The Companion Guide to Safety & Quality Improvement in Paediatric Care
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Acknowledgements
About this Workbook

Welcome to Children’s Healthcare Australasia’s (CHA’s) Companion Guide to Safety & Quality Improvement in Paediatric Care. CHA is a community of more than 90 children’s healthcare services across Australia & New Zealand. Our members have been working together over the past year or so to develop this Workbook. Lots of people with expertise in paediatric care, in service management and in safety & quality of care for children have had input to the design of this tool.

The aim of this workbook is to support clinical teams - regardless of whether they work in emergency care, outpatients, wards, or PICUs, to identify opportunities to further improve the care being provided to children, young people and their families, and to work together to make those improvements a reality.

It recognizes that each clinical team caring for children has a unique context. The facilities available, the space you work in, the systems in place, the people in the team and the group of children & families being cared for are unique to each service.

But what they all have in common is that we are all human beings, and as human beings our relationships with one another are important and shape what we can achieve together.

This workbook does not give you the answers about how to deliver safe care to children. It is not another training course. Rather, it aims to help you and your colleagues to ask yourselves some key questions about how you work together, and to better understand what you are doing well, and what you might be able to do better for the benefit of children and families in your care.
Enhancing safety & quality of healthcare for children & families

Every hospital providing care to children and their families has a commitment to safety and quality. This commitment is usually spelt out in an organisational or unit philosophy or quality statement and this is unique to each service.

Sometimes these organisational safety and quality maps don’t give dedicated attention to the needs of children and young people. They just assume that what’s good for adult patients in terms of safety and quality is good for kids. Sometimes this is true - all patients benefit from hand hygiene for example. But children and families also have particular needs that any service that is serious about safe and high quality paediatric care cannot afford to ignore.

In August 2014, experts in paediatric safety and quality from across Australia and New Zealand got together to brainstorm what a comprehensive picture of safety and quality in paediatric care would look like. They came up with 3 complimentary graphic images, one of which is shown on the following page.

- This depiction of safety and quality of care has a number of important elements:
- The child and family being at the centre of care - partners in their own healthcare
- Care should be evidence based and regularly evaluated
- The need to minimize harm, through managing risks and learning from mistakes
- The need for staff to be supported to have the right knowledge and skills
- The importance of communication - with kids and their families and between the providers of care

The importance of teamwork - How will we build and sustain respectful relationships over time? Sometimes it is hard for busy clinical teams at the ‘frontline’ of caring for children to see the relevance of hospital wide strategic plans on safety & quality to what they do day to day. That’s why this workbook offers some activities aimed at helping local clinical teams to ‘digest’ these important elements of safety & quality, and to see how they work in your own specific context.
These are things that we think are important to you and to us:

- Evidence-based Care
- Good Communication
- Not taking short-cuts
- Preventing Harm
- Doing the right thing
- Always Learning & Teaching
- Getting Better Together
- Working Together
- Safe Children & Families
- Safe Staff
A guide to using this workbook.

The first thing you need to decide before you get started, is:

1. **Is there interest in your team in using this workbook together?**
   Is there an appetite to provide the best possible care to children & families? Is there a reasonably stable group of clinicians (doctors, nurses, allied health) working together who could benefit from the discussions prompted by this workbook? Who should be invited to participate in team discussions prompted by the exercises in this Workbook?

If the answers to the above are ‘yes’, then there are a number of things that may help you to get the most out of the journey this workbook can help to take you on:

2. **Who will facilitate our team’s discussions?**
   The workbook is divided into a number of sessions so that it can be more easily implemented at your service. We strongly suggest that you utilise someone as a facilitator to get the most out of these sessions. Will it be an educator from your team? Will you use someone from Human Resources? Is there a person from your safety and quality team with great facilitation skills who can lead this? Is there someone within your team who’s good at helping everyone participate and have a say? What strategies will you use to ensure you have as many of the right people participating?

3. **Which exercises in this workbook are most relevant to your team?**
   Your facilitator/s need to have a good look at the whole workbook to decide which exercises your team will implement and to pick the videos, culture survey and group activities that are best suited to your timeframes, resources and service.

4. **When will your team meet?**
   You may choose to:
   - Take your team off site for a day;
   - Allocate two half-days, spaced a couple of weeks apart;
   - Set aside some regular time during a stream or team meeting over a number of weeks.

   Would you prefer to have a whole day together and cover everything in one session? Would everyone benefit more from a slower timeline over a couple of months, which might give people more time to think about each exercise and to reach a consensus about next steps?

5. **Where you will meet and what resources you will need?**
   (e.g., internet access, projector, laptop, pens, whiteboards, butchers paper).

6. **Who needs to know about the outcomes & how will these be shared & implemented?**
   Will someone write up key findings from each session for your team to share? Will your facilitator provide an update at stream meetings? Who will report on progress, outcomes and any new initiatives arising from this work?
For those who choose to make the investment of time and effort to utilise this workbook, there is plenty of evidence emerging that the resultant cultural change will deliver better care outcomes, and a better experience for children and their families. It may also help to make your area a more rewarding and enjoyable place to work.

So let’s take a look at some of the key concepts which help us to better understand why we do things the way we do, and what the opportunities are to do them even better in future...

We wish you every success.
Session One:
Taking a Fresh Look at Ourselves
(Allow 2 - 2.5 hours)

Let’s start with a patient story to focus our thoughts.

**Ryan’s Story**
As told by Ryan’s mum:

Ryan was a relatively healthy 2-year-old who went into hospital for a routine procedure - a colostomy reversal.

The procedure went as planned and Ryan went into recovery where my husband and I met him after the procedure. After about an hour in recovery, Ryan was sent to the ward, the ward nurses seemed busy but Ryan was settled, so I wasn’t worried. After about an hour on the ward Ryan just didn’t look himself. He was a bit restless and even a bit pale - just not his usual self. I let the nurses know, who reassured me that this was fine considering his procedure and the anaesthetic he had just had.

The nursing staff were taking his pulse and breathing rate about every hour or so, and didn’t seem worried. They gave him some Panadol for pain and pretty much just let him sleep - but I was a bit worried, he just wasn’t himself, and following his two previous surgeries he had been much more awake and playful by this time.

About 6 hours after Ryan came to the ward, not long after dinner time... I remember because he didn’t want to drink or eat anything which was very unusual, that was the first time I saw that the nurse was concerned. Ryan had a dry nappy, (in fact he hadn’t urinated at all since the operation) and his heart rate was ‘a bit high’. The nurse (a different one from earlier in the night) said she was going to call the Doctor, but the Doctor didn’t come and see Ryan. The nurse told me she spoke with the Doctor and that she had prescribed some IV fluids (normal saline), which the nurse told me would help with his urine.

Time progressed and Ryan’s observations were conducted less frequently as the nursing staff were caught up with other patients. I was getting more worried, he looked sick, he was just very flat. I didn’t leave his side.

About 10 hours after the operation was when things took a turn for the worst. Ryan did not look any better, the Nurses did his blood pressure and couldn’t get a reading. They tried about three machines. At this stage he was very sleepy, almost a bit floppy - even his favourite teddy wouldn’t get him to move much. At this point we still hadn’t seen a Doctor and the nurses were clearly getting worried about Ryan. I started crying, I told them how worried I was, and this seemed to get the nurses attention as they promptly called an emergency. It felt like 20 people came running from all around, and right there in front of us Ryan was prodded and prodded and then put on a breathing tube. He was quickly taken to the intensive care unit where my husband and I were told things were very serious and that Ryan had been bleeding internally. Three days later, they turned the breathing machine off, and he died shortly after.

There are so many things that I would have changed about that day. I just wish I had insisted on seeing a Doctor when he was first unwell. I wish the nurses weren’t so busy and reacted sooner. I just wish I had done something. More than anything, I just don’t want any other family to go through what we have.
Everyone involved in providing children’s health-care recognises that this story could happen at their place. Not only is it a tragedy for the child and his family, it is also a tragedy for the nurses and doctors involved. No one goes to work to inadvertently harm a child in their care.

Patient stories remind us of what matters most. Some paediatric services are now routinely capturing patient feedback with 1-2 minute videos recorded on smartphones with patient’s consent, in which the child, young person or parent/carer is free to share any insight they wish to with their carers. Lots of good feedback – often very positive, sometimes negative – can be gained this way, and it can be easier to see what you are doing afresh - from the patient’s point of view.

The first team activity we would encourage you to spend some time on involves looking at your unit/ward/service through the eyes of a few different ‘typical’ patients and families. You may find it helpful to consider the following questions:

- What is it like for the average patient who comes to your unit/ward/service?
- How do children come into your service?
- How long do they typically stay in your care?
- What contact do they have and with whom while they are in your care?
- Where do they go when they leave your unit/ service?
- How does referral to, and handover back to other services/care providers occur at present? (e.g. How do you access a surgical opinion? What processes are in place for mental health review?)
- What facilities do we have/offer to help make our unit child & family friendly? (e.g. separate waiting room for kids and their families, dedicated play areas, rooming in facilities, etc)
- What supports are offered to them if ongoing treatment or care is required? e.g. What follow up occurs after discharge for our children & their families? (Telephone follow-up, outpatient review for specific groups of patients, dressing review, follow up at a paediatrician’s rooms, etc)
- How do you learn what your children & families think of your care? How often and by what means do you collect their feedback? What do you do with that information?
Safety & quality is everybody’s business

Who is responsible for safety and quality of care at your paediatric service? If your team’s answer is: “the Safety and Quality officer in Building 3” then you know you’ve got a problem.

“So how do we get to the point where everyone in our team ‘owns’ responsibility for safety and quality, as an integral part of what we do every day?”

Good question. The answer to this question is going to be unique to you and your team. It will depend upon the knowledge, skills, attitudes, relationships, expectations and experience of every member of your team, as well as on how you interact with one another.

In order to explore the answer to this question specific to your own circumstances, we invite you to step through the concepts and reflection questions on the following pages.

You may also wish to discuss these concepts in a different order, or skip some altogether if they do not seem relevant to your team. It’s up to you.

There are no right or wrong answers to the questions posed. Rather, these questions are presented here as a means to assist you and your colleagues to better understand how you work with one another and with your patients and their families.

What we currently do and how we do it

Before it is possible to identify opportunities to further improve care for children & their families in your unit/service, it is helpful to spend a little time mapping out how things currently work in your area, and what challenges you face in providing the best possible care.

Some questions to help you tease this story out are offered on the following page.

Team Discussion

- Who are our ‘typical’ patients and families? What needs to they typically have?
- What are the main areas of care we provide? (Medical, surgical, day stay, mental healthcare, care of neonates etc.)
- How many children does our unit/service see each week? How long do they typically spend with us?
- What skill mix do we have across disciplines within our team to care for our children & families? Are there any gaps? eg. mental health
- What processes do we have in place to streamline care? (Care pathways, criteria led discharge protocols, admission criteria, discharge planning processes)
- Which other providers are also contributing to care of our patients, (e.g. outpatient clinics, emergency department, wards, ICUs, pathology, pharmacy). What are our relationships like with those other providers of care & support services?
- How much pressure is our team typically under? How does this influence our care?
- Is there a change in function anticipated at our service? eg. New specialty introduced, short stay unit etc.
About the way we work together

“Why does our team culture matter anyway? We all get on with the job. We all care about the kids and families we look after...”

There is good evidence that a strong culture of safety is associated with better patient outcomes. When staff feel safe themselves to raise concerns, respectfully flag errors or potential errors, and be heard and respected for doing so, patients benefit.

Westrum has extensively studied organisation safety culture in healthcare. Westrum highlights that leadership shapes culture in a clinical unit, which in turn shapes the flow of information. Good information flow has an effect on patient safety. In particular where a culture is open & “generative”, there will be better uptake of innovation and better response to signals of risk or danger to patients. (see http://qualitysafety.bmj.com/content/13/suppl_2/ii22)

The table to the right illustrates the relationship between organisational culture and performance in Westrum’s view.

Despite this, culture in clinical teams is rarely measured. In part this is because of the high cost of externally administered survey instruments. We have sought to simplify this by providing you and your team with two culture surveys that you may like to use.

- The first survey, developed by the University of Texas’s Centre for Healthcare Quality & Safety, is short and relatively fast to do. It has 35 questions, but those questions quickly divide into six different areas that can be quickly assessed and then your team could use this to inform your discussions about how things are at you place right now.


  This webpage also includes a link to the scoring key and some instructions. The information that your team will get out of doing this will include:

  - Your teamwork culture
  - Your safety climate
  - Job satisfaction
  - Stress recognition
  - Perceptions of management
  - Working conditions

- The second survey, the Manchester Patient Safety Framework, is more detailed but it provides a culture survey focused at the acute care setting and one specifically focused on the mental health setting. This model of culture has been developed and validated by Diane Parker of the University of Manchester for the National Health Service and is freely available at the following website:

  See http://www.nrls.npsa.nhs.uk/resources/?entryid45=59796

  This tool is easily applied at a local team level to assess patient safety culture. Importantly, correctly applied, it is also an effective team intervention to improve safety culture.

  There is a PowerPoint presentation in here for facilitators and the two surveys most suited to the paediatric setting are the mental health and the acute care questionnaires.

  Both of these tools include facilitation and scoring guides.

  Ideally no culture survey is undertaken without a commitment to some targeted action to change things when issues emerge from the survey results. The activities throughout the rest of this workbook are designed to look at how your team might do that.

  Whether you choose to use one or other of these survey tools, or something else altogether, you may find it beneficial to give the team time to talk through the insights you gain from the survey process.
### The Companion Guide to Safety & Quality Improvement in Paediatric Care


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### Manchester Patient Safety Framework

- **Level A - Pathological**: Why do we need to waste our time on patient safety issues?
- **Level B - Reactive**: We take patient safety seriously and do something when we have an incident.
- **Level C - Bureaucratic**: We have systems in place to manage patient safety.
- **Level D - Proactive**: We are always on the alert thinking about patient safety issues that might emerge.
- **Level E - Generative**: Managing patient safety is an integral part of everything we do.

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### Dimension of Patient Safety Culture

1. Commitment to overall continuous improvement
2. Priority given to safety
3. System errors and individual responsibility
4. Recording incidents and best practice
5. Evaluating incidents and best practice
6. Learning and effecting change
7. Communication about safety issues
8. Personnel management and safety issues
9. Staff education and training
10. Team working
Team Surveys

- Invite each team member to complete the Patient Safety survey tool that is most relevant to your team.
- Collate the results using the appropriate scoring key.
- After you have completed this scorecard you can bring the results through to a team meeting and workshop why people have answered each section as they have using the trigger questions on the below.

Team Discussion

- Undertake a SWOT analysis outlining the strengths, weaknesses, opportunities and threats to your service that have been highlighted through the analysis that your team has undertaken.
- Are there some common or key areas that are concerning you as a team, and that you would like to focus on together?
- What strategies/solutions can you identify for the problems you have identified? Are there some easy quick fixes that you would like to implement?
- What areas will require more time and planning to rectify? How important are these harder problems? How much influence does your team have over them, or do they require action from people outside your team? If so what needs to happen?
Session Two:
Do we actually have a problem?
Allow 2 - 2.5 hours

We can all think of examples of what are typically called ‘best practice’ or ‘lead paediatric’ healthcare services around the world. They tend to attract attention because of their success in avoiding harm and achieving positive outcomes for their patients.

In the paediatric sector, services such as Cincinnati Children’s Hospital Medical Centre in the US and Great Ormond Street Hospital in the UK are often looked to as examples of leaders in children’s healthcare organisations.

Studies of such services have highlighted an important common characteristic: they never think they have ‘made it’ on safety and quality in patient care. They recognise that they must always be on the alert, thinking about and acting on patient safety issues that can and/or do emerge hour by hour, day by day, patient by patient. In these services, patient safety and quality is an integral part of everything they do, and of everyone’s work, regardless of their role/job.

So the first step to having the most resilient and reliable safety and quality culture in your team is to consider the following key questions:

- **Problem? What problem?**
- **What special challenges exist when working with the kids and families we care for?**
- **What are the key risks to patient safety and quality of care where I work?**
- **Is there a specific safety and quality problem in our area and what are my personal experiences and beliefs about it?**

Using the templates on the following pages, you may wish to encourage your team members to document their thoughts and experiences regarding safety and quality in your own work area.

Once everyone has completed this, you may wish to discuss the different responses as a group, and identify the common ground on what the team regards as the specific challenges, the key risks, and one or two specific quality & safety problems you agree are a concern. If you can, try and identify something you all wish to act upon.
What special challenges exist when working with the children and families we care for?

- E.g. Our service does not provide ENT surgery or paediatric surgery
- Our patients live in rural area a longway from our service
- There is no appropriate step-down unit for us to refer kids to
- We have a very diverse and fast growing local population
- Our paediatricians work on a fly-in, fly-out basis
- We have limited staff qualified in...
- Patients always arrive late because of the parking problems around here
How do we know how we are doing as a team?

- How safe is our care and where is the evidence to support that?
- How do we know if we are doing well, middle-of-the-road or poorly in terms of quality & safety in our unit/ward/service?
- What information does our team regularly collect and review related to the safety & quality of our care? Is the information accurate? Is it timely?
- What information and feedback do we give/receive when people do a good job?
- What is it that tells us that things need to improve? (e.g. critical incidents, SAC 1 & 2 incidents, comments and complaints, late discharge issues, unit overcrowding, staff turnover)
- How reliably are we collecting and reporting clinical incidents? How safe is it for staff to do so? How efficient is it to report?

Your team might want to have a listen to this podcast (5.5min) produced by the Solutions for Patient Safety team in the US. It is all about how clinicians can improve incident near-miss reporting and the level of attention that is being paid to them in your unit. See [https://www.youtube.com/watch?v=w7M-1FloC6mg](https://www.youtube.com/watch?v=w7M-1FloC6mg)
What are our experiences and beliefs about the safety & quality challenges we face?

As the 6/9 cartoon illustrates, everyone has a unique perspective. Resilient teams recognize that different perspectives can all be equally valid. By tapping into all the different perspectives in a team it is possible to gain a clearer view of any issues that require attention.

- What are the key reasons for the patient safety and quality problems that we encounter?
- What factors are contributing to this problem/issue persisting over time?
- Why do we do what we do?
- Why do we adopt some behaviours known to improve the care for our kids but not other behaviours?
- Facilitation hint: some services used small focus groups to work together to identify and solve key issues. They then brought the groups back together to identify the one or two key areas that they all wanted to solve using sticky dot voting and group consensus to a priority area of focus.

Notes...
What priority issues do we wish to act on together?

- What are the opportunities for us to further improve the safety and/or quality of our care?
- Which of these do want to work on improving together as a priority?
- What is stopping us from doing the things we know will make a difference?
- What do we want to change so that we can reliably provide the best possible care as a team?
Session Three: How do we achieve change?
Allow 1.5 - 2 hours

Once your team has identified a priority safety or quality issue you’d like to improve on, the challenge becomes how it is that improvement will be achieved. Sometimes improvements can be brought about quite readily, with an alteration to a form, or a tweak in a communication pathway. More typically, achieving improvement involves more complex change, including in the way people behave.

We just need to educate everyone.

It is common in healthcare to respond to the need for people to behave differently by delivering education. This ensures that everyone has the same understanding about what is required, and the skills they need to do things in the way we require them to.

In the past, professional education in health has been based on a model which makes the assumption that once a healthcare provider gains the relevant knowledge that this will lead to an intended behavioural change. However, there is little evidence for this being the case. Education is a necessary but not sufficient ingredient in ensuring safety and quality in children’s healthcare.

Education is usually not sufficient on its own because there are other influences on the way people behave than just what they know. Whilst acquiring knowledge through education is clearly important, the factors that determine whether a health professional will apply this knowledge in practice are complex. Health professionals are part of a complex social system of professional and workplace systems, norms and beliefs.

There are many theories that explain why people behave the way they do in different settings and with different peers and what makes them change their behaviour. For example, Ajzen’s Theory of Planned Behaviour (shown opposite) has been used successfully to model and explain a range of health related behaviours such as hand hygiene and reporting of patient safety incidents. This model suggests that the behaviour of an individual is influenced by such factors as:

- a person’s core beliefs about the behaviour;
- their expectations about personal gain (rewards) or loss (penalties) from the behaviour.
- their beliefs about what their professional peers expect them to do, and
- what they observe being modelled by leaders in their area

In other words, people’s behaviour is influenced not just by the knowledge they have about what they should do, but also by things like their beliefs about what the benefits will be, whether it’s easy to do, what other people around them think and do, and whether they have the skills required.

If your team is interested in understanding how to change behaviour around a particular issue or problem, you may be interested to watch the following 7 minute video on the website of the UK based Improvement Academy. It explains Ajzen’s theory of planned behaviour in everyday language and relates it to the clinical setting:


Please note: this webpage also includes a number of detailed forms, worked examples & tools that your service can use to workshop behaviour change. If your team can set aside the time they might be valuable.
The Theory of Planned Behaviour

- Behavioural Beliefs
  - Attitude towards Behaviour
    - What beliefs do I have about this behaviour?
    - What is in it for me?
    - What are the consequences for non compliance?
  - Subjective Norms
    - What do my peers expect me to do?
    - Do I care what they think?
  - Perceived Behavioural Control
    - Will my actions make a difference to patients?
    - Do I have the power to do it (or not?)

- Evaluation of Behavioural Outcomes

- Normative Beliefs

- Motivation to Comply

- Control Beliefs

- Perceived Power

(Adapted from Ajzen, 1988)
Team Discussion

- Is there a need for education of staff around the priority problem/issue you have identified?
- To what extent do you think the source of the problem is related to education or to other influences on people’s behaviour?
- Think of a change that may have been introduced at your paediatric service and/or in your team. How successfully has your team adopted this?
- Watch the Improvement Academy video (7mins) with this change in mind.
- What insights can you gain as a group from stepping through the elements in the model of planned behaviour in relation to this? In other words, what have been the (often unspoken) attitudes and expectations of team members around the change?
We just need everyone to comply with the protocols and guidelines

In highly complex systems such as modern healthcare, it is tempting to think we can reduce uncertainty about risks through standardisation and rules. In healthcare there is work that can be standardised, work that can be routine and work that has to be tailored to the individual child & family. There is a need to recognise how to skilfully apply procedures, clinical guidelines and how to appropriately individualise care. Safety and quality is more than a set of policies, procedures and guidelines.

High performing organisations are able to demonstrate this skilful application and also have high levels of trust, respect and teamwork. This results in resilience and high reliability in the delivery of safe & high quality care to children and their families.

The model by Lillrank provides a useful conceptualisation of the relationship between risk, systems and culture. It can be used to counter the notion that safety and quality can be reduced to a set of procedures with compliance as the goal.

While we all know that following evidence based guidelines or protocols helps to make our care safer, we also know that sometimes the expert judgment of skilled clinicians in making decisions outside of guidelines and protocols is required to get the best outcome. An example from outside the healthcare sector is the famous emergency landing of a passenger plane on the Hudson River in the U.S., which saved hundreds of lives of both passengers & crew.

The need to have routines, and to create situations where variation is allowed, wanted and applauded (at the appropriate time) is explained well by Paul

Lillrank explains that a broom is made out of three components, the broomstick (a hard unyielding part); a soft, flexible part made of a bundle of straws and the connector between the two. Applying this image to an organisation, the broomstick represents repetitive operations where each step is identical or nearly so. The target outcome, i.e. what is good and bad, is known exactly, or with minimal variation. The other end (the bundle of straws) represents non-routine situations when a variety of flexible outcomes might occur. The assumption is that with fixed inputs and known realistic targets, processes can be standardised. If conditions vary within certain boundaries, the process is routine. As conditions move beyond the regular experience or knowledge of the clinician, the process becomes non-routine.

Lillrank provides an example of the cleaning of hotel rooms. The target, a clean room, can be easily defined. A detailed manual can be written, and pictures can be provided. Equipment and training can be standardised, as well as the procedures for performing various tasks. However, the actual condition of a particular room (after the occupant has left) mean the work of the cleaner must be adjusted to fit the condition that the room is left in each time.

Most healthcare professionals are constantly running back and forth on the Broom. Protocols & procedures serve us well to support consistent delivery of best practice care. However, clinicians are ever vigilant for the patient whose circumstances or condition require a unique response – when clinical judgement dictates a response that might be outside the usual protocol or procedure, for the benefit of this particular child. The challenge for us is to accept both routine tasks, and highly chaotic or non-routine situations as OK, and to build a service that supports success & high quality outcomes being achieved at both ends of the spectrum.

The team may find it helpful to think about the “quality broom” idea when discussing the questions adjacent.

Team Discussion

• Are our quality systems robust? (Do we hear about and use feedback from either internal (audit) or external (child and family) feedback to improve our care?)
• When is deviation from protocols or processes acceptable? When is it not?
• How do we respond to non-routine decision-making in the care of individual paediatric patients?
• How can we standardise best practice care? (e.g. clinical pathways, communications, local updates on customer feedback, audit results and safely escalated care, MET calls...)
• How do we know we are complying with what we have standardised?
• What are the next steps that we must take to improve the communication and timeliness of feedback and who will lead this?
We just need some change champions

If you are aiming to create a new culture within your team around a particular paediatric safety or quality issue, then it is important to understand how organisational change works, and to understand what will be the most effective.

Rogers studied behaviour in the early 1960s. He tried to explain how, over time an idea or product is adopted and gains support or acceptance and use in a group. He described five general reactions to change, and proposed that representatives of each will be present in most groups:

- **Innovators**: people who want to be the first to try out new things. These people are interested in new ideas and are willing to take risks. These people are also frequently the first to develop new ideas.
- **Early Adopters**: often people who are opinion leaders. They enjoy leadership roles and embrace new opportunities. They are already aware of the need for change and are comfortable with adopting new ideas.
- **Early Majority**: These people adopt new ideas before the average person. This group of people usually need to see the evidence that shows what they are implementing will work before they are willing to adopt the change.
- **Late Adopters**: These people like tradition and keeping things the same is important to them. They are the hardest group to convince. Things that help this group to adopt new practice include the provision of research evidence, repeated audit information, written confirmation this will be the new practice in the unit and pressure from the rest of the group to conform.
- **Laggards**: 16%

Strategies that appeal to this population include success stories and evidence that shows the innovation has been a success.

- **Late Majority**: These people are cautious of change, and will only adopt an innovation after it has been tried by most people. Strategies that appeal to this group includes information on how many people or units have already had success with it.

<table>
<thead>
<tr>
<th>Public Health Campaign</th>
<th>Manage</th>
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<tbody>
<tr>
<td>Attracts Early Adopters (10 - 30%)</td>
<td>&quot;We don't care if you think it is a good idea - just do it!&quot; Attracts Early &amp; Late Majority (30 - 80%)</td>
</tr>
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### Rogers Diffusion of Innovation Model

![Rogers Diffusion of Innovation Model](image-url)
Healthcare tends to be good at supporting the innovators and early adopters through promotion and sharing of ideas and research findings. You can see in the figure of Roger’s Diffusion of Innovation Model that in order to establish a change in your team’s behaviour around a particular issue, both the early and late adopters have to convert to the new way, behaviours or practice for it to be sustained and effective.

It may take some form of tension to move those who otherwise are less motivated to get on board with the changes. Going back to the Theory of Planned Behaviour (discussed above), it can be seen that the introduction of some form of consequence (either carrot or stick) is usually required to change people’s motivation to adopt a different behaviour. There has been little appetite to date in application of such tension in healthcare.

Some organisations are now taking a more serious approach to applying consequences for certain undisputed behaviours such as hand hygiene and use of track and trigger observation charts. Research has found that rather than having to resort to draconian compliance measures (“thou shalt, or else...”), that most behaviour can be changed through simple peer to peer conversation by professional peers who have credibility and are respected by their colleagues.

As a result, one of the most meaningful things that you and your team can do is to start a conversation about how care should look at your place and to build on this either each week or on a regular basis, so it is really clear to everyone what is expected and acceptable practice.

It might be that your team can start the conversation in ward rounds, stream meetings, at handovers or during huddles by giving different people an opportunity to mention one thing that they thought was really great care or strongly aligned to your new approach on a given issue. An example might be to compliment someone on a really good pick-up of a child whose observations were going south and their ability to get the team and family involved in remedial treatment before this blew up into a big issue.

There are other more structured ways in which your team might choose to work towards changing aspects of the team culture. This might include adding some form of clinical audit into the standard processes in place in your service. An excellent process for implementing clinical audit is outlined in the Clinical Excellence Commissions document: Clinicians Guide to Quality & Safety. In particular have a look at Chapter 4: How to identify a clinical issue & monitoring improvement.

• Consider an important change that your paediatric service has tried to implement. Where do you think your team is at in relation to Roger’s Model in implementing this? Have the “late majority” embraced the change as yet?
• What do we need to do to achieve a critical mass in support of this change? Write down your ideas and discuss them together. CHA suggests that you ask every member of the team to speak to this and talk through their ideas. This will help with considering all of the available options to move forward.
• What is it that prevents us from implementing this change globally across our unit or service?
• What are our next steps (who will do what, time frames...)?
• How will we know we have achieved our goal? What measures can we use or put in place to help us monitor progress?

Notes...
Session Four: Where to from here?

So now you have hopefully reached some agreement within your team on what the key safety & quality risks and opportunities are in your ward, area or service. You’ve also developed some consensus about what safety/quality improvements you’d like to aspire to, and have begun to identify strategies to help you get there. If you have chosen to consider all of the team discussions suggested in this workbook you will have:

- Reflected on your unit/service from the point of view of your children & their families
- Participated in at least one survey to help identify & characterise the team’s culture & reflected on how that culture is supporting (or not) safe, high quality patient care
- Analysed existing information that helps the team to identify how safe your collective care is
- Identified current challenges & risks and priorities in providing the best possible care to the children & families you look after
- Agreed as a team on the highest priority safety & quality issue you’d like to work together on

Having identified a priority problem, you will then have had a think about

- What needs to change to achieve the improvement you want
- The role of staff education in improving outcomes
- The role of compliance with procedures & protocols in improving outcomes
- The role of attitudes & expectations among team members in relation to the problem and the changes needed

If you have agreed on a priority problem(s), and identified the key drivers behind that problem and what needs to change, the next step is to work out how to achieve those changes.

So what do we do now?

Most health services have a safety & quality team that includes people with expertise and training in quality improvement. You might want to start by approaching that area for some assistance, or you may have individuals within your team with quality improvement expertise. Either way, there are a number of excellent resources freely available on the internet from very credible sources to help you and your team to embark upon and successfully implement a quality improvement project or change.

If you’d like an introduction to an evidence based approach to Quality Improvement, you may find it helpful for the team to look at a video designed by the US based Institute for Healthcare Improvement. This 10 minutes video provides a clear, cartoon based introduction to the ‘whys’ and ‘hows’ of quality improvement in healthcare, and the role of teams in making small scale changes to big effect.

See: [https://www.youtube.com/watch?v=jqS2zjMzqyl](https://www.youtube.com/watch?v=jqS2zjMzqyl)

If you are looking for additional thinking and resources to support your change effort the US Agency for Healthcare Research & Quality has a 10 step guide to action planning - it focuses on creating a strong driving team and also looks at how clinical teams can sustain and spread changes to a service.

See: [https://www.ahrq.gov/teamstepps/instructor/essentials/implguide1.html](https://www.ahrq.gov/teamstepps/instructor/essentials/implguide1.html)

There are also tools to help you to map your existing processes (understand how the systems you currently use are working), identify the things that need to change (called drivers in the Quality Improvement world) and work out small tests of change you can implement locally to gradually strengthen the performance of your team/unit in relation to the problem you have decided to focus on.
For example, see:

**The US Institute for Healthcare Improvement**
- How to Improve: [http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx](http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx)

Includes advice on forming the team, setting improvement aims, establishing measures, selecting changes, testing changes, implementing changes and spreading successful changes.

**The UK based Improvement Academy**

Includes step by step guide to forming your implementation team, identifying target behaviours, understanding barriers to performing the target behaviour, devising intervention strategies to address identified barriers, implementing interventions and evaluating the effectiveness of your project.

**Children’s Hospitals Solutions for Patient Safety**
- SPS provides a range of paediatric specific clinical intervention bundles for reducing harms to children associated with healthcare.
  See: [http://www.solutionsforpatientsafety.org/for-hospitals/hospital-resources/](http://www.solutionsforpatientsafety.org/for-hospitals/hospital-resources/)

**NSW Clinical Excellence Commission**
- Provides a wealth of quality improvement tools for use by hospitals, including advice on aim statements, measures & statistics for improvement, brainstorming techniques, case and effect diagrams, Driver Diagrams, How to use the IHI Model for Improvement, Measuring your progress with run charts, and much more.

But before you turn to any one of these tools, you may find it helpful to do one last mapping exercise in this workbook. For ease of reference, you might like to summarise these on the following pages

Your team might also like to action plan some elements that have been raised throughout your discussion and to timetable discussion of this in an appropriate team meeting.

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**How do I minimise the risk of patient harm in my job?**

- What specific strategies can I use in caring for the children and their families to minimize the risk of harm? E.g consider:
  - Identifying hazards and reporting incidents & potential harms
  - Designing for safety
  - Speaking up if concerned
  - Communicating for safety
  - Proactively assessing risks
  - Using available risk systems e.g. CEWT
  - Specific risk mitigation for high risk kids/treatments
  - Enlisting the family on the team
  - Modelling and rewarding safety behaviours
How do we ensure that the care we deliver as a team has the best outcomes?

- Consider the following strategies. Which ones are the most relevant to your team, which do you want to apply to provide safe, quality care to your children & families?
  - Auditing what we do
  - Applying best evidence through guidelines or other best practice tools
  - Benchmarking with peers
  - Re-designing for reliability
  - Care pathways
  - Measuring performance and variation
  - Creation and posting of a monthly feedback resource so everyone knows how things are going

Notes...
How do we deliver child & family centred care and create a great experience?

- What does quality children’s healthcare look like in the context of our team’s work for children and their families? What are we aspiring to achieve?
- How best can we optimise the experience of our care for children and their families? E.g consider:
  - Communicating with empathy
  - Listening to patient stories - at the beginning of each meeting
  - Learning from family and patient feedback – (e.g. can you introduce something where everyday a staff member asks one child or parent how it is going and if there is something else/different that can be done to make things better?
  - Turning complaints into opportunities
  - The child & their family as partners in designing care

Notes...
How do we tell if our changes are improving outcomes for children?

- Measuring the changes that you are making is key to determining if the things you are doing are improving patient experience & outcomes, or not. Tools to assist with evaluation and reporting include:
  - Audits - observational, workflow, surveys
  - Report of safety events
  - KPIs
  - Scorecards
  - Dashboards
  - Run charts
  - Sharing your experiences
What is working well in our team?

- What do we see?
- What do parents and children tell us?
- What do parents and children see?
- What do visitors to our ward say about our team?
- What do we report?

Notes...
How do we sustain any improvement we make?

- Embed required changes in systems (e.g., alter the EMR, change the form, move the cupboard in which those drugs are stored, etc)
- Daily safety huddles
- Ongoing monitoring of key measures & communication of the outcome to team members (e.g., it’s 68 days since we last had a hospital acquired infection in our ward)
- Clear and ongoing communication of any change
- Celebrate successes – acknowledge achievements & support speaking up for safety

Notes...
Acknowledgements

Children’s Healthcare Australasia is a not-for-profit community of more than 90 children’s hospitals and paediatric units across Australia and New Zealand. Our multidisciplinary Paediatric Safety & Quality Special Interest Group comprises representatives from member hospitals with expertise and interest in safety & quality of care for children & their families.

CHA would like to acknowledge and thank all members of the Safety & Quality Special Interest Group who contributed to the conception, design, testing and finalisation of this resource. The group was motivated by a perceived gap between organisation wide strategic plans about safety & quality in patient care, and the ability of local clinical teams to translate these principles into their daily work. This workbook was born of a desire to help address this gap, by providing teams with some guidance on the tools and resources available to them that may assist with their efforts to continuously improve the safety & quality of care they provide to children & families in their care.

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Like all good improvement projects, CHA does not regard this Workbook as a finished project. We welcome ongoing suggestions from hospitals and clinical teams about how it could be further improved. Please contact us via our website: children.wcha.asn.au