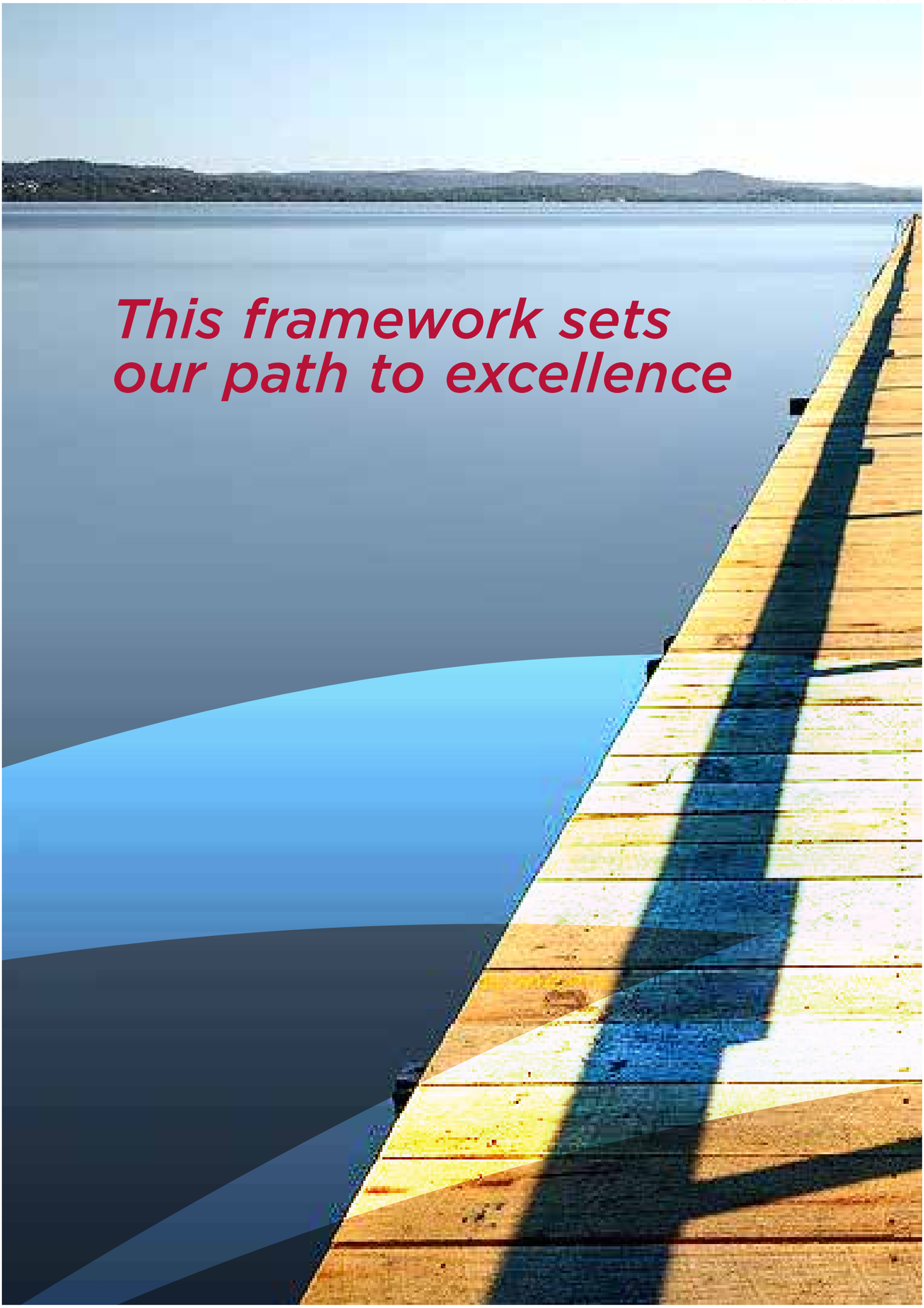
Organisational Improvement and Innovation Framework

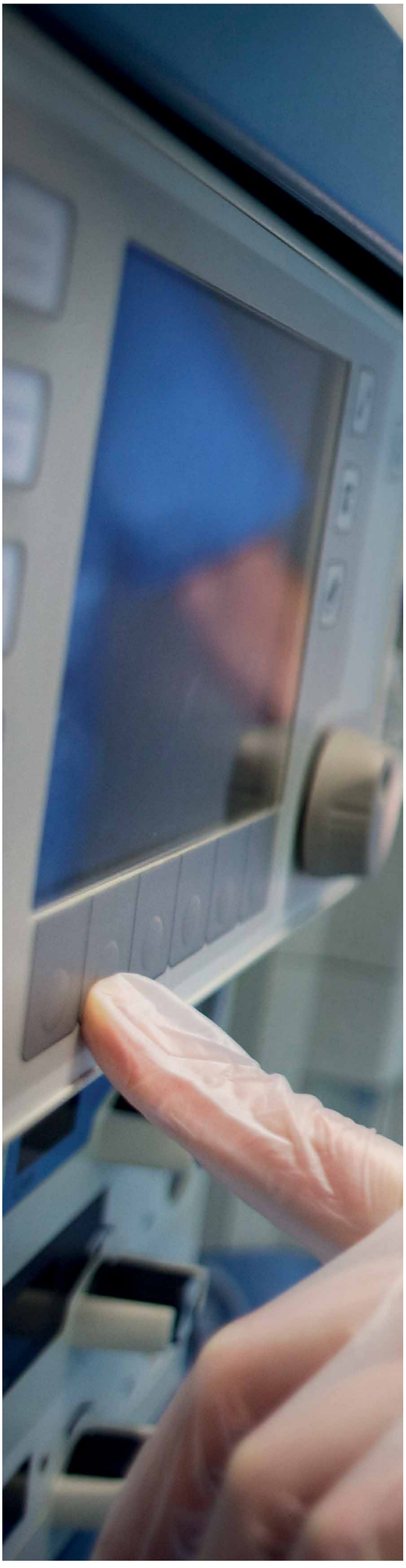
Achieving excellence is everyone's job

NSW GOVERNMENT

Health
Central Coast
Local Health District


This framework sets
our path to excellence

Contents



Foreword

I am delighted to present the Central Coast Local Health District's (the District) Organisational Improvement and Innovation Framework which will support our District in achieving the Caring for the Coast vision of a healthy and vibrant community.

The Central Coast is a beautiful region and being healthy is important to enjoy the lifestyle it offers. At the same time the Central Coast community is facing challenges. The population is growing, we are getting older, and many are experiencing the impact of chronic health conditions which affects our ability to live well. When combined with the rising costs and increasing demand for health services, the importance of safe, high quality, patient centred care has never been more critical.

This framework sets the aspiration for the District to become an improvement leader, locally, nationally and internationally. The framework is also a roadmap as it describes the tools, which when applied, will see the organisation become a place where patient safety and quality improvement is central to everything we do and an intrinsic part of everyone's job, every day, in all parts of the District. Engagement, and working with consumers, community representatives, primary health care providers (inclusive of general practitioners) will be a vital part of our success. We will measure our improvement journey, so we know where we are and where we are headed.

The framework outlines our four commitments for working strategically. When these are addressed simultaneously, we will achieve maximum impact. These commitments are:

- we will build systems and structures for excellence
- we will measure the results and impacts of our improvement activities
- we will build the improvement capability of our people
- we will grow our organisational culture for improvement.

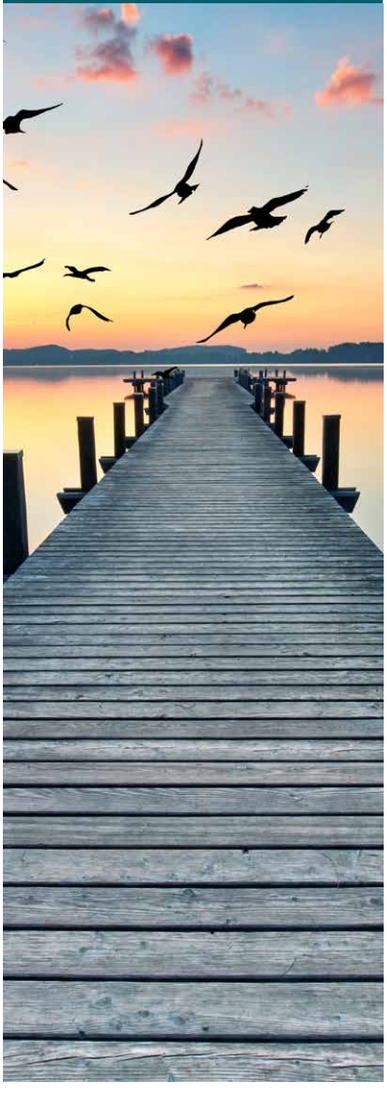
We would like to thank all that have provided input into the development of the Districts Organisational Improvement and Innovation Framework. The Central Coast Local Health District Board, executive team and staff look forward to the opportunities that this framework will provide in delivering the best healthcare to our community.

Paul Tonkin
Chair, Central Coast Local Health District Board

Dr Andrew Montague
Chief Executive, Central Coast Local Health District

Introduction

This framework sets our path to excellence



The vision of Central Coast Local Health District (the District) is: Healthy People – Vibrant Community. Our mission is to: Promote and enhance the health and wellbeing of our community. The Caring for the Coast strategy outlines our commitment to achieving our strategic priorities by:

Caring for our Patients

Patient care is achieved through continuous reviews of our performance identifying opportunities to improve how, when and where we deliver care to the community and meet growing demand.

Caring for our Staff

A happy, healthy and innovative workforce is good for our staff and good for our community. We encourage and support professional development and innovation that will lead to improving the way we deliver health care to the community.

Caring for our Resources

It is our responsibility to use our resources effectively and efficiently. As technology advances and ways of delivering healthcare change we need to be able to adapt and embrace these changes.

Caring for our Community

We are fortunate to have a wonderful community that is willing to provide us with feedback when we do things well and also when they notice opportunities for improvement.

Caring for our Future

It is our imperative to build strong and effective partnerships to meet the community's healthcare needs. Only together we can achieve our vision.

This framework is designed to support the District's improvement aspiration to 'become an improvement leader, locally, nationally and internationally; an organisation with a strong track record of operational excellence, engagement and innovation in improvement.'

1 Scope of Framework

The Central Coast Local Health District Organisational Improvement and Innovation Framework establishes the best ways to drive improvement priorities across the health care service and by ensuring:

- improvement and innovation is integrated throughout our business and is the responsibility of all staff, at all levels
- improvement and innovation is governed by an Improvement and Innovation Committee which advocates for service improvement to become an organisational priority and ensures business processes, systems, practices and training opportunities are integrated and best respond to the needs of the District
- the role of the Strategic Development and Delivery Unit is to support the development, implementation and ongoing effectiveness of the improvement system which includes the development and implementation of tools, resources, training and networking to increase our improvement and innovation maturity
- there is continuous evaluation and development of the improvement systems and activities
- the rollout of improvement activities aligns strategically across the organisation
- the most appropriate tools and resources are selected to help redesign strategies and programs, build staff capabilities, and sustain and replicate business process improvements.

2 Sustainability

The Central Coast Local Health District aspires to achieve long-term sustainable process improvements. To do this, the organisation is focused on strategies that promote sharing, adaptation and the replication of success. Specifically, supporting the development and implementation of improvement projects that:

- support sustainable improvements
- replicate successful improvement solutions as appropriate across all relevant departments and service areas.

The District adopted the Clinical Excellence Commission (CEC) Organisational Strategy for Improvement Matrix (OSIM) tool to assess and monitor organisational capability. The OSIM is a diagnostic process to highlight the organisational conditions for quality improvement. The results indicate how the organisation may take a strategic approach to make it easy for local teams to initiate, test and develop their local improvement ideas.

3 Why Improvement and Innovation Framework?

The New South Wales health care system is faced with a challenge. While there is a strong commitment to providing effective, efficient, evidence based, safe and high quality health services, our changing health care environment is influenced by a number of trends.

The increased demand for services, an aging population, and the increased prevalence of chronic disease are the trends our health care system is trying to address within an increasingly fiscally constrained environment as the Commonwealth and State growth funds are experiencing a slowdown. It is exactly in this stressed environment where a focus on improvement is critical to orientate the planning and delivery of health care away from crisis management to proactive service improvement.

This framework represents our local response to this challenge and proposes that improving quality is everybody's business. To achieve real and sustained improvements we must find new and better ways to achieve the outcomes that we want.

International organisations provide insight into what can be achieved when quality improvement is placed at the core of all business. Intermountain Health care (Utah), Jonkoping County Council Health care system (Sweden) and Salford Royal Foundation Trust (UK) have steered their health care services to prioritise quality above all else. Over the last number of decades these organisations have achieved improved clinical outcomes, improved safety, reduced costs and reported improved patient experience.

To become an organisation that delivers outstanding, safe and quality health care, we need to understand where we are on our improvement journey. In April 2017, the District conducted its first Organisational Strategy for Improvement Matrix OSIM workshop to assess its readiness.

Figure 1: © State of Victoria (through Safer Care Victoria) and State of New South Wales (Clinical Excellence Commission) 2018

The workshop group assessed the District to be at the '**Building**' maturity level (from the matrix in Figure 1) across most indicators. The OSIM workshops will be repeated every 12 months followed by development of an organisational improvement plan by the Improvement and Innovation committee. The organisational improvement plans will focus on areas that need improvement as identified in the workshop while maintaining existing well performing functions which support organisational improvement efforts.

This framework is structured around four OSIM domain areas:

1. organisational systems and structures
2. culture and behaviours
3. workforce capability and development
4. results and system impact.

The four domains comprise 18 criteria that describe the organisational conditions, capability and readiness for continuous improvement.

3.1

What is improvement?

There are a number of definitions describing improvement as a 'systematic approach that uses specific techniques to improve quality'. Improving quality is about making health care safe, effective, patient-centred, timely, efficient and equitable. Batalden and Davidoff (2007) define improvement as 'the combined and unceasing efforts of everyone to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning)'.

One important ingredient in successful and sustained improvement is a consistent positive attitude across the organisation.

"Quality is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge"

(Institute of Medicine, 1990)

3.2

What is quality?

The Institute of Medicine (2001) has identified **six dimensions of health care quality**. These state that health care must be:

- **equitable** – providing care that does not vary in quality because of a person's characteristics
- **safe** – avoiding harm to patients from care that is intended to help them
- **effective** – providing services based on evidence and which produce a clear benefit
- **efficient** – avoiding waste
- **timely** – reducing waits and sometimes harmful delays
- **person-centred** – establishing a partnership between practitioners and patients to ensure that the care respects patients' needs and preferences.

3.3

What is the link between quality improvement and patient safety?

In recent years it has been widely recognised that unnecessary harm happens in the process of providing health care. Quality improvement approaches are increasingly being used to address these system failings. The review of evidence has been used as a key approach in several national initiatives to encourage health care organisations to reduce harm.

3.4

Where does improvement thinking come from?

The roots of many quality improvement approaches such as Lean, Six Sigma, and Theory of Constraints (see section 3.6) can be traced back to the thinking about production quality control that emerged in the early 1920s. During the 1940s and 1950s, quality improvement techniques were further developed in Japan, pioneered there by the US experts W. Edwards Deming, Joseph Juran and Armand Feigenbaum and the Japanese expert Kaoru Ishikawa (Health Foundation, 2012).

Deming's teachings demonstrated that employees from all layers of the organisation need to be engrossed in quality improvement efforts and not just the organisation's leadership. There are a number of quality improvement approaches that draw upon the work of these pioneers.

3.5 How can we improve quality?

Quality improvement draws on a wide variety of methodologies, approaches and tools.

Most quality improvement approaches share some simple underlying principles:

1. **Data and measurement for improvement** – measurement and gathering data are vital elements in any attempt to understand the problem and improve performance or quality, and are also needed to assess the impact of the change.

2. **Understanding the process** – once the problem is identified the next step is to understand the processes and systems within the organisation by exploring the patient journey.

3. **Improving reliability** – once a process is understood, a key focus of quality improvement is to improve the reliability of the system and clinical processes.

4. **Demand, capacity and flow** – through analysis of demand and capacity for a service, it is possible to identify and apply good practice approaches to improve flow and decrease waiting times.

5. **Enthusing, involving and engaging staff** – it is not just the method that predict success; it is also the way the change is introduced. Factors such as leadership, staff engagement (particularly of clinicians), patient, consumers and carer engagement, training and education all play an important role.

6. **Involving consumers and co-design** – patients, carers and the wider public have a significant role to play – not only in designing improvements, but also in monitoring whether they have the desired impact. This is particularly important because they are the only people who really experience the patient pathway from start to finish.

3.6 Which improvement approach should we use?

This section looks at how the theory translates into practice and identifies some of the best-known approaches to quality improvement. No one approach is better than the others, and some may be used simultaneously. Each improvement approach has a unique methodology which will suit certain quality improvement initiatives.

Understanding the characteristics of commonly used methodologies will help staff/teams select methods and tools appropriate to their needs. Specific methods commonly used include: Total Quality Management, Theory of Constraints, Lean Thinking, Six Sigma and Lean Six Sigma. Table 1 and Figure 2 summarise the different approaches:

	Total Quality Management (TQM)	Theory of Constraints	Lean	Six Sigma
Focus	Continuous improvement	Manage constraints in the process	Maximise value and speed in the process	Perfection to achieve performance of 3.4 defects per million occasions
Approach	Make everyone aware of and responsible for quality in all aspects of the organisation	Manage and remove constraints from the process	Remove waste, reduce complexity and streamline the process	Reduce variation
Improve revenue by	Reducing errors	Increasing throughput	Adding value throughout the process	Identify and eliminate defects
Methodology	• Plan • Do • Study • Act	• Identify constraints • Exploit the constraints • Subordinate process steps • Elevate constraints • Repeat cycle	• Identify value • Map the value stream • Improve process flow • Pull work through process • Seek perfection	• Define the problem • Measure the current state • Analyse • Improve • Control
When to use	Use TQM to capitalise on the involvement of management, workforce, suppliers, and consumers in order to meet or exceed consumer expectations and build quality into the process	Use Theory of Constraints when you wish to understand bottlenecks to a process and better manage these bottlenecks to create an efficient process flow	• Use Lean when you strive to maximize value to the customer while using as few resources as possible • When you wish to analyse workflow to reduce cycle time and eliminate waste	Use Six Sigma when you strive for near perfect results that will reduce costs and achieve higher levels of consumer satisfaction

Table 1: Comparison of commonly used improvement methodologies (Redesigning Hospital Care, Department of Health, 2012)

At Central Coast Local Health District, our improvement tools of choice are Lean Six Sigma. Lean Six Sigma will be offered through a one day training course known as Empower Training. Also available will be the Lean Six Sigma six month training referred to as Green Belt. Our staff may have undertaken other improvement methodologies training and we encourage staff to apply those techniques where appropriate.

Theory of Constraints

A constraint is 'anything that limits a system from achieving higher performance versus its goal' (Goldratt, 1990). The Theory of Constraints (ToC) is about concentrating efforts to identify and reduce the impact of the constraint in a system. Summarised by three improvement questions and steps:

- what to change?
- what to change to?
- how to cause the change?

Strengths:

- the focus on bottlenecks and constraints, managing capacity and demand and reducing variation
- fits well with Lean Thinking and supports the rigour of Six Sigma measurement.

Model for Improvement (including PDSA)

This is an approach to continuous improvement where changes are tested in small cycles that involves planning, doing, studying and acting (PDSA) before returning to planning, and so on. These cycles are linked with three key questions.

- what are we trying to accomplish?
- how will we know that a change is an improvement?
- what changes can we make that will result in improvement?

Strengths:

- each cycle starts with hunches, theories and ideas and helps them evolve into knowledge that can inform action and, ultimately, produce positive outcomes.

Lean Thinking

The 'Lean' approach was pioneered by Toyota in Japan and is widely used in the manufacturing industry. Since the 1980's, Lean has been increasingly utilised in the health care sector; it focuses on value from the patient perspective, by eliminating all activities that add no value. Lean is more about waste prevention than elimination whilst emphasising continuous improvement.

Strengths:

- emphasis on customer purpose
- •adding value for the patient, eliminating unnecessary waits, delays and waste
- improving flow between departments.

Lean thinking is even more effective when combined with the Theory of Constraints or Six Sigma.

Six Sigma

Six Sigma is a rigorous strategy for improvement based on analysis and measurement. Originally conceived in the manufacturing sector, it is becoming the predominant improvement methodology in private and public sector organisations worldwide. Six Sigma aims to develop products and services to such a high level of reliability that they are virtually 'defect free'.

The method of improvement is called DMAIC. This is an acronym that stands for Define, Measure, Analyse, Improve, and Control: the five steps to systematic process improvement used in Six Sigma methodology.

Strengths:

- the rigorous application of process and systems thinking including measuring for improvement and reducing variation
- understanding customer needs and root causes

However there is less emphasis on personal and organisational aspects of improvement.

Figure 2: Comparison of commonly used improvement methodologies.

3.7 CCLHD Improvement and Innovation Logic

Organisational Improvement Vision	To become an improvement leader, an organisation with a strong track record of operational excellence, clinical engagement and innovation in improvement			
Improvement Framework Domain Areas	Systems and Structures	Improvement Capability	Results and Impact Measures	Organisational Culture
Our Improvement Objectives	We will build systems, structures and processes to support improvement across the LHD	We will develop our staffs improvement capability to be able to sustain improvement across the LHD	We will build our measurement systems, operational information and data to drive informed decision making, ownership and improvement across the LHD	We will build the culture of improvement, expectations and actions of our leaders and staff and our collective capacity to learn from the outcomes of the past improvements
Our Strategic Priorities	**Our Community**	**Our Resources**	**Our Future**	**Our Staff**
	Invest in better health by promoting healthy lifestyle and available health services	Use resources effectively and efficiently	Develop strong and effective partnerships to meet the community's health needs	Support and develop our most important resource and provide a safe and rewarding workplace
	Our Patients			
	Provide best practice care to ensure patient safety and satisfaction			
Caring for the Coast Values	Collaboration	Openness	Respect	Empowerment

Table 2: CCLHD Improvement and Innovation Logic

3.8 What is our improvement and innovation planning model

Figure 3 below explains the planning cycle for development of improvement and innovation plans, which consists of self-assessment against the OSIM criteria performed every 12 months, alignment of improvement activities against strategic priorities, development of annual improvement and innovation plans, as well as their implementation, monitoring and re-assessment. This is the cyclic process.

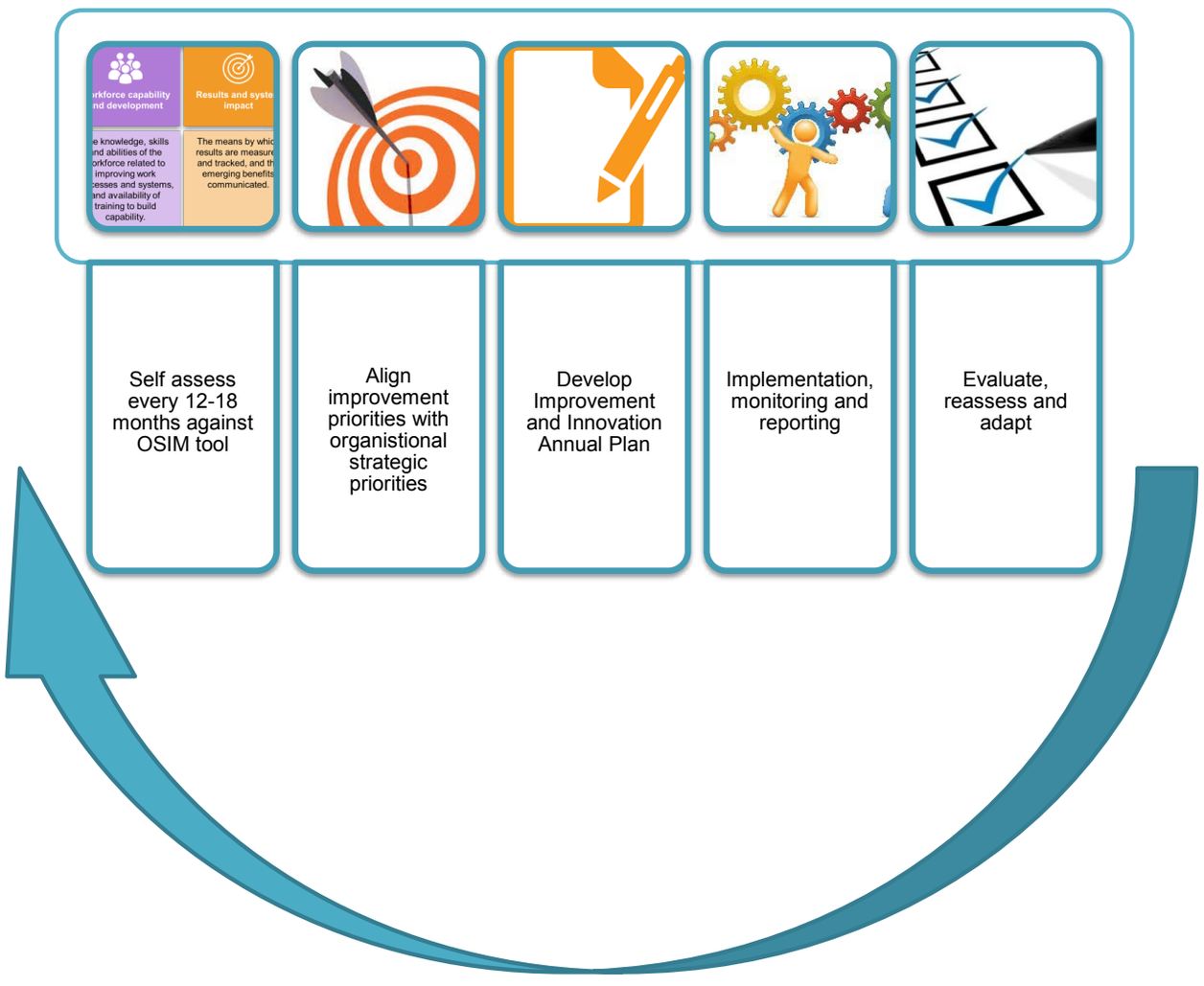


Figure 3: Improvement and Innovation Planning Cycle modified from OSIM Administration Guide (Clinical Excellence Commission, 2017)

3.9 Our four improvement domain areas

- Building our system and structures for excellence
- Improvement capability of our people
- Results and impact measurement
- Organisational culture for improvement

4 Building Our Systems and Structures for Excellence

4.1

Leadership and support for improvement and innovation framework

4.1.1 The role of Leadership

Leadership is a critical component of any organisation seeking to drive improvement. As health care delivery systems shift from volume based to value based systems, leaders require new ideas, behaviours and actions to be able to achieve this. Quality improvement across the District require leaders to adopt a set of five leadership behaviours:

- person centredness
- frontline clinican enagagement
- relentless focus
- transparency
- boundarilessness (IHI, 2017)

4.1.2 The role of Directorate for Quality, Strategy & Improvement

The directorate of Quality, Strategy & Improvement was created to coordinate the delivery of key initiatives including the organisation's strategic and operational plans. The Directorate provides advice to the Chief Executive (CE), Health Care Quality Committee (HCQC) and Clinical Council regarding strategies, innovations, efficiencies and effectiveness. The Directorate works in partnership across directorates and divisions to transform the current approach of reactive, hospital-centric care to proactive, integrated, needs-based care.

4.1.3 The role of Strategic Development and Delivery Unit

Within the Directorate of Quality, Strategy & Improvement, the Strategic Development and Delivery Unit has been created to facilitate the design and delivery of strategically significant long term projects, as well as provide governance, monitoring, mentoring and support for the delivery of medium and small improvement initiatives.

The responsibilities of the Strategic Development and Delivery Unit are to:

- provide a centralised service that provides a standardised approach to project management (support with project plans, process maps, risk registers, engagement plans, monitoring scope and outcomes)
- ensure the alignment of new initiatives associated with continuous improvement and innovation ties in with strategic priorities
- improve organisational capability and capacity by the provision of training, coaching and mentoring with the application of endorsed tools and templates
- ensure knowledge of project successes is shared throughout the organisation and beyond

- act as a vehicle to optimise stakeholder communication, engagement and collaboration
- provide stewardship in ensuring that benefits are realised in an environment of scarce health resources.

The Strategic Development and Delivery Unit's Activity Based Management (ABM) staff support clinicians and managers with information about their performance in an Activity Based Funding environment.

ABM is a process which assists in managing activity and resources. ABM drives evidence-based decisions by utilising casemix, patient level costing and operational KPIs to achieve operational and strategic objectives.

The ABM Unit:

- supports change by working with clinical teams on productivity strategies such as quality improvement projects to reduce readmissions, length of stay or process changes such as new clinical pathways
- provides expert advice on the funding model and provides detailed analysis of services and/or performance
- assists with analyzing the impact change has on key performance indicators
- educates clinical and non-clinical staff on things that impact on funding or performance such as clinical documentation, care type changing, data collections
- delivers training on Casemix tools such as casemix application, ABM portal, SNAP App and Synaptix system.

4.1.4 The role of Patient Quality & Safety Unit

The role of Patient Quality and Safety Unit is to provide systems that can be used by staff to implement, monitor and evaluate clinical performance and compliance throughout the District. This is achieved by a combination of processes including:

- a centralised clinical audit platform
- clinical programs and system improvements
- clinical indicators
- engagement with patients and consumers
- risk management and mitigation
- adverse event reporting and investigation (incident management, root cause analysis)
- morbidity and mortality reviews
- capture, utilise and monitor consumer feedback for quality improvement
- accreditation processes
- policy directives and best practice guidelines
- policy implementation and monitoring
- safety initiatives
- benchmarking with other LHDs and Clinical Excellence Commission in relation to patient care initiatives.

Education and training and ongoing support are provided for all of the above-listed processes. In addition, organisational support is provided for all quality award submissions, both internal and external to the District.

4.1.5 The role of our workforce

Our staff play a crucial part in the delivery of high-quality health care and they are the most important resource of the health system. Providing patient-centred, safe, effective and coordinated care requires a workforce sufficient in numbers, with the necessary competencies, and enabled by the environments in which they practice to deliver care consistent with these competencies.

The complexity and dynamic nature of our organisation and of health care system can often mean that work can be undertaken in silos leading to duplication, disconnection and lost opportunity to improve our services and care. These impact on workplace culture, employee wellbeing and patient outcomes and experiences.

In 2018, the Central Coast Local Health District Workforce Development Directorate launched the Culture Plan outlining four distinct focus areas:

Living our CORE values - empowering our people

- All people are treated with dignity and respect, and our staff are valued, listened to and recognised

Safe and high quality care with continuous improvement

- Our culture, systems and processes ensure care and services to patients are always safe and of the highest quality

Inclusive leadership that enables performance

- Our inclusive leadership motivates and inspires our people to achieve their best performance towards our shared purpose

Enhancing capability and capacity within our people

- Learning takes place at all levels and collaboratively so that our people are continuously gaining knowledge, skills and experiences to expand their capability.

Continuous improvement and innovation enable the District to ensure best practice care is provided as patient feedback identifies areas for improvement or research identifies changes to clinical practice.

Improvement and innovation requires change and challenges. Change management is key to enabling successful implementation of improvement projects as well as building staff resilience with change.

The initial focus areas of the Culture Plan are:

- safety culture program – safety becomes a part of everything we do not only for our patients, but also for our staff
- continuous improvement and innovation framework - a framework (this document) that enables local and system wide improvement, while also delivering on compliance. A coordinated approach, minimising duplication and transferring/translating improvements across the District
- change management capability and resilience programs – a clear structure and processes for how change is managed and how staff are supported during change
- Organisational Strategy for Improvement Matrix (OSIM) – the OSIM enables the District to align strategy, process and people to support bottom up quality improvement that results in safer, harm-free quality care.

The Implementation of the CCLHD Culture Plan directly supports the Improvement and Innovation Framework objectives in the area of workforce development.

4.1.6 The role of our consumers

Our ability to improve the quality of care will require an effective partnership with informed and engaged consumers. When patients partner with us as providers and take on a significant role in maintaining their health, they are in essence helping to "produce" health.

By engaging in effective self-care, taking preventive actions, and collaborating with providers to define and implement care plans, patients can be co-producers of health (Kaplan, 1989). With greater knowledge, patients can make more informed decisions about their care enabling them to manage and improve both the quality of care and health outcomes.

The Improvement and Innovation Framework recognises the importance of capturing, analysing and applying the "right patient experience/consumer engagement" at the "right time" across a range of issues, programs and projects and recommends investment in the following areas:

- support further development of consumer engagement structures
- facilitate a consumer engagement approach that matches the needs of the issue/program/project with the appropriate consumer voice, reflecting a fluid process that adds value to both parties and asks critical questions such as "what is best for the patient?" and "what is best for the system?"
- consider innovative ways to involve consumers in improvement and not just at the bedside or at a meeting table:
    - narratives
    - focus groups
    - surveys
    - rapid improvement events
    - outreach activities
    - co-design
    - evaluation processes
    - staff training
    - staff recruitment
    - formal committees
    - reporting

4.2 Governance of improvement and innovation framework

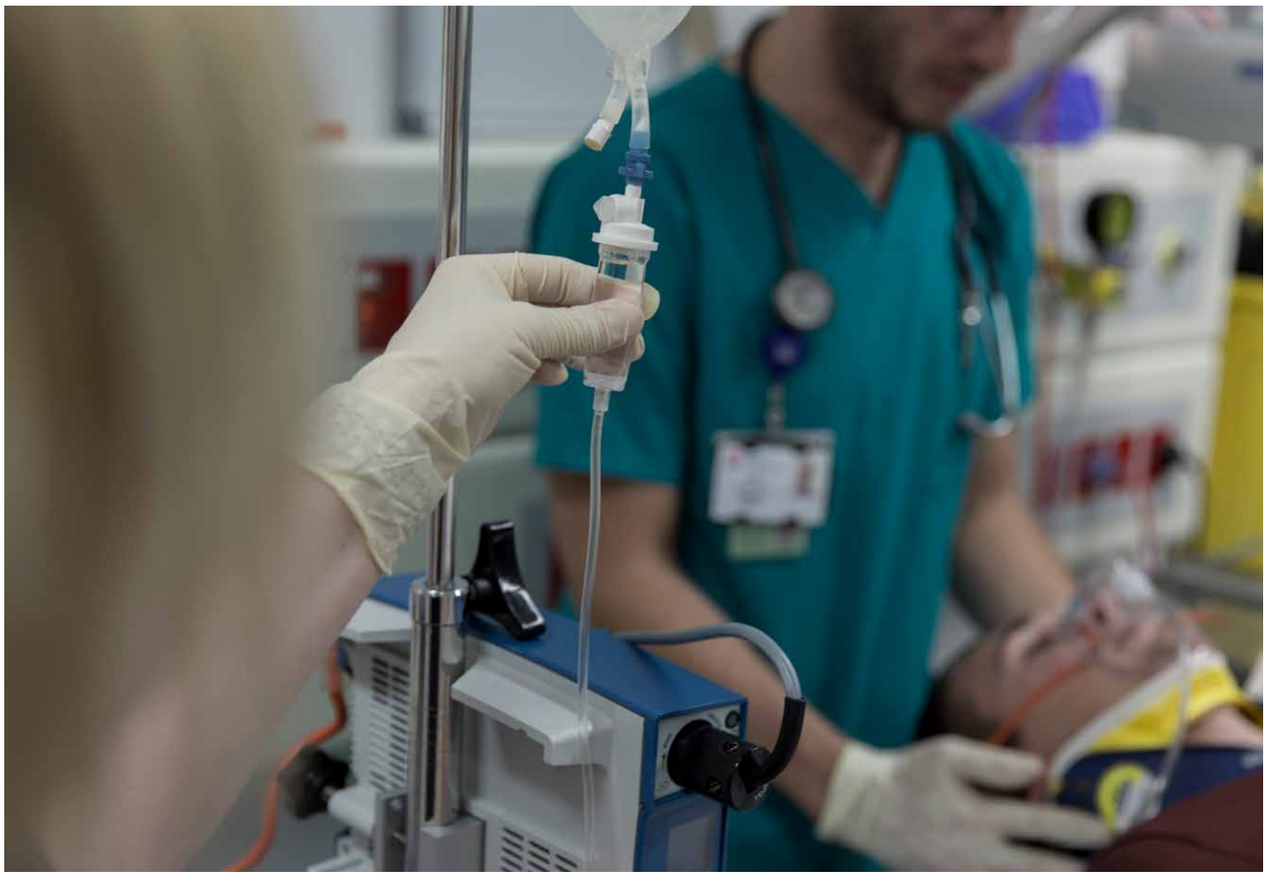
The overarching goal of the Improvement and Innovation Framework is to embed improvement as a "whole of organisation" approach that influences our management model.

The Improvement and Innovation Committee is established to govern the improvement and innovation efforts across the District. The committee will manage annual improvement and innovation plans overseeing the process of selection, implementation, reporting and sharing of projects.

The Improvement and Innovation Committee:

- provides direction and strategic leadership in areas of improvement and innovation
- provides advice on prioritisation and selection of opportunities for improvement
- ensures the improvement projects align with the strategic vision and priorities
- reviews project proposals for major risks and proposes mitigation strategies
- reviews project reports and monitors implementation of initiatives.

The committee meets bi-monthly and reports to the Executive Leadership Committee (ELC). The membership consists of representatives from across any division of the District with the annual improvement and innovation agenda driving the membership. The membership consists of core members as well as members chosen through the expressions of interest process from staff from all layers of the organisation who are passionate about improvement.



4.3 Management process of improvement initiatives

Idea	Assessment	Approval	Implementation and Reporting	Reviewing
• Staff suggestion • Mandatory • Regulatory • Maintenance • Enhancement • Business growth • Innovation • Current project priority	• Project proposals registered with Strategic Development and Delivery Unit • Project proposals presented to the committee for prioritisation and selection	• Priority projects selected • Priority projects recommended to ELC for final approval • Resources and project management assistance is assigned to the project management teams • All applicants receive explanation for approval/no approval • Approved projects become part of the Project Portfolio	• Implemented projects will be reported through the Improvement and Innovation Committee • Project Status Report • Project Completion Report • Project Implementation Review	• All completed projects will be reviewed, stored at the central repository system, learning shared, published if appropriate, presented at conferences etc.

The management process for improvement initiatives is integrated with the annual planning cycle to ensure that project ideas are encouraged that align with the organisation's strategic direction/priorities.

Project portfolio management is the layer that rests on top of all project and program management activities. Project portfolio management is composed of its own set of processes, templates, techniques, roles and responsibilities, which are different than the direct project and program management processes. The objectives of the project portfolio management process are to assist with decision-making on:

- which projects to select for the best interest of the organisation
- what is the best use of our existing and future financial and operational resources
- what are the projects to stop suspend or delay?

The most important aspects of project portfolio management are:

- alignment with the organisation's strategic objectives/priorities (i.e. a roadmap)
- a standard and structured process for collection of ideas
- a procedure for prioritising and selecting new project ideas

- a governing body
- a gate approval process
- a method for monitoring the implementation of the projects
- a process for capturing synergies and the benefits.

By maintaining awareness and oversight of the improvement initiatives that are being identified, the District leadership can ensure their alignment with strategic priorities and that resources are applied responsibly, providing best benefit for our patients and our community. To this end, the process is intended to commence with a single point of access for all improvement opportunities (regardless of their origin) that would contribute to the organisation's objectives.

The first phase of the process will be facilitated by way of an internet-based improvement and innovation portal, located in a prominent location on the District intranet home page. Through an appropriate communications strategy, the portal will become known as the single point of access for identification and endorsement of any and all improvements. The portal will be easily accessible, and will utilise in-built workflow to steer the user through the process. In this way, simple improvements can be easily identified and exit the process early, avoiding unnecessary red tape and delays, whereas initiatives that are likely to require significant resourcing can be evaluated, prioritised and endorsed by the ELC.

The second phase of the process, following endorsement of major projects to progress, will be facilitated by the use of the Rigorous Program Management (RPM) tool, which is utilised across NSW Government for the monitoring and management of improvement projects.

4.3.1 What is a project?

"A project is a temporary endeavour undertaken to create a unique product, service, or result". The temporary nature of projects indicates that a project has a definite beginning and end (Project Management Institute, 2012).

In summary:

- projects have a definite start
- projects have a definite end
- the start and end define the project life cycle
- projects start with the charter
- projects end with closing
- closing happens after turnover and acceptance.

4.3.2 Preferred project management methodology

A methodology is a body of procedures, methods and practices. They solely belong to those working in a specific discipline. At Central Coast Local Health District, we chose the PMBOK (Project Management Body of Knowledge) methodology to be our organisational preferred methodology for project management. PMBOK is the entire collection of processes, best practices, terminologies and guidelines that are accepted as standards within the project management industry (see figure 5). This methodology works by breaking down the project in five process groups as shown below:

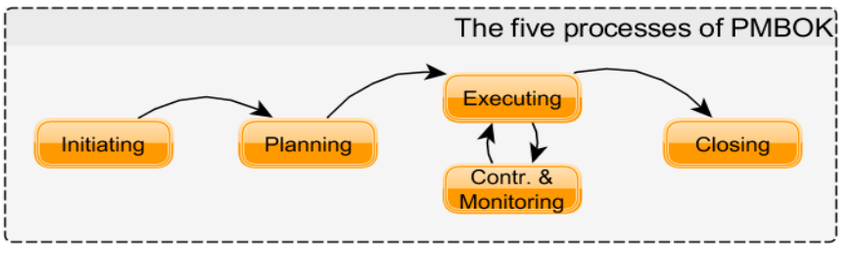


Figure 5: PMBOK, 2017

4.3.3 What to prioritise?

Only projects that require budget, resources, staff time and are classed as "large" will be required to go through the prioritisation process. Projects classed as medium will be registered, but will not need to be prioritised. Medium size projects will have to be approved by the appropriate manager or director within their financial and staffing delegation rights and responsibilities.

4.3.4 Project sizing

The following criteria have been developed to assist in determining the size of projects. During this process consideration should also be given to other factors such as the impact, duration, staff commitment and cost.

4.3.5 Project sizing guide

The approval process will depend on the size and scope of the project (see Table 3). A general guide has been developed to assist staff when asking for approval.

	Small	Medium	Large
Resources Required	Staffed from existing resources in the department/service (1-2 people)	Dedicated staff level required to achieve outcome (2-4 people)	Dedicated project manager/pool of staff to achieve outcome (4+ people)
Duration	Fast to medium project duration of up to 6 months	Project duration falls between 6 - 12 months	Project duration exceeds 12 months
Total Cost	From existing budget or less than $25K	Cost between $25K and $100K	Cost greater than $100K
Level of Change	Impacts a single business unit	Impacts a number of business units	Impacts a large number of business units or the whole of organisation
Complexity	Easily understood problem and the solution is readily achievable	Either difficult to understand problem, solution unclear or solution difficult to achieve	Both problem and solution are difficult to define or understand and solution difficult to achieve
Dependencies/ Interrelated Projects	No major dependencies or inter-related projects	Some major dependencies or inter-related projects but considered low risk	Major high risk dependencies or inter-related projects

Table 3: Project sizing criteria

Project approval requirement guide

Type	Approval
Quality Improvement	Business Unit Manager/ Department Manager/ NUM
Project Small	Relevant manager with appropriate financial delegation
Project Medium	Relevant divisional director with appropriate financial delegation
Project Large	Improvement and Innovation Committee, ELC

Projects deemed as **Medium** will be registered with Strategic Development and Delivery Unit and qualify to receive assistance from the Project Managers. Medium size projects will need no approval from Improvement and Innovation Committee.

Only projects deemed as **Large** will be required to go through the prioritisation and selection process by the Improvements and Innovation Committee

Table 4: Approval requirements based on project type and size

4.3.6 When or how often should a project prioritisation exercise be performed?

The major prioritisation exercise will be performed once a year as part of the strategic planning and budgeting cycle and project prioritisation session will be performed quarterly in order to incorporate additional projects which were unknown in the original round of prioritisation.

4.3.7 Who will be involved?

Pending development of the Innovation Portal, the staff from the Strategic Development and Delivery Unit will receive applications for medium and large projects. The applications will be submitted by email by filling in the project proposal form and then collated and prepared for prioritisation by the Improvement and Innovation Committee.

The committee members prioritise projects against the set criteria and make recommendations to the ELC requesting final approval and sign off. Once the project portfolio has been finalised, the Strategic Development and Delivery Unit will monitor the progress of the approved project portfolio of large projects and provide regular updates on its performance to the ELC, Clinical Council and Board if required. Once the project portfolio has been approved, each project will still need a project plan/business case in order to access funding, assistance and support.

All successful and unsuccessful applicants will be advised in writing of the process outcomes, together with the marked selection criteria and explanation of the reasons for approval/no approval.

4.3.8 How to prioritise the project?

The Project Prioritisation and Scoring Criteria tool (see table 5) has been developed in order to assist with assessing the priority of projects within the District. This will be used by the Improvement and Innovation Governance Committee. The criterion includes a combination of indicators, which factors in the Quadruple Aim of Health Care and a tool for Executional Certainty (see figure 6). The proposals for projects deemed as medium and large will be scored; the highest to be recommended for approval. The overall number of projects approved for each financial year will depend on the funding, resource and staffing availability. The scoring process considers the following criteria:

1. project contribution to CCLHD Strategic Priorities and organisational key performance indicators (KPIs)

2. impact on the health, safety and experience of the patients, carers and the community

3. the project will contribute to the efficiency improvement program of the District (productivity, expense reduction or revenue generation)

4. resources required to run the project

5. execution risk using the DICE score (Duration, Team Performance Integrity, Senior Management Commitment, Local Commitment, Effort).

Project Prioritisation and Scoring Criteria

		Strategic priorities and Organisational KPIs	Impact	Efficiency Improvement	Resource Requirements	Execution Risk
		The project will have an impact on the LHD's strategic priorities and operational KPIs	What is the impact on the health, safety or experience of the patients, carers and the community?	The project will contribute to productivity, expense reduction or revenue generation	The amount of resources required to conduct pwroject (including people, knowledge, skill mix, training, technology and equipment)	DICE Tool (duration, team performance and integrity, senior management commitment, local commitment and effort)
Weight		**20%**	**30%**	**10%**	**10%**	**30%**
Point Allocation	1	**Minor** Minor or no contribution to strategic priorities or operation KPIs	**Minor** Minor or no impact on improving patients health, safety and experience	**Minor** Minor or no impact on efficiency improvement (<$50K)	**Significant** Significant large teams with complex knowledge/new technology/ outsourcing	**High** Structured to fail DICE score 20-28
	2	**Medium** Some contribution to priorities or operation KPIs	**Medium** Some impact on improving patients health, safety and experience	**Medium** Medium impact on efficiency improvement ($50K-$200K)	**High** Large teams with complex knowledge and additional resources, technology/ equipment	**Medium** Project likely to fail DICE score 17-20
	3	**High** Significant contribution to strategic priorities or operation KPIs	**Major** Significant impact on improving patients health, safety and experience	**Major** Major impact on efficiency improvement ($200K-$500K)	**Medium** Medium team with general knowledge and minimal extra equipment/ technology	**Low** Project has some risk but likely to succeed DICE score 14-17
	4	**Critical** Critical to achieving strategic priorities or operation KPIs	**Critical** Critical to patients health, safety and quality and/or is a mandated project	**Critical** Critical to the organisation achieving efficiency improvement (>$500K)	**Minimal** Small team, general knowledge and no extra equipment/ technology	**Minimal** Project likely to succeed DICE score 7-14

DICE Score					
Elements			Selection	Score	
D	Duration	Select from the drop-down menu the time (duration) until either the project is completed or the next learning checkpoint will occur. The 'learning checkpoint' is a stage in implementation (predetermined by the Roadmap owner) at which project strengths, weaknesses and progress against key performance measures are formally assessed.		-	
I	Team Performance Integrity	Select from the drop-down menu the performance integrity assessment of the project team. The following attributes of team performance integrity should be considered in making the assessment: capable leadership, clear objectives, fast track individuals, challenging minds, people skills, team playing, self motivation, appropriate resources, pushing to conclusion, hardworking and organisational skills.		-	
C1	Senior Management Commitment	Select from the drop-down menu the senior management commitment assessment for the Roadmap. In formulating the assessment, the focus should be on evaluating senior management commitment to change; in particular in terms of the visibility of, and effectiveness in communicating, commitment to change.		-	
C2	Local Commitment	Select from the drop-down menu the local commitment assessment for the Roadmap. Specifically this assessment relates to an evaluation of the commitment to change of the majority of the local staff who will be affected by the implementation of the Roadmap.		-	
E	Effort	Select from the drop-down menu the additional amount of local effort (beyond normal working requirements) that will be needed during implementation of the Roadmap.		-	
			Overall Score	-	

DICE Status		Actions to Improve DICE Score
G	Please complete DICE selections	[Please include here any actions to improve the DICE Score]

DICE formula

$$DICE = D + 2I + 2C_1 + C_2 + E$$

Figure 6: DICE Scoring Tool

4.3.9 When does an improvement project need an ethical consideration?

Improvement is a standard practice across the District. In line with National Statement on Ethical Conduct in Research (2007) Human Research Ethics Committees - Quality Improvement & Ethical Review: A Practice Guide for NSW (GL2007_020), the Research Office only needs to review improvement activities that fit into two categories:

1. **Projects that are going to be published**

   If publishing in academic journals then prospective ethical approval is required through the District's research office.

   Journals will not accept papers without confirmation from the Research Office that improvement project do not require ethical review.

2. **Project that involves ethical risk – i.e. collection of identifiable information, a vulnerable population etc.**

   The primary purpose for the collection of patient data is for a patient's medical care. If this information is to be used for a secondary purpose it is only exempt from ethical review if it is using/recording non-identifiable data (and only if it's primary purpose is for the evaluation of health services).

   If a project needs to use coded or potentially identifiable data in accordance with the National Statement only a Certified NHMRC Human Research Ethics Committee (HREC), the HREC needs to decide whether the project can still be deemed quality improvement.

   In case a project involves the collection of vulnerable populations or other sensitive topics data, the above process would also apply.

   When this is the case, the Research Office will assess the application and forward to Certified NHMRC HREC for assessment to decide whether a research application will be required.

   The Central Coast Local Health District has an agreement with Northern Sydney Local Health Service Human Research Ethics Committee (HREC) to review applications that involve ethical risk.

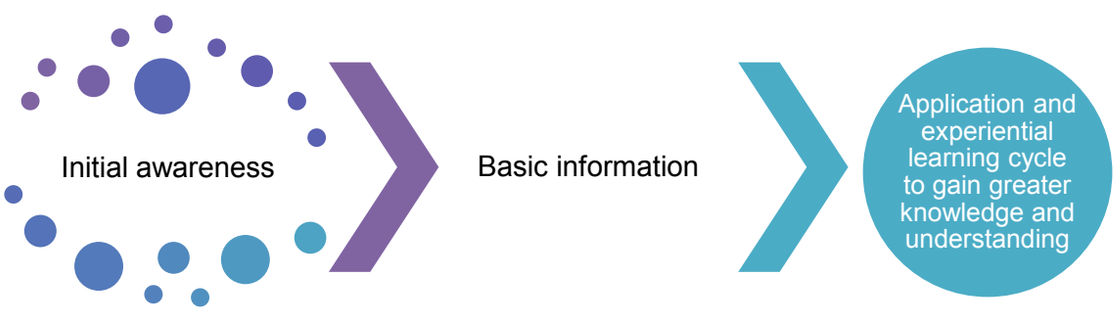
5 Improvement Capabilities of our People

5.1

Training and development of staff

Work should be coordinated and well-planned to ensure improvement training is translated into improvement practice. This will achieve this by:

- building our improvement programs collaboratively through Education and Content Advisory Group (ECAG), a collaborative between Clinical Governance, Research, Improvement and Innovation, Workforce Development and develop training and education plans
- giving opportunities for participants to learn by doing
- ensuring the training is appropriate for all participants
- building up a network of training program graduates to champion improvement and mentor future participants
- building up knowledge of a range of different Quality Improvement (QI) methods and techniques
- evaluating the training regularly
- being honest and transparent about the process.



Modified from: Improvement knowledge and skill

To enable sustainable service-wide improvements, the Improvement and Innovation training program focuses on efforts to support District staff and to develop and embed improvement capability at all levels (see table 6). The District supports staff with a range of capability-building support and professional development opportunities.

	Training Courses	Methodology Applied	Target Audience	Duration	Frequency	Delivered By
Quality Improvement	*NEW EMPOWER	Lean Six Sigma	Staff interested in improvement	1 day	12 x per year	Internal
	*NEW Lean Six Sigma Green Belt	Lean Six Sigma	Staff interested to become advanced Improvement Specialists	12 day classroom	1 x per year	External (on site)
Clinical Redesign	Graduate Certificate of Clinical Redesign	Clinical Redesign	Staff wishing to develop skills in Clinical Redesign to the master level	20 weeks	3 x per year	External (off site)
Project Management	*NEW PM PLUS	PMBOK (Project Management Body of Knowledge)	Staff interested in Project Management	3 days classroom	3 X per year	Internal
Change Management	Accelerated Implementation Methodology (AIM)	AIM	Staff interested in change management	2 days in classroom	6 x per year	Internal
Clinical Leadership	Clinical Leadership Program	Improvement Science	All clinical staff (medical, nursing, allied health)	11 classroom days over a year	1 x per year	Internal
	Executive Clinical Leadership Program	Improvement Science	All clinical staff in senior roles	12 classroom days over a year	2 x per year	Internal
Clinical Practice Improvement	Clinical Practice Improvement	Improvement Science	All clinical staff interested in improvement	1-2 days training	1 x per year	Internal
Transformational Practice Development	Essentials of Care	Practice Development	Nursing staff	2 days	1 every two years	Internal
	Take the Lead 2	Practice Development	Nursing/ midwifery managers (<12 months experience in a management position)	5 days	1 every two years	Internal
Measurement	ABF	Activity Based Funding	All staff	1 day	12 x per year	Internal

Modified from: Improvement knowledge and skill

Table 6: Improvement and Innovation Training Program

5.2 Training and development planning

An improvement training and development plan should be used to build the internal capacity of our people and support an organisation wide improvement and innovation culture. The Improvement Training and Development Plan will build on a gap analysis and will include:

- content and methods for up skilling of new employees
- objectives and KPI's for the introductory improvement and innovation training
- training courses schedules for job classifications and for the lead staff.

The plan will outline the recommended skills and knowledge in improvement across all levels of staff and recommended courses to achieve this.

Our aim is to train staff from all layers of the organisation over the next five years:

- 100% of ELT and Board members in Leadership for Improvement training (2 hours training)
- 100% of managers in White Belt Lean Six Sigma equivalent – EMPOWER Improvement Training course (1day training)
- 60-80% of the District to Improvement Basic level (mixture of online - yet to be developed and EMPOWER Improvement Training Course).

6 Results and Impact Measures

The establishment of the Central Coast Local Health District Strategic Development and Delivery Unit provides a platform from which more efficient planning, implementation and monitoring of projects can take place. The Unit will not only provide a consistent approach to project management but will also provide project quality assurance. Each project proposal will require a different set of metrics based on a project's objectives and complexity. However, the following four typically cover the most important measurements:

- **Resource management** – this metric allows project managers to assess the utilisation of resources. It compares the total effort to the budgeted effort, which has a direct impact on the bottom line. Delays in the timeline, underperformance by staff or vendor and unavoidable circumstances can all impact the productivity metric.
- **Scope of work** – a project's scope is typically established right up front, but changes and additions can derail even the best project manager's efforts. Tracking change requests is necessary, to control them and keep the project on time and budget.
- **Quality and satisfaction** – quality assurance is a truly customer-focused metric. Assuring low defects throughout the project, as well as a quality deliverable at its end, should be part of every project. Catching defects early can also help prevent the entire project from losing focus and failing.
- **Cost** – measuring how costs are managed is often critical to a project's success. Cost management is related to other variables, such as quality, scope and productivity, so if it varies above or below projections, the project can suffer. Ideally, cost is closely monitored throughout the project so if costs rise unexpectedly, variables such as scope or time are adjusted and the project can still achieve its objectives.

As the cost of health care continues to rise, driven by factors such as a growing and ageing population, emerging chronic health conditions such as diabetes associated with modern lifestyle, advances in technology and community expectations to improve health care services, there is a need to improve financial management and efficiency of the health system on an ongoing basis in order to deliver more value for money each year.

The program of efficiency improvement is driven by District strategic objectives, operational objectives, key performance indicators, statewide strategic initiatives and compliance requirements and requires a coordinated approach to measure our system performance. There are three types of efficiency improvement programs:

- **productivity** – cash cost saving or avoided cost initiatives that meet increased demand through more efficient use of existing capacity or avoid the costs of hospital admissions or other services and interventions
- **expenses** – are initiatives that have cash benefits such as procurement/contract savings and savings in employee-related expenses
- **revenue** – strategies that support compliance with budget via revenue levers. Revenue strategies can focus on improving own sourced revenue generation to ensure the District has adequate funding to achieve service delivery goals.

There are a suite of tools that assist users within the District to access information about financial, activity and KPI metrics. These include but are not limited to:

- ED utilisation application
- Allied health activity application
- Casemix application
- Non-admitted Patients (NAP) application
- Sub and Non-acute Patients (SNAP) application
- Pharmacy application
- Financials application
- Activity Based Management Portal

7 Organisational Culture for Improvement

Here at Central Coast Local Health District, we need a workforce that is innovative, adaptive and nimble to meet health care changes and challenges. However, when it comes to developing this capability in staff, it can be difficult to know where to start. A pipeline of ideas to progress our strategic objectives should be feed into a central platform known as the Innovation Portal. Staff from across the District should use the innovation portal to suggest ideas for improvement.

The culture of an organisation is the embodiment of the core values, guiding principles, behaviours and attitudes that collectively contribute to its daily operations. Culture drives the policies, practices, and processes used to accomplish an organisation's work. It matures over many years as norms are passed from one generation of staff to the next. Shifting an organisation's culture requires commitment and deliberate management of the change process.

When a quality culture is achieved, all employees, from senior leadership to frontline staff, have infused Quality Improvement (QI) into the way they do business daily. Employees continuously consider how processes can be improved, and QI is no longer seen as an additional task but a frame of mind in which the application of QI is second nature.

7.1

Quality Improvement (QI) infrastructure

To achieve a culture of quality, an organisation must have the systems and structure in place to support quality improvement. QI must be aligned with the organisation's mission, vision and strategic plan and linked to organisational and individual performance. The following components of a strong QI infrastructure have been integrated into this framework:

- **Improvement and Innovation Committee** — governs the quality program. It is responsible for overseeing the implementation of the program of priority projects
- **Performance Management System** — the process of measuring, monitoring and reporting of progress is structured and data-driven to identify and prioritise necessary improvement projects
- **Improvement and Innovation Framework and Annual Plan** — outlining the organisation's improvement and innovation goals and objectives, this living document provides direction and structure for improvement efforts. Leadership should continuously evaluate and revise the Improvement and Innovation Annual Plan to progress further and maintain momentum. The District's strategic and operational plans should inform the Improvement and Innovation Annual Plan, and improvement efforts should align with strategic priorities.

7.2 Employee empowerment

Leadership should empower staff to infuse improvement into their daily work by ensuring they have the necessary awareness, knowledge, skills, resources and support. This can be accomplished by incorporating improvement into orientation, including in job descriptions and performance appraisal, providing ongoing training opportunities, granting authority to make decisions and eliminating fear of consequence or placing blame. Additionally, improvement champions serve to spread expertise and advocate for improvement, which reduces the impact of any staff turnover.

7.3 Customer focus

A customer focus is a core tenet of quality, it should be incorporated into the vision and values of the District. Services offered should be customer driven, and continuous assessment of internal and external customer needs should drive improvement efforts to meet and exceed customer expectations and prevent dissatisfaction.

7.4 Teamwork and collaboration

In an organisation with a culture of quality, teams have clearly defined performance expectations and gather routinely to brainstorm, solve problems, implement QI projects and share lessons learned. Collaboration among divisions and programs aids in standardising

processes and breaking down silos. Peer sharing is a norm.

7.5 Continuous process improvement

Abandoning the notion of perfection, continuous process improvement is a never-ending quest to improve processes by identifying root causes of problems. Process improvement involves making gradual improvements in everyday processes to reduce variation and redundancies, improve quality of services, and increase customer satisfaction. As noted above, the District uses a number of models for continuous improvement including Lean, Six Sigma and Total Quality Management. The most widely used improvement process in public health today is Rapid Cycle Improvement through the use of successive Plan-Do-Study-Act (PDSA) cycles.

7.6 Celebration of improvement and innovation

It is important to celebrate improvement and innovation efforts of our staff. Even if the idea is not implemented, employees are encouraged to suggest ideas. A system of awards for individuals or teams should be used to applaud employee's efforts. Additionally, platforms such as Safety and Quality awards and utilisation of methods such as recognition through staff forum acknowledgements, staff newsletters and personal acknowledgements by the ELT and other management forums should be adapted.

8 Tools and Resources

The following tools and resources support the implementation of the framework.

Tool/Resource	Purpose	Link
Caring for the Coast	To achieve our vision of a healthy and vibrant community, Central Coast Local Health District (CCLHD) will play a leading role in making the Central Coast a place where the health of the people is maximised through quality health services, accessible when and where people need them	http://intranet.cclhd.health.nsw.gov.au/CaringCoast/Documents/CaringForTheCoastPreparingForTheFuture.pdf#search=caring%20for%20the%20coast%20plan
Safety and Quality Framework 2017-2018	The Safety and Quality Plan describes a vision and direction to continue to improve safety and quality in our Health District and sets out the key activities that will be happening throughout the organisation to improve the safety and quality of care we provide to improve the health care outcomes and experience for our consumers	http://intranet.cclhd.health.nsw.gov.au/clinical/ClinGov/cgu/Documents/Safety%20and%20Quality%20Framework%202017%202018%20V%205%20FINAL.pdf#search=Safety%20and%20Quality%20Framework%202017%2D2018
A Clinical Governance Framework 2013	The Clinical Governance Framework offers a practical, well founded approach by which effective clinical governance can be maintained at the District. The framework aims to provide support to the Chief Executive and the District's Board decision-making in relation to accountabilities for the safety and quality of clinical care at the District	http://intranet.cclhd.health.nsw.gov.au/clinical/ClinGov/cgu/Documents/CCLHD%20Clinical%20Governance%20Framework%20final.pdf#search=A%20Clinical%20Governance%20Framework%202013
CCLHD Culture Plan 2018-2023	The Plan defines what "the way we do things around here" looks like and how we will measure our progress	http://intranet.cclhd.health.nsw.gov.au/CaringCoast/Documents/CCLHDCultureStrategicPlan2018-2022.pdf
Organisational Strategy for Improvement	Enables health services to assess and monitor their organisational capability	Guide to support Health ICQ

9 Accountabilities

Accountabilities for Implementation of Organisational Improvement and Innovation Framework

Function	Who	Responsibility
Overseeing Body	Board ELC	The Board and ELC are responsible for: • establishing and setting the tone for the improvement culture • demonstrating leadership and commitment to improvement and innovation through endorsement of the Improvement and Innovation Framework consistent with the values of the District
Governing Body	Improvement and Innovation Committee	The Improvement and Innovation Committee is: • accountable to the Board/ELC • responsible for enhancing the improvement and innovation culture of the organisation by fostering and enhancing improvement efforts • responsible for selecting/endorsing/overseeing improvement projects • responsible for addressing and reporting redesign achievements/ issues

10 Glossary of Terms

Lean Thinking	Lean Thinking is primarily concerned with the creation of flow in processes and the removal of wasteful activities that do not directly improve patient care
Lean Six Sigma	Improvement methodology used to improve performance by systematically removing waste; combining lean manufacturing/lean enterprise and Six Sigma
Measurement	Measurement is a vital part of any scientific enterprise, as it provides an external and objective template against which to assess the impact of process improvement
Organisational Improvement capability	Organisational ability to perform a coordinated task by utilising organisational resources, for the purpose of achieving a particular task
Project	A project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end
Program	A program is a group of related projects managed in a coordinated manner to obtain benefits not available from managing them individually. Program management is the application of knowledge, skills, tools and techniques to meet program requirements
Project management	Discipline of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria
Six Sigma	Six Sigma is a data-driven methodology that focuses on identifying and reducing variation in a process, thereby eliminating defects. A defect is defined as anything outside of customer specifications
Theory of Constraints	The Theory of Constraints states that in any complex system there are only a few factors (constraints) that limit performance and for improvement to occur, these constraints must be identified and strengthened.

11 References

Batalden, P.B., & Davidoff, F. (2007). What is "quality improvement" and how can it transform healthcare? BMJ Quality & Safety, 16(1), 2-3. doi:10.1136/qshc.2006.022046

Clinical Excellence Commission. (n.d.). Organisational Strategy for Improvement Matrix. Retrieved from http://www.cec.health.nsw.gov.au/quality-improvement/organisational-development/osim

Clinical Excellence Commission. (2017). Organisational Strategy for Improvement Matrix Administration Guide. Retrieved from https://www.bettercare.vic.gov.au/capability-and-leadership/organisational-strategy-for-improvement-matrix

Clinical Excellence Commission. (2018). Organisational Strategy for Improvement Matrix Sponsor Information Sheet. Retrieved from http://www.cec.health.nsw.gov.au/__data /assets/pdf_file/0008/347399/OSIM-Sponsor-Information-Sheet.pdf

Department of Health for State of Victoria. (2012). Redesigning Hospital Care Program. 2012. Retrieved from file:///C:/Users/60139075/Downloads/1210014_Redesigning%20Hospital%20Care%20Program%20Measures%20Guide_Introduction_WEB%20-%20PDF.pdf

Encourage, I. I. D. (2012). Quality improvement training for healthcare professionals.

Goldratt, E. M. (1990). What is this thing called theory of constraints and how should it be implemented?. Indiana University: North River Press.

Sirkin, H. L., Keenan, P., & Jackson, A. (2005, October). The Hard Side of Change Management. Harvard Business Review, 83(10), 109-118.

Institute of Healthcare Improvement. (2017). High-Impact Leadership Behaviors: Five Things Leaders Can Do to Promote Improvement. Retrieved from http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0011/427439/OSIM-Sponsor-Information-Sheet.pdf

Institute of Medicine (US) Committee on Quality of Health Care in America. (2001). Crossing the Quality Chasm: A New Health System for the 21st Century. Washington DC: National Academy Press.

Jones, B., & Woodhead, T. (2015). Building the foundations for improvement. London: The Health Foundation.

Kaplan, S. H., Greenfield, S., & Ware, J.E. Jr. (1989). Assessing the effects of physician-patient interactions on the outcomes of chronic disease. Medical Care, 27(3), S110-S127. Retrieved from http://www.jstor.org/stable/3765658

Lock, D. (Ed.). (1994). Gower handbook of project management. Aldershot: Gower.

Teller, J., Unger, B. N., Kock, A., & Gemünden, H. G. (2012). Formalization of project portfolio management: The moderating role of project portfolio complexity. International Journal of Project Management, 30(5), 596-607.

The Health Foundation. (2013). Quality improvement made simple – What everyone should know about health care quality improvement. Retrieved from https://www.health.org.uk/sites/health/files/QualityImprovementMadeSimple.pdf

12 Acknowledgement

We would like to acknowledge the contribution of staff across the District in developing this framework.