



An Stiúirthóireacht um Ardchaighdeán
agus Sábháilteacht Othar
Oifig an Phríomhoifigigh Cliniciúil

National Quality and
Patient Safety Directorate
Office of the Chief Clinical Officer

Quality and Patient Safety Improvement

Improvement Collaborative Handbook

V1 August 2023



About the National Quality and Patient Safety Directorate

The National Quality and Patient Safety Directorate (National QPS Directorate) was established in mid-2021 as a result of the HSE Central Reform Review. The Directorate is part of the HSE Office of the Chief Clinical Officer and is led by Dr Orla Healy, National Clinical Director, Quality and Patient Safety.

Purpose of the National QPS Directorate

Our vision for patient safety is that all patients using health and social care services will consistently receive the safest care possible by:

- Building quality and patient safety capacity and capability in practice
- Using data to inform improvements
- Developing and monitoring the incident management framework and open disclosure policy and guidance
- Providing a context for sharing and learning, reducing common causes of harm, and enabling safe systems of care and sustainable improvements.

Teams

In line with the “Patient Safety Strategy 2019-2024”, the National QPS Directorate delivers on its purpose through the following teams:

- **Office of the National Clinical Director:** Working in partnership with HSE operations, patient partners and other internal and external partners to improve patient safety and the quality of care.
- **QPS Improvement:** Using improvement methodologies to address common causes of harm.
- **QPS Intelligence:** Using data to inform improvements in quality and patient safety.
- **QPS Incident Management:** Working with people to identify, understand and share safety learning, advocate for open disclosure and develop the national incident management system in the HSE
- **QPS Education:** Enabling QPS capacity and capability in practice.
- **QPS Connect:** Communicating, sharing learning, making connections.
- **National Centre for Clinical Audit:** Supporting Clinical Audit service providers locally and nationally.

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Introduction

Background and Context

In the ever-evolving landscape of healthcare, organisations face complex challenges related to service standards, person-centred care, technology integration, and cost management, among others. There are several improvement approaches to address these challenges and strengthen the quality of health services, including:

- **Lean:** an approach to improve flow and remove waste from systems and processes, delivering maximum value to the “customer” or patient.
- **Sigma Six:** a problem-solving approach which focuses on reducing variance and eliminating defects, with an emphasis on involving people who are already doing the job
- **Model for Improvement:** an improvement process using the Plan-Do-Study-Act (PDSA) cycle to achieve iterative tests of change, widely used in healthcare by many leading organisations.

These improvement approaches share similar underlying philosophies, and can even be combined in hybrid approaches to address complex challenges.

Throughout this Handbook, we refer to Quality Improvement (or “QI”) in the sense of the IHI Model for Improvement. QI is a well-established, evidenced based approach to understanding processes and systems, pinpointing improvement opportunities, and designing sustainable solutions.

In Ireland, QI has been used successfully to address clinical patient safety priorities such as improving medication safety; reducing and managing sepsis; and the prevention and management of pressure ulcers. QI is also effective in addressing wider service improvement priorities across all sectors of the HSE, for example:

- Consolidating Human Resources Reports: Using QI methods, Tallaght University Hospital significantly reduced the time needed to produce Human Resource reports from 5 days to one hour.¹
- Improving Governance in Mental Health Services: A QI project addressed clinical governance in Galway and Roscommon Metal Health Services. The project established important baseline information to influence clinical governance structures and functions.²
- Optimising Available Capacity of a Physiotherapy Service: A team-based QI project in an Athlone Primary Care Centre achieved significant process changes within the administration of the physiotherapy service, including a measurable reduction in “Did Not Attends” (DNAs).²
- Managing Referral Processes for Absenteeism: Through new absence management guidelines, Tallaght University Hospital reduced the average time from receiving a referral to an Occupational Health appointment by 4 days.¹
- Improving the Reliability, Efficiency and Cost Effectiveness of the Decontamination Process: Data from the National Track and Trace System was used to identify and minimise “bottlenecks” in the decontamination process. The project empowered staff

¹ Tallaght University Hospital. Quality Report 2015.

² Royal College of Physicians of Ireland. Book of Abstracts. Diploma in Leadership and Quality in Healthcare 2016-2018.

to co-design a QI checklist, achieving a 100% reduction in cancelled wash cycles due to human error, over a period of 5 months.²

QI methods can be applied in numerous ways; from a small team project undertaken to achieve local improvements, to systemic change focused on building a culture of continuous improvement. Improvement Collaboratives, which we cover specifically in this Handbook, have been used for over 20 years as a successful strategy for employing QI methods and approaches. They use a structured approach to support individuals, teams, and systems all at the same time. The shared learning and mutual support that comes from participating in a Collaborative motivates professionals to do things differently, which in turn works as an effective vehicle for change to improve patient outcomes, service use and costs.

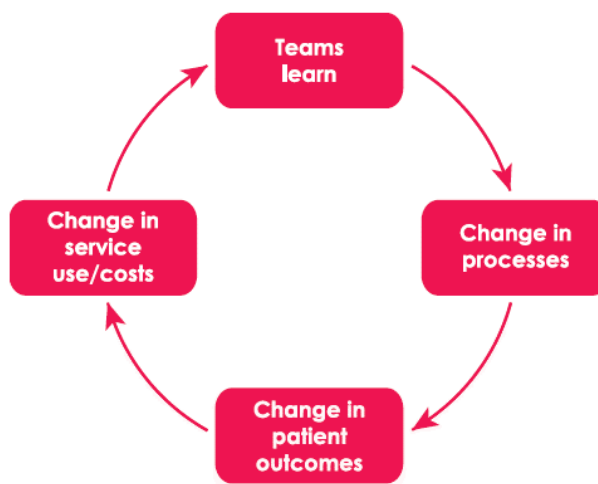


Figure 1: From the Health Foundation (UK) “Improvement Collaboratives in Healthcare”

Purpose of this Handbook

This Improvement Collaborative Handbook was designed to support staff and teams who wish to implement an Improvement Collaborative in their service. This Handbook provides background information and a step-by-step approach to organising and leading short-term Improvement Collaboratives, bringing together teams from various healthcare settings to address focused topics.

This Handbook shares learning from the National QPS Directorate, which has successfully delivered a range of national Collaboratives for over a decade on topics such as reducing pressure ulcers, reducing harm from falls, and improving medication safety. Using the [HSE Framework for Improving Quality](#), the Directorate has tested and adapted the [Institute for Healthcare Improvement’s Breakthrough Series Collaborative Model](#) for an Irish context. This model has been further adapted and updated relative to the post-COVID world in which we live by maximising the use of audio-visual telecommunications to facilitate online meetings so that participating teams can minimise travel and participate in the Collaborative virtually.

A key factor in successful Improvement Collaboratives is local ownership. A Collaborative should be coordinated and driven by people working within the service, engaging with staff to encourage them to creatively develop solutions for local challenges and to enable clear collective ownership of goals. The National QPS Directorate can offer coaching, mentoring, advice, and signposting to useful resources to support your Improvement Collaborative.

1. Overview of Improvement Collaboratives

An Improvement Collaborative is a systematic approach to healthcare quality improvement in which organisations and providers test and measure practice innovations and then share their experiences to accelerate learning and widespread implementation of best practices.

It involves:

- ✓ Team-based learning sessions,
- ✓ Identifying and testing changes for improvement,
- ✓ Continuous sharing of ideas, learning, and best practice among participants.
- ✓ Identification of an important quality or safety goal, ideally with evidence of effective interventions from research (e.g. CVC (central venous catheter) infection reduction, Pressure Ulcer prevention)

To achieve measurable and sustainable improvements, the Collaboratives bring together subject matter knowledge and skills from the clinical care area and technical knowledge and skills around quality improvement methods.

The Collaborative approach in this Handbook is based on the following:

- The Institute for Health Improvement (IHI) (2003) Breakthrough Series Collaborative Model
- The Framework for Improving Quality (HSE, 2016)

1.1 The Institute of Healthcare Improvement Breakthrough Series Collaborative Model

In 1995, the Institute for Healthcare Improvement (IHI) held the first Breakthrough Series Collaborative. It was developed to assist healthcare organisations in making “breakthrough” improvements in quality while reducing costs. The format of the Collaborative helps organisations create a structure in which interested organisations can quickly learn from each other and from recognised experts in topic areas where they deem improvements necessary.

Since 1995, more than 2,000 teams from over 1,000 international healthcare organisations have participated in Collaboratives. IHI standards and best international practices guide the approach and design of a Collaborative.

Teams in Collaboratives such as these have achieved dramatic results, including:

- reducing waiting times by 50%
- reducing worker absenteeism by 25%
- reducing ICU costs by 25 %, and
- reducing hospitalisations for patients with congestive heart failure by 50%.

The figure below represents an overview of the IHI Breakthrough Series Collaborative Model. This Handbook will guide you through each step, adapted by the National QPS Directorate for an Irish post-COVID platform.

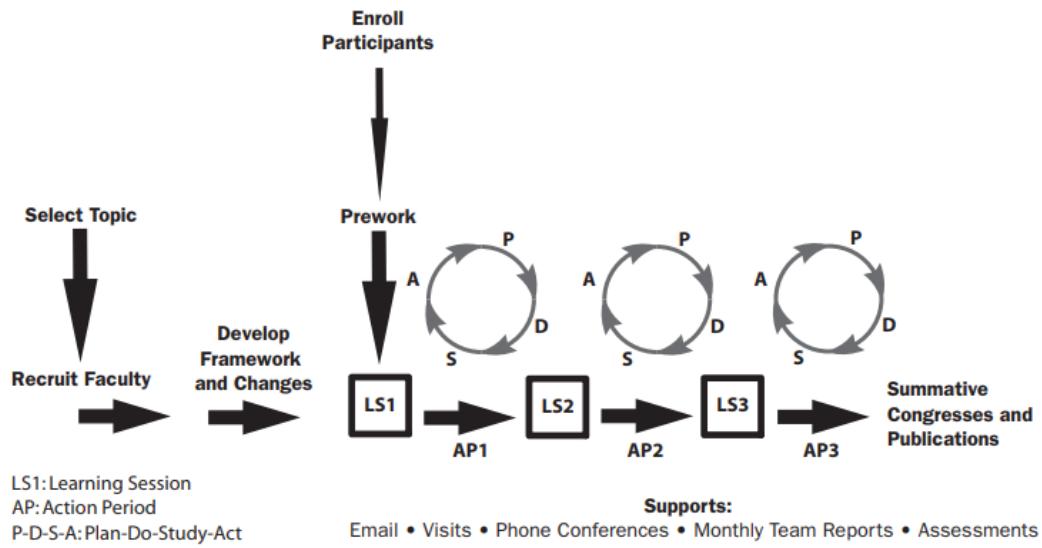


Figure 2: IHI Breakthrough Series Collaborative Model

1.2 The HSE Framework for Improving Quality

The [HSE Framework for Improving Quality](#) (HSE, 2016) was developed to provide a strategic approach to improving quality at all levels, from the front line to national level. It aims to foster a culture of quality, which continuously seeks to provide safe, effective, person-centred care. It is orientated towards quality and safety, to improve patient experiences and outcomes, diverting the planning and delivery of healthcare away from crisis management to proactive service improvement. It provides a strategic approach to enhancing quality at the frontline, management, board or national level.

The Framework comprises six drivers, which give a structured approach to improving service quality.



Figure 3: Six Drivers of the HSE Framework for Improving Quality

Focusing on one of the drivers alone will not yield the desired effect for improvement. The collective synergy of all drivers fosters an environment for improvement and propels the acceleration thereof.

The National QPS Directorate has applied the Framework for Improving Quality to guide the planning and delivery of Improvement Collaboratives. This framework has played a pivotal role in the success of the Collaboratives, serving as the foundation for:

1. The development of the overall Collaborative approach
2. The planning and delivery of learning sessions and action period activities
3. The measuring and assessment of participant knowledge and skill development
4. The sustainability and spread of successful improvements

1.3 Purpose of an Improvement Collaborative

The purpose of an Improvement Collaborative is to:

- Demonstrably improving outcomes, equity and patient safety, for example through reducing a “common cause of harm” as identified in the [HSE Patient Safety Strategy 2019-2024](#) and promoting the achievement of improved clinical outcomes

- Enhance Quality Improvement knowledge and skills across services
- Enable the culture of improvement and promote the spread of successful practices by facilitating sustainable improvement projects, both within and across services

1.4 Key Learnings for Improvement Collaboratives

The [Evaluation of the Implementation of the Framework](#) identified five critical features of successful improvements, offering valuable insights to strengthen the growth and vitality of a Collaborative.

1. Giving **due consideration and time to planning and implementation** is crucial. To ensure readiness for change and continuous quality improvement, a significant amount of time is allocated to the preparation stage in collaboration with site leads, staff, and patient and family inclusion.
2. **Identifying key planned areas of work** (the target for improvement) **at the outset** in partnership with participating teams and services enabled clear and consistent vision, mission, and goals to be agreed upon and worked towards in a planned and comprehensive manner.
3. **Applying a co-design approach** whereby sites took ownership and leadership of the work to achieve sustainability and spread was crucial in enabling the sites to take the leadership and governance role of this work and to navigate the various stages of change to nurture new approaches of working within the service culture.
4. **Effective communication, coordination and engagement with participating sites/services**, as well as communication to wider audiences, e.g., staff and service users, ensured that each test of change using the developed by Associates in Process Improvement (API, <http://www.apiweb.org>) [Model for Improvement](#) was coordinated, manageable and consistent.
5. **Access to resources, skills and knowledge** in a coordinated and pre-agreed manner. This reflected the organisation's commitment to ensure each driver had appropriate assistance at each stage of the application and with equal emphasis on its approach. No driver across the Framework took precedence over another, thus resulting in a comprehensive application of the Framework in its entirety.

Evidence from International literature has shown that Improvement Collaboratives can lead to improvement. The extent to which they achieve improvement may be influenced by several factors, including:

- Teamwork
- Teams remain intact and continue to gather data
- Facilitators are perceived as being helpful
- The sharing of improvement ideas
- Interactive calls
- The amount of control participants have

(Schouten *et al.*, 2008; Hulscher *et al.*, 2013; Power *et al.*, 2014)

However, challenges may arise during the Collaborative process, such as:

- Competitive desire vs Collaborative aims
- Competing organisational pressures
- Perceived duplication of effort (some individuals might view the Collaborative as duplicating existing improvement initiatives)
- Variability in starting positions (participants may have different levels of experience, resulting in varying learning and teaching opportunities)
- Evidence of free-riding (some participants contribute less to the Collaborative efforts)
- Challenges of benchmarking (while benchmarking can promote improvement, it may also lead to friendly rivalry, time-consuming efforts, or increased stress)

(Carter *et al.*, 2014)

Key Learning for Patient Partnership

A 2017 study looking at patient and family/carer experiences concluded that their involvement in pressure ulcer (PU) prevention within the PUTZ (Pressure Ulcer to Zero) Collaborative was limited. There was also a lack of awareness of the SSKIN (Surface, Skin, Keep Moving, Incontinence, and Nutrition / Hydration) care bundle, with some confusion about its acronym. However, participants expressed a desire to be more involved in PU prevention and collaborative processes. Empowering patients and family/carers through education and communication could increase their level of involvement. The findings are relevant for future Collaboratives, where tools like acronyms and activities, such as designing and presenting visual aids relate to the Collaborative subject, require both patient and patient focus (Fleming *et al.*, 2017).

The key findings of an evaluation of patient engagement in an HIV Care Improvement Collaborative indicate that deliberately incorporating patient partnership in the Improvement Collaborative led to better integration and value of patient perspectives. The conditions established in the Improvement Collaborative fostered improved mutual understanding and empathy between healthcare providers and people living with HIV, and both groups recognised the benefits it brought to the quality improvement efforts (Bluemer-Miroite *et al.*, 2022).

Patient, family, and caregiver partnership drove positive changes in tracheostomy care within the Global Tracheostomy Collaborative. Social media facilitated engagement and knowledge sharing, while patient experiences were shared during symposia and family forums for joint learning. This approach improved tracheostomy safety (Kim *et al.*, 2023).

2 Planning your Improvement Collaborative

2.1 Governance and Leadership

Governance for quality involves establishing appropriate structures, processes, standards and oversight mechanisms to ensure the delivery of safe, person-centred, and effective services (HSE Framework for Improving Quality, 2016).

In the context of an Improvement Collaborative, governance responsibilities lie solely within the participating services. Collaboratives are designed and delivered in partnership with patient input, service leads, and clinical experts. During the pre-work phase, the significance of effective governance, at both regional and local levels, is emphasised and agreed upon.

For this document, the Lead Organisation is defined as the health region, Hospital Group, or Community Healthcare Organisation overseeing the design and delivery of the Collaborative.

While the roles within the Collaborative are clearly defined in this Handbook, it is important to recognise the need for co-creation and adaption.

Key Roles within the Collaborative

Allocating key roles within the Collaborative is good practice as it enhances coordination accountability and engagement amongst participants.

1. **Collaborative Lead:** The Lead Organisation designates an individual as the Collaborative Lead. The Collaborative Lead assumes overall responsibility for the Collaborative's design, coordination, delivery and evaluation, supported by a Collaborative Advisory Group.
2. **Clinical Champion:** The Lead Organisation designates a Clinical Champion. This is most often a front-line clinician responsible for guiding the design and delivery of the Collaborative from a clinical perspective.
3. **Site Leads:** Each participating hospital and/or community-based service (e.g. HSE residential disability services in the area) designates a Site Lead. For example, the Site Lead may be a Quality and Patient Safety lead for the hospital or community service or a senior clinician with experience in QI. The Site Lead is crucial in facilitating and guiding improvement efforts locally.
4. **Project Team Leads and Members:** Every participating Site will have one or more project teams, each comprising a Team Lead and Team Members. The Project Team Lead provides leadership and direction to the team, while the members actively contribute to the project's activities and work collaboratively towards achieving the improvement goals. A Project Team typically consists of 3 – 8 team members. Within a Collaborative, it is customary for 2-3 members of the Project Team to participate in all Collaborative activities, whilst the other Team members continue the work of the project at home base and are guided by the learning of those team members participating in the Collaborative. This inclusive approach promotes broader engagement and maximises the potential for positive outcomes.

Each collaborative will require team members to take individual areas of responsibility requiring specific skill sets, e.g., a measurement champion responsible for data collection and analysis.

Roles and Responsibilities are outlined in Table 1:

| Role | Responsibility |
|-----------------------------|---|
| Collaborative Lead | <ul style="list-style-type: none"> • Chair Collaborative Advisory Group • Champion the Improvement Collaborative locally, regionally and nationally • Provide leadership, coaching and mentoring to Site leads • Attend and contribute to all planned Improvement Collaborative activities • Share learning, progress and impact with other teams and other Collaborative leads involved in the Collaborative • Ensure that all required educational resources are available and accessible to all Site Leads and Project Leads in advance of the first learning session • Commit to the dates identified for webinars and learning sessions • Schedule and carry out pre-work Site visits in advance of Learning Session 1 • Learning Session Management: Promote, communicate, book rooms, schedule participants, and manage attendance records for learning sessions. Tasks may be delegated to site staff. |
| Clinical Champion | <ul style="list-style-type: none"> • Advocate for the Improvement Collaborative locally, regionally and nationally • Provide leadership by inspiring and motivating others to actively participate in improvement activities. • Provide expertise and knowledge based on clinical experience and understanding of evidence-based practice • Monitor and evaluate progress and outcomes of changes to inform decision-making and guide further improvement efforts • Facilitate Learning Sessions as relevant |
| Site Lead | <ul style="list-style-type: none"> • Provide QPS and QI advice to the Project Teams • Contribute to all planned Collaborative activities • Share learning, progress and impact with the Collaborative Lead and other Site Leads involved in the Collaborative • Ensure that all project team members can access IT resources required to complete project phases, e.g., computers, internet connection, and webinars. • Commit to the dates identified for webinars and learning sessions • Encourage project teams to have protected time and space to connect locally as a team regularly and progress improvement activity as part of their daily work • Facilitate a pre-work Site visit in collaboration with the Collaborative Lead in advance of Learning Session 1 |
| Project Team Lead | <ul style="list-style-type: none"> • Co-ordinate and ensure that project team members attend Collaborative activities • Lead the design and delivery of a team-based Quality Improvement project as part of the Improvement Collaborative • Co-ordinate the collation of the submission of progress updates, storyboards, and data for the Collaborative • Attend and contribute to all planned Collaborative activities • Act as a central point of contact for the project for the Site Lead |
| Project Team Members | <ul style="list-style-type: none"> • Use QI methodology to deliver an improvement project to address the clinical area identified for the Collaborative, and collect and share relevant data • Share learning, progress and impact with other teams • Contribute to all planned Improvement Collaborative activities • Be available for an agreed number of hours per week to participate in Collaborative activities and improvement projects |

| Role | Responsibility |
|-------------------------------------|--|
| Collaborative Advisory Group | <ul style="list-style-type: none"> • Partner to provide specific clinical expertise and technical knowledge and skill sets to support the planning, development and delivery of the Collaborative • Promote an integrated approach to improving healthcare services • Develop and deliver learning session material. • Coaching support for participating teams. • Facilitate the development of education & skill development resources. • Plan for sustainability and spread. • Evaluation of the Collaborative |

Table 1: Collaborative Roles and Responsibilities

Collaborative Leadership Team

The Collaborative Lead, Clinical Champion, and Site Lead(s) form the basis of the **Collaborative Leadership Team**. Where the Collaborative takes place on one site with multiple project teams, including the Project Leads as members of the Leadership Team may be helpful.

The Leadership Team should include individuals with expertise in quality and patient safety, quality improvement, project management, and healthcare leadership. It may be helpful for the Leadership Team members to assess their knowledge and skills related to Quality Improvement using the [HSE Quality Improvement Knowledge and Skills Guide](#). The Guide was developed to help individuals discover what knowledge and skills they need to make effective, sustainable quality improvements. Where the Leadership Team identifies a requirement for skills development around QI, they can refer to the [QPS Prospectus of Education and Learning Programmes](#) or contact the QPS Improvement team at QPS.Improvement@hse.ie to explore opportunities.

Collaborative Advisory Group

It is helpful to establish a **Collaborative Advisory Group**, and may include:

- The Collaborative Leadership Team
- Representative clinicians in the clinical area(s) addressed by the Collaborative, including consultants, nurses and health and social care professionals.
- Representatives from quality, safety and risk in the Lead Organisation
- Service user/patient representative
- Academic expert on the subject matter

The Collaborative Advisory Group works with the Collaborative Leadership Team. Advisory Group members act as a conduit through which information about the Collaborative is shared with colleagues and liaise with groups and activities related to the Collaborative's identified clinical area of focus.

Collaborative Advisory Groups typically have an initial face-to-face meeting followed by bi-monthly meetings with teleconference facilities as appropriate (approximately 1 hr).

The Collaborative Advisory Group membership may include:

- The Collaborative Leadership Team

- Representative clinicians in the clinical area(s) addressed by the Collaborative, including consultants, nurses and health and social care professionals.
- Representatives from quality, safety and risk in the Lead Organisation
- Service user/patient representative
- Academic expert on the subject matter

Collaborative Sponsor

It may be helpful to name a Collaborative Sponsor, a senior figure who supports the work, takes an interest in its success and who will come to help if there is a problem blocking the Collaborative's success BUT is not directly involved in the day-to-day running of the Collaborative.

2.2 Improvement Collaborative Phases

Improvement Collaboratives follow a structured approach consisting of different phases, each contributing to the overall success of the Collaborative journey. Each phase represents a distinct stage that builds upon the accomplishments and progress made in the previous phase, ultimately leading to the desired outcomes. Collaboratives follow a cyclical series of learning sessions, action periods, measurement and evaluation, and summative publications.

The figure below shows the phases and a sample timeline for an Improvement Collaborative. This may vary based on the participating services. Each phase is broadly outlined below and further detailed in this Handbook.

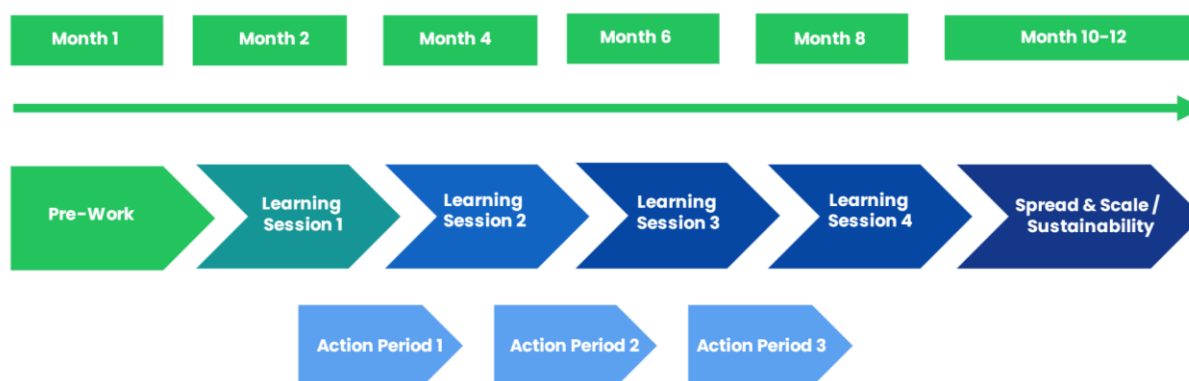


Figure 4: Improvement Collaborative Sample Timeline

Pre-work Phase

The pre-work phase refers to the period between receiving this Handbook and Learning Session 1. It is a crucial time to complete several essential tasks in preparing for the Collaborative. The pre-learning section of this Handbook outlines the specific tasks, offers a comprehensive checklist for pre-work activities, and includes a worksheet for convenience.

Learning Sessions

Learning Sessions constitute the primary interactive component of the Collaborative. Collaboratives typically offer 3 - 4 Learning Sessions during the Collaborative. These

sessions encompass plenary gatherings, small group discussions, and team meetings, offering attendees many benefits, including:

- Learning from experienced faculty and fellow participants
- Receiving personalised coaching and technical assistance tailored to individual needs
- Acquiring knowledge of both the subject matter and quality improvement techniques
- Sharing experiences and engaging in Collaborative efforts to develop improvement plans
- Collaboratively problem-solving barriers

Action Periods

Action Periods occur between learning sessions. During this time, project teams actively progress their improvement projects using the [Model for Improvement](#) by conducting PDSA (Plan-Do-Study-Act) tests of change specific to their project's clinical quality indicators. They also communicate their improvement progress to senior leaders through monthly reports and engage in shared learning experiences facilitated by the Collaborative through virtual project clinics and webinars.

Sustainability, Spread and Scale

This is the last phase of the Improvement Collaborative, albeit perhaps the most important. Although it is the last stage chronologically, it should be planned for from the beginning of the Collaborative.

It is important to keep in mind that during a Collaborative, the concepts of spread, sustainability, and scale are organic. Collaborative leads should recognise and support these concepts, but they come about as participants share effective solutions or take inspiration from other sources.

Sustainability focuses on ensuring the long-term viability of implemented changes. This includes:

- Integrating the improvements into the organisational culture
- Continuously monitoring and evaluating their impact
- Learning from sustained improvements
- Fostering collaboration beyond the Collaborative initiative
- Celebrating the achievements

Spread and scale focuses on disseminating successful changes to a broader audience and implementing them on a larger scale. This includes:

- Identifying impactful changes
- Developing effective spread strategies
- Facilitating communication and knowledge sharing,
- Providing ongoing coaching and assistance
- Continuously evaluating and monitoring the implementation

Monitoring and Evaluation

Monitoring and evaluation are undertaken throughout the Collaborative to ensure the effectiveness and impact of the Collaborative efforts. Project Teams are responsible for monitoring their projects by collecting and analysing data to assess the progress and outcomes of their improvement initiatives. Key metrics are identified and measured, including process, outcome, and balancing measures. Through continuous monitoring and evaluation, teams can identify areas for further improvement and make data-driven decisions to drive sustainable change.

At a Collaborative level, the aggregate results of the participating Project Teams contribute to the overall evaluation of the Collaborative. Other evaluation efforts are usually included during each Learning Period to ensure the Collaborative is effectively and efficiently delivering on learning outcomes and is beneficial for the participating sites and teams. Data collection methods, such as surveys, interviews, and observations, are used to gather the required information.

Further advice on monitoring and evaluating a Collaborative is available later in this Handbook.

2.3 Collaborative Schedule

Table 2 provides an overview of an Improvement Collaborative schedule for illustrative purposes, including stages, activity, and timeline. NB. The duration of an Improvement Collaborative will depend upon the nature of the problem and the type and effectiveness of improvement actions.

| Stage | Collaborative Activity | Timeline |
|-------------------------|-------------------------------------|----------|
| Pre-Work Planning Phase | • Pre-Work Activities | Month 1 |
| | • Coaching/Training (Virtual) | |
| | • Launch event (In-Person) | |
| Period 1 | • Learning Session 1 (In-Person) | Month 2 |
| | • Action Period 1/ Webinar Period 1 | |
| | • Evaluation Period 1 | |
| | • Data collection and collation | |
| Period 2 | • Learning Session 2 (Virtual) | Month 4 |
| | • Action Period / Webinar Period 2 | |
| | • Evaluation Period 2 | |
| | • Data collection and collation | |
| Period 3 | • Learning Session 3 (Virtual) | Month 6 |
| | • Action Period / Webinar Period 3 | |
| | • Evaluation Period 3 | |

| Stage | Collaborative Activity | Timeline |
|---------------------------------|---|-------------|
| | <ul style="list-style-type: none"> Data collection and collation | |
| Period 4 | <ul style="list-style-type: none"> Learning Session 4 (In Person) | Month 8 |
| | <ul style="list-style-type: none"> Action Period 1/ Webinar Period 4 | |
| | <ul style="list-style-type: none"> Evaluation Period 4 | |
| | <ul style="list-style-type: none"> Data collection and collation | |
| Spread & Scale / Sustainability | <ul style="list-style-type: none"> Data collection and collation for remaining months of Collaborative – <i>length of data collection to be determined and agreed upon at the beginning of the Collaborative</i> | Month 10-12 |
| | <ul style="list-style-type: none"> Sustainability and Sharing Learning (Virtual) | |
| Close Out | <ul style="list-style-type: none"> Overall Evaluation Survey (Virtual) | |
| | <ul style="list-style-type: none"> Closing Event– Celebrate Success (In Person) | |
| | <ul style="list-style-type: none"> Final Collaborative Report | |

Table 2: Collaborative Activities – Sample Schedule.

3. Improvement Collaborative Process

3.1 Pre-Work Activities

Pre-work is the period between receipt of this Handbook and Learning Session 1. The Collaborative and Site Leads have several essential tasks to complete during this time.

| Checklist for Completing Pre-work Activities | | Complete |
|--|--|--------------------------|
| 1. | Read the Improvement Collaborative Handbook | <input type="checkbox"/> |
| 2. | Form the Collaborative team | <input type="checkbox"/> |
| 3. | Define the Population of Focus | <input type="checkbox"/> |
| 4. | Provisionally Arrange Learning Sessions | <input type="checkbox"/> |
| 5. | Schedule Pre-work Site Visits | <input type="checkbox"/> |
| 6. | Develop the Collaborative Aim Statement | <input type="checkbox"/> |
| 7. | Complete the Pre-Work Worksheet | <input type="checkbox"/> |
| 8. | Develop the Collaborative Driver Diagram | <input type="checkbox"/> |
| 9. | Define Collaborative Measures | <input type="checkbox"/> |
| 10. | Prepare Storyboards for Learning Session 1 | <input type="checkbox"/> |

Checklist 1: Checklist for Completing Pre-work Activities

Form the Collaborative Leadership Team

As outlined earlier in this Handbook in the section on [Governance and Leadership](#), each Lead Organisation (e.g. health region, Hospital Group, or Community Healthcare Organisation) must form a Collaborative Leadership Team to guide and facilitate the Collaborative.

When selecting members of the Collaborative Leadership Team, be aware that influential team members have the following qualities:

| Checklist for Selecting Team Members: | |
|--|--------------------------|
| Leadership qualities | <input type="checkbox"/> |
| Team players | <input type="checkbox"/> |
| Have specific skills and technical proficiencies relevant to the quality improvement and/or the clinical subject matter | <input type="checkbox"/> |
| Excellent listening skills | <input type="checkbox"/> |
| Good verbal communication | <input type="checkbox"/> |
| Problem-solvers | <input type="checkbox"/> |
| Motivated to improve current systems and processes | <input type="checkbox"/> |
| Believe it is possible to improve care. | <input type="checkbox"/> |
| Creative, innovative, and enthusiastic | <input type="checkbox"/> |
| Demonstrates a solid commitment to the Collaborative's goals, investing dedicated time and effort to actively contribute while having management support and allocated time for collaborative activities | <input type="checkbox"/> |

Checklist 2: Checklist for Selecting Team Members

Define the Population of Focus

A population of focus is a specific subset of the larger population, which exhibits particular characteristics or experiences, or specific health concerns, for example, all patients with diabetes, patients 55 and older with diabetes. In the context of an Improvement Collaborative, it is the population of patients that will be most impacted by the changes being made.

Defining the population of focus ensures the relevance and effectiveness of the Collaborative. This targeted approach allows for more tailored strategies, interventions, and measurements of outcomes.

Provisionally Arrange Learning Sessions

The Collaborative Lead will arrange and facilitate Learning Sessions for the Collaborative. At this point, preliminary planning around the learning sessions should commence, considering aspects such as potential dates and locations for in-person sessions, as these may require booking some time in advance.

The Collaborative Leadership Team are expected to attend all learning sessions and share their learning with all teams participating in the Collaborative.

| Checklist for Arranging Learning Sessions: | |
|---|--------------------------|
| Identify the learning objectives | <input type="checkbox"/> |
| Identify the speakers | <input type="checkbox"/> |
| Plan the activities (Presentations, discussions, exercises, case studies) | <input type="checkbox"/> |
| Create the agenda | <input type="checkbox"/> |
| Send out invitations | <input type="checkbox"/> |
| Prepare the materials | <input type="checkbox"/> |
| Facilitate the session | <input type="checkbox"/> |
| Follow up | <input type="checkbox"/> |
| Plan feedback and evaluation | <input type="checkbox"/> |

Checklist 3: Checklist for Arranging Learning Sessions

Schedule Pre-work Site Visits

The Collaborative Leadership team schedule pre-work site visits with each site participating in the Collaborative before the first learning session. Visits are used to assess Site's readiness to participate in the Collaborative, understand site-specific issues and goals, and assist site teams in preparing for Learning Session 1.

The Collaborative Lead, while reflecting on the factors that influence participation, may consider the following:

- Conducting workshops if multidisciplinary/cross-sector teams do not naturally come together.
- Asking the CEO/GM to approve applications to support organisational buy-in.
- Asking clinicians to negotiate time within job plans for their participation.
- Describing reputational benefits, comparative performance, and commitment-building approaches to encourage involvement.

Site Team communication should also be established at the Pre-work Site Visit. The Site Team will communicate with the Collaborative Leadership Team and with Project Teams onsite through email to distribute information and tools, ask questions and receive replies, and conduct ongoing discussions of changes tested and lessons learned. At least one member from each Project Team (usually the Project Team Lead) and a backup contact will take responsibility for distributing information to the rest of the team.

Develop the Collaborative Aim Statement

The Collaborative Aim Statement helps to articulate the intended outcome of a proposed improvement project. It should provide all relevant information. This should be in a SMART format:

- **Specific:** who, what, where, when, how
- **Measurable:** numeric goal
- **Actionable and Achievable**
- **Relevant to stakeholders and organisation**
- **Timeframe:** short cycles of tests, by when

Aim Statement Template

We will increase/decrease _____ (outcome)
 from: _____ (baseline %, rate #, etc.)
 to: _____ (future state %, rate, #, etc.)
 by: _____ (date, 3 – 6 month timeframe)
 in: _____ (Population of focus)

Template 1: Aim Statement Template

Examples of a SMART Aim within a Collaborative:

- To reduce the number of hospital acquired pressure ulcers in St Mary's ward by 50% within a six-month timeframe and to be sustained by 12 months (date).
- To reduce the number of falls within a designated ward/service by 40% by XX month (6 months after commencing the collaborative) and sustain success by 12 months of commencing the collaborative.

Complete the Pre-Work Activities Worksheet

The pre-work activities worksheet on the next page will help document your progress.

Pre-Work Activities Worksheet

| 1. Collaborative Key Roles | | |
|--------------------------------------|--|-------|
| | Name | Title |
| Collaborative Lead | | |
| Clinical Champion | | |
| Collaborative Advisory Group Members | | |
| Site Lead(s) | <i>Include for each site</i> | |
| Project Team Lead(s) | <i>Include for each project</i> | |
| Project Team Members | <i>Include separately for each project</i> | |

| 2. Definition of Population of Focus |
|--------------------------------------|
| |

| 3. Working Draft of Aim Statement |
|-----------------------------------|
| |

| 4. Working List of Measures Selected |
|---|
| <p><u>Process Measures:</u></p> <p><u>Outcome Measures:</u></p> <p><u>Balancing Measures:</u></p> |
| <p>Potential issues in collecting data for the required measures:</p> |
| <p>Other optional measures:</p> |
| <p>Potential issues in collecting data for the optional measures:</p> |

Worksheet 1: Pre-work Activities Worksheet

Develop the Collaborative Driver Diagram

A Driver Diagram predicts the changes required to accomplish a given aim or outcome. It includes a graphic representation showing the links between an aim (describing the desired result), the changes needed and the specific proposals for change.

The Driver Diagram for the Collaborative is typically completed during the pre-work phase and refined and agreed by all team members. The document is dynamic and can be updated throughout the collaborative. It is a valuable tool for the Leadership Team to identify the key factors they need to focus on to improve the quality of care through the Collaborative. It can also help the team to prioritise their efforts and to identify the most effective interventions.

Steps to complete a driver diagram:

1. **Identify the improvement outcome.** What is the problem you are trying to solve through this Collaborative? What are your goals for improvement?
2. **Identify the factors that influence the outcome.** What are the factors that are most likely to affect the outcome? Examples include policies, procedures, staff knowledge, or patient behaviour.
3. Use the [template provided](#) to **draw the relationships between the factors.**
4. **Prioritise the factors.** Which factors are the most important to focus on? These factors will have the most significant impact on the outcome.
5. **Identify interventions that can be used to improve the factors.** What can be done to improve the factors that you have identified? Examples include changes to policies, procedures, or staff training.

Additional tips for completing a driver diagram include:

- **Involving the team in the process**, helping to ensure the diagram is accurate and the interventions are feasible
- **Use data to support your decisions**, ensuring that decisions are evidence-based. Healthcare organisations already collect large amounts of data, for example, to monitor quality, safety, efficiency and cost. This existing data can help better understand performance and minimise data collection costs/time. National audits provide quality-assured data describing national priorities and are a valuable source of information for monitoring improvement and evaluating the Collaborative.
- **Keep the diagram simple**
- **Developed from left to right and when completed, read from right to left**

A tutorial is available from the Institute for Healthcare Improvement on how to use a driver diagram: <https://www.ihl.org/resources/Pages/Tools/Driver-Diagram.aspx>

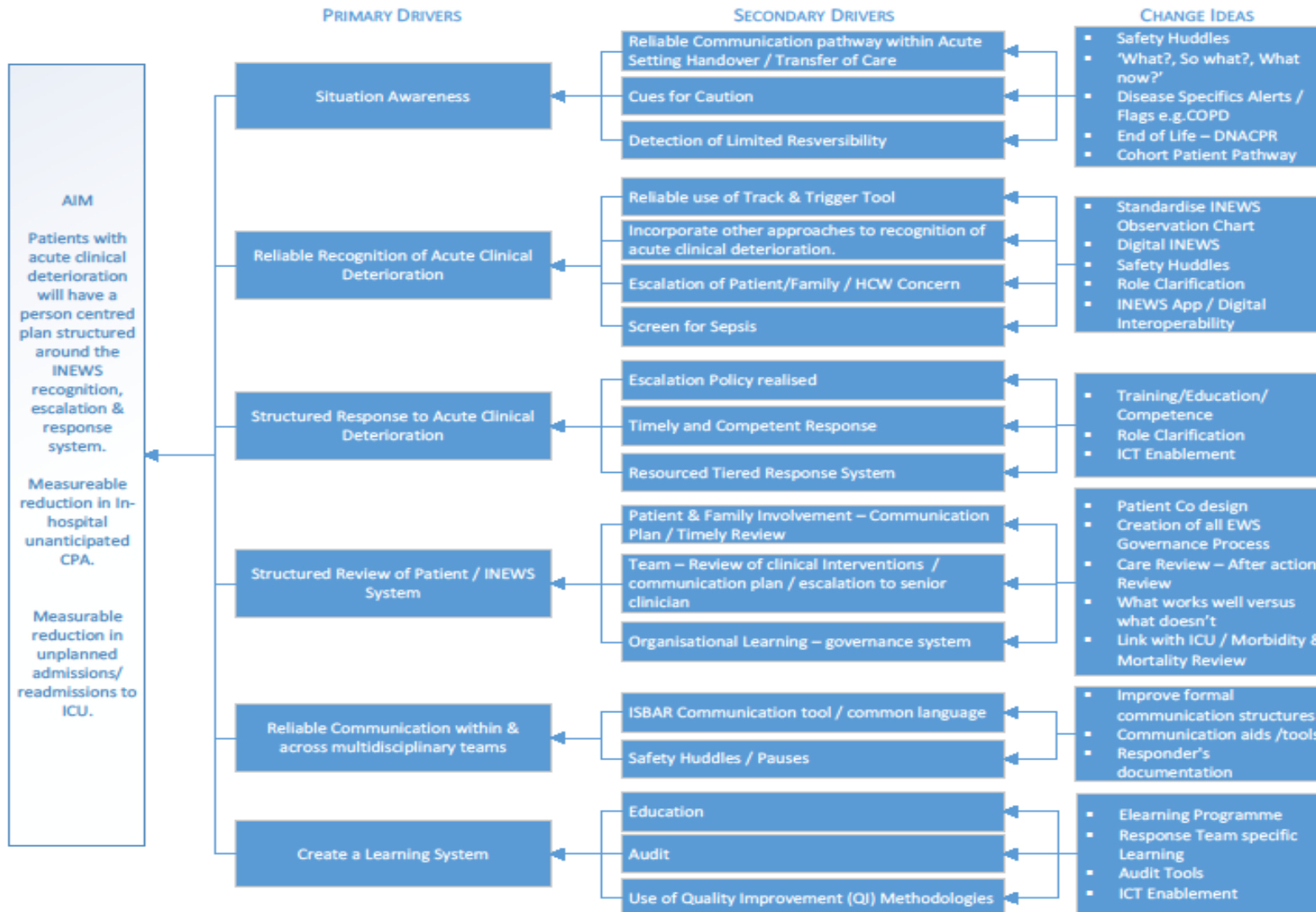


Figure 5: Sample Driver Diagram from the Deteriorating Patient Improvement Programme, 2020

Driver Diagram Template

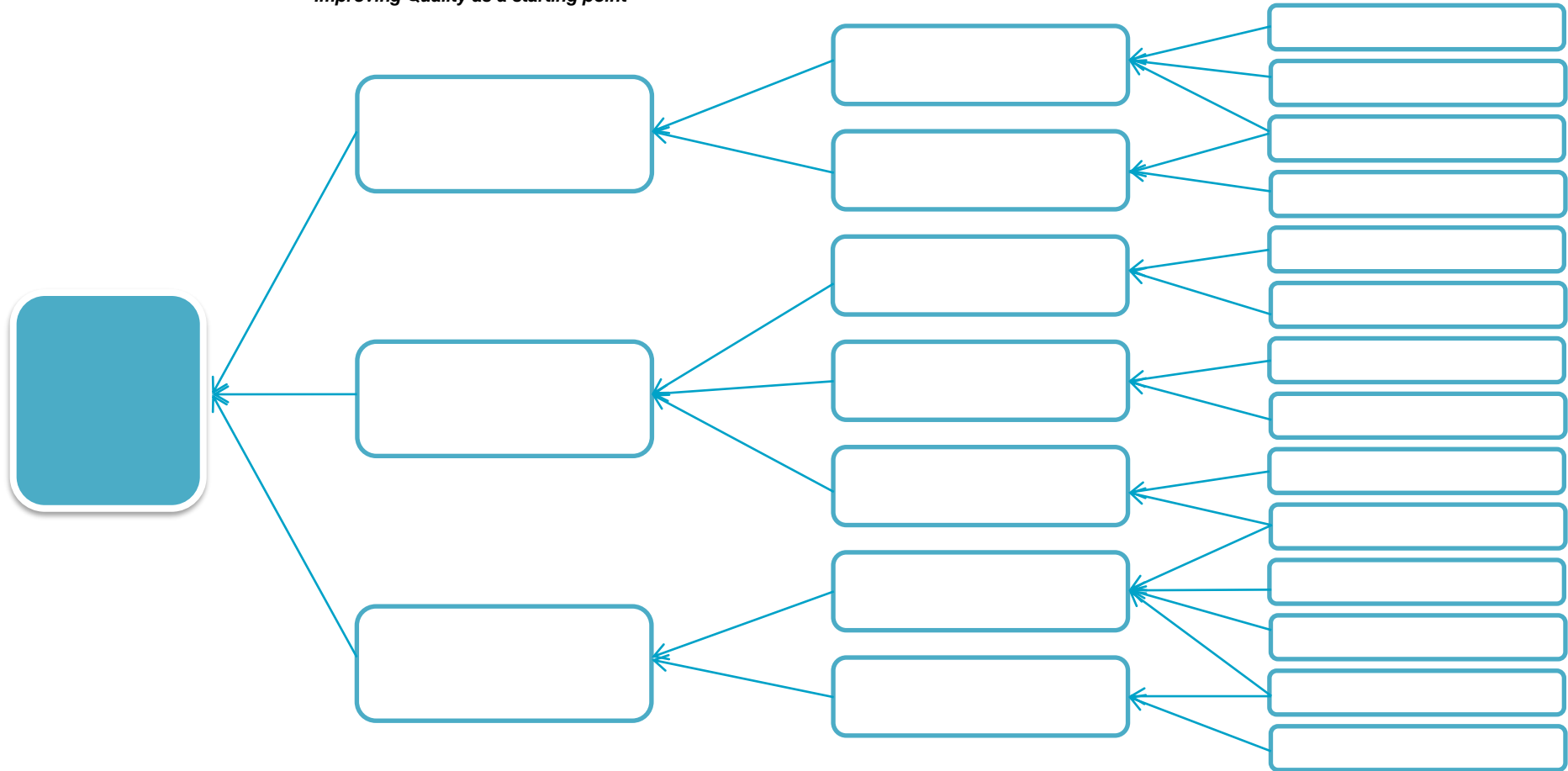


Aim
SMART aim

Primary Drivers
What must be present to achieve our aim
Consider the 6 Drivers of the Framework for Improving Quality as a starting point

Secondary Drivers
What must be present to deliver each primary driver

Change Ideas



Template 2: Driver Diagram Template



Define Collaborative Measures

Measures are used to track progress and to determine whether or not the Collaborative is having an impact. At a minimum, teams should select one outcome measure and one process measure. Teams may also develop new process measures based on the issues of most interest and importance. All selected measures are reported monthly to the Site Lead.

Each **Project Team Lead** is expected to report the team’s progress on the selected measures and to document the system changes tested during that month. Each **Site Lead** is expected to collate the progress reports on each Site in their remit and forward them to the **Collaborative Lead**.

Outcome Measures are measures of the performance of the system under study. They tell us whether the changes lead to actual improvement, i.e. if they have the desired effect.

Example of Outcome Measures

- ❖ Number or % rate of Pressure Ulcers
- ❖ % Surgical Site Infection Rate
- ❖ Number of Falls

Process Measures are measures of the workings of the system. They relate to the change(s) made to achieve the outcome (primary and secondary) – they are measures of activities or steps in the process.

Examples of Process Measures

- ❖ Achieve >95% compliance with SSKIN Bundle
- ❖ Achieve >95% on time antibiotic prophylaxis within 3 months

Balancing Measures are used to understand the effect of changes on the broader system and to ensure that changes to improve one part of the system do not adversely affect other areas.

Examples of Balancing Measures

- ❖ Length of Stay/Bed Management
- ❖ Re-Admission Rate

Before attending the first learning session, participating Project Teams are asked to collect **one calendar month's baseline data (in advance of any intervention)** on their measurement tool (e.g. safety stick, run chart, etc.) and to send this data to the Collaborative Lead so that the baseline measurement for the Collaborative can be calculated.

Prepare Storyboards for Learning Session 1

Each participating Project Team is required to develop a very short 'storyboard' that will be displayed and discussed at the first learning session. It can be added to for each subsequent learning session. This will allow teams to share and learn from each other's ideas and approaches. This helps to accelerate the rate of improvement.

A sample storyboard template is provided below and can be emailed in PowerPoint format (email QPS.Improvement@hse.ie to request a copy). The completed template can be printed and brought to the learning session for display on a poster board. Teams are invited to bring examples and resources that showcase good practices. Examples might include patient leaflets, logos, and signs.

Template for Learning Session 1 Storyboard

Improvement Collaborative
Learning Session 1 Storyboard

Site/service:

Team:

Collaborative Lead:

Clinical Champion:

Site/Service Lead:

Project Team Lead:

Team members:



An Stiúrthóireacht um Ardchaighdeán agus Sábháilteacht Othar
Oifig an PhríomhOstailigh Cliniciúil


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Office of the Chief Clinical Officer

Improvement Collaborative Handbook

Improvement Collaborative

Baseline data

Please provide the baseline data for one calendar month on the measurement tool of your choice (such as the Safety Cross, Safety Stick, or Run Chart).



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Improvement Collaborative Handbook

Template 3: Learning Session 1 Storyboard Template

3.2 Learning Sessions

Learning Sessions are at the heart of the Collaborative. These are where participating teams come together to share their experiences, learn from experts, and develop improvement strategies. Learning Sessions are organic and responsive to participants' needs, experiences and feedback. It is important to note that Collaboratives are social as much as technical solutions. Allowing time and creating an atmosphere of psychological safety are essential features that enable teams to be creative and openly share. Fun is another critical ingredient!

It is recommended that a number of the Learning Sessions take place in person; these include the Launch Event, 1st and 4th Learning sessions, and Closing Event. Other Learning Sessions and Collaborative events can be held virtually to enable teams to participate from home base and reduce the requirement to travel for Collaborative events.

The Collaborative Leadership Team shape the content of the Learning Sessions around delivering capacity and capability around QI and instruction in the theory and practice of improving performance in the Collaborative's specific topic area, e.g. presenting on the relevant clinical care bundle. At the first Learning Session, expert faculty offer a vision for ideal care in the topic area and discuss change ideas which, when implemented locally, could significantly improve the quality of care. Teams learn the Model of Improvement, enabling them to test change ideas in their area. At subsequent Learning Sessions, teams share successes, challenges and lessons learned. This rich exchange lends academic knowledge with the practical experience of peers who can offer solutions based on their first-hand encounters with similar problems.

Consider the following during this phase:

- **Expert Presentations:** Invite subject matter experts to deliver presentations on relevant topics, evidence-based practices, and successful improvement strategies. Encourage interactive discussions and Q&A sessions to enhance knowledge exchange. If possible, try to find subject matter experts from within the Lead Organisation before reaching out externally.
- **Team Storyboard Presentations:** Participant teams will each have an opportunity to present their storyboards under the following headings:
 - Aim Statement
 - Driver Diagram
 - PDSA Cycles
 - Measurement data
 - Progress to date
 - Learning to date
 - Successes and Challenges
 - Sustainability and Spread

Storyboard sharing can be facilitated in several ways, such as:

- Requesting teams to print out their storyboard Powerpoint slides in advance and display them around the room on the day of the Learning Session. Allow time during the session for participants to go around the room reading about other teams' progress.



- Using a laptop connected to a large monitor or TV, display the storyboard as a rolling presentation. Set up a stand that people can visit during designated times and tea breaks.
- Including a segment of the Learning Session whereby each Project Team has 5 – 10 minutes to present their Storyboard at the Learning Session. If time is short, they may give their top three “WWW/EBI” standing for “What Works Well” in their project and how it would be “Even Better If” certain conditions were met.

A sample storyboard template for Learning Sessions 2 – 4 is provided below. This can be emailed in PowerPoint format (email QPS.Improvement@hse.ie to request a copy).

| | |
|---|--|
| <p>Improvement Collaborative Learning Session __ Storyboard Slide 1</p> <p><u>Site/service:</u> <u>Team:</u> Collaborative Lead: Clinical Champion: Site/Service Lead: Project Team Lead: Team members:</p> | <p>Improvement Collaborative Slide 2</p> <p><u>Aim Statement</u></p> |
| <p>Improvement Collaborative Slide 3</p> <p><u>Driver Diagram</u></p> | <p>Improvement Collaborative Slide 4</p> <p><u>PDSA Cycles</u></p> <p>Please provide the PDSAs the team has tried</p> |
| <p>Improvement Collaborative Slide 5</p> <p><u>Measurement data</u></p> <p>Please provide the data for every month since the last learning session</p> | <p>Improvement Collaborative Slide 6</p> <p><u>Progress to Date</u></p> <p>Please summarise your progress to date</p> |
| <p>Improvement Collaborative Slide 7</p> <p><u>Learning to Date</u></p> <p>Please summarise your learning to date</p> | <p>Improvement Collaborative Slide 8</p> <p><u>Successes and Challenges</u></p> <p>Please provide an overview of the team's successes and challenges</p> |
| <p>Improvement Collaborative Slide 9</p> <p><u>Sustainability and Spread</u></p> <p>(Increased focus on sustainability in the final learning session)</p> | |

Template 4: Learning Session 2-4 Storyboard Template

- Collaborative Learning Activities:** Facilitate interactive activities to promote active learning, reflection, and the exchange of best practices. These can include small group discussions, case studies, skills practice, interactive games, role play and simulation exercises. Encourage teams to learn from one another's experiences and identify potential adaptations for their settings.

- **Action Planning and Testing:** Facilitate teams to develop action plans, outlining specific changes and interventions to be tested. Encourage teams to use PDSA (Plan, Do, Study, Act) rapid testing cycles to implement and evaluate their improvement ideas. Share templates such as the [Quality Improvement Toolkit](#) with them to document their progress.
- **Coaching and Assistance:** Provide ongoing coaching and assistance to participating teams. Where possible, assign experienced improvement coaches or mentors to guide teams in applying improvement methodologies, analysing data, and overcoming challenges.

The Collaborative Lead is encouraged to seek direction from the National QPS Directorate should assistance sourcing an appropriate QI Coach be required.

The [PUTZ Collaborative Programme of Learning](#) linked here can be used as an example.

3.3 Action Periods

Action Periods are the weeks between each Learning Session where teams apply their learning in context. Teams and colleagues work together, implementing and evaluating improvement interventions using the **Model for Improvement**.

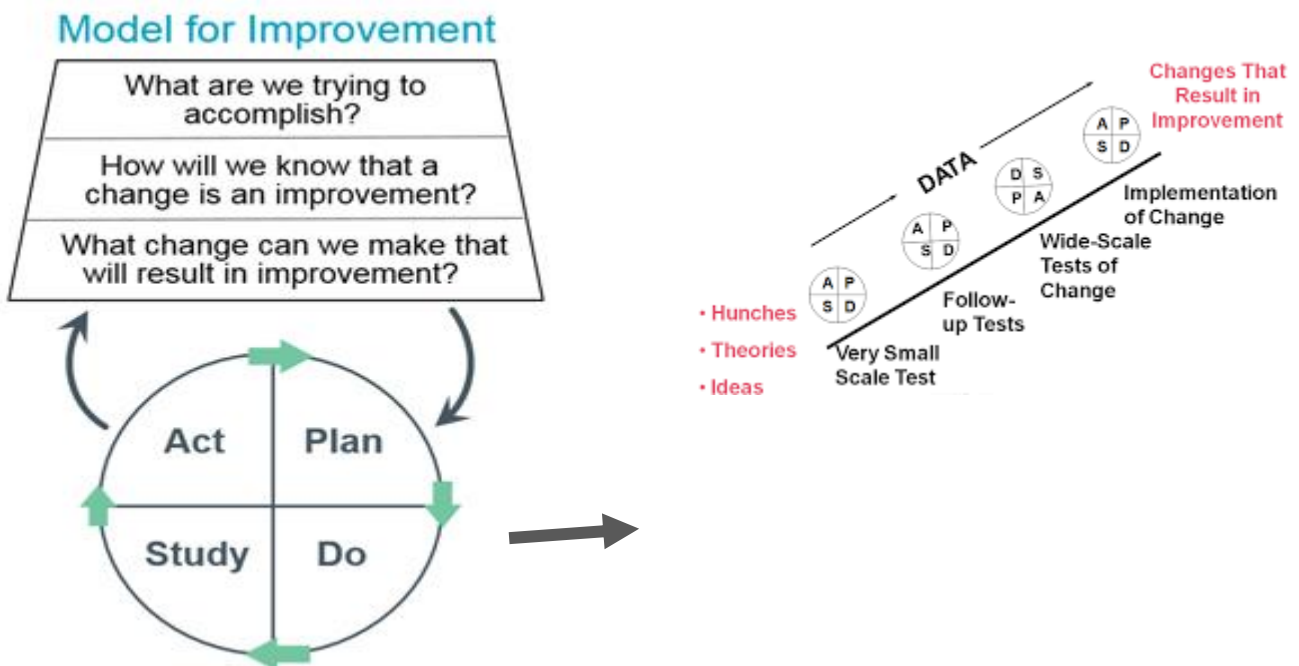


Figure 6: Model for Improvement

Teams should consider the following during Action Periods:

- **Small-Scale Testing:** Encourage participating teams, with the wider multidisciplinary team, to test change ideas on a small scale within their site through PDSA (Plan, Do, Study, Act) cycles. This allows teams to gather data, assess the impact of the changes, and identify opportunities for further refinement.

The following image illustrates a PDSA ramp. These were a series of PDSA tests carried out by one hospital team in a “Preventing Blood Clots in Hospitals”

Collaborative. Using PDSA cycles, the team tested their idea for change: the use of pre-printed prescription stickers for VTE prophylaxis in the drug chart.

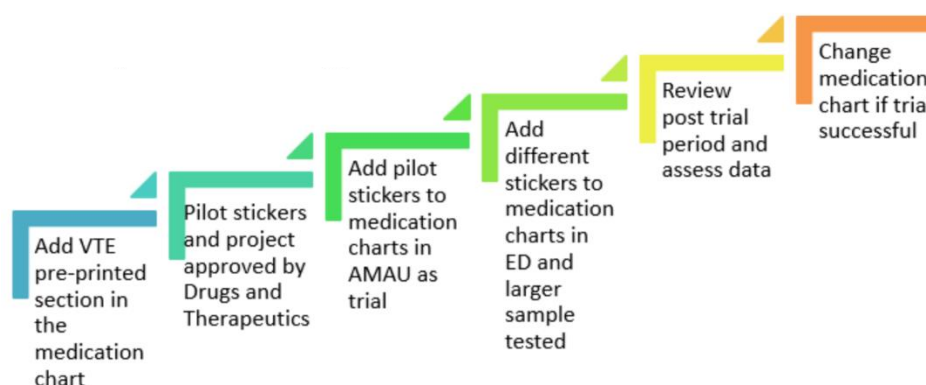


Figure 7: PDSA ramp from Preventing Blood Clots in Hospitals Collaborative.

- Data Collection and Analysis:** Teams use appropriate measurement tools to track key metrics and to identify trends or patterns. See sample measurement tools in the figures below from PUTZ (Pressure Ulcer to Zero) and Falls Collaboratives (a series of Quality Improvement Collaboratives focusing on reducing avoidable falls using a suite of evidence-based interventions). The PUTZ Collaborative concentrates on reducing avoidable pressure ulcers and increasing the capacity and capability of frontline clinical teams to improve the care they deliver. The role of participating teams was to implement the SSKIN bundle (Surface, Skin, Keep Moving, Incontinence, and Nutrition / Hydration), which is a specific five-step process that, when performed collectively and reliably, can improve pressure ulcer prevention as it guides assessment and prompts targeted prevention strategies. The Falls Collaborative focused on reducing avoidable falls using a suite of evidence-based interventions.
- Learning from Testing:** The Collaborative Leadership Team may arrange for project clinics or short webinars where project teams can share their testing experiences and findings. This promotes collaborative learning by discussing common challenges, successful strategies, and opportunities for improvement.
- Adaptation and Refinement:** Encourage teams to refine their improvement changes based on the feedback and data collected during the Action Period. Assist them in making necessary adjustments and modifications to improve the effectiveness of their interventions.
- Documentation and Sharing:** Emphasise the importance of documenting the testing process and outcomes. Encourage participating teams to share their experiences, lessons learned, and best practices. This document can be a valuable resource for other teams and future Collaboratives. The [QI Toolkit](#) offers a range of templates which can help with documenting a QI Project
- Reporting within the Organisation:** The team may consider reporting within the organisation, for example, to the Quality and Safety Committee, as a way to engage stakeholders, to gain commitment and as a strategy for sustainability.

The Collaborative Lead should aim to contact each Site Lead at least once during each Action Period to offer signposting to resources or phone/email/in-person assistance if required.

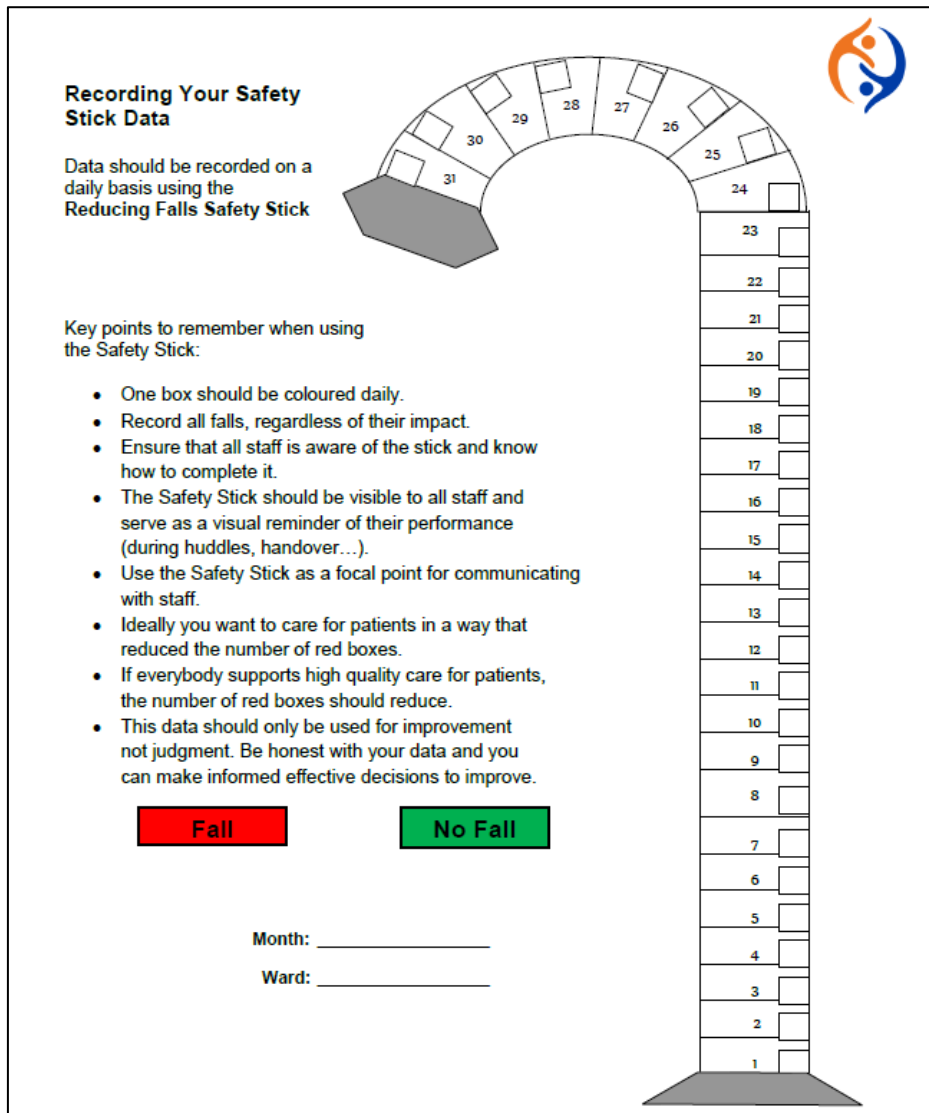


Figure 8: Example of an Action Period Measurement Tool: Falls Collaborative Safety Stick



Figure 9: Example of an Action Period Measurement Tool: PUTZ Collaborative Safety Cross

3.4 Sustainability

As described in the [People's Need Defining Change: The Health Service Change Guide](#), sustainability is achieved through continuous engagement; providing innovative ways for proficiency in new tasks; measuring critical outcomes; and striving to maintain long-term performance. Planning for sustainability and long-term success is vital throughout all stages of the Collaborative.

Leadership actions to deliver and sustain change include - practising collective leadership, monitoring governance arrangements, being visible and engaged, and ensuring alignment with core values.

Accountability for performance and outcomes involves - providing necessary organisational assistance, prioritising facilities and equipment, and integrating changes into crucial business processes.

Engaging and communicating with stakeholders ensures that investing in people and teams, networking, and partnering is essential.

Evidence and leveraging technology are also important. They include articulating outcomes and benefits, measuring progress, acknowledging milestones, facilitating staff and utilising digital innovations.

Examples of Activities that can facilitate Sustainability:

- ❖ Celebrate successes to reinforce positive behaviour and create a sense of improvement.
- ❖ Remove options to revert to the old system to prevent regression.
- ❖ Continuously measure outcomes to track sustained improvement and to identify areas of deterioration.
- ❖ Embed the changes by making measurement systems permanent, updating procedures, and incorporating them into job descriptions and personal objectives.
- ❖ Make it difficult to deviate from the new process by implementing constraints, affordances, and differentiation.
- ❖ Connect with individuals' values and beliefs to foster intrinsic motivation and commitment to the change.
- ❖ Plan contingencies for exceptional circumstances, which may impact the new system's performance.
- ❖ Plan for continuous improvement to adapt to changing environments, to patient needs, to best practices, and to policy changes.

3.5 Spread and Scale

Spread and scale focuses on disseminating successful changes to a broader audience and implementing them on a larger scale.

Key considerations for Spread and Scale:

- ❖ Identify successful changes with positive outcomes for spread, supported by documentation and data.
- ❖ Collaborate with teams to develop strategies for spreading improvements to other settings, for considering adaptation, for engagement, and for addressing barriers.
- ❖ Establish communication and knowledge-sharing platforms to disseminate successful changes, best practices, and lessons learned.
- ❖ Provide coaching and assistance to teams during the spread process, including identifying spread sites and addressing challenges.
- ❖ Continuously evaluate and monitor the spread and implementation of changes, by collecting data on impact, sustainability, and scalability.
- ❖ Use evaluation findings to drive further improvement and to inform future Collaboratives.
- ❖ Incentivise spread through recognition schemes such as the achievement and excellence awards, and ring-fenced development funds, etc.

4. Measuring and Evaluating

Measurement and evaluation provide valuable insights into the effectiveness of improvement efforts. They help identify areas for further refinement, and they enable evidence-based decision-making.

4.1 Developing a Measurement Framework

Take the following points into consideration when developing a measurement framework:

- **Define Key Metrics:** Identify the key metrics that align with the Collaborative's goals and objectives. These metrics should be measurable, relevant, and aligned with the improvement topic. Examples include process measures, outcome measures, and balancing measures.
- **Data Collection Methods:** Determine the data collection methods which will be used to gather the required information. This may include surveys, interviews, chart

reviews, observations, or existing data sources. Ensure the chosen methods are feasible and provide reliable and valid data.

- **Data Analysis and Reporting:** Establish a plan for analysing and reporting the collected data. Determine the frequency of data analysis, the methods used, and the format for presenting the results. Consider creating visual representations like charts or graphs to enhance understanding and facilitate communication.
- **Data Quality Assurance:** Implement processes to ensure the accuracy and integrity of the collected data. Train participating teams on data collection protocols, conduct regular data audits, and promptly address any data quality issues. Maintain clear documentation of data sources, definitions, and data-cleaning procedures

The National QPS Directorate's [Measurement Plan Template](#) describes the rationale behind choosing a measure, the type of measure, the relevant definitions and how to collect and present the measure to ensure that a team has clarity on all aspects of measurement.

[Resource B Measurement for Improvement: Run Charts](#) of this Handbook provides details and guidance on how to use run charts to interpret and analyse the data.

4.2 Evaluation Methods

National QPS Directorate Resources:

- ❖ “Evaluation of Education and Learning Programmes Guide 2023” is a useful guide in evaluating learning programmes. It provides useful tools to support education and learning programme evaluation. If you are interested in reviewing it, please contact QPS.Improvement@hse.ie
- ❖ [Self-Evaluation Guide](#) is designed to assist teams who wish to evaluate their Quality Improvement projects. The [QI Self-Evaluation Workbook](#) contains editable templates to support the evaluation.
- ❖ [Designing, Conducting, Analysing and Presenting Surveys Guidance Document](#) offers guidance on designing, conducting, analysing and presenting surveys. Surveys are an effective way to quickly gather information and data.
- ❖ [Introduction to Qualitative Methods](#) This presentation describes qualitative research, the differences between qualitative and quantitative approaches to research and evaluation, and briefly addresses approaches to analysing qualitative data.

The Collaborative Leadership Team should coordinate an **End of Day Evaluation (Level 1 Evaluation of Learning)** following each **Learning Session**. This evaluation should ascertain the participant’s self-assessed knowledge and skills of the Care Bundle and QI methodology. It should also explore logistical elements of the Learning Session. Sample questions are as follows:

- **For In-Person Learning Sessions (answered on a Likert scale)**
 - The Learning Session was well organised
 - The Learning Session covered what I expected it to cover.
 - The facilitators/presenters were knowledgeable about the content they delivered.
 - Participation and interaction were encouraged throughout the session.
 - There was sufficient opportunity for discussion throughout the session.
 - The facilitators supported my learning.
 - Materials and resources provided were helpful to my learning
 - Adequate supports were sign-posted during the module to enable me to transfer the learning to my workplace

- **For Online Learning Sessions (answered on a Likert scale)**
 - The use of interactive approaches (e.g. chat box, polls, breakout rooms) enabled me to participate in the discussion.
 - The facilitators quickly dealt with any technical issues.
 - The platform used for the virtual classroom was easy to navigate
 - The content of this Learning Session was better suited to an in-person setting rather than online.

- **General review questions:**
 - What I enjoyed most about the Learning Session was...
 - The Learning Session could be improved by...

An **Overall Evaluation (Level 2 Evaluation of Learning)** should be carried out at the end of the Collaborative. This should be at an agreed timeframe, after the celebration event. The purpose of the Overall Evaluation should be to establish the success as well as the sustainability and spread of the QI Collaborative. A pre- and post-learning assessment survey based on the [Quality Improvement Knowledge and Skills Guide](#) is an effective way of carrying out the **Overall Evaluation**.

The individual **End of Day Evaluations** and the **Overall Evaluation** results should be compiled into a **Collaborative Report**. The Collaborative Report should be issued to all Collaborative participants.

To assess the impact and effectiveness of a Collaborative, consider employing the following evaluation methods:

| Evaluation Methods | |
|-------------------------------------|--|
| Pre- and Post-Comparisons | Compare baseline data with post-implementation data to measure the change in performance. This method provides insight into the impact of the improvement efforts and allows for calculating improvement percentages or rates. |
| Control or Comparison Groups | Use control or comparison groups to assess the causal relationship between the Collaborative and the observed improvements. This method helps determine whether the improvements are attributable to the Collaborative's interventions or to external factors. |

| Evaluation Methods | |
|-----------------------------|--|
| Surveys and Feedback | Administer surveys or collect feedback from participating teams, patients, and other stakeholders to gather qualitative and quantitative information. Surveys can assess changes in attitudes, perceptions, and satisfaction levels, providing a more comprehensive understanding of the Collaborative's impact. |
| Qualitative Methods | Utilise qualitative research methods, such as interviews or focus groups, to gain in-depth insights into participating teams' experiences, challenges, and successes. These methods can capture valuable narratives and contextual information, which may be only partially captured by quantitative measures. |

Table 3: Evaluation Methods

4.3 Evaluation of Spread and Sustainability

Evaluating the spread and sustainability of improvements is crucial for assessing the long-term impact of Collaboratives.

| Evaluation of Spread and Sustainability | |
|---|--|
| Spread Assessment | Evaluate how successful changes have been spread to other settings or organisations. Measure the number of organisations who adopt the changes, their adherence to the original intervention, and their impact on the spread sites. |
| Sustainability Evaluation | Assess the sustained impact of the improvements over time. Monitor key performance indicators, collect ongoing data, and assess if the changes have become ingrained in the organisational culture and processes. |
| Monitoring Adaptations | Understand the adaptations made to the interventions during spread and sustainability efforts. Evaluate the effectiveness of these adaptations and their impact on outcomes. Determine whether the transformations maintain the original intervention while addressing contextual factors. |
| Long-term Outcome Measurement | Consider tracking long-term outcomes beyond the Collaborative's duration to evaluate the lasting effects of the improvement efforts. This may involve monitoring patient outcomes, quality indicators, or financial measures. |

Table 4: Evaluation of Spread and Sustainability

4.4 Using Evaluation Findings for Continuous Improvement

The evaluation findings should be utilised to drive continuous improvement within the Collaborative and to inform future improvement initiatives.

| Using Evaluation Findings for Continuous Improvement | |
|--|--|
| Analysis of Findings | Analyse the evaluation findings to identify patterns, trends, and areas of success or improvement. Look for insights regarding what worked well, |



| Using Evaluation Findings for Continuous Improvement | |
|--|--|
| | what challenges were encountered, and what factors influenced the outcomes. |
| Feedback and Reflection | Based on the evaluation findings, provide feedback to participating teams. Encourage teams to reflect on their results, celebrate achievements, and identify areas for further growth and refinement. |
| Learning and Adaptation | Use the evaluation findings as a basis for shared learning among participating teams. Facilitate discussions, workshops, or learning sessions where teams exchange experiences, strategies, and lessons learned. Encourage teams to adapt and refine their improvement efforts. |
| Dissemination of Findings | Share the evaluation findings with key stakeholders, including participating teams, leadership, and other healthcare organisations. Communicate the successes, challenges, and lessons learned from the Collaborative. This promotes transparency, accountability, and knowledge sharing. Consider submitting an article for publication, sharing learning and achievements from the collaborative. (For Q members in Ireland there is support via the Q community https://q.health.org.uk/get-involved/journals-and-learning-resources/) |
| Incorporation into Future Collaboratives | Utilise the evaluation findings to inform the design and implementation of future Collaboratives. Identify areas for improvement in the Collaborative model, measurement approaches, or support structures. Continuously refine the Collaborative model based on the accumulated knowledge and experiences. |
| Ongoing Monitoring and Evaluation | Implement a system for ongoing monitoring and evaluation of the Collaborative's impact, even after its conclusion. This ensures that improvement efforts are sustained and opportunities for further refinement are identified. |

Table 5: Using Evaluation Findings for Continuous Improvement

5. Celebrate Success

The Collaborative Leadership Team should organise a Celebration Event at the end of the Collaborative. This is usually an in-person event. All individuals involved in the Collaborative can be invited, including the Collaborative Leadership Team; Collaborative Advisory Group; Site Leads, Project Leads and Project Teams; and several speakers and facilitators at the Learning Sessions (where practicable). It is also an opportunity to invite senior leaders from the Lead Organisation to attend to highlight the accomplishments of the Collaborative at a senior level.

The Celebration Event allows project teams to celebrate their accomplishments and present effective models for improving care and reducing harm. Even where a QI project did not achieve its stated aim, the team has commendable learning to share. The teams may wish to develop poster presentations to share at the event. It is also a day for the Collaborative Leadership Team to share their findings, learning and achievements from the overall Collaborative.



As part of the Celebration Event, participants should be given the opportunity (generally through an interactive workshop segment) to explore “what next” – building on the professional relationships and networks that have grown through the Collaborative. Participants may consider establishing a Community of Practice or other self-sustaining networking and learning structure to further their work in this area. For information on establishing a community of practice, see this Handbook's section on Communities of Practice.



6. Using Care Bundles in an Improvement Collaborative

Improvement Collaboratives often use clinical care bundles as a mechanism by which targeted improvements can be delivered in a service. Care bundles are “a small set of evidence-based interventions for a defined patient segment/population and care setting that, when implemented together, will result in significantly better outcomes than when implemented individually” (Resar *et al.*, 2012). They are a structured way of improving the processes of care and patient outcomes. They promote teamwork and communication among multidisciplinary teams to provide safe and reliable care.

The efficacy of a bundle derives from its foundation in scientific knowledge and the method of execution and is typically established through rigorous research, clinical trials, and real-world experience. The changes being implemented in the bundle are based on well-established best practices. However, they are often not performed uniformly, making treatment unreliable and inconsistent. By bringing the changes together into a package of interventions, a bundle ensures that healthcare professionals have a standardised approach for each patient, without exception. **A bundle focuses on how to deliver the best care, not what the care should be.**

Bundle changes are clear-cut and involve all-or-nothing measurement, with a "yes" or "no" answer for each step. Successfully implementing a bundle means completing the bundle in total.

The SSKIN Safety Bundle

The SSKIN (**S**kin, **S**urface, **K**eeP Moving, **I**ncontinence, and **N**utrition / Hydration) care bundle provides a specific process for safely preventing pressure ulcer development and was used in the PUTZ (Pressure Ulcer to Zero) Collaborative.



Figure 10: The SSKIN Care Bundle

The Care Bundle Design Concept was initially developed in 2001 as part of the Idealized Design of the Intensive Care Unit (IDICU) initiative. The IHI and the Voluntary Hospital Association (VHA) collaboration, involving 13 hospitals, focused on improving critical care processes to the highest levels of reliability, leading to improved patient outcomes. The focus was on areas with the potential for the greatest harm and higher costs, with a solid evidence base.

When designing care bundles, it is recommended that:

- Bundles should consist of three to five interventions with strong clinician agreement.
- Each bundle element should be relatively independent so that the implementation of one component does not depend on the implementation of others.
- Bundles are most effective when used with a defined patient population in one location, allowing focused strategies to achieve all-or-none compliance.

- The bundles should be developed by multidisciplinary care teams and designed to be descriptive rather than prescriptive, allowing for local customisation and clinical judgment.
- Bundle compliance should be measured using an all-or-none approach to achieve 95% or greater compliance. This means that if any step in the bundle is not completed or the desired outcome is not achieved, the patient has not received the full benefit of the bundle, and the quality of care is still lacking.

The benefits of using a care bundle in an Improvement Collaborative include:

- **Standardised approach to care delivery:** Care bundles ensure that all participants follow the same evidence-based interventions, thus reducing variation and promoting consistency in practice. This standardisation enhances patient safety and improves the reliability of outcomes.
- **Improved patient outcomes:** Care bundles can improve patient outcomes by implementing a bundle of proven interventions. The bundle components are based on rigorous scientific evidence, increasing the likelihood of positive results and reducing the risk of adverse events.
- **Streamlined care processes:** Care bundles can streamline care processes by focusing on the most effective interventions, promoting efficiency, reducing unnecessary variations, and eliminating redundant or ineffective practices.
- **Clear guidelines:** Care bundles provide clear guidelines on the appropriate steps taken for every patient, eliminating the need for individual decision-making or interpretation, leading to a simplified decision-making process and reducing potential errors.
- **Common framework for collaboration and learning:** Care bundles serve as a common framework for collaboration and learning within the Improvement Collaborative. Participants can share experiences, discuss challenges, and exchange best practices pertaining to bundle implementation.
- **Precise tracking of progress and accountability:** The bundle's specific components and all-or-nothing measurement approach allow for precise tracking of progress and accountability. Participants can easily monitor adherence to the bundle and measure and assess outcomes. This facilitates data-driven decision-making and promotes a culture of continuous improvement.
- **Scalability and replicability:** Care bundles are designed for scalability and replicability across healthcare settings. Once successful within the Collaborative, the bundle can be shared and implemented in other sites/services, leading to broader improvements in patient care and outcomes.

Previous PUTZ (Pressure Ulcer to Zero) Collaboratives, for example, were designed to reduce the incidence of pressure ulcers in hospitals. They used two QI tools: the PUTZ Safety Cross and the SSKIN Bundle. The PUTZ Safety Cross is a visual tool to track the number of pressure ulcers acquired on a ward. The SSKIN Bundle is a care bundle that outlines the evidence-based interventions that should be implemented to prevent pressure ulcers.

7. Using Clinical Audit in an Improvement Collaborative

“Clinical audit is a clinically-led quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and acting to improve care when standards are not met. The process involves the selection of aspects of the structure, processes and outcomes of care, which are then systematically evaluated against explicit criteria. If required, improvements should be implemented at an individual, team or organisation level, and then the care re-evaluated to confirm improvements.”

DOHC (2008, p.152)

Clinically-led includes the breadth of clinical professionals working in health and social care services. (HSE NCCA Nomenclature document, A Glossary of Terms for Clinical Audit, 2022)

Clinical audit is a highly valuable and objective tool for healthcare organisations as it systematically assesses healthcare practices, processes, and outcomes. By providing unbiased evaluation, it identifies areas for improvement and enables data-driven decision-making to enhance healthcare quality. Clinical audit contributes to patient safety by pinpointing potential risks and vulnerabilities in care delivery. Moreover, it monitors performance over time, enabling adherence to established standards and facilitating benchmarking against best practices. Emphasising a culture of continuous learning, clinical audit promotes transparency, accountability, and efficient resource allocation. With its capacity to sustain improvements through regular monitoring, clinical audit empowers healthcare providers to deliver safer, more effective and patient-centred care through evidence-based practices and ongoing quality enhancement efforts.

Clinical audit can be used in an Improvement Collaborative in the following ways:

- **Data Collection and Analysis**

Clinical audit involves collecting data on specific aspects of healthcare practices and processes. In Improvement Collaboratives, participating teams can use their audit data to identify variations and gaps in care delivery.

- **Identifying Improvement Opportunities**

Audit data helps to identify areas where improvements are needed. Teams can identify common challenges, patterns, or opportunities for standardisation and optimisation.

- **Setting Shared Improvement Goals**

These goals can be established based on the audit findings. These goals should be measurable, achievable, and aligned with the Collaborative's aim.

- **Continuous Monitoring and Feedback**

Clinical audit facilitates ongoing tracking of performance and progress towards improvement goals. Teams can regularly review their audit data and receive feedback

from the Collaborative, allowing them to make timely adjustments, address challenges, and sustain improvement practices.

[Clinical Audit: A Practical Guide \(2023\)](#) provides guidance in relation to clinical audit design, governance, data protection and ethical issues. It includes resources, including checklists and templates, clinical audit proposal forms, clinical audit report templates and Quality Improvement/action plan templates. It also provides a standardised framework for the seven stages of clinical audit. The guide should be read in conjunction with [National Centre for Clinical Audit Nomenclature - Glossary of Terms for Clinical Audit](#), the purpose of which is to provide a glossary of agreed terms, including a standard definition for clinical audit to be adopted across all healthcare services and clinical audit service providers.

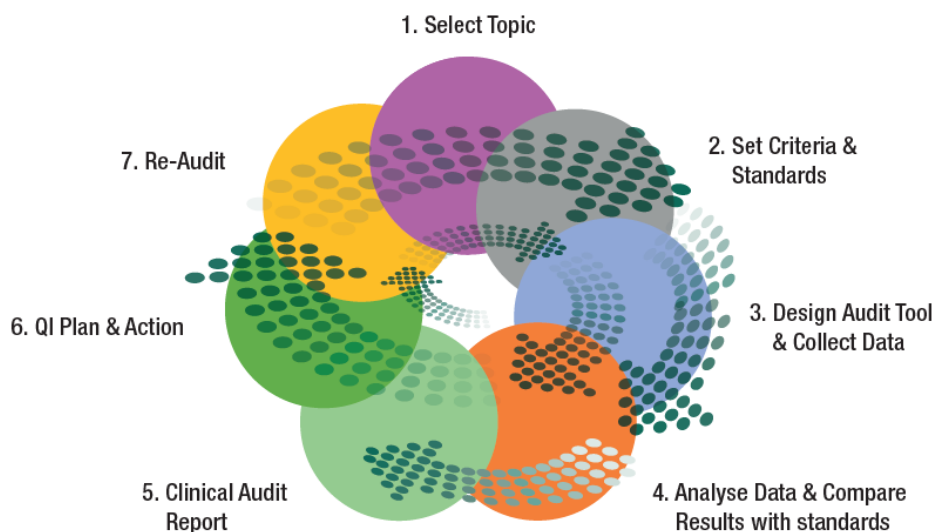


Figure 11: The Seven Stages of the Clinical Audit Cycle. *Clinical Audit, A Practical Guide.*

8. Using Learning from Incidents and other Reportable Events

Engaging with established processes around incident reporting and analysis is important when embarking on an Improvement Collaborative journey. A Collaborative can help to close the loop on incident reporting and review by supporting sharing of learning and excellence. This may include reviewing data from the [National Incident Management System \(NIMS\)](#), analysis of serious reportable events, and reviews of complaints and compliments. Probing this existing data can help identify opportunities for improvement and build strategies to improve patient safety, staff well-being, and organisational performance.

Incident Management Data can be used in a Collaborative in several ways, including:

- **Identify Recurring Problems**

Analysing incident data patterns can identify recurring problems that need to be addressed. By identifying specific incidents that occur with higher frequency, the



Collaborative team can focus on developing strategies to prevent similar incidents in the future.

- **Identify Root Causes**

Incident data can be used to identify the root causes of problems. Understanding these root causes empowers teams to develop more effective solutions. For example, if a particular incident occurs due to inadequate training, the team can create a targeted training programme to address the root cause and mitigate future occurrences.

- **Identify Opportunities for Improvement**

By analysing incident data, Collaborative teams can identify areas within their processes that can be improved.

- **Measurement**

Incident management data can be used for measurement in the following ways:

- **Baseline Assessment:** Incident data provides a starting point to understand the current state of patient safety and incident occurrence.
- **Performance Indicators:** Incident rates, severity levels, and specific incident types can be used as performance indicators to measure improvement progress and evaluate the impact of interventions.
- **Outcome Measures:** Linking incident data to patient outcomes, such as harm, readmission rates, or length of stay, helps assess the effectiveness of improvement initiatives.
- **Comparative Analysis:** Comparing incident data among participating teams allows benchmarking and identifies variations in performance, facilitating learning from high-performing entities.
- **Evaluation of Interventions:** Incident data helps evaluate the impact of improvement interventions by analysing changes in incident rates and patient safety outcomes before and after implementation.
- **Feedback and Reporting:** Sharing incident data and progress reports within the Collaborative fosters transparency, accountability, and continuous learning among participating teams.

The [HSE Incident Management Framework](#) (2020) describes the following six steps in the management of incidents:

1. Prevention through supporting a culture where safety is a priority
2. Identification and immediate actions required (for persons directly affected and to minimise the risk of further harm to others)
3. Initial reporting and notification
4. Assessment and categorisation
5. Review and analysis
6. Improvement planning and monitoring

The QPS Incident Management Team has developed a number of Review Tools and Guidance Documents which offer a practical guide to reviewing incidents. These should be read in conjunction with the HSE Incident Management Framework.

Review of Pressure Ulcer Incidents

- [Pressure Ulcers - A Practical Guide for Review](#)
- [Pressure Ulcer Review - Preliminary Assessment Form](#)
- [Pressure Ulcer Review - Report Template](#)

Review of Service User Falls Incidents

- [Service User Falls - A Practical Guide for Review.](#)
- [Service User Falls Review - Preliminary Assessment Form](#)
- [Service User Falls Review - Report Template](#)

Review Tool Healthcare-Associated Infections (HCAI)

- [HCAI Review Tool Generic](#)
- [HCAI Review Tool SA](#)
- [HCAI Review Tool Severe CDI](#)
- [PPPG Procedure for the utilisation of Review Tools \(RTs\)](#)
- [Worked example HAI Review Tool Generic](#)
- [Worked example HAI Review Tool SA](#)
- [Worked example HAI Review Tool Severe CDI](#)

[The National Care Experience Programme](#) is a collaborative effort between the Health Information and Quality Authority (HIQA), the Health Service Executive (HSE), and the Department of Health in Ireland. Its primary goal is to enhance the quality of health and social care services by gathering feedback from individuals about their care experiences and using that information to drive improvements. The programme includes several surveys, such as the National Inpatient Experience Survey and the National Maternity Experience Survey, with plans to develop additional surveys like the National Maternity Bereavement Experience Survey, National Nursing Home Experience Survey, and National End of Life Survey. These surveys serve to understand people's perspectives on the care they receive, identifying areas of strength and areas needing improvement in health and social care services. Data from the National Care Experience Programme can serve as a foundation for evidence-based decision-making and continuous quality improvement within a Collaborative. It promotes patient-centred care and empowers stakeholders to work together towards achieving better health and social care outcomes.

9. QI Learning, Tools, and Resources to Support Collaboratives

The National QPS Directorate supports a culture of continuous learning by enabling the development of competencies for quality and patient safety across the health system. In particular, the Directorate provides support, tools, and resources to build QI skills, knowledge and confidence. This helps our health service to deliver better care and outcomes for staff and patients.

The following may help you in designing and delivering your Improvement Collaborative:

[The Annual Prospectus of Education and Learning Programmes](#) contains programmes covering quality improvement, incident management, open disclosure, clinical audit and human factors, and information on connecting and networking with others interested in improving quality and patient safety in our health services. Information on quality and patient safety-related programmes offered by other teams across the HSE is included.

The prospectus includes information on several QI programmes (delivered via online, in-person, and hybrid arrangements), including:

- Introduction to Quality Improvement
- Foundation in Quality Improvement
- Improvement in Practice
- Post-graduate Certificate in Quality Improvement Leadership in Healthcare
- Working as a Team for Improvement
- Coaching for Improvement
- National Facilitators Education Programme
- Schwartz Rounds Training
- An Introduction to Engagement Techniques for Quality and Patient Safety - Liberating Structures
- Clinical Audit Training
- Human Factors

[Quality Improvement Knowledge and Skills Guide](#): This guide aims to support our healthcare services in their work to build their local QI capacity and capability. It articulates the six core competencies required for QI and the behaviours, knowledge and skills that align with these competencies. The guide sets out a QI Learning journey where knowledge and skills are incrementally built upon as people choose to progress through the three levels of learning. Within each level, knowledge and skills are set out against the six core competencies aligned to the HSE Framework for Improving Quality. The guide can be used as a pre- and post-learning assessment tool for Collaborative participants, providing evaluation data and indicating where participants most need learning.

[Quality Improvement Toolkit](#) This QI toolkit contains 17 practical tools that make carrying out a Quality Improvement project easier. The tools are appropriate for each of the project's four phases, starting with a 'light bulb' moment to the sustainability plan, where you embed the improvements you have achieved. Some tools will be helpful for all projects, and some

will be more applicable to specific projects. *NB, we are currently updating this Toolkit and the updated version is anticipated to be available in Q1 2024.*

Quality Improvement Terms and Concepts: This document includes a collection of standard terms and concepts used in Quality Improvement and Improvement Science in the Irish healthcare setting. It was collated from a wide variety of national and international resources. It broadly explains terms and concepts used in QI work and links to additional information and resources. A resource section has been provided as an appendix to support an in-depth understanding of how these terms and definitions relate to improvement in practice.

Guidance for analysing and presenting your data includes:

- **Guide on using measurement for improvement methods.** This resource guides how to present your data, including how to create run charts.
- **Excel template for creating a 'C' chart.** This document is an Excel template for creating an SPC “C” chart.
- **Excel template for creating a Run Chart.** This document is an Excel template for a Run chart.
- **Excel template for 8 SPC charts.** This template allows the calculation of 8 SPC charts, including the special cause.
- **Some 'Do's and Don'ts' of measurement.** This document includes examples of some common mistakes people inadvertently make when dealing with measurement and best practices.

Quality and Patient Safety Data for Decision Making Toolkit This toolkit contains tools, resources and guidance to develop a Quality Agenda Item for Boards, Committees and Leadership Teams.

The Quality and Patient Safety Data for Decision Making Toolkit contains four parts:

- Part one helps you plan and test your quality agenda item using quality improvement (QI) and co-design methodologies.
- Part two contains tools and resources to support you in developing a Quality Profile and producing and interpreting statistical process control and run charts.
- Part three contains guidance on developing patient, service user, family and staff ‘stories’ or experiences to share at committee, board and leadership team meetings.
- Part four contains valuable resources to gather feedback and evaluate your project.

QPS TalkTime: The National QPS Directorate provides a regular lunchtime one-hour webinar series focusing on quality safety and improvement. They run approximately every two weeks (in term time) and are open to all those interested in improving quality and patient safety across our healthcare services. The webinars aim to:

- connect people interested in QPS
- share learning and experiences of improvement.



The [Q Community](https://q.health.org.uk) is an initiative connecting people with health improvement experience across the five countries of the UK and Ireland, with almost 6,000 members. Ireland's participation is coordinated and driven by the National QPS Directorate. Membership is free. To apply online, visit: <https://q.health.org.uk>

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Other Useful Resources

A. People's Needs Defining Change: The Health Service Change Guide

[People's Needs Defining Change](#): Health Services Change Guide (2018) is a step-by-step guide designed to facilitate and guide the process of leading and implementing change within healthcare settings, supported by evidence-based research. It is intended to provide health and social care system managers and staff with practical and hands-on support in implementing change.

The guide comprises the Health Services Change Framework and the step-by-step change implementation guide. It increases the chances of success by supporting teams in understanding needs, valuing experiences, and designing service improvements. It simplifies change complexity by tailoring initiatives to local contexts and facilitating local and national collaboration. The guide helps teams develop skills, knowledge, and confidence through a detailed process and practical resources.

The People and Culture Change Platform focuses on collective leadership, shared values, engagement, behaviour change, and accountability. The engagement approach involves identifying stakeholders, tailoring engagement strategies, and sustaining effective communication.

By leveraging the Health Services Change Guide within an Improvement Collaborative, members can benefit from its practical advice, evidence-based approach, helpful tools and shared understanding, ultimately leading to more effective and successful change initiatives. Collaborative leads may find it beneficial to use the Change Guide to identify the existing culture in services so that they can navigate same in the move to a continuous culture of improvement.



Figure 12: People's Needs Defining Change, Health Services Change Guide

B. Measurement for Improvement: Run Charts

An annotated run chart is a graphical representation of data over time, which includes additional information or annotations to provide context and insights. It typically consists of a line graph where data points are plotted on the y-axis, and time intervals are plotted on the x-axis. In addition to the data points, annotations are added to the chart to highlight significant events, interventions, or changes that may have influenced the observed patterns or trends.

These annotations can include details about specific actions taken, modifications to the process, external factors, or any other relevant information that helps explain the fluctuations or improvements observed in the data. By providing contextual information alongside the data, the annotated run chart helps users understand the story behind the data and identify potential cause-and-effect relationships.

The purpose of an annotated run chart is to enhance the interpretation and analysis of the data, facilitating informed decision-making and quality improvement efforts. It allows stakeholders to track progress, identify successful interventions, and learn from experiences.

The minimum standard for monitoring a team's progress throughout the Collaborative is an annotated run chart of the selected process measures. Data points should be plotted monthly on a run chart and submitted with senior leader reports. Annotations on the run chart should include changes being evaluated or implemented and other circumstances that could impact Collaborative measures.

Example of a Run Chart

Percentage of patients with a hip fracture undergoing surgery within 48 hours, by month

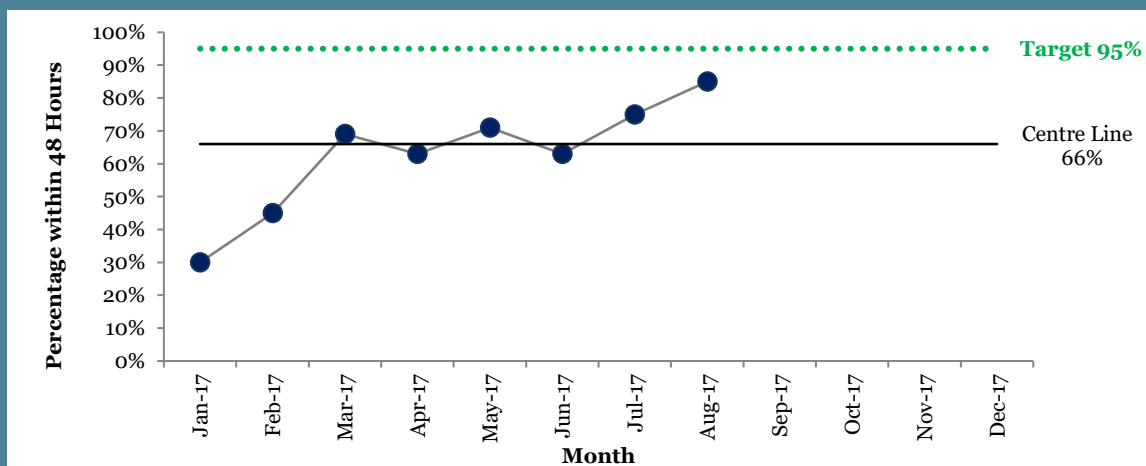


Figure 13: Run Chart Example



C. Sustaining and Spreading Improvements: Communities of Practice

Communities of Practice (CoPs) provide a forum for sharing knowledge and expertise, helping to promote collaboration and innovation. They bring together groups with different knowledge perspectives and strengthen their capacity to work and learn creatively.

The [European Commission's Community of Practice Playbook](#) provides a hands-on toolbox to help organisations run and develop CoPs. Based on rigorous scientific research and vast empirical experience, the playbook covers eight success facets of CoPs: vision, governance, leadership, convening, collaboration and cooperation, community management, user experience, and measurement. It can help organisations to co-create a roadmap to develop, engage, and empower their CoPs at every stage of their journey.

The [Communities of Practice Leadership Development Programme](#) run by The [Health Innovation Network](#) (HIN) and [Q Community](#) offers experiential learning to deepen improvement knowledge and develop leadership skills for convening a CoP. The program is designed to address the challenges and complexities faced by health and care professionals in their day-to-day work, with a focus on practical experience and successful CoPs. The shift towards integrated care systems and the importance of social learning and shared transformation in the health and care sector are emphasised. Participants have the chance to shape workshop content based on their own Community of Practice experiences.