomes, first time
- You only receive treatment that is necessary and appropriate for you.

4. **Accessible** means:

- Healthcare is timely and appropriate: the right care at the right time and in the right place
- You travel the appropriate distance to receive suitable services
- Suitable services are available when you arrive.

5. **Efficient** means:

- We make the best use of infrastructure, human resources, technology and communications
- We reduce duplication
- Services are simplified through innovation and responsible decision making
- Patient care is co-ordinated across the system.

6. **Equitable** means:

- Quality services are delivered to every person who needs them.

Quality standards and system implications

The Clinical Advisory Committees have developed standards they believe should apply to our metropolitan hospital services. The full list is available at Attachment 1.

There are 42 overarching standards covering our broad healthcare expectations and another 250+ standards covering four key areas of hospital care. The standards are for:

- Emergency care services
- Elective surgery services
- Some clinical speciality services
- Women's and children's hospital services.

These are just a starting point. There will be more to do.

Of the nearly 300 standards developed there are 52 that cannot be achieved in our metropolitan hospital services. That is, they cannot be achieved in the current configuration of our metropolitan hospitals. Those 52 standards are identified in Attachment 1 by an asterisk (*).

If we adopt these standards we need to look at how and where we deliver our metropolitan hospital services.

Restructure of services will be required.

First, then, we must make sure these are the standards we want for our system.

The clinicians have advised us on the quality standards, and if accepted by the community, Government will need to determine how best to deliver them.

The way the system is currently structured does not produce the best quality outcomes all of the time.

There are examples where service redesign and transformation are already underway, such as the move of the Women's and Children's Hospital to the new Royal Adelaide Hospital site.

We also have examples of improvements made to healthcare delivery that have resulted in good outcomes. We need to build on existing improvements to ensure we lift the standards across the whole system.

We already have areas where services are consolidated, such as burns, some paediatric services and renal transplantation services.



Did you know?

In 2013, the new purpose-built ward at the Lyell McEwin Hospital was dedicated to specialised paediatric services.

This provided a better service for children in the north, with more medical staff in-house 24 hours a day plus new positions, including a Paediatric Clinical Practice Consultant and a Paediatric Nurse Educator. This enables a higher level of teaching and training for our health workforce which helps deliver better quality care to sick children. This means, too, that Modbury Hospital can provide outpatient services, enabling access to services closer to home, but specialty care is delivered across the north in a safe, consistent and efficient way.



Did you know?

Prior to 2001, burns services in South Australia were disjointed. Burns sufferers were cared for in metropolitan and rural public hospitals, in smaller health facilities and managed at home by general practitioners. Delays in people with burns injuries presenting to the Burns Unit were common, which resulted in higher infection rates and high numbers of skin grafts (return to normal function in hand burns takes approximately three months if treated without grafting, but 12 months if grafts are required.)

A vision to create a centre of excellence resulted in a centralised specialist adult burns unit. Major improvements in the speed of burns referrals and better pre-treatment of burns (treatment prior to specialised burns treatment in hospital) followed.

An example of the Unit's success is that hand burns requiring skin grafts have reduced from 45 percent to 7 percent.

Delivering patient-centred, efficient, accessible and safe healthcare, will mean we move from a good health care system to the best we can be. Achieving such high quality will mean changes across the entire system.

We have to get better at delivering care when you need it; the current configuration limits our health professionals' ability to do this.

Delivering better treatment, better specialisation, better integration and better processes means transforming how we deliver services

Workforce opportunities

The quality standards will also have implications for our workforce. For example, if services move, we will need an adaptable workforce to ensure we have the right teams in the right places to deliver quality care across the system.

Providing efficient and sustainable services may also require us to look at opportunities for role substitution so we can use the most appropriately skilled health professionals for the service required. This can mean more satisfying roles for our staff, and more flexibility within our system.

The health system is becoming more complex so it becomes important to find new ways to work more effectively, providing the right care, at the right time and in the right place. With better alignment of staff with services, roles with added responsibility, such as nurse practitioners, are being used successfully.



Did you know?

A **nurse practitioner** is a Registered Nurse who can function independently in a more advanced clinical role. For example, in early 2014, a Renal Supportive Care Nurse Practitioner was appointed across the Renal and Transplantation Service to support people living with end stage renal disease. This role was created to meet the special health needs of patients in this group and the nurse works closely with treating Nephrologists, palliative care teams and community clinics.

The nurse practitioner is part of a multidisciplinary team for this group of patients and provides more opportunities for choice and access to treatment.

Extended Care Paramedics are highly-skilled ambulance clinicians who treat people with common health conditions in their homes. For example, they may have a blood test or be given intravenous antibiotics.

Patients who would normally be transported to hospital for treatment, and who fit the criteria for care administered by an Extended Care Paramedics, are treated at their residence instead. This reduces pressure on emergency departments and allows them to focus more on patients whose lives are at great risk.

To the left are just two examples of the new types of roles our health workforce can undertake. There are other opportunities to better harness the skills of health professionals such as allied health workers, which will improve services for patients and enhance roles for our workforce.

Transforming Health also affects teaching, training and research, which are essential to a sustainable quality healthcare system.

Research tells us about the effectiveness of our care and treatment, and helps us improve our practices. Teaching and training our next generation of health professionals is critical to maintaining a continuing focus on delivering quality care.

To have this continuing focus, as well as quick responses to service failures, we need to change how we work and ensure that we have systems that help us achieve those goals.

Transforming Health will mean changing the infrastructure, processes and systems that support service delivery and our workforce.

If quality means care that is:

**Patient-centred – Safe – Effective –
Accessible – Efficient – Equitable**

...then we can see we need to change where and how we deliver services. We do not yet know exactly what that looks like, but this paper outlines some areas for exploration.



Opportunities

Some potential opportunities for service improvement our clinical groups have identified are:

- Improving elective surgery by increasing day cases. We can also improve processes to reduce unnecessary hospital stays, deliver more efficient services, reduce unnecessary cancellations and deliver better patient experiences and outcomes
- Improving outpatient services to maximise the use of our resources, reduce waiting times and reduce unnecessary cancellations
- Reducing unnecessary transfers of patients between hospitals so people can get to the right care first time
- Increasing early access to rehabilitation services so people get better health outcomes and improved recovery times
- Reducing undue variation in length of stay. This will make our hospitals more efficient, enable better access to a hospital bed for those needing admission, and reduce risks associated with staying in hospital
- Increasing our use of technology and innovation so patients get better health outcomes and we can deliver them more efficiently and effectively.

Better treatment options

Not all hospitals are the same and this means emergency departments are not equally supported to admit and manage all patients who go to an emergency department.

Some of our emergency departments admit only 7 percent of the people who present and they also transfer a significant proportion to bigger hospitals.



Patient journey

Michaela's story

Michaela's partner rushed her to the local hospital at 10pm as she had experienced chest pain. She was assessed in the Emergency Department (ED) but the hospital didn't have the specialist Michaela needed. She waited another 25 minutes for an ambulance to become available to take her to a major hospital 15 minutes away. Michaela then had another assessment in that hospital's ED, which confirmed that she needed emergency heart treatment. This hospital had the right type of specialists available, so she was able to be admitted and given the necessary care. However, by then her condition had deteriorated to a critical level, which could have been fatal.

If Michaela had known which hospital to attend first and gone straight to the major hospital best equipped to treat her condition, her treatment would not have been delayed.

We need to be clearer about the different roles of our hospitals. Not all hospitals can provide the same level of access to specialist treatment and diagnostics.



Did you know?

In metropolitan Adelaide we have seven emergency departments. That equates to about 5.4 emergency departments for every million people. This is far more than most cities our size. For example, Auckland has 3.3 emergency departments for every million people, Copenhagen has 3.4 and Calgary has 3.7.

Source: 1. SA Health; 2. Ministry of Health New Zealand; 3. Region Hovedstaden, Statistics Denmark; 4. Canadian Institute for Health Information/Alberta Health Services.

Most conditions treated at emergency departments are urgent but not life-threatening. Two-thirds of patients are treated and then leave the hospital without needing to be admitted. This does not mean that they should not have attended an emergency department. Instead, there may be opportunities to look at different levels of services. For example, would a service that sits between general practice type services and full emergency care be able to provide a better service for people with urgent but non-life threatening health needs?

Once again, redesigning our system can help us to reduce unnecessary transfers between hospitals and deliver the right care at the right time.

This may also require change to our health workforce to ensure we have the right staff in the right place at the right time.

Better specialisation

Advances in technology and the need for specialised staff means that not all hospitals are equipped to deal with 'once in a lifetime' emergencies that occur.

Evidence shows that strokes and heart attacks need to be treated at hospitals that are fully equipped in terms of medical specialties, technology, and entire workforce teams who are highly experienced in specific treatments and procedures.



Did you know?

In South Australia around 70 percent of all multiple traumas are managed at the Royal Adelaide Hospital, because it has the specialists who are equipped to treat patients with those complex injuries. Multiple trauma events do not happen to many people but require highly specialised care. Concentrating this type of service helps ensure quality of care and effective treatment when these events occur.

The size of South Australia's population makes it impossible to provide every speciality at every hospital. As we have said, evidence shows that some specialties need a minimum number of patients to ensure the service is the safest possible, and at some hospitals there just aren't enough patients for staff to be able to maintain the required skills. High level skills are necessary to provide the best outcomes for patients and many of these services need to be available 24 hours a day.

The benefits of specialising

For stroke patients, fast treatment at a specialised stroke unit can be the difference between life and death, or the difference between long term disability and none.

People with stroke symptoms who are taken by ambulance direct to a stroke unit hospital see experienced staff who have access to the essential equipment, from the moment they arrive at the hospital doors. The time lapse in treatment for stroke is a crucial determinant of successful care.



Patient journey

Nora's experience

Nora is 84 years old and lives independently. She had stroke symptoms and received thrombolysis therapy within two and half hours. One side of her body had become paralysed, but the early treatment resulted in her full recovery from paralysis, and she was able to return home.

Specialist treatment delivered within the recommended timeframe, meant a better outcome. This involved direct care staff, SA Ambulance, emergency department staff and radiology staff all working together.

Consolidating specialist services can result in better outcomes for patients.

People deserve to get the right service, first time.

Better integration

We have identified some areas where specialisation of services would result in better care, but there are others where existing services need to be better integrated.

For example, South Australians with a spinal or acquired brain injury cannot begin their rehabilitation while they are in hospital because the required rehabilitation services are only provided at a separate, stand-alone site. Other patients who still need acute medical care and treatment have to move back and forth between the rehabilitation site and the medical service. Better integration of allied health and other services would result in quicker recovery for patients.



Patient journey

Joe's story

Joe suffered a stroke and was taken to a major tertiary hospital where he spent 24 days receiving the necessary care. He was then admitted to a rehabilitation facility but his condition deteriorated the next day. He was returned to the previous hospital as the rehabilitation facility could not deal with the deterioration in his condition. This happened to Joe two more times.

Joe had a total of five ambulance transfers between the rehabilitation site and the acute hospital. His recovery time was longer because he couldn't access rehabilitation and acute medical care at the same place.

A better system for services such as rehabilitation could mean integrating the service across appropriate sites. This would enable rehabilitation to start early and be available at sites that can meet patients' full medical needs.

Better integration is also needed for women who have a highly complex birth at a site without an adult intensive care unit.



Did you know?

If a mother gives birth at the Women's and Children's Hospital (W&CH) and needs intensive care, she is separated from her newborn baby.

There is no adult Intensive Care Unit (ICU) at the W&CH, so the mother will be transferred to the Royal Adelaide Hospital, while her baby stays in the W&CH.

This is distressing for both mother and baby and interferes with the vital bonding process.

A patient-centred, efficient, effective system would provide speciality services for complex conditions for women and children at the same site.

Better processes

When our clinicians analysed our health system data, they identified areas where we can improve simply by doing things differently. They have identified

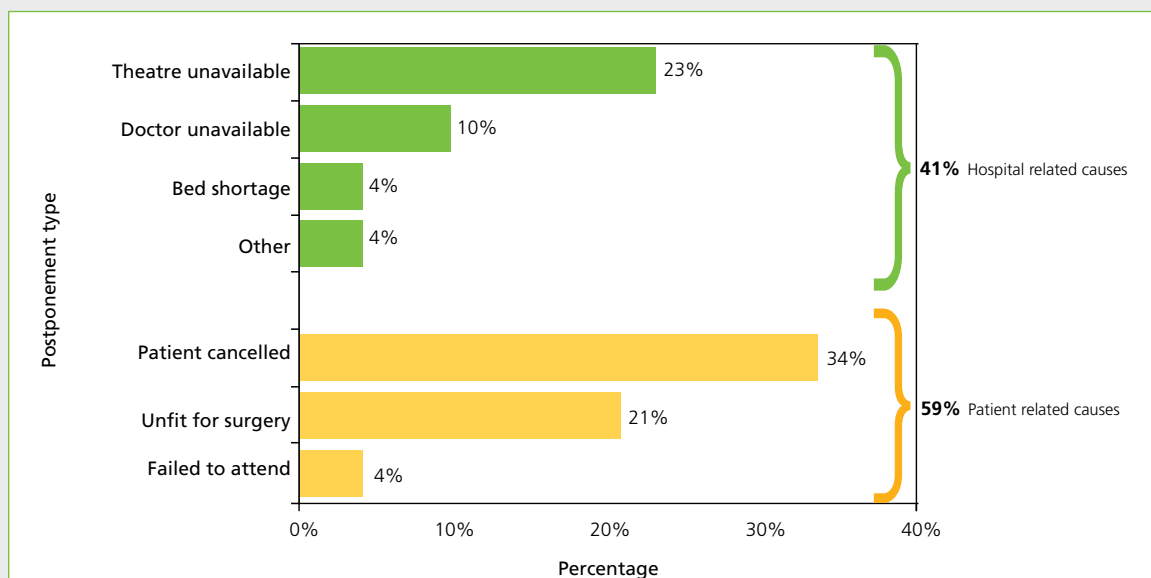
areas where we can improve the quality of South Australian's healthcare without increasing the cost.

One example is elective surgery. There were more than 11,000 elective surgery postponements in our major metropolitan hospitals in 2012-13. 23 percent were because the surgical theatre was not available. When elective surgery and emergency departments are at the same site, elective surgery theatres are sometimes made available for emergencies and surgeons are often called away from elective surgery to emergency departments. Patients' elective surgery is then postponed resulting in longer waiting lists and inconvenience and frustration for patients.

Improving our pre-surgery processes may also reduce the numbers of patients who cancel or postpone their surgery.

Our clinicians have identified that separating elective surgery from general hospital functions could result in improvements for patients.

41% of all elective surgery postponements in metropolitan hospitals are due to hospital related causes



Source: SA Health data - Elective Surgery postponements 2012-13 FY, excluding Modbury Hospital as data not consistently available.

We could reduce waiting times and postponements if we created a specialised site for elective surgery. This would allow specialised teams to deliver expert, streamlined care without being called away to other service demands.



Did you know?

The Alfred Centre in Victoria is adjacent to the Alfred Hospital but focuses almost exclusively on elective surgery. This has achieved:

- a 45 percent decrease in semi-urgent patients waiting longer than the recommended time
- a decrease from 28 percent to 6 percent in hospital initiated postponement of surgery
- a reduction in the combined length of stay from 4.8 days to 2.3 days
- a 70 percent increase in admissions per month for elective surgery
- 100 percent satisfaction with new pre-admission process among short stay elective surgery patients
- improvement in morale among medical, surgical and nursing staff.

Reference: Medical Journal Australia (2011) Streamlining elective surgery care in a public hospital: the Alfred experience.

Similarly, performing more surgery as day surgery (where safe to do so) would mean less disruption for patients, as well as a more efficient healthcare system. In our metropolitan hospitals, only 52 percent of all elective surgery is day surgery, compared to 60 percent in Victoria. However, in the United Kingdom, 76 percent of surgery is same-day.

Modern health care practice and innovation means today's hospital systems can deliver more day surgery and more out-of-hospital care. We can improve practices such as discharges and

emergency admissions. We can free up acute overnight beds by reducing unnecessarily long hospital stays. We can make sure we only use medical interventions that show a benefit to people's health and wellbeing, and that are the most effective way to treat them. We can deliver better service without increasing the number of acute beds.

We will be able to deliver better service without increasing the number of acute beds.

Future proofing our system means ensuring we use all our resources in the best way possible. This means we must think differently, work differently and deliver healthcare differently.

Savings that result from better systems can be invested in other areas of health. In this way we can future proof our health system for the years ahead.

**Patient-centred – Safe – Effective –
Accessible – Efficient – Equitable**



What are your thoughts?

- Are you willing to travel further to get the right care first time?
- Do you support the creation of specialised services at fewer sites to reduce waiting times and delays?
- Do you agree that highly specialised work should be concentrated in specialist locations to provide best-quality patient care?
- Would you like to see rehabilitation services better integrated within hospitals so patients can start rehabilitation as soon as medically appropriate?
- Do you support the creation of a specialised elective surgery site to reduce waiting times and delays?

Section 5 – What's next?



This discussion paper challenges us to set and achieve ambitious goals for our hospitals. It also gives some perspectives about the challenges, barriers and enablers to achieving the quality hospital care we want.

We want to hear what you think. A number of questions have been posed throughout this paper for you to consider. You can respond to them by completing the online survey available at transforminghealth.sa.gov.au

Delivering on the quality principles will require us to change how and where services are delivered. The interactions between services, and within and between hospitals, means change will be complex. There are some things we can do now to improve our system, but others will need to progress over a number of years.

After consultation on this discussion paper the Minister for Health will host a Summit to discuss the process of Transforming Health.

The Government will then have a clear vision of how Transforming Health can be delivered and will announce how this can be achieved.

Transforming Health is about delivering a system focused on continuous improvement, a system that supports innovation and a system that is committed to quality.

Best care. First time. Every time.

Transforming Health

**Clinical Engagement Committees analysis
– commenced June 2014**



**Discussion Paper –
released 17 October 2014**



**A five week consultation period –
closes 21 November 2014**



**Summit –
late November/early December 2014**



Government decision

How to contact Transforming Health

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We are keen to hear what you think of these quality standards. Do they meet your expectations for the quality care you want from your health system?

A full list of all the standards proposed by our Clinical Advisory Committees is provided at Attachment 1.

Attachment 1

Clinical Standards of Care

The proposed standards developed by members of the three Ministerial Clinical Advisory Committees are the result of over two months of discussion, debate and review of local, national and international data and evidence. These standards have been recommended by our doctors, nurses, midwives, allied and scientific health professionals as being central to transforming our health system.

The standards do not cover every aspect of public health care, but rather these focus on four aspects of care: General Unscheduled Care, Routine Elective Care, Women's and Children's Care and Selected Specialties.

If adopted, the standards will be regularly reviewed, monitored and assessed to ensure they are effective in driving quality.

All of these standards drive towards better quality of care, but only those marked with an asterisk (*) were considered to have implications for how we configure the whole healthcare system.

Overarching standards to apply to the whole health system

1. Every South Australian has an equal right to access quality healthcare. This means specific groups may need to be targeted for affirmative action to ensure their needs are met, this includes: veterans, frail and elderly, those with mental health needs, the disabled, children, those with eating disorders and Aboriginal and Torres Strait Islanders. All aspects of care should be patient-centred and focus on quality outcomes. This includes service design, delivery and evaluation, supported by research and teaching.
2. Health literacy should be promoted in the general population.
3. A holistic approach should include patient priorities and involve partnerships between patients, their families, service providers including multidisciplinary professional practices and primary and community healthcare organisations.
4. Patients, their families and care-givers should be actively involved in decision making.
5. Consumers have a right to information, data and reporting that is relevant to them. All information and test results should be shared with patients and they should be advised of all options for treatment and treatment setting.
6. Patients have a right to dignity and respect at all times. Patients should be able to express their wants and needs, or complain, without fear of retribution. Their privacy must be respected. There is zero tolerance of all forms of abuse.
7. Efforts to continually improve the health system should have clinical leadership and promote multidisciplinary clinical engagement and teamwork.
8. Care should be delivered in the right place, by the right person, the first time and every time.
9. Health care is provided by the most cost effective health worker whilst ensuring quality and safety standards are met.
10. *Care should be delivered in the most appropriate cost effective venue as close to home as safely possible.
11. Quality of care should be determined by patient reported outcomes, patient clinical outcomes and system outcomes.
12. Agreed and uniform reporting related to patient outcomes should be made accessible to health agencies and clinical care delivery staff. There should be consistent data recording, coding, measurement and accounting, developed by clinicians in partnership with SA Health.
13. Hospitals should all participate in morbidity and mortality reviews and use them as a learning exercise to improve quality of care.
14. Electronic systems should be used to track care pathways and collect information about key milestones to support audit, research and quality activities.

15. Information should follow the patient through the care continuum. For example, through the Personally Controlled Electronic Health Record.
16. *Healthcare services should be offered seven days a week, every week. Human and infrastructure resourcing should be aligned to achieve this.
17. *There should be seven day a week access to allied health and other clinical support.
18. All services should be culturally and linguistically appropriate.
19. Practice should be evidence-based where sufficient evidence, or evidence-based guidelines exist. Where a new practice has been demonstrated to be successful, it should be replicated across the entire system, replacing superseded practices.
20. Effective and efficient models of care should be regularly updated and replicated across the entire system.
21. Each presentation should follow a defined end-to-end patient pathway consistent across the state. Patients may require more than one pathway for multiple diagnoses, or if they belong to a group with identified special needs. Care should be delivered against this pathway, with protocols in place to ensure continuity.
22. Clinical pathways should be developed by a multidisciplinary team and should be diagnosis or procedure specific rather than doctor specific. They should specify outcomes to be achieved, relevant timelines and should incorporate discharge-planning principles.
23. Principles, protocols, pathways and procedures are state-wide, and should include telehealth and patient transfers where necessary. This can be facilitated through coordination of services across multiple sites including across Local Health Networks (LHNs) and state-wide networks.
24. There should be consistent documentation of policies and procedures to ensure safe, appropriate, accountable, effective and measurable improvement in patients and their quality of life.
25. All policies and procedures are living documents and should be updated regularly and as required by advances in evidence.
26. Technology should be used to its maximum extent to provide more effective care when appropriate. For example, shared electronic health records, telehealth, phone or SMS follow-up, and SMS-based appointment reminders. Telehealth should be made use of to support patient assessment if distance is a potential issue.
27. Agreed pathways and protocols should be followed by all clinicians and unnecessary duplication should be avoided. All practitioners should engage in continuous professional development, including the best implementation of patient pathways.
28. Appropriately credentialed practitioners should be able to make referrals in accordance with patient pathways, including nurse and allied health referral to specialists.
29. Models of care should include escalation policies if deviation from accepted pathways is required.
30. Governance and accountability structures for adhering to principles and meeting targets should be in place, with ongoing change management.
31. Clinicians should adhere to and report on the National Safety and Quality Health Service Standards.
32. Practitioners must be adequately trained and credentialed for their scope of practice. There should be appropriate response mechanisms when practice is outside accepted norms.
33. Ongoing training and development opportunities should be available to all staff to ensure development and maintenance of a skilled workforce, including advancing teamwork and leadership skills.

34. Sufficient teaching, continuing education and research should be built in to all pathways; research and development activities should facilitate continuous improvement of services. Research and training programs should evolve to fit with new models of care.
35. Admission pathways need to be clearly defined and communicated to the public.
36. Admitted patients should be seen within a specified time period, pre-defined by presentation, risk-profile and age.
37. Delayed discharges should be routinely reviewed with action taken to address any identified problems.
38. Multidisciplinary criteria-led discharge should be established. Diagnostic and therapeutic support should be readily available for all disciplines to use when appropriate.
39. Referrals should be pathway-based not directed to individual specialists, for example a patient with congestive cardiac failure should be referred to the congestive cardiac failure service.
40. There should be a consistent step by step process for developing a resuscitation and care plan for clinical decision making for patients near the end of their lives.
41. All patients (and relevant support persons) should be actively engaged in developing care plans and end-of-life plans. Advance Care Directives should be in place.
42. Administrative and managerial support should be available 24 hours every day.
46. Clinical handovers should be structured, documented and resourced appropriately.
47. There should be structured arrangements in place for handover of patients at each change of responsible health professional/team.
48. There should be a clear decision tree and chain of authority to avoid disagreement around which admission clinic is appropriate.
49. Risk profiling for patients should be routine and standardised to give due consideration to frailty, co-morbidities and malnutrition.
50. *Results from diagnostic tests should be available in a timely manner, and should be viewed and acted on during the emergency visit where possible.
51. The use of diagnostic tests should be determined by the patient's pathway and used to inform management decisions.
52. No patient should remain in a setting where they are not being actively managed.
53. Newly admitted patients should be reviewed a minimum of three times in the first 24 hours by a clinician, for example a doctor or nurse practitioner, involved in their decision making, and at least once by a consultant.
54. *Acute medical care needs the presence of a senior consultant 12-16 hours every day, who is readily accessibility to ensure early decision making. There should be clear protocols for their involvement, and the ability for 24 hour input in-person, over the phone or via telehealth.
55. *All acute admissions should be seen by a consultant within 12 hours of initial assessment. High risk patients should not be discharged without having been seen by a consultant.

General unscheduled care

Acute Medicine

43. Hospital should be the last resort for patients; admissions and presentations to emergency departments should be minimised with alternate models of care, chronic disease pathways and palliative care.
44. Systems should be in place to ensure continuity of care along the patient pathway without gaps.
45. The skill mix and number of staff in healthcare facilities should be matched with the needs and flow of patients.
56. *There should be a consistent standard of resourcing and infrastructure support based on need across the entire acute care pathway, for example diagnostics, across Acute Medical Unit (AMU), Critical Care Unit (CCU) and Intensive Care Unit (ICU).
57. AMUs should have defined medical and nursing leads, written operational policies and regular audits including 24-hour mortality, seven day readmission and direct discharge rates.

58. Acute patients requiring inter-specialty input should be seen by those specialists in a timely manner.
59. Surgical units should have ready access to acute medical services for medical co-morbidities or for those who develop medical complications.
60. Where a patient in AMU requires surgical input, a senior surgical review should occur within 4 hours.
61. Emergency Departments (EDs) should monitor 'did not wait' patients and implement systems to detect patients who may be at significant risk following departure from the ED.
62. Where critical care units send a team to the Emergency Department (ED) to transfer the patient to the intensive care facility, the medical and nursing handover should occur in the ED and the transfer of responsibility occurs at that point.
63. Prior to patient's discharge from ED, staff should identify and communicate with the appropriate healthcare professional who will be responsible for follow-up.
64. ED staff should prepare an interim plan and orders for ward care of the patient until the planned review by the receiving unit, and should take reasonable and appropriate steps to ensure the clinical safety of the patient until reviewed.
65. The hospital and its medical staff must provide the ED with a list of appropriate on-call and admitting specialists.
66. All patients discharged or transferred from a healthcare facility should have specific, printed (or legibly written) aftercare instructions given at the time of discharge.
67. Systems should be in place to enable staff to quickly identify the treating ED doctor.
68. *Interdisciplinary pathway-based care should be available for all patients, and allied health input should be sought as early as possible.
70. *Theatre allocations should be planned to allow adequate time for emergency surgery.
71. No surgery should be performed out-of-hours except in pre-defined emergency cases.
72. The time between the decision to operate and the time of operation is recorded and audited locally along with other appropriate metrics.
73. *Appropriate diagnostic imaging, interventional radiology and pathology support should be available as required by the patient pathways.
74. Theatre must be appropriately resourced with respect to storage, equipment, access, workforce and seniority of presence.
75. Where out-of-hours surgery occurs, there should be a dedicated, adequately resourced 24 hour emergency theatre with 24 hour consultant cover every day.
76. High risk patients must be discussed with the consultant surgeon within four hours if the management plan remains undefined and/or the patient is not responding as expected. These patients must have their operation carried out in a timely manner under the direct supervision of a consultant surgeon and consultant anaesthetist.
77. As an absolute minimum, for patients not considered at high risk, all emergency surgical admissions must be discussed with the responsible consultant within 12 hours of admission. Active and continued monitoring of the patient must be carried out and the consultant should be notified immediately if the patient's condition deteriorates.
78. *Interventional radiology should be available within one hour of request.
79. Clinical staff should adhere to safe working hours.
80. High-risk patients may need access to multispecialty teams for resuscitation and optimal care. Early input from senior anaesthetists and critical care specialists should be considered.
81. *In specialties with a high emergency workload the surgical team should be free of elective commitments when covering emergency and consultants should not cover more than one site.

Emergency Surgery

69. Access to theatre should be based on need, regardless of whether emergency or elective surgery.

82. Surgeons with private practice commitments should make arrangements for their private patients to be cared for by another surgeon/team when they are on call for admissions.
83. Day surgery should be performed whenever possible.
84. Inter-disciplinary clinicians, whose input will be required, such as anaesthetists, critical care specialists and allied health professionals, should be involved in a planned way from the start. Telehealth should be utilised if required.
85. Discharge planning should begin at time of admission; a discharge plan should be in place within 24 hours of admission.
86. Post-operative management should be standardised by procedure as part of a clinical pathway.
87. There should be clearly defined parameters for monitoring and detecting deterioration in surgical ward patients with guidelines and defined responsibilities for escalation of care and involvement of senior staff from critical care, anaesthesia and surgery.
88. The WHO Surgical Safety checklist should be used for all procedures.
89. Discharge planning for potentially long-stay patients should be proactively managed from admission.
90. Outcomes of emergency surgery should be regularly reviewed by risk and clinical governance groups.
91. Rehabilitation should be started immediately post-operation.
92. Nurse practitioners should be utilised across the surgical system to improve efficiency.
97. Equity of access, quality and speed of service should be ensured for people seeking acute mental health care. Safety of mental health and non-mental health patients and care-givers is a priority.
98. Allied health staff in the ED Mental Health team should facilitate psychosocial assessments and interventions that underpin some mental health presentations.
99. There should be specific pathways integrating mental health care where non-mental health comorbidities exist. For example, when patients are admitted under acute medicine or surgery.
100. Mental health services and emergency departments should collaborate closely to develop appropriate pathways for treatment and admission, including hospital avoidance strategies.
101. Escalation policies should be in place for when there are insufficient dedicated mental health resources.
102. Access to mental health services should occur via mental health clinicians located in the ED, off-site community mental health teams, on-call clinicians, and psychiatric triage phone services. While not all components of a mental health service are readily available to every ED, crisis intervention should facilitate prompt referral to other programs and providers.
103. Mental health care in the ED is provided by a combination of general ED clinicians and mental health clinicians including nurses, mental health and allied health.
104. ED staff should check the mental health care plan of each mental health patient, and consolidate or create as appropriate.
105. Appropriate handover should occur on transfer between units; supervision protocols should be utilised when a mental health patient is transferred out of the ED.
106. *A comprehensive multidisciplinary psychiatry liaison service should be provided throughout the acute hospital.

Acute Mental Health

93. In mental health, community care is central to care.
94. Consumers and carers are centrally and actively involved in care planning at every stage.
95. Pathways should include structured phone follow up after acute care, where appropriate.
96. There should be early referral to appropriate community or specialist teams for those patients

107. All acute mental patients admissions should be seen by a consultant psychiatrist within 24 hours of admission.
108. There should be provision of some 'same day' or 'next day' services, such as an alcohol support worker, who may then initiate brief interventions.

Acute Elderly Care

109. Care pathways should be adapted in an age-appropriate fashion and should include community aspects of care.
110. The pathways for the elderly should be fully integrated with functioning connections between Geriatric Consultation Liaison Teams, General Practitioners, and specialists.
111. There should be geriatrician input into diagnosis related elderly patient pathways to optimise outcome, for example, ortho-geriatrics and geriatric-oncology. Surgical pathways for the elderly should include peri-operative to manage co-morbidities.
112. Acute support in nursing home should be promoted as a hospital avoidance mechanism (and can include Extended Paramedic Care).
113. Where appropriate, actions that can avoid transfer to a public hospital should be considered, particularly in the case of predictable medical requirements, and when there are known alternatives to hospitalisation (for example where there are pathways to 'in reach' services inclusive of GP visitation, or rapid response services).
114. Technological advances should be incorporated into pathways to reduce the need for elderly patients to visit hospital.
115. All healthcare professionals interacting with the elderly should be capable of looking after older people.
116. EDs should be configured in such a way that they can screen for common frailty syndromes in all older people, and then initiate (but not necessarily deliver entirely) more detailed assessments in selected individuals.
117. The use of validated ED assessment tools such as Identification of Seniors At Risk (ISAR) tool should be considered to identify older persons at risk for mortality, functional decline, readmission and institutionalisation on discharge.
118. There should be consideration of the cultural context of the individual and if any additional services (for example interpreter services) are required.
119. Patients should have carers or next-of-kin notified by telephone on admission unless contraindicated.
120. To provide effective acute care services to older people, a hospital requires a multidisciplinary consultancy service, led by trained geriatricians working closely with nursing and allied health staff, with a process to facilitate early referral.
121. Consultant review for acute elderly inpatient care should occur at least three times per week, or more if clinically indicated.
122. *There should be a daily consultant visit (in-person or via telehealth) to all medical wards on weekends and holidays – to address new problems and to progress patient care.
123. Acutely unwell elderly patients should see a geriatrician within 24 hours (in-person or via telehealth).
124. There should be a review of medication by pharmacy within 24 hours (may need electronic review for settings with no on-site cover).
125. Screening for and prevention of functional decline within in-patient facilities should occur within the first 24 hours after admission, for any patient expected to stay for longer than 72 hours.
126. Active case management should be in place for high risk, high complexity patients.
127. Carer involvement should be facilitated during inpatient management.
128. Specialist geriatric inpatient units should not need to accommodate all older people admitted to hospital. However, older people not admitted to specialist units should have access to specialist geriatric services through the Geriatric Consultation Liaison Teams.
129. Geriatric Consultation Liaison Teams should target patients older than 65 years (50 years for Aboriginal people). Priorities include those aged over 80 years and those at risk of functional decline, geriatric syndromes (delirium, frailty, falls, fracture) or prolonged hospitalisation.

130. Patients admitted from residential aged care facilities should not be excluded from rehabilitation programmes in the community or hospital, or as part of an early supported discharge programme.
131. Every rehabilitation patient should be seen by a consultant ward round and discussed at a multidisciplinary team meeting once a week or more frequently if required.
132. Older people should be screened for delirium risk with appropriate tools for assessing delirium and enacting the relevant pathway. There should be suitable hospital facilities to address delirium.
133. If a procedure is required for a person who is confused, two health care professionals should perform the procedure, one to monitor, comfort and distract, and the other to undertake the procedure.
134. Analgesia should be sufficient to allow movements necessary for investigations (as indicated by the ability to tolerate passive external rotation of the leg), and for nursing care and rehabilitation.
135. Correctable co-morbidities should be identified and optimised immediately so that surgery is not delayed by anaemia, anticoagulation, volume depletion, electrolyte imbalance, uncontrolled diabetes, uncontrolled heart failure, correctable cardiac arrhythmia or ischemia, acute chest infection or exacerbation of chronic chest conditions.
136. Patients should be offered a choice of regional or general anaesthesia after being informed of the risks and benefits. Intraoperative nerve blocks should be considered for all patients.
137. *Hip and other fracture surgery should be scheduled on a planned trauma list where an appropriately skilled team is available to undertake the procedure.
138. Unless medically or surgically contraindicated, mobilisation should start the day after surgery, with full weight bearing as an aim.
139. If unable to meet the criteria for early supported discharge, in-patient rehabilitation should be considered for those in whom further improvement with a structured multidisciplinary program is anticipated.
140. Carers for elderly patients should be advised of expected date of discharge, and called on the morning of discharge.
141. There should be safe and timely transfer of individuals across the public health service-residential aged care interface every day of the week with adequate continuity of care and support.
142. Where possible, the GP should be involved in discharge planning. The aim is to maximise the support of the GP in the transfer and follow up care.
143. Elderly patients living alone should not be discharged from the ED back to their homes unless appropriate support has been confirmed, particularly after-hours.
144. Patients at risk of re-admission should be identified and proactively managed to prevent re-admission.

Rehabilitation

145. The rehabilitation multidisciplinary team should have sufficient skills and training to address patient impairments, activity limitations and participation restrictions, to help patients achieve their optimal level of functioning and participation in society.
146. Rehabilitation pathways should be in place, and involve treatment goals, periodic assessment and documentation of the functional status of patients, regular case discussion amongst treating practitioners, and attention to the optimal management of concurrent medical problems and psychosocial issues.
147. The rehabilitation pathway should include direct ward admission for allied health monitored chronic conditions.
148. Each patient should be reviewed by a consultant within 24 hours of admission to a rehabilitation ward, using telehealth where appropriate.
149. Each patient should be reviewed by a consultant at least twice a week. Appropriate rehabilitation equipment should be available and easily accessible at appropriate service sites.

150. Lifestyle intervention strategies should be developed and implemented in rehabilitation settings to reduce preventable complications and consequences for high risk patients.
151. Outpatient services will provide timely patient access to appropriate consultations, diagnostic and treatment facilities and interventional and therapy areas.

Routine Elective care

Elective Medicine

152. The GP and the specialist clinic (outpatient service) work in partnership to share the care of patients with complex and chronic conditions.
153. Patients with chronic disease should be risk stratified with interventions targeted appropriately. Chronic disease follow-up should be by the most cost efficient, fully qualified person, such as a nurse practitioner where appropriate.
154. All patients with a chronic disease should have a self-care plan, supported by appropriately qualified staff.
155. There are effective processes in place to support the transition of care between specialist clinics and community based care.
156. There should be mechanisms for streamlined re-entry to the clinic for the same problem once a patient has been discharged.
157. During the telehealth consultation, the main focus needs to be on direct communication with the patient rather than communicating with the clinician. However, it is recommended that a staff member must always be present at the patient end of a telehealth consultation.
158. Targeted interventions should be utilised to avoid hospital admissions for repeat presenters.
159. Pathways in elective medical care should include event-led discharge.
160. Patients should be discharged from hospital care back to the community as soon as possible based on their healthcare needs. Only people who require specialist care should continue to see a specialist.

Elective Surgery

161. Where possible, patients should be triaged based on need for surgery or not. Those definitely not requiring surgery should be diverted to non-surgical services such as allied health led clinics.
162. There should be adequate allied health services to support our elective surgery pathways.
163. Referral criteria should be established and consistently applied for commonly presenting conditions.
164. Pre-operative assessment should be carried out to determine and optimise fitness for procedure; effective models should be introduced. For example, SA Health model of telehealth care.
165. Pre-admission assessment must be performed by professionals with the right skills, and should be standardised, comprehensive, and benchmarked for quality.
166. *Day surgery should be performed where possible; rates should rise to meet international norms.
167. There should be dedicated elective surgery lists with separate resources that are not impacted by emergency surgery demands.
168. There should be dedicated lists for high-throughput cases with separate resources.
169. Appropriate waiting list metrics should be measured and benchmarked against state-wide and national targets. These should align with urgency categories. For example, time from referral to first assessment and from first assessment to treatment.
170. The decision to operate on the frail and elderly should be taken at the consultant level, using a risk categorisation tool and geriatric input when possible.
171. Systems should be in place to reduce the conflicting commitments of on-call staff.
172. *There should be a minimum of two anaesthetists for any stand-alone surgical sites.
173. *Patients presenting with acute conditions requiring urgent surgery can be efficiently and effectively treated as day cases via a semi-elective pathway.

174. Day surgery anaesthesia should be a consultant-led service. Enhanced recovery should be used for all patients. Domains include: pre-operative preparation, intra-operative issues and post-operative factors. For example comorbidities, type of anaesthetic, drains, and mobilisation.
175. Where same day discharge is clinically appropriate but not practically feasible, patients should be pro-actively managed to be discharged within 23 hours.
176. For stand-alone surgical sites there must be clear operational policies for: management of patients who cannot be discharged home, management of problems after discharge, appropriate cover until patients are discharged, management of medical emergencies, transfer agreements to other facilities, teaching, training and supervision for research.
177. Effective audit is an essential component of good care in all aspects of day and short stay surgery.

Women's and Children's Care

General Paediatrics

178. There should be state-wide agreement on the definition of "paediatric", "adolescent" and "adult", based on physiology.
179. The transition from paediatric, through adolescence and into adult care should be adequately planned and implemented to ensure continuity.
180. Paediatric health services should be delivered by a skilled, innovative and flexible workforce. The paediatric health workforce should be valued and supported to acquire and maintain the necessary skills and competencies to deliver high-quality care.
181. Hospital admission should be the choice of last resort for children. Services should be community-based and provided as close as possible to the child's home, when it is clinically safe to do so.
182. *Paediatric patients should have access to allied health services seven days a week.
183. Like all other services, paediatrics should follow the principles of multidisciplinary care.
184. *There should be a state-wide coordinated and networked paediatric trauma service.
185. Adolescent mental health services should address comorbidity issues, particularly drugs and alcohol, with a coordinated and integrated approach.
186. *State-wide high complexity/low volume services should be planned and delivered to provide optimal health outcomes and maximise efficiencies while avoiding unnecessary duplication.
187. *Service hubs (metropolitan and regional) should support sufficient volumes of services to ensure clinical expertise, quality and safety of services.
188. *The specialist care of children at tertiary level should be concentrated in designated units where there are the appropriate staff and facilities and a critical mass of patients sufficient to ensure an adequate level of experience.

Unscheduled Paediatrics care

189. *Children and adolescents should be kept separate from adult patients, ideally in dedicated facilities. Where they are co-located with adult services there should be clear separation from adult access.
190. Outreach services should be considered to avoid hospitalisation and facilitate management of chronic conditions in the community.
191. *Adequately qualified, designated, senior paediatric staff should be available 24 hours a day in the hospital or via telehealth for immediate consultation when necessary. This includes paediatricians, paediatric surgeons and anaesthetists. Consultants should be aware of all admissions.
192. There should be a minimum of two registered paediatric nurses at all times in all inpatient and day care areas.
193. Family and carers should be actively involved in decision making and care when surgical services are provided to their children.
194. Non-specialised and specialist centres caring for children should participate in multidisciplinary networks for surgery and anaesthesia.

195. There should be at least one medical handover in every 24 hours led by a paediatric consultant (or suitably qualified person) and consultant-led ward rounds should occur daily.
 196. Every child or young person with an acute medical problem who is referred for a paediatric opinion should be seen by, or have their case discussed with, a paediatric staff member.
 197. Every child or young person who is admitted to a paediatric department with an acute medical problem should be seen by a consultant paediatrician, within the first 12 hours.
 198. *All EDs which treat children but do not have in house paediatric and neonatal intensive care facilities must have immediate access for consultation with and utilisation of appropriate retrieval services.
 199. Paediatric guidelines regarding assessment and treatment of specific conditions must be available in the ED at all times.
 200. Paediatric resuscitation equipment must be available wherever and whenever children are treated, and anaesthetists must maintain their skills in advanced paediatric life support.
 201. *Paediatric anaesthetic services for children require specially trained clinical staff together with equipment, facilities and an environment appropriate to the needs of children. They should be led at all times by consultants who regularly anaesthetise children.
 202. *There should be 24 hour a day access to a paediatrician and social worker with child protection experience and skills, available to give immediate advice and subsequent assessment, if necessary, where there are child protection concerns. This must be culturally appropriate.
 203. A medical and/or nursing staff member must be appointed to act as the local paediatric clinical leader in facilities that have attached inpatient paediatric services.
 204. *A Level 6 emergency service should provide 24-hour ED and triage by qualified paediatric emergency staff, access to a 24-hour child and adolescent psychiatric emergency service, and access to paediatric medical and surgical subspecialties on-site.
 205. In a life-threatening emergency where transfer is not feasible, the most senior appropriately experienced anaesthetist available should lead the resuscitation/anaesthesia in consultation with paediatric services.
 206. There should be a properly staffed and funded acute pain service that covers the needs of children, and access to a chronic pain service.
 207. Neonatal and paediatric high dependency and intensive care services should be available as appropriate for the type of surgery performed.
- ### *Routine Elective Paediatric care*
208. *Paediatric surgery should occur in hospitals equipped and supported to provide such surgical services. Consideration should be given to the specific paediatric skills of the surgeon required to provide a safe surgical service. Appropriately trained and skilled anaesthetic and nursing staff must be available during surgical procedures and to provide necessary after care. Arrangements for appropriate in and out of hours cover must be in place for services provided.
 209. When children receive hospital care other than in the paediatric unit (for example emergency department or x-ray), there is a process of liaison with a designated paediatric care team (medical and nursing) in the paediatric unit to ensure appropriate advice is available (for example on consent issues and pain management).
 210. Day surgery is the preferred option whenever possible.
 211. Elective surgery for children is scheduled on dedicated paediatric theatre lists.
 212. As part of the service delineation, standards for pre-anaesthetic consultation should be developed. Pre-anaesthetic consultation can be done in-person or via telehealth.
- ### *Neonatal care*
213. Neonatal surgery should be done in a specialist unit closely linked to a neonatal ICU with ready access to appropriate obstetric services.
 214. *Level 6 Neonatal ICUs should be co-located with a tertiary obstetric hospital with access to an adult ICU and a tertiary paediatric hospital.

215. All newborn infants should have a complete clinical examination as soon as possible and certainly within 24 hours of birth and before discharge.
216. Minimum standards with respect to the immediate care of the newborn require that basic life support skills should be available wherever a baby is born, and this will be provided in the first instance by midwives.
217. When an obstetric unit provides neonatal special care but is not intending to provide neonatal intensive or high-dependency neonatal care, there should be a designated link paediatrician for the labour ward and neonatal service and 24 hour availability of a consultant paediatrician, who can attend within 30 minutes.

Maternity

218. The South Australian Perinatal guidelines should be used for determining when caesarean sections are appropriate, and parents should be informed of risks.
219. All women should have access to the most appropriate care giver who is qualified to manage their level of risk in accordance with the state-wide guidelines.
220. All women should have access to midwifery care.
221. *There should be a minimum number of planned births at all delivery sites to maintain quality of care.
222. Workforce from lower volume sites should have exposure to higher volume sites to guarantee adequate training, via telehealth and staff rotations.
223. Birthing options should consider risk factors in pregnancy and maternal preference where it does not compromise safety.
224. As with all common presentations, there should be standardised pathways for all uncomplicated vaginal birth for all women regardless of the lead carer (obstetrician or midwife).
225. *Units should have in place arrangements to ensure safe care when there are increases in demand or reduced levels of staffing. There should be an early warning system so that, if the unit is becoming busy, proactive intervention can

reduce the need for it to 'close'. There should be an arrangement within and between LHNs to ensure that problems in one unit are not transferred to a neighbouring unit with just as many difficulties.

226. *A facility that delivers babies should have ready access to adult services. Facilities doing high-risk births should have access to an adult ICU.
227. Obstetric units should have support from different services, including onsite access to emergency surgery, interventional radiology, and critical care, in addition to appropriate neonatal support. Each maternity and gynaecology unit should have ready access to the full range of medical specialties.
228. A paediatrician (GP or specialist) trained and assessed as competent in neonatal advanced life support should be available 24 hours a day and accessible within 30 minutes.
229. *Maternity services that do not have adult intensive care facilities, advanced imaging and cardiology on site must have protocols in place to ensure that women in need have access to these resources.
230. Maternity services that do not have high level neonatal services should have defined arrangements for both in utero transfer and the transfer of a recently delivered mother and her newborn baby to a linked secondary or tertiary unit.
231. All at-risk women should be identified as soon as possible after pregnancy is confirmed (including some women with complex comorbidities). Mothers with risk of birth <32 weeks should go to the appropriate hospital.
232. During pregnancy, all women who are at identified risk of serious perinatal mental illness should be assessed by a psychiatrist or psychiatric team. They should have a written management plan of possible agreed multidisciplinary interventions to be undertaken, which includes a system of close supervision following birth.
233. Women with complex pregnancies and those receiving care from a number of specialists or agencies should receive the support of a lead medical practitioner throughout the pregnancy.

This could be the woman's family doctor or an obstetrician.

234. Women with complex needs should be referred to an obstetrician as soon as possible after pregnancy is confirmed and, where necessary, be seen at a combined consultation with the team that will be caring for her.
235. Women with complex medical conditions or high risk factors must be managed (including collaborative management) by a consultant obstetrician. Such conditions include for example, epilepsy, neurological disorders, diabetes, asthma, renal disease, congenital or known acquired cardiac disease, autoimmune disorders, haematological disorders, obesity (body mass index 30 or more), severe pre-existing or past mental health disorder and any condition for which they are under continuing specialist medical review. (Refer to the Australian College of Midwives National Guidelines for Consultation and Referral, 2013.)
236. When women and babies are transferred into hospital with complications, the risk assessment should be discussed and form an integral part of the initial medical review undertaken by the most senior obstetrician present on the labour ward, either immediately if a life-threatening emergency exists or, in any case, within 30 minutes of admission.
237. Complicated births in maternity units should be managed by a consultant obstetrician.
238. *Maternity services that provide intrapartum care should have access to a 24 hour anaesthesia and analgesia service, haematology and blood transfusion services, and a neonatal care service. Where, by virtue of location, these services are not available, the woman and her family should be made aware of the limitations and be given an opportunity to birth elsewhere.
239. *Complex intrapartum cases should have integrated, multi-professional specialist management and direct consultant involvement.
240. Every pregnant woman attending an emergency department for problems other than obvious minor injuries should be seen by a midwife or obstetrician. Where this is not possible, a midwife or obstetrician should be consulted by telephone.
- A consultant obstetrician should be available within 30 minutes outside the hours of consultant presence.
241. Categorisation of emergency caesarean sections should be used to facilitate communication and reduce misunderstanding between health care professionals.
242. The risk level of the woman and the timing of decision making by medical practitioners (general practitioners or specialists) should be taken into account when determining the place for delivery.
243. In the case of emergencies, anticipated difficult births, including caesarean sections or whenever the clinical situation gives cause for concern, the consultant obstetrician must be contacted and must attend the obstetric unit as required.
244. The consultant obstetrician must be contacted prior to emergency caesarean section and must be involved when a patient's condition gives rise for concern and attend as required.
245. The anaesthetic team's response time is such that a caesarean section may be started within a time appropriate to the clinical condition.
246. *There must be separate provision of staffing and resources to enable elective work to run independently of emergency work, in particular to prevent delays to both emergency and elective procedures and provision of analgesia in labour.
247. To ensure 24 hour managerial cover, each labour ward must have a roster of experienced senior midwives as labour ward shift coordinators, supernumerary to the staffing numbers required for one-to-one care. Their role is pivotal in facilitating communication between professionals and in overseeing appropriate use of resources.
248. High-dependency care should be available on or near the labour ward, with appropriately trained staff. If this is unavailable women should be transferred to a general high-dependency unit in the same hospital.
249. All women should be assessed immediately after giving birth by a suitably qualified member of the birth team (doctor or a midwife) and again prior to transfer to community care and/or within 24 hours of giving birth, by a midwife.

250. There should be a 'Hospital in the Home' program to support out of hospital care.

Gynaecology

251. All obstetric or gynaecology services should have access to general surgery and other relevant surgical specialties.

252. Gynaecological oncology services should be provided through a multidisciplinary team, and follow the agreed state-wide pathway.

253. Gynaecological oncology inpatients should have designated ward beds and facilities and should be reviewed daily by a gynaecological oncologist.

254. *All sites doing highly complex gynaecological surgery should meet minimum volume standards to maintain a high quality service.

255. Any centres performing emergency abdominal surgery on women should have access to a gynaecologist.

Selected Specialities

256. *In all specialist areas, a centre designated as a state-wide comprehensive centre, must be able to provide all relevant, appropriate treatment options. Services only able to provide a limited range cannot be designated a state-wide centre, and must be integrated with centres able to provide appropriate alternatives.

Cardiology

257. *As a minimum, a designated consultant interventional cardiologist must be available on a formal on-call rota to provide overnight medical cover after all elective Percutaneous Coronary Intervention (PCI) procedures, including day-case procedures.

258. Cardiac catheterisation laboratories performing only diagnostic coronary angiography do not require on-site surgical facilities.

259. Laboratories performing diagnostic angiography should have access to coronary care or intensive care facilities and their staff should be capable of inserting intra-aortic balloon pumps, and transvenous pacemakers.

260. Patients with a stable clinical profile can have angiography as a day case procedure.

261. High-risk patients should have diagnostic cardiac catheterisation in facilities with onsite surgical backup.

262. *Coronary interventional procedures, other than simple angiograms, should be performed at a facility with on-site surgical backup.

263. *Facilities providing only elective PCI should have an on-call team available to deal with post-procedural complications for at least 24 hours after the last procedure is performed.

264. Rural and regional centres without cardiac surgery should establish a formal liaison with a high volume PCI centre which has on site cardiac surgery.

265. For centres undertaking complex ablation procedures, there should be on site access to emergency cardiothoracic surgery or arrangements in place for immediate transfer.

266. Paediatric cardiac catheterisation should only be undertaken in centres with access to paediatric intensive care and paediatric anaesthesia. The paediatric cardiac catheterisation laboratory should perform a minimum of 60 cases a year to maintain proficiency.

Vascular

267. When needed, transfer to a specialist vascular centre should occur within 30 minutes of diagnosis.

268. *Elective abdominal aortic aneurysm (AAA) repair should only be undertaken in hospitals where: there is a 24 hour on-site vascular on call roster every day covered by consultant vascular surgeons, there is a 24 hour critical care facility every day, and there are a minimum of 33 AAA procedures per year.

269. There should be protocols and pathways in-place to deliver adequate multidisciplinary care for patients requiring vascular procedures, including: pre-operative, acute care, resuscitation, and rehabilitation. Patients requiring carotid endarterectomy should be allocated to the next available operating list (ideally within three days of referral).

Bariatric

270. In circumstances where the benefits of bariatric surgery have been proven, bariatric operations should be performed by surgeons who have substantial experience with the required procedures and who are working in a clinical setting with adequate support for all aspects of patient assessment, treatment and management, including psychological support.
271. *A bariatric service (surgeon with all support facilities) should perform at least 40 bariatric cases per year.

Major Trauma

272. High level trauma patients should be sent directly to a major trauma centre (MTC) if the travel time is under 45 minutes, unless there is an imperative to go to a closer trauma unit (TU) for the immediate management of a life-threatening condition. The majority of patients presenting to TUs with major trauma should be transferred to an MTC after immediate management.
273. Where the estimated travel time is more than 45 minutes and the preferred destination is an MTC, consultation should occur between the paramedic, ambulance clinician and retrieval trauma advice and referral line.
274. Hospitals admitting patients with major trauma should have a HDU and ICU on site.
275. *Hospitals that receive patients with major trauma should have an emergency operating theatre and a radiology intervention suite situated sufficiently close to the emergency department to allow rapid transfer.
276. All major trauma centres and trauma units that receive acutely injured patients should have a defined response to major trauma that includes the prompt assembly of a multidisciplinary trauma team in the emergency department.
277. High volume major trauma centres should provide dedicated consultants in trauma resuscitation and anaesthesia to respond to major trauma calls in the emergency department, and provide a seamless transition to intra-operative care. There should be a defined agreement for immediate or emergency access to an operating theatre or intervention suite with

appropriately trained and experienced staff to provide rapid intervention in life-threatening or limb-threatening conditions.

278. All patients requiring acute intervention for haemorrhage control must be in a definitive management area within 60 minutes.
279. Definitive skeletal stabilisation of open fractures and wound cover should be achieved within 72 hours.

Stroke

280. The evidence based stroke pathway (see SA Health's Stroke Management Procedures and Protocols, Sept 2014) should be in operation across South Australia. Patients should be managed according to this pathway, and outcomes should be monitored for service improvement.
281. *There should be a designated 24 hour acute stroke unit and, outside of agreed hours, all stroke patients should be sent to this facility.
282. *Door to needle time for a stroke should be less than 45 minutes during normal working hours and 60 minutes after-hours. An initial medical assessment should be completed in the first 15 minutes and CT scan within 30 minutes during normal working hours and 45 minutes after-hours.

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