An Stiúrthóireacht um Ardchaighdeáin agus Sábháilteacht Othar
Oifig an Phríomhoifigigh Cliniciúil

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

Quality and Patient Safety Data for Decision Making Case Study;

Co-designing the Quality Agenda with the HSE Leadership Team

January 2023

Version 1

About National Quality and Patient Safety Directorate

The National Quality and Patient Safety Directorate (NQPSD) was established in mid-2021 as a result of the HSE Central Reform Review. The NQPSD 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

The NQPSD works in partnership with HSE operations, patient representatives and other internal and external partners to improve patient safety and the quality of care 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 platform 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 NQPSD delivers on its purpose through the following teams:

- **QPS Improvement:** Use of improvement methodologies to address common causes of harm.
- **QPS Intelligence:** Using data to inform improvements in quality and patient safety.
- **QPS Incident Management:** developing and monitoring the Incident Management Framework, Open Disclosure Policy and National Incident Management System.
- **QPS Education**: Enabling QPS capacity and capability in practice.
- **QPS Connect:** Communicating, sharing learning and making connections.
- **National Centre for Clinical Audit:** Implementing the HSE National Review of Clinical Audit Report recommendations

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Version Control

Date	Version	Created by	Reviewed by	Final document approved by
26.01.2023	1	QPS Intelligence Team	Dr Jennifer Martin	Dr Colm Henry

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Foreword

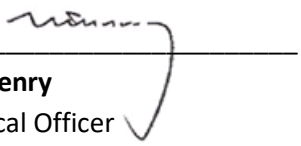
It is very challenging in any large complex healthcare organisation such as the Irish Health Service Executive to efficiently and effectively organise the process of enabling board level oversight. This is why I, as Chief Clinical Officer, together with all my colleagues on the HSE Directorate, undertook the Quality Improvement Project described here with the goal of developing a quality agenda item to improve our oversight and accountability of quality and patient safety and offering a robust process for quality oversight to the incoming board. I am delighted to share with you this case study and toolkit which presents the innovative methods developed and used during the project.

Over the course of 6 months, with the support of the National Quality and Patient Safety project team, we tested a new approach to how we assess quality of care in our monthly national meeting. This case study describes the quality improvement and co-design methodologies that were used to iteratively develop a quality agenda item over 6 months. The Picture-Understanding-Action approach was used to plan and implement the project, to ensure the 'Picture' of quality in the form of the Quality Profile and People's Experience of Quality was used to facilitated greater insight and 'Understanding' of the quality of care, and guide our 'Action'.

Two complementary aspects of the 'Picture' were developed simultaneously: a Quality Profile that uses statistical process control methods to present indicators across seven domains of quality, and 'People's Experience of Quality' where patient, service-users, families and front-line staff experiences presented at our meetings. The Quality Profile developed over the course of this project applied statistical process control methodology which is a valuable tool for busy leadership groups to analyse variation over time in a selected "critical few" indicators across a healthcare system, and to differentiate between expected and unexpected variation. The second and vital aspect developed over the course of this project was hearing directly the experiences of patients, service-users, families and front-line staff. These experiences are so important in really understanding the experience and quality of the care that we are striving to provide.

When the HSE Board was established in 2019, this approach was handed over to the HSE Board and it continues to evolve and form a key part of the HSE Board's Safety and Quality Committee's work.

My thanks to my colleagues on the HSE Directorate who participated in the co-design, testing and refinement of this project. I would like to thank the members of the project team, in particular Jennifer Martin, Maureen Flynn, John Fitzsimons, Michael Carton, Gráinne Cosgrove and Gemma Moore. I encourage you to read this case study and associated toolkit, and use it to evolve your organisation approach to overseeing and improving quality.



Dr Colm Henry
Chief Clinical Officer
Health Service Executive

Contents

1. Executive Summary

Project summary

In 2018, the HSE Directorate requested that the National QI team (now National Quality and Patient Safety Directorate NQPSD) support them to develop a quality agenda item to improve oversight and accountability of quality and patient safety, in order to support the incoming board in their role. The HSE Directorate were an internal group of national HSE directors which fulfilled all traditional responsibilities of a board of directors until a board was re-established in 2019 (after this project was complete). This report describes the co-development of a quality agenda item with the HSE Directorate over a six month period using Quality Improvement (QI) methods and the learning from applying these approaches. The project team had recently developed the 'Picture-Understanding-Action' approach (Martin et. al 2022) that outlined the steps that support a board to oversee and improve quality. The quality agenda item was designed to contain a 'Picture' of quality which facilitated greater insight and 'Understanding' of the quality of care, and guided 'Action'.

Using co-design and applying the 'Picture-Understanding-Action' approach the project team supported the HSE national directors to identify and test a qualitative and quantitative picture of the quality of care across the Irish health system. The quality agenda item developed consisted of:

1) A **Quality Profile (QP)** which presented quantitative indicators, analysed using statistical process control methods, focusing on the Directorate selected critical few indicators across seven domains (safe, effective, person-centred, timely, efficient, and equitable and better health and wellbeing). Statistical Process Control (SPC) methodology was used to analyse and display variation over time and across a system, and to differentiate between expected (common cause) and unexpected (special cause) variation.

2) **People's Experience of Quality (PEQ)** which presented qualitative information on patient, service-users, families and front-line staff experiences.

Over the course of six meetings these Quality Profile and People's Experience of Quality were tested and evolved using Plan-Do-Study-Act (PDSA) cycles.

The quality agenda item proved successful in improving national oversight of quality in the Irish healthcare system. At the end of the project, the quality agenda item was offered to the newly instituted HSE Board as a robust process to support them in their role of providing oversight of quality and safety of care. The HSE Board's Safety and Quality Committee continue to have both the Quality Profile and People's Experience of Quality items at their monthly meetings.

Quality Agenda Project Phases

Phase One – Planning

The planning phase enabled the project team to develop a baseline understanding of the approach to overseeing quality at directorate level, to understand the directors' expectations and to ensure a collective

commitment from the directors to the project. Phase one consisted of seven tasks: establish project governance structure, develop project methodology, complete desktop research on best practice, conduct scoping interviews with directors, consult clinical and quality and patient safety subject matter experts, hold co-design workshop with directors and identify training needs.

Phase Two - Testing Phase

Three sets of PDSA cycles were used in parallel over the course of the six-month project. Using a PDSA approach within the Directorate monthly meetings enabled the directors to iteratively co-design changes to the quality agenda item, with minimal disruption to the business of the meeting. The testing phase had three objectives: to agree the indicators that would be included in the Quality Profile, to iteratively test and refine the formatting and display of the Quality Profile and to test four approaches for the People's Experience of Quality. The PDSA cycles were:

Table 1. PDSA Cycles

PDSA 1 – Quality Profile Indicators	At a co-design workshop the directors agreed 7 domains of quality and identified 12 indicators for inclusion in the Quality Profile. These indicators were introduced incrementally over the course of the project.
PDSA 2 – Formatting and Display of Quality Profile	This PDSA focused on the use of the statistical process control approach to enhance understanding of the variation over time and across the system, and improvement in display of individual measures and changes to single measure graphics, based on feedback from directors during and after meetings. The final version of the Quality Profile developed during this project is available in Appendix C.
PDSA 3 – People's Experience of Quality	Four different approaches were tested at Directorate meetings: (i) a video of a staff member experience, (ii) review and discussion of the qualitative information in a patient experience survey, (iii) a service user attending the meeting to share their experience, and (iv) a HSE director meeting a patient one-to-one and then narrating and discussing their experience in the meeting.

Phase 3 – Sustaining and Spreading

In 2019 the HSE Board was established and the Directorate structure was replaced with an Executive Management Team. The Directorate offered the quality agenda item developed during this project to the HSE Board as an approach to support them in their role in overseeing and leading quality. The project team held a workshop with the HSE Board Safety and Quality Committee to introduce the Quality Profile, to provide training on SPC and to introduce the Quality Profile and People's Experience of Quality, and these are now standing items on the HSE Board's Safety and Quality Committee agenda. They are collectively discussed and actions are requested of the executive of the HSE or escalated to the Board. The Chair of the Safety and Quality Committee presents the Quality Profile to the HSE Board as well as highlighting issues that have arisen in People's Experience of Quality presentations.

Table 2. Recommendation for Future Project

Planning	Although time consuming, preparation sets the project up for success. Tasks such as background research on best practice, scoping interviews and consultations with subject matter experts and a co-design workshop were invaluable to inform the direction and focus of the project. In addition, establishing the project governance structure facilitates the smooth running of the project. Combined these tasks provide a solid base for the implementation phase.
Project Methodology	Establishing an appropriate methodology provides a systematic approach to developing a quality agenda. The 'Picture-Understanding-Action' (Martin et al., 2022) approach guided our overall purpose. Co-design and PSDA cycles facilitated the iterative development and refinement of the QP and PEQ based on test of change, evaluation and acting on feedback.
No Stories Without Data, No Data Without Stories	The inclusion of qualitative information (patient, service users, family and staff experiences) together with quantitative information (quality profile indicators) enhanced discussions by grounding the board and committee members in the real life experience and by providing context and/ or triangulation to the quantitative information.
Training	Group and individual training on interpreting SPC quality indicators should be offered initially and as a refresher to members given the variation in previous experience of using these methods.
Participant Observer	During the testing phase a project team member attending Directorate meetings for this agenda item serves several important purposes. The project member can observe discussion and decision making resulting from the QP and PEQ. It allowed directors to provide suggestions or make change requests in real time. Both of these help inform the evaluation of PDSA cycles. The project member, as a QI expert, can provide real-time guidance on the methodology and interpretation of SPC during meetings. The provision of just-in-time training allows very busy directors to ask questions and learn without having to take time out of their day.
Time Commitment	Board and committee members should plan to devote sufficient time to the development of a quality agenda items including participation in workshops, training on SPC and the provision of feedback. Sufficient time should be included on the meeting agenda to engage with and discuss the quality agenda items.
Ownership	The project team's role is to facilitate the members to reach a consensus on the design of their quality agenda. Co-design assists in the successful adoption of a quality agenda item by members gaining a sense of ownership of the item.
Planning for Sustainability	Planning to sustain the quality agenda item ensures continuity of the efforts in future and assists in transition of the project into business as usual. In this case, the project was transferred to the HSE Board's Safety and Quality Committee who co-designed the development of these items and reviewed the QP and PEQ at their committee meetings.

2. Introduction

This report describes the co-development of a quality agenda item with the HSE Directorate using Quality Improvement (QI) methods and the learning from applying these approaches. In 2018, the HSE Directorate identified that the information they received about the quality of care was not on a par with their sight of financial matters. Martin and Flynn (2022) had recently developed the 'Picture-Understanding-Action' approach that outlined the steps that support a board to oversee and improve quality in work with the Mater Hospital[1] and Children's Health Ireland at Temple Street Boards[2]. The HSE Directorate requested that the National QI team (now National Quality and Patient Safety Directorate) support them in undertaking a similar project to develop a quality agenda item for their meetings.

The HSE Directorate were an internal group of national HSE directors which fulfilled all traditional responsibilities of a board of directors until a board was re-established in 2019 (after this project was complete). The Directorate set out to develop a quality agenda item to handover to the incoming board that could be sustained in the long-term and improve oversight and accountability so that better actions could be taken at board level. Prior to commencing, the project directors stated that they faced various challenges that limited their ability to effectively govern quality and safety. Based on the information and reports provided to them, the Directorate struggled to judge the level of quality and safety of services. Many of the reports presented at Directorate meetings were lengthy and could not be discussed in detail due to time constraints. On certain issues such as breast screening, discussions were reactive to media and the political system. Significant work had occurred to improve performance data including introducing trends and yearly comparisons. The Directorate wanted to evolve its quality and safety capacity further. The outcome of the quality agenda item was to focus on the development of a culture of assurance and to present measures of a culture of quality and safety which help the directors establish whether the system is safe or unsafe. The agenda item was aimed to guide the Directorate in identifying patient safety issues and system failures in order to take appropriate actions to reduce the risk to patients and staff.

Using co-design and applying the 'Picture-Understanding-Action' approach (Martin et al 2022), the project team supported the HSE national directors to identify and test a qualitative and quantitative picture of the quality of care across the Irish health system. The quality agenda item developed consisted of 1) a *Quality Profile (QP)* which presented quantitative indicators, analysed using statistical process control (SPC) methods to provide an overview of key indicators of quality and safety across health and social care services and to enhance understanding of the variation over time and across the system in these key indicators; and 2) *People's Experience of Quality(PEQ)* which presented qualitative information on patient, service-users, families and front-line staff experiences. These methods were tested and evolved over the course of six meetings, leading to quality of care being prioritised and interrogated at a national level.

[1] **https://www.hse.ie/eng/about/who/nqpsd/qps-intelligence/board-on-board-quality-mmuh.pdf**
[2] **https://www.hse.ie/eng/about/who/nqpsd/qps-intelligence/chi-temple-street-case-study-and-toolkit.pdf**

3. Literature: Leading and Governing Quality

There is a growing body of literature on the effective role of board oversight in governance for quality and patient safety in improving quality of care (Millar et al., 2013). Including quality as an agenda item at board meetings allows members to deliberate on quality of performance and is linked to improved quality management (Botje et al., 2014). Research suggests that healthcare board members should strive to keep quality and safety as a top priority, and routinely review safety metrics and narrative reports (Gandhi et al., 2016). While Boards have the fiduciary duty to ensure the quality and safety of care, there is variation among boards in the priority they assign to this responsibility, their training and knowledge to assess improvement, and the type of quality measures they rely on (Goeschel et al., 2011).

Governance for quality is a pertinent issue for health systems across the world. The New Zealand Health Quality and Safety Commission is working to challenge outmoded views of healthcare governance that are overly focused on financial health (Health Quality & Safety Commission New Zealand, 2016). The Australian Commission on Safety and Quality in Healthcare has identified board participation in defining safe and high-quality care and the review of key quantitative and qualitative quality outputs as essential to a healthcare board's role in managing quality (Australian Commission on Safety and Quality in Health Care, 2015). A recent report in the UK based on input from board members of healthcare boards revealed that board members considered the discussions of lived experience of healthcare helpful in keeping the board focused on quality (Smith et al., 2021). A study based in the US demonstrated that organisations where the board regularly received reports on quality performance, performed better than those that did not (Szekendi et al., 2014).

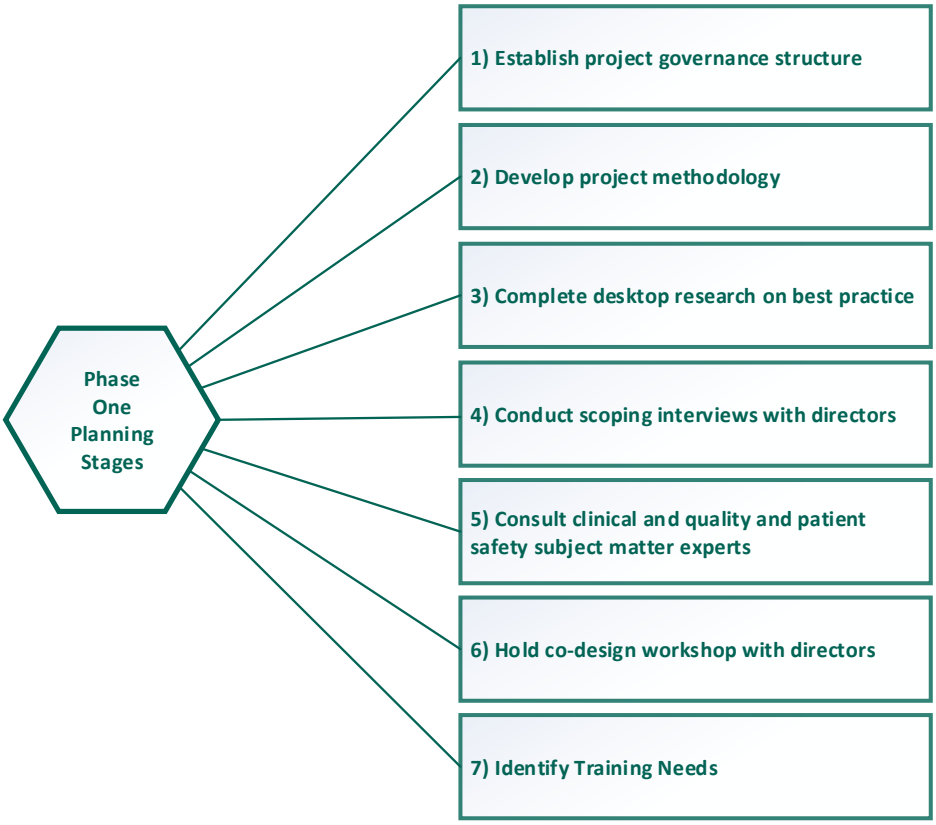
The Institute for Healthcare Improvement (IHI) proposed a framework for effective board governance of health system quality (Daley Ullem et al., 2018). This framework is supported by an assessment tool, and other support guides aimed at reducing variation in quality oversight (Daley Ullem et al., 2018). However, this framework offers limited actionable steps that a Board can take to include quality in its agenda and its continuous monitoring. A growing focus on the subject has highlighted the need for more research on the mechanisms boards can follow to achieve expected outcomes, educating and training boards, identifying, and presenting relevant and timely measures to the board, allocating appropriate time to quality on board meetings agendas and 'people-ising' the data by including patient and staff stories (Thompson, 2013).

Martin and colleagues (Martin et al., 2022) demonstrated the benefits of iteratively introducing changes with Boards in Irish hospitals by developing a quality improvement approach titled "Picture-Understanding-Action" (PUA) to enhance the role of healthcare boards in the oversight of healthcare quality and its improvement. The PUA approach presents a quantitative and qualitative "Picture", probed by board members to develop a shared "Understanding" which leads to "Action(s)" from board members to improve the "Picture" and "Understanding" (feedback action), to ask better questions and make better decisions and recommendations to the executive (feed-forward action).

4. Phase One: Planning

There were seven key tasks involved in the planning phase:

Figure 1. Phase One Planning Stages



1) Establishment of Governance Structure

Once the decision was made to provide support for the development of the quality and safety agenda item, the project governance structure was established. Mr Tony O'Brien, the Director General (later replaced by John Connaghan, Anne O'Connor and Mr. Paul Reid, CEO), and chair of Directorate was the project sponsor and Dr Colm Henry, Chief Clinical Officer and Directorate member was the project champion. The governance structure included members from the HSE Directorate, an advisory group, a project team, a quality profile working group and patient and staff engagement working groups:

Figure 2. Governance Structure for Quality Profile

Governance Structure		
Directorate	Advisory Group	Project Team
Director General	Project Manager / QID Lead	Project Manager / QID Lead
Corporate Secretary	Corporate Secretary	QIP Clinical Director & Quality Improvement Facilitator
Chief Clinical Officer	Chief Clinical Officer & Directorate Member	QIP Evidence for Improvement Lead & Quality Improvement Facilitator
Chief Operations Officer	Chief Operations Officer & Directorate Member	QIP Lead – QI Connections & Quality Improvement Facilitator
National Director - HR	National Director – HR & Directorate Member	QIP Lead – QI for Boards & Quality Improvement Facilitator
Chief Strategy & Planning Officer	National Director – QID	Directorate Patient & Staff Engagement Working Group Lead
Chief Financial Officer	National Director – QAV	Directorate Quality Profile Working Group Lead
	QIP Evidence for Improvement Lead & Quality Improvement Facilitator	QI Project Data Curator
		Data Owners / Managers

Directorate Quality Profile Working Group
Core Membership*:
Working Group Lead
Project Manager / QID Lead
Quality Profile Sustainable Production Project Lead

Directorate Peoples Experience of Quality Working Group
Core Membership*:
Working Group Lead
Service User Representative
Project Manager / QID Lead

*Other members can be co-opted onto the working group for the specific pieces of work or PDSA cycles

The project and working groups met weekly throughout the project, while the advisory group met before and after the monthly Directorate meetings.

2) Develop Project Methodology and Documentation

A project charter was developed, which was signed off by the Director General. The purpose of the project charter was to create a detailed understanding of what the project would entail and how it would be measured, and to ensure that all stakeholders had a shared understanding and were committed to the project. It helped to identify potential gaps at project initiation, so that they could be addressed at an early point in the project. The project charter mapped out the aims, objectives, deliverables, timescale, benefits, risks and resources required to complete the project, see Appendix A.

Roles and responsibilities were established and the next step was the development of a detailed methodology for the project. The methodologies used during this project included the 'Picture-Understanding-Action' approach (Martin et al., 2022), the Model for Improvement (Langley et al., 2009), Plan-Do-Study-Act (PDSA) cycles and co-design methods in its design and implementation.

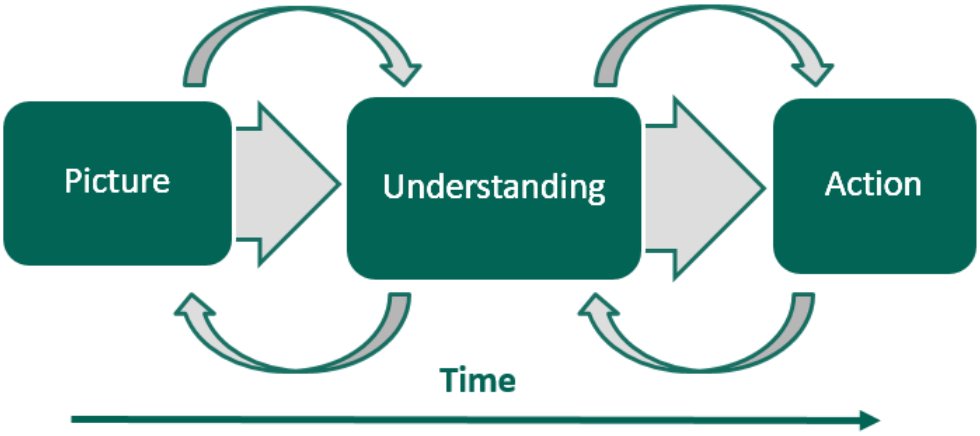
Table 3. Picture-Understanding-Action Methodologies

Methodology	Description
Picture-Understanding-Action	"Picture-Understanding-Action" describes an actionable approach on how and what information (Picture) is provided to a board, the collective interaction that a board must have to extract meaning (Understanding) and act appropriately (Action). (Martin et al., 2022)
Model for Improvement	The model for improvement provides a framework for developing, testing and implementing changes leading to improvement by focusing on three questions: 1. *What are we trying to accomplish?* 2. *How will we know whether a change is an improvement?* 3. *What changes can we make that will result in improvement?* (Langley et al., 2009)
Plan-Do-Study-Act cycles	Part of the model for improvement, *PDSA cycles* are used to rapidly test improvement ideas and make incremental changes. (Langley et al., 2009)
Co-design	A co-design approach aims to utilise the knowledge, skills and experience of all stakeholders, which leads to the development of a greater understanding, engagement and ownership of processes. (Ward et al., 2018).

Picture- Understanding-Action

The 'Picture-Understanding-Action' (PUA) approach (Martin et al., 2022) was developed by members of the project team to enhance the role of healthcare boards in the oversight of healthcare. The PUA approach evolved over a number of projects, including the Boards of the Mater[3] and Temple Street hospitals[4]. The quantitative "Picture" consists of a quality dashboard/profile of board selected indicators representative of the health system using SPC charts to focus discussion on real signals of change. The qualitative picture provides stories or experiences of patients and staff to add context and meaning to the 'numbers' and to ground the board in the meaning and impact of their work. Probing this "Picture" with collective grounding[5], curiosity and expert training/facilitation a shared "Understanding" is developed. This leads to "Action(s)" from board members to improve the "Picture" and "Understanding" (feedback action), to ask better questions and make better decisions and recommendations to the executive (feed-forward action). This project applied the PUA approach as the overarching method to ensure that attention was given in planning and implementation to the three key drivers of the picture of quality of health and social care services, the Directorates collective understanding of this and feedback and feedforward action.

Figure 3. Picture-Understanding-Action Approach



Model for Improvement and Plan-Do-Study-Act (PDSA) cycles

The Model for Improvement and PDSA cycles were used to guide the iterative design, testing and implementation and "Picture-Understanding-Action" approach. Previous literature suggests that healthcare boards should be involved in choosing the quality metrics they will monitor (Scott, 2015). Using PDSA cycles allowed the directors collectively to engage in design and implementation of the project including the choice

[3] **https://www.hse.ie/eng/about/who/nqpsd/qps-intelligence/board-on-board-quality-mmuh.pdf**
[4] **https://www.hse.ie/eng/about/who/nqpsd/qps-intelligence/chi-temple-street-case-study-and-toolkit.pdf**
[5] *Grounding* refers to board or committee members engaging with the personal experiences of people who use or work in health services to help frame and focus their discussions and decisions.

of indicators and how they were selected. It served as a way of providing the directors with the experience of applying a change methodology promoted by the HSE, and giving them a direct understanding, through their own actions, of the benefits and challenges of using PDSA cycles to improve quality and safety. It also allowed the project team to get timely feedback from the Directorate in order to iteratively improve the information being provided to them. Three sets of PDSA cycles that were planned for use in parallel over the course of this six-month project are described in part two.

Co-design

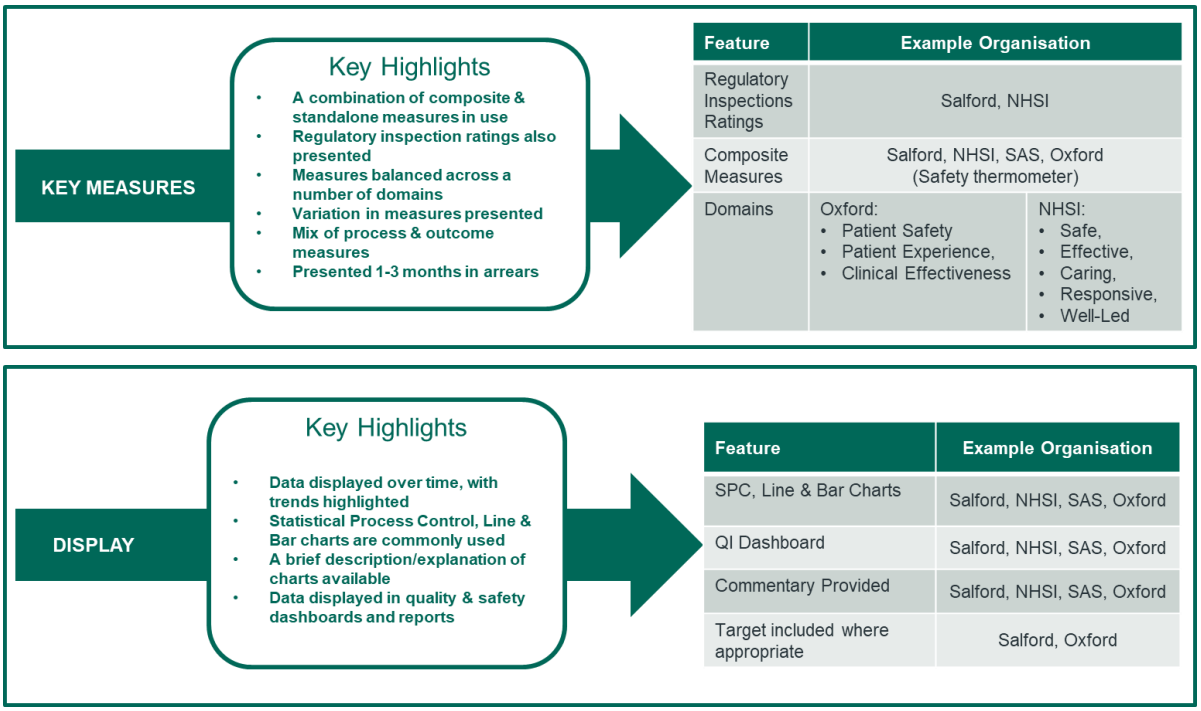
Co-design facilitates combining service user insights with in-house professionals' knowledge leading to better outcomes for service users (Trischler et al., 2017). Co-design was used in this project to directly engage the directors in design of every part of the quality agenda item. Co-design complimented the PDSA approach by ensuring greater involvement of the directors themselves in the 'Plan' and 'Study' parts of the cycle. Methods employed included:

- One-to-one semi-structured interviews with directors individually to inform project priorities at the start of the project
- A co-design workshop with all directors at project initiation. Directors were supported to select and prioritise indicators of quality and methods of engaging with people's experiences
- Feedback collected at meetings which guided changes and improvements throughout the testing phases
- An evaluation workshop at the end of the project and one-to-one interviews with directors to capture feedback and learning to further refine the approach based on their experiences

3) Desktop Research of International Best Practice

The project team conducted a detailed desktop search to identify the quality agenda examples of various boards. The analysis depended on the availability of the board reports. The board reports analysed in depth during this phase included the Scottish Ambulance Service (SAS), National Health Service Improvement England (NHSI), Salford Royal NHS Foundation Trust and Oxford Health NHS Foundation Trust. The analysis identified three key areas for consideration for the project: person centeredness, types of measures and displaying information.

Figure 4. Desktop Review



4) Scoping interviews with participants

One-to-one semi-structured scoping interviews with members of the Directorate and senior HSE staff were conducted by two project team members. The purpose of these interviews was to understand what senior executives viewed as most important in a Quality and Safety (Q&S) agenda item and the information and means of interpretation that would provide the best picture and understanding for their purposes. Eleven interviews were conducted with each interview focusing on three open ended questions:

1. *In your opinion, why does the Directorate want to enhance the way it looks at quality?*
2. *Are there specific aspects of service provision or care that you feel are particularly important when looking at Q&S?*
3. *Are there any supports that would help you use Q&S information most effectively?*

All members acknowledged the importance of quality in relation to their role and the existence of a gap in the system however they were unsure of the way forward and were sceptic about how to execute a comprehensive and useful discussion on quality.

The directors' aim was that the new agenda item would be an engaging and meaningful discussion that would add value in terms of what gets measured and what gets done. The agenda item should inform directors if the services are unsafe and what could be done to ensure provision of adequate resources. They identified a need for an early warning system to flag issues to be addressed.

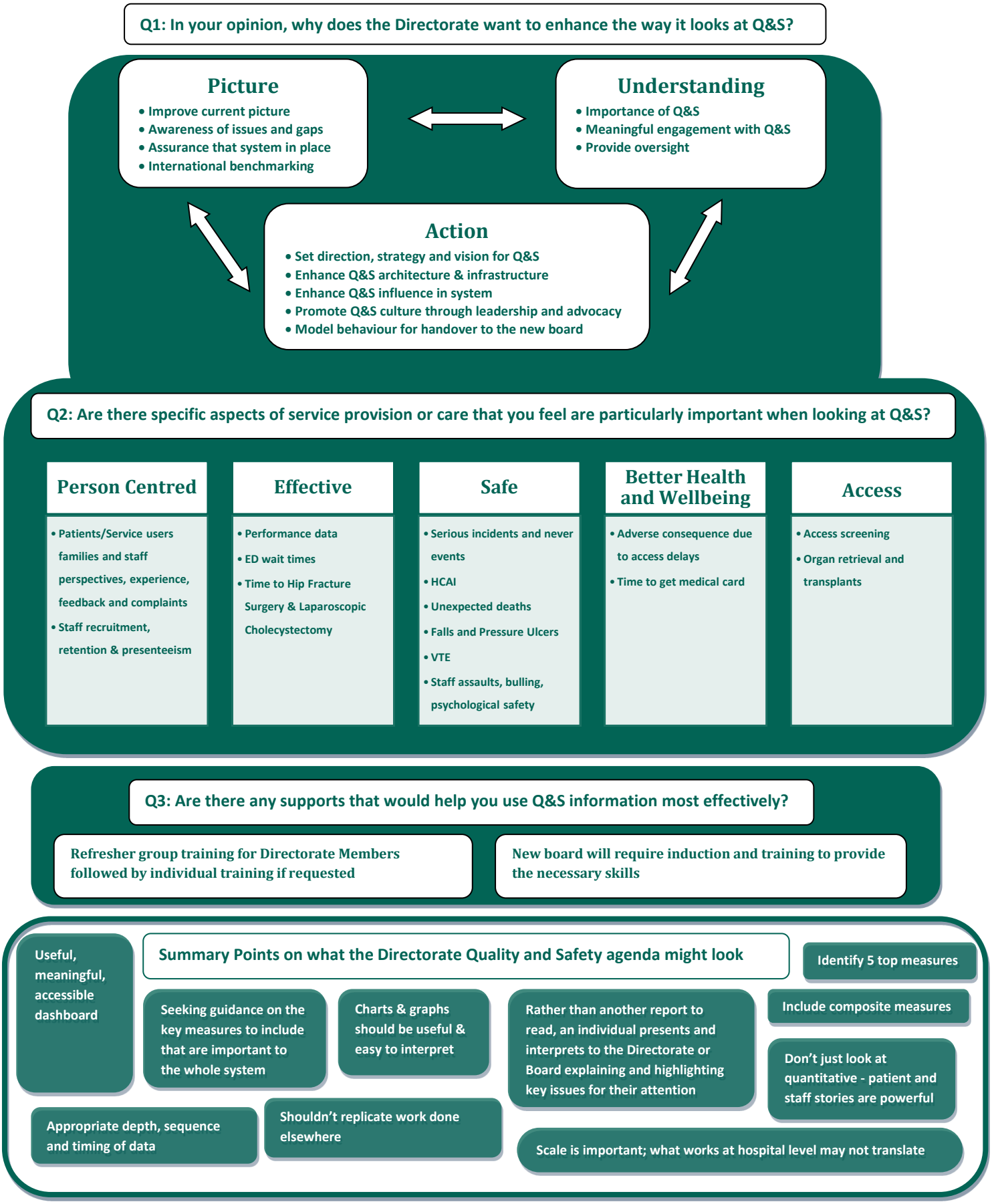
In terms of the structure of the agenda item, the directors highlighted the need for an interesting and engaging report in a clear format. In terms of the content of the agenda item, there were a variety of

suggestions. Some expected to see quality on a scale with a comparison to other jurisdictions while others expected already interpreted information to be presented to them. Another member expected the agenda item to recommend actions to be taken while also highlighting the time and resources needed to do so. Another suggestion was to bring in a presenter during the discussions who is a data expert and could present the current Q&S scenario and recommend what needs to be done.

The majority of the directors believed in the worth of patient stories in offering insights which quantitative data cannot. However, they believed that including patient stories in the meetings should follow a structured format and were interested to explore manageable options such as videos. The members also acknowledged the importance of staff stories as a potential component of the agenda item.

Themes were developed through thematic analysis of the interviews (see figure 5).

Figure 5. Thematic Analysis of Interviews



ED - Emergency Department; HCAI - Healthcare Acquired Infections; VTE - Venous Thromboembolism

5) Consultation with Clinical and Quality and Patient Safety Subject Matter Experts (SMEs)

One-to-one interviews were held with Irish clinical and QPS SMEs to (i) help identify the important aspects of care, (ii) gain a deeper understanding of what QPS information was available, and (iii) understand the benefits and limitations of same, that would best provide insight into the areas identified by the directors and the international review.

These interviews, together with the desktop research, resulted in the identification of 117 important aspects of care. This number was considered to be too many to be feasible for the Directorate to consider, and so these individual aspects of care were reviewed by a team of doctors, nurses and data experts and refined by applying the following criteria:

- Reflective of quality of care, e.g. safe, effective, person centred, or leads to better health and wellbeing
- Important, e.g. areas with high mortality, morbidity, costs, areas know to have variation or not performing as well as international comparisons
- Outcome level where possible

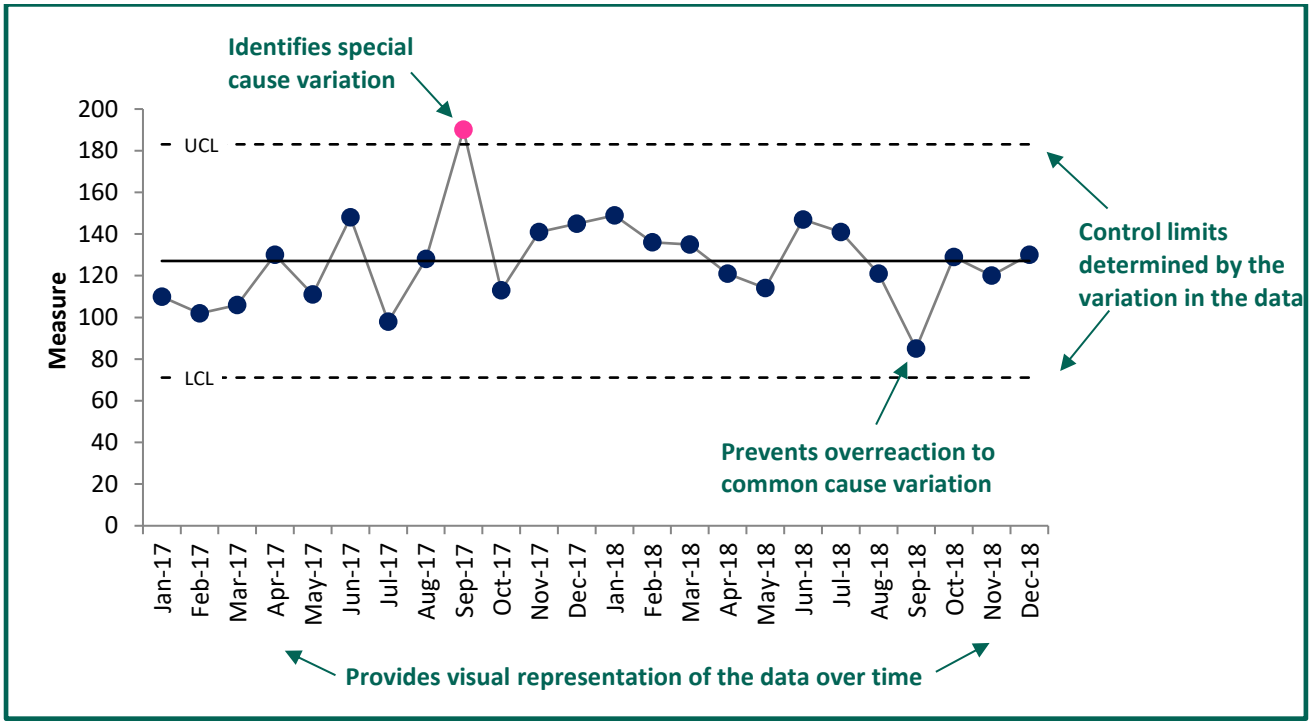
This process resulted in a 'long list' of 63 aspects of care, which after applying further criteria to ensure a balanced group of 'aspects of care', was grouped into a short list of 13 proposed aspects of care and 50 aspects of care on a reserve list for consideration at the co-design workshop.

6) Co-design Workshop

The planning phase concluded with a co-design workshop to identify qualitative and quantitative information that would support the development of a fit for purpose HSE Directorate quality agenda item. It was designed as a participatory, co-development workshop based on the insights from the interviews, the desktop research of international best practice and the interviews with Irish clinical and quality subject matter experts.

At the commencement of the workshop the project team presented the background and rationale of the project as well as the proposed QI approach using the 'Picture-Understanding-Action' model and PDSA cycles so that directors understood the approach and their role in the project. A presentation was given summarising feedback of the individual interviews with the executives and clinical and quality experts and the review of best practice and examples from exemplar organisations regarding Board Quality and Patient Safety Agenda in order that all directors had a good understanding of what indicators and approaches were available. The Project team provided an introduction to understanding variation in healthcare data, including the differences between common cause and special cause variation, the risks of failing to distinguish between these types of variation, and the benefits of using SPC charts to understand and analyse data. The project team also provided introductory training on how to interpret SPC charts. The remainder of the workshop focused on practical tasks to help directors identify the picture (data and information) that they wanted to develop over the course of their QI project.

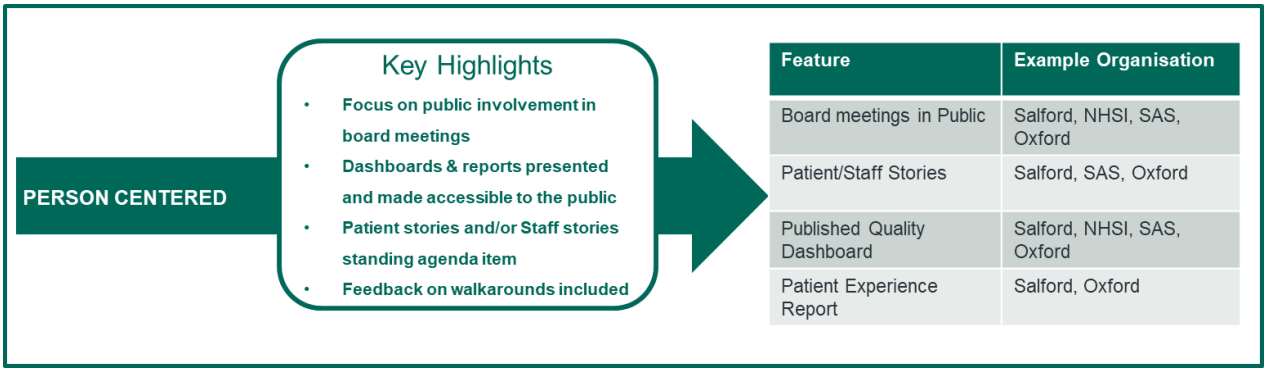
Figure 6. Statistical Process Control Chart



Task 1: Designing People's Experience of Quality

During the pre-workshop individual interviews, participants indicated the importance of including patient and staff experiences of quality at Directorate meetings. Patient and staff perspectives were considered important to provide a full picture of how quality, or failures of quality, are experienced by those who use our services and by our frontline staff. International best practice confirmed the inclusion of person centred patient and staff experience during meetings by exemplar Boards such as Salford Royal NHS Foundation Trust, the Scottish Ambulance Service and Oxford Health NHS Foundation Trust.

Figure 7. Review of Best Practice Person Centred Experience



Feature	Example Organisation
Board meetings in Public	Salford, NHSI, SAS, Oxford
Patient/Staff Stories	Salford, SAS, Oxford
Published Quality Dashboard	Salford, NHSI, SAS, Oxford
Patient Experience Report	Salford, Oxford

Workshop participants were invited to consider four possible options for including patient and staff experiences of quality at Directorate meetings. Participants were divided in to four small groups and tasked with deciding whether they wished to test the options and to rank them in their order of preference (1 being

highest preference and four being lowest preference). Following the ranking exercise the group decided to test and evaluate all of the four options in order of overall ranking:

Figure 8. Options Ranking

Task 2: Designing the Directorate Quality Profile

The Directorate Quality Profile was to be a report of the key quality indicators, displayed in a way that was understandable and useful for the Directorate. The project team proposed a 'long list' of measures or aspects of care related to the picture of quality based on the input from the Directorate and SME interviews and the scoping review of international practice. These measures were not at the detailed level of an indicator or KPI, but rather described the area of interest e.g. *Staph. Aureus infection* rather than the indicator that was eventually included of 'hospital acquired new cases of S.aureus bloodstream infection per 10,000 bed days used'.

The first consideration was the use of domains or dimensions of quality to structure the Directorate Quality Profile. The Workshop facilitation team proposed the use of 4 domains of quality as per the National Standards for Safer Better Healthcare (HIQA, 2012): Safe, Effective, Person-Centred and Better Health and Wellbeing. However one director proposed that the Institute of Medicine Domains of Timely, Equitable and Efficient should be added and the directors collectively agreed to create a list that combined the domains from both. The final list of seven domains chosen were:

Figure 9. Chosen Domains

The second consideration introduced by the facilitation team was the appropriate number of measures that should be included in the Directorate Quality Profile. While the directors agreed in principle to having a short

list of measures, the feedback at the workshop was strongly in favour of not putting a maximum limit on the number of measures at this point.

The third consideration discussed at the workshop was which aspects of care the directors would specifically like to include in the Directorate Quality Profile. This task began with the facilitation team presenting their proposed 'short list' of 13 aspects of care. A further 50 aspects of care were presented for the Directorate to consider. To support an interactive discussion, each 'aspect of care', together with a short sentence on what it described and why it was important was put on a card, which was stuck up on the largest wall in the room. These aspects of care were clustered into the different domains of quality. This allowed directors to actively take down one aspect of care and replace it with another. There was an engaged discussion and debate from directors on the merits of including specific aspects of care. The directors also identified additional aspects of care not included in the proposed list and wrote these on cards and put them on the wall. The output of this task was that the directors identified which aspects of care were greatest priority and assigned to each one of the seven domains.

The final consideration was the approach to analysing and displaying this information and the directors agreed that the SPC approach, including funnel plots would be fit for their needs.

Task 3: Organisation of the Directorate Quality Agenda Item

In order to best facilitate the development of the new quality agenda item in Directorate meetings the directors also agreed:

- To make quality a regular discussion item at Directorate meetings
- That quality would be the first item on the agenda and discussed for at least 30 minutes
- To use a PDSA approach to refine the quality agenda item
- All meetings would be supported by a participant-observer QI expert from the project team with expertise in SPC methodology, who would attend their meeting to provide support if required and to observe discussions to refine future PDSA cycles

Workshop Evaluation

The analysis of the co-design workshop included an evaluation of the feedback forms, workshop report, after action review and project team observations of the workshop. Four main areas emerged in the analysis: i) excellent participation and engagement ii) good approach to enable feedback on project methodology and approach, iii) useful forum to identify challenges and iv) QI Agenda considerations. The workshop evaluation results showed that most participants were satisfied with the workshop in facilitating the aim of developing a quality agenda item and considered it a valuable use of their time. Participants also expressed satisfaction with the tasks used to agree on the content for the Quality Profile and the patient and staff stories.

7) Identify Training Needs

During phase one, training needs and understanding training preferences of the directors were assessed. Directors had various understanding levels in terms of handling data. While some were familiar with SPC charts and funnel plots, others required more assistance. During the planning stage some members expressed hesitancy in the need to develop SPC skills while others had an expectation of receiving data interpretation training to ensure everyone possessed the same level of understanding of Q&S language. The preferred training format was an engaging and fun, collective training programme for all, while also offering more support to those who struggle with the concepts or wanted more in-depth training.

Summary

The planning phase enabled the project team to develop a baseline understanding of the approach to overseeing quality at directorate level, to understand the directors' expectations with regards to the project and to ensure a collective commitment from the directors to the project. Phase one consisted of establishing a governance structure, developing the project methodology and planning documentation, desktop research of international best practice, scoping interviews with participants, consultations with clinical and QPS subject matter experts, hosting a co-design workshop and identifying training needs.

5. Phase Two: Testing Phase

The PDSA approach (Langley et al., 2009) to improvement was used during the testing phase as an effective method for testing and delivering change. Using a PDSA approach within the Directorate monthly meetings enabled the directors to iteratively co-design changes to the quality agenda item, with minimal disruption to the business of the meeting. This highlighted the usefulness of the PDSA methodology in engaging people in quality improvement who often do not have the time to step out of their role.

The following structures were put in place to deliver the PDSA cycles:

- The project team met once to **Plan** each 'test' of change at a Directorate meeting. The project reconvened after each test to review/ **Study** the findings as described by the participant observer.
- An advisory group was formed to inform the planning of each test.
- Two working groups were formed to develop (**Act**) and deliver (**Do**) the picture of quality to be presented at Directorate meetings (a quality profile working group and a patient and staff experience of quality working group).

For each PDSA cycle, a set of predictions were made by the Project Team and proposed to the Advisory Group **(Plan)**. These were tested **(Do)** at Directorate meetings. A review **(Study)** was carried out by the Project Team[4] after each Directorate meeting, based on observations collected by the participant observer, feedback surveys and 1:1 informal feedback from directors. The Working Groups[5] applied the learning **(Act)** to both the qualitative and quantitative elements of the 'Picture of Quality' as well as to improving how the project team could better support the Directorate to frame their discussion on quality around the Picture-Understanding-Action model. All meetings were supported by a participant-observer QI expert from the project team.

The organisation of the Directorate meeting agendas, minutes and capturing actions was the responsibility of the secretary. Regular communication between the project lead and secretary was required before and after meetings. The support of the secretary greatly assisted the success of the project.

Training

Training on SPC interpretation was provided throughout the project. Group training was offered at the pre and post project workshops. One-to-one training was offered to directors who had different levels of experience using SPC. In addition, just in time training was provided, whereby the QI facilitator modelled how to interpret the SPCs within the Quality Profile during the Directorate meeting.

Three sets of PDSA cycles were used in parallel over the course of the six-month project and are detailed below:

PDSA 1 - Quality Profile Indicators

The first version of the Quality Profile contained seven indicators, one within each of the seven domains of quality. Over the next five months, additional indicators were assessed for suitability for inclusion in the Quality Profile. Once included in the Quality Profile and discussed at the Directorate meeting, the participant observer listened to the discussion on the new indicator and provided feedback to the project team. Feedback surveys were also issued to directors at the end of each meeting seeking their feedback. This facilitated the project team in determining whether to retain, drop or modify the new indicators added to the Quality Profile. In total 5 additional indicators were added to the Quality Profile, bringing the total number of indicators in the Quality Profile to 12 by the end of the project.

PDSA 2 - Formatting and Display of Quality Profile

The second set of PDSAs focused on the use of SPC methodology to enhance understanding of the variation in the data, and improvement in display of individual measures and changes to single measure graphics, based on feedback from directors during and after meetings. While some of the directors were familiar with SPC methodology prior to the initiation of the project, for many this was their first opportunity to routinely use this approach to understand and interpret variation in quality indicators. The participant observer listened to the discussion of the SPC charts, and provided just in time training where required. Feedback from the directors was requested on aspects of the Quality Profile including whether the Quality Profile was clearly presented, whether it was useful in understanding how the organisation in performing in relation to quality of care over time, whether it was useful in understanding variation across health and social care services, and whether the supporting text provided enough information to allow the directors to understand what the indicator was measuring and how it was performing. The feedback from the directors on the use of the SPC approach was very positive, despite some initial lack of familiarity with this approach. A number of changes were made to the display of the SPC charts, including adding icons to flag a signal of statistical change, additional labelling of the SPC funnel plots to improve understanding and the addition of a summary page to provide an easy access overview of the data. The first (November 2018) and last (April 2019) Quality Profile presented as part of the project during the Directorate meetings are presented in Figure 11). The full version of the final Quality Profile developed during the project is presented in Appendix C.

Figure 10. PSDA 2: Improvement in display of individual measures

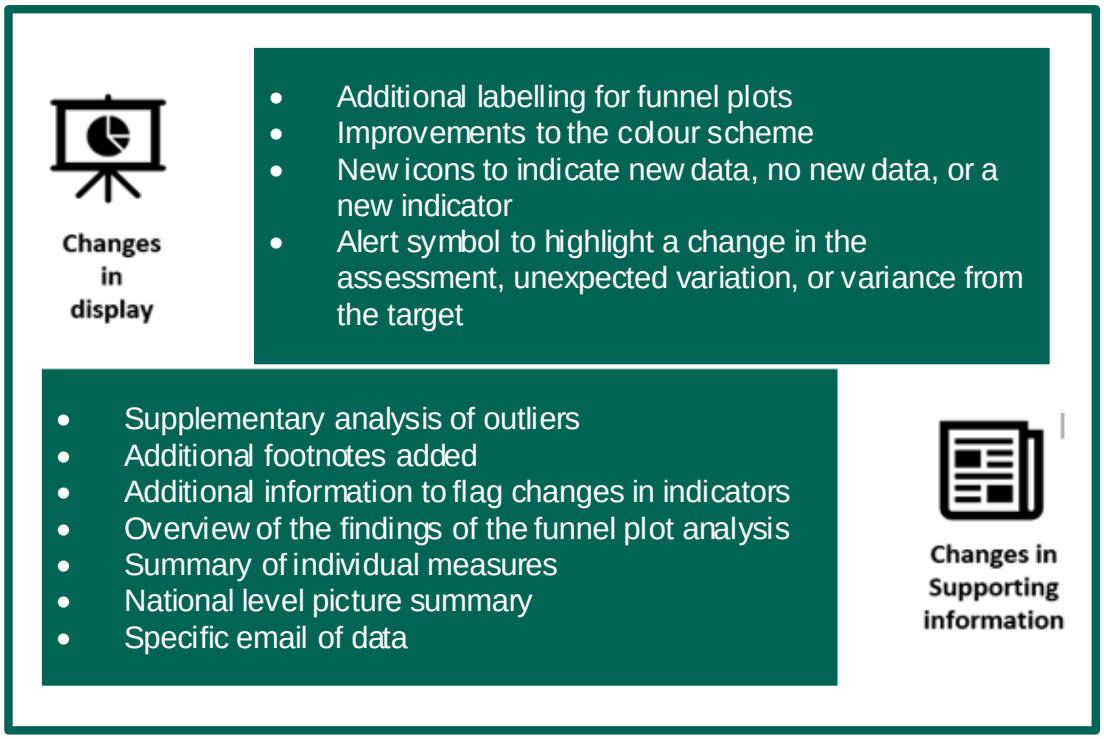
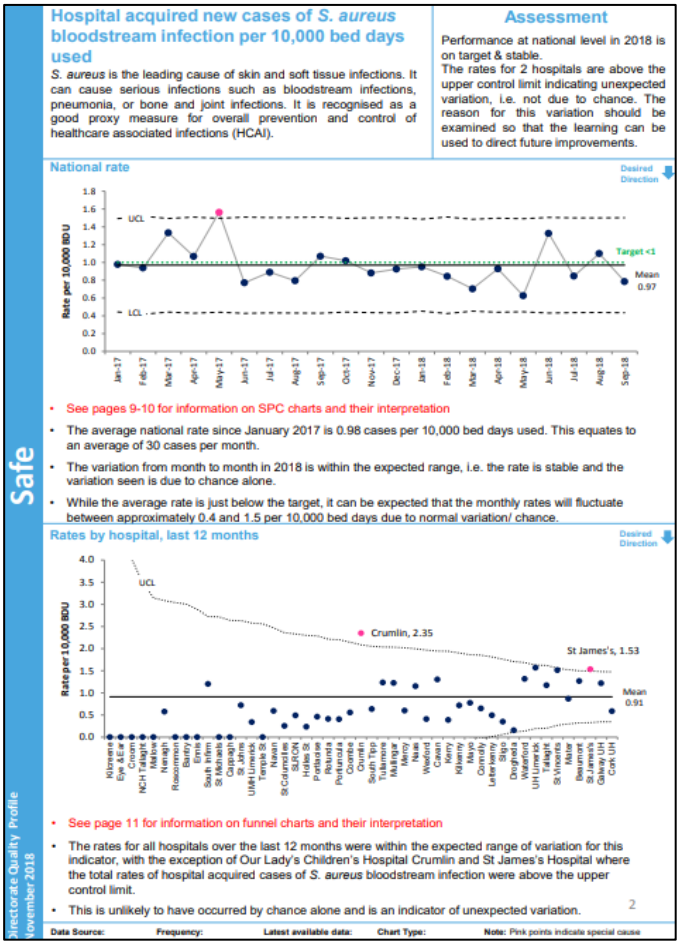


Figure 11. The evolution of the 'Safe' quality domain from first to last version

Directorate Quality Profile, November 2018



Directorate Quality Profile, April 2019

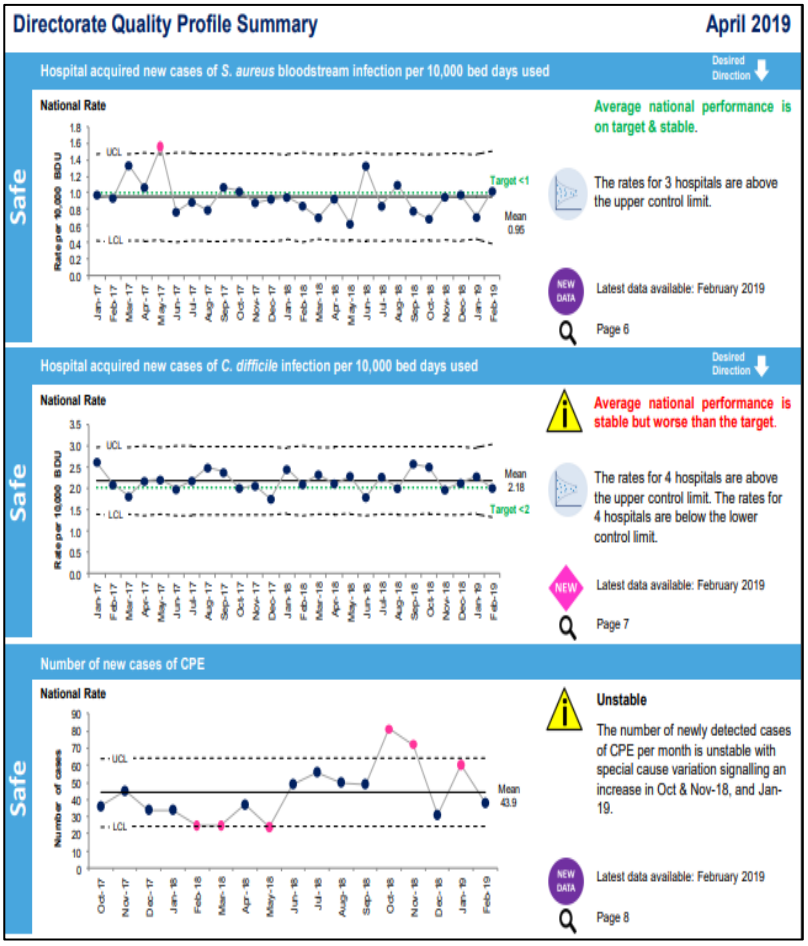


Table 4. Quality Profile Indicators

Safe	Hospital acquired new cases of *S. aureus* bloodstream infection per 10,000 bed days used Hospital acquired new cases of *C. difficile* infection per 10,000 bed days used Number of new cases of CPE
Effective	Return of spontaneous circulation (ROSC) at hospital
Person-centred	Percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 24 hours of registration Bed days used in CAMHS inpatient units as a percentage of total bed days
Timely	Percentage of people waiting <13 weeks following a referral for routine colonoscopy or OGD Hip fracture surgery within 48 hours
Efficient	Weekly number of delayed discharges Day of surgery admission rate
Equitable	Homeless services: service users' health needs assessed within 2 weeks of admission
Better Health & Wellbeing	MMR vaccination rate

PDSA 3 - People's Experience of Quality

The third set of PDSA cycles focused on 'People's Experience of Quality' (PEQ). The PEQ working group benefited from the inclusion of a patient representative who guided a patient centred approach. Four different approaches to sharing people's experience of quality were tested at Directorate meetings:

Table 5. Approaches to sharing People's Experience of Quality

1. Video of a staff member experience	Patient safety story - Barry: Video describing the impact of an adverse event on staff, and the importance of managing the adverse event and staff in a timely manner.[6]
2. Review and discussion of the qualitative information in a patient experience survey	Qualitative data was reviewed from the 'Your Voice Matters' Patient Narrative Project[7] available in Appendix D.
3. Service user attending the meeting to share their experience	A patient attended the Directorate meeting to share their experience of quality in our health system. The person spoke to directors about his experience of having a chronic illness.
4. HSE director meeting a patient one-to-one and then narrating and discussing their experience in the meeting.	Mr Liam Woods had a one-to-one discussion with a person who had experienced maternity and cancer services. Mr Woods brought the key issues from the conversation to the Directorate meeting for discussion.

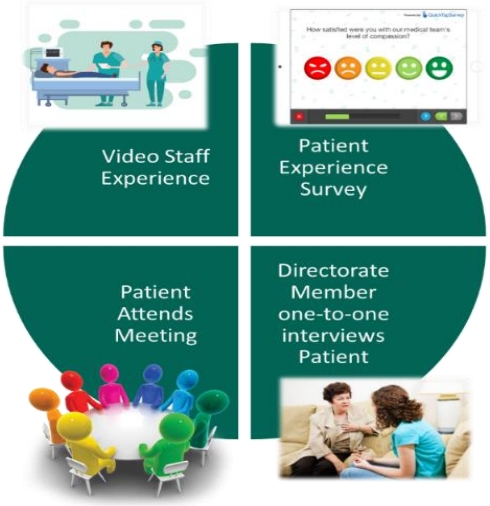
Ethical mindfulness was at the forefront of the PEQ to ensure that those sharing their stories had a positive experience. Patients who shared their experience with directors were supported by a project member before, during and afterwards and their feedback was valuable in informing future iterations. Information and consent forms were provided and discussed in detail to gain full informed consent from participants.

The sets of PDSA cycles s are presented in Figure 12.

[6] 'The video was developed by the QPS Incident Management Team. Staff Safety Stories were shared by staff to provide services with an insight into their experiences to learn and improve: **https://www.hse.ie/eng/about/who/nqpsd/qps-incident-management/incident-management/staff-safety-stories.html**

[7] Your Voice Matters is a nationally available patient experience framework tool that captures the lived experiences of service users and/or their families by inviting them to describe in their own words a recent experience of engaging with health and social care service(s). The focus is on what matters most to service users, and allows the opportunity to capture both positive and negative feedback: **https://www.hse.ie/eng/about/who/cspd/patient-narrative/your-voice-matters/**

Figure 12. People's Experiences of Quality



The People's Experiences of Quality was reported by directors as highly engaging and useful as it 'people-ised' the data. Including people's experiences in the quality agenda item proved central to the success of the project. Starting the meeting with a patient or staff experience set the tone for the rest of the meeting and helped the members view other items through the lens of the human impact of their decisions. In addition to this, it led to the directors to ask more questions about what is being done to act on this valuable information. Hearing real lived-experiences highlighted issues that did not usually show up in the metrics and provided additional insights. It grounded the quality agenda in human experience as described by one director:

> *"It's very easy for us, [HSE Directorate members] to get lost in numbers and paperwork and everything else and forget why we are doing this".*

Summary

The testing phase had three objectives; to iteratively test and refine the quantitative and qualitative elements of the Directorate quality agenda item; to achieve consensus on the content of the quality agenda item; to provide just in time training and support to directors. The project team and directors were able to achieve these objectives working collectively. At the end of the PDSA tests, there was a consensus on 12 quantitative measures and on the inclusion of qualitative information as well. An expected outcome of the testing phase was that quality should be the first item on the agenda and discussed for 30 minutes. The testing phase also changed the traditional quantitative way of viewing quality towards an acknowledgement of qualitative aspect of quality.

At the end of the project, an evaluation workshop was held as well as one-to-one interviews with directors to capture feedback and learning to further refine the approach based on their experiences. The findings indicated the directors had a very positive experience during the project welcoming the enhanced focus on quality and patient safety at their meetings, appreciating the SPC method of looking at data over time and valuing the opportunity to hear patient and staff stories. Evaluation results are included in Appendix B.

6. Phase Three: Sustaining and Spreading

In 2019 the HSE Board was established and the Directorate structure was replaced with an Executive Management Team (EMT). The Directorate offered the quality agenda item developed during this project to the Board as an approach to support them in their role in overseeing and leading quality. The Quality Profile and People's Experience of Quality are standing items on the HSE Board's Safety and Quality Committee agenda. They are collectively discussed and actions are requested of the executive of the HSE or escalated to the Board. The Chair of the Safety and Quality Committee presents the Quality Profile to the HSE Board as well as highlighting issues that have arisen in People's Experience of Quality presentations.

The Safety and Quality Committee members continue to engage with the development of this item, holding an annual workshop to review and update the Quality Profile and refine the People's Experience of Quality. The co-design approach has proved valuable in refining this work to meet the needs of the Committee. The People's Experience of Quality has been further developed to align with a topic on the Committee's agenda, bringing further insight into a topic under discussion.

Table 6. People's Experience of Quality at HSE Safety and Quality Committee

Theme	Presentation	Method
HCAI	**Patient experience of HCAI (UTI catheter)**	**Video**
Social Inclusion	**Syrian refugees experience of accessing healthcare**	**Qualitative research quotes and vignettes**
Safe Guarding	**Service users experience of Safeguarding**	**Video**
Residential Care setting during Covid 19	**Staff experience working in Older Person's Community Nursing Unit during Covid**	**Staff member attend meeting to share their experience**
Cyber Attack	**Front line staff experience during Cyber-attack**	**Qualitative research quotes**
Trauma	**Trauma patient experience**	**Video and person attend meeting to share their experience**
Women's Health	**National Women's Council of Ireland study findings 'Improving the Healthcare Outcomes and Experiences of the Healthcare System for Marginalised Women'**	**Research findings & quotes**
Paediatric Model of Care	**Family experience of paediatric renal service**	**Video**

The National Quality and Patient Safety Directorate (NQPSD) have developed a series of tools, resources and guidance designed to assist committees, boards and leadership teams interested in developing their own quality agenda item. The 'QPS *Data for Decision Making Toolkit: Tools, Resources and Guidance to Develop a Quality Agenda Item for Boards, Committees and Leadership Teams'* is structured into four sections designed to assist with different stages of developing a quality agenda:

Part One: Planning and Testing a Quality Agenda Item

This section contains tools and resources useful when establishing your quality agenda project. The tools facilitate and support a QI approach to your project.

Part Two: Producing a Quality Profile

This section contains tools and resources for designing a Quality Profile and for producing and interpreting statistical process control and run charts.

Part Three: Producing People's Experiences of Quality

This section contains guidance on developing patient, service user, family and staff 'stories' or experiences to share at committee, board and leadership group meetings.

Part Four: Evaluation and Feedback

This section provides useful tools and resources to help you capture feedback from committee, board and leadership members and to evaluate your project.

The toolkit is available online via: **Quality and Patient Safety Data for Decision Making Toolkit**

7. Conclusion

Over a six month period, this project aimed to establish a quality agenda item, with the necessary information and support to enable the Directors to have oversight of quality and its improvement. The quality agenda item contained a 'Picture' of quality which facilitated greater insight and 'Understanding' of the quality of care, and guided 'Action'. The quality agenda item contains two complementary aspects: a Quality Profile focusing on the Directorate selected critical few indicators across seven domains (safe, effective, person-centred, timely, efficient, and equitable and better health and wellbeing), and dedicated time to engage with the experiences of staff, patients, carers and families in the health system.

The project introduced SPC methodology which is used to analyse and display variation over time and across a system, and to differentiate between expected (common cause) and unexpected (special cause) variation. Just-in-time SPC training and the availability of support from our project team facilitated the directors in developing a clearer 'Understanding' of the data and SPC methods. Many of the directors were previously unaware of SPC methodology and greatly appreciated this aspect of the project.

Since board members are ultimately responsible for the quality of care, it is imperative that they have a good 'Understanding' of quality and are supported by robust governance systems and processes (Smith et al., 2021). The quality agenda item proved successful in improving national oversight of quality in the Irish healthcare system. The project established a link between governance and quality based on a systematic approach which was backed by data. It changed the traditional processes of governing for quality of care and brought quality and its improvement into the mainstream discourse rather than just being a formality. At the end of the project, the quality agenda item was handed over to the newly instituted HSE Board by the HSE Directorate. The HSE Board's Safety and Quality Committee continue to have both the Quality Profile and People's Experience of Quality items at their monthly meetings.

Recommendations for Future Projects	
Planning	Although time consuming, preparation sets the project up for success. Tasks such as background research on best practice, scoping interviews and consultations with subject matter experts and a co-design workshop were invaluable to inform the direction and focus of the project. In addition, establishing the project governance structure facilitates the smooth running of the project. Combined these tasks provide a solid base for the implementation phase.
Project Methodology	Establishing an appropriate methodology provides a systematic approach to developing a quality agenda. The 'Picture-Understanding-Action' (Martin et al., 2022) approach guided our overall purpose. Co-design and PSDA cycles allowed the iterative development and refinement of the QP and PEQ based on test of change, evaluation and acting on feedback.
No Stories Without Data, No Data Without Stories	The inclusion of qualitative information (patient, service users, family and staff experiences) together with quantitative information (QP indicators) enhanced discussions by grounding board and committee members in the real life experience and by providing context and/ or triangulation to the quantitative information.
Training	Group and individual training on interpreting SPC quality indicators should be offered initially and as a refresher to members given the variation in previous experience of these methods.
Participant Observer	During the testing phase a project team member attending Directorate meetings for this agenda item serves several important purposes. The project member can observe discussion and decision making resulting from the QP and PEQ. It allowed directors to provide suggestions or make change requests in real time. Both of these help inform the evaluation of PDSA cycles. The project member as a QI expert can provide real-time guidance on the methodology and interpretation of SPC during meetings. The provision of just-in-time training allows very busy directors to ask questions and learn without having to take time out of their day.
Time Commitment	Board and committee members should plan to devote sufficient time to the development of a quality agenda items including participation in workshops, training on SPC and the provision of feedback. Sufficient time should be included on the meeting agenda to engage with and discuss the quality agenda items.
Ownership	The project team's role is to facilitate the members to reach consensus on the design of their quality agenda. Co-design assists in the successful adoption of a quality agenda item by members gaining a sense of ownership of the item.
Planning for Sustainability	Planning to sustain the quality agenda item ensures continuity of the efforts in future and assists in transition of the project into business as usual. In the case of this project, the project was transferred to the HSE Board's Safety and Quality Committee who co-design the development of these items and review the QP and PEQ at their committee meetings.

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Appendix A: Project Charters for Directorate Quality Agenda Item

Pre Charter - Stage 1

QID Internal Assessment of Project

- What is the name of the project?
  - HSE Directorate Quality Agenda Project

- What is the high level aim for the project
  - To develop a picture of quality of care, that includes both quantitative and qualitative information, that supports the Directorate in leading the organisation in improving Quality

- What are the objectives / deliverables for the project?
  - Define the currently available, relevant quantitative Quality information and include in a Directorate Quality Profile[8]
  - To identify additional data required for the Directorate Quality Profile and establish systems and process to capture this, with a view to evolving the Profile based on feedback from the Directorate
  - To test options for including Qualitative Information as a Directorate meeting agenda item and to implement the best approach
  - Establish the process on how the qualitative and quantitative information is routinely included in Directorate meetings

- What timescale is envisaged for the project?
  - Anticipated duration: Minimum 6 directorate meetings for design and testing phase, beginning in November 2018. Given the anticipated changes in the HSE structures, Following 6 months testing a review will be undertaken to agree the best route to embed and sustain the HSE Directorate Quality Agenda work and/ or to transition to the new board of the HSE or other structures as deemed appropriate .

- What are the potential benefits of project for Directorate?
  - Brings important Quality information together into one quality agenda item and supports Directorate oversight of quality and its improvement.
  - The inclusion of qualitative information together with quantitative information enhances discussions by grounding the Directorate in real life experience of patients and staff, and by providing context and/ or triangulation to the quantitative information
  - Provides a basis for monitoring important aspects of quality of care
  - Supports learning from trends and variation
  - Supports senior national leaders in developing their skills in relation to measurement for improvement
  - Helps identify areas for Quality Improvement
  - Will provide the senior executives of HSE to hold grounded and evidence based discussion with HSE Board

- What are the potential benefits of project for HSE more widely?
  - Help drive the development of Quality Profiles at other levels in the organisation such as hospital groups and CHOs

[8] The Directorate Quality Profile is a report comprising priority measures that provides the Directorate with a balanced and representative picture of the quality of care provided across health and social care services in order to oversee and drive improvement. It is not intended that the Directorate Quality Profile provides a comprehensive picture of quality of care across all services.

- Support alignment and flow of information relevant to quality of services from service providers to national leadership
-Provides the initial steps of a platform for patients, staff and service providers to engage and inform national leadership
- Will provide a template and example for how a HSE Board can engage with quality of care
- Alignment with QlikSense project with OCIO will allow for a sustainable and flexible source of data for Directorate and other Quality Profiles in the future

- What QID Supports/Resources are available?
  - QID will support the Directorate through a project team with 2 working groups, one focusing on the development and initial production of the Directorate Quality Profile (The membership of this working group includes Gráinne Cosgrove (lead), Emma Hogan and Michael Carton) and the other focusing on testing and initially implementing options for including qualitative information on patient and staff experience of quality of care (the membership of this working group includes Gemma Moore, Michael Carton and a Patient Representative (TBC))
  - QID will support any required workshops for the Directorate
  - QID will provide support and training as required on a 1:1 basis for Directorate members
  - QID will support the transition of the project to a sustainable programme

- What are the potential high level risks?
  - Uncertainty as to the structure and function of Directorate following the establishment of HSE Board could impact on the preparation to transition the work (e.g. to the HSE Board or to the HSE senior executive)
  - Change in HSE Directorate membership
  - Overlap with other information planning work (e.g. Corporate Planning)
  - Overlap with other oversight roles e.g. NPOG
  - Availability at Directorate meetings of sufficient time to review and understand the complexity of information
  - QID capacity to support the project
  - Directorate willingness to engage in QI approach and PDSA cycles
  - Sustainability – the heavy reliance on QID and limited support from Directorate and its structures is a risk to sustaining the project following hand over to the Directorate
  - Reliance on delivery of QlikSense project to allow for handover and sustainability
  - Reliance on EFI team mainly to deliver project

- Is the work aligned to the Framework for Improving Quality in our Health Service?
  The project is aligned to the six drivers of the Framework for Improving Quality. While the main focus is on Measuring for Quality, including patient and staff experience, the project incorporates aspects of all drivers including leadership for quality, governance for quality, person and family engagement and staff engagement. The project will be delivered using Quality Improvement methods.

- Does the team have the capacity to manage project?
  QID has the knowledge and skills to deliver this project.
  This project is very resource intensive with Michael Carton (lead) spending 0.7 WTE, Grainne Cosgrove 0.6 WTE, Emma Hogan 0.4 WTE, Gemma Moore 0.4 WTE and Jennifer Martin 0.2 WTE. With the introduction of the NQIT strategic plan, the Evidence for Improvement (EFI) team staff may have other priorities.

Project Governance Overview

Figure 1. Summary of Governance Structure for the HSE Directorate Quality Agenda Project

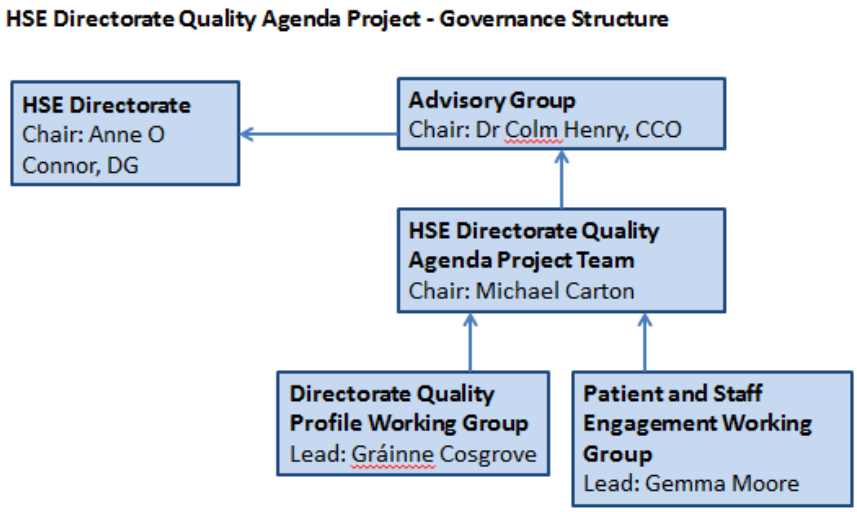


Figure 2. Membership of the Advisory Group, Project Team and working groups for the HSE Directorate Quality Agenda Project. In addition to the links highlighted between these groups, four members of the advisory group attend Directorate meetings.

Directorate	
Anne O'Connor	Director General
Jim O'Sullivan	Corporate Secretary
Colm Henry	Chief Clinical Officer
Liam Woods	Chief Operations Officer
Rosarii Manion	National Director - HR
Dean Sullivan	Chief Strategy and Planning Officer
Stephen Mulvany	Chief Financial Officer

Advisory Group	
Michael Carton	Project Manager/ QID Lead
Jim O'Sullivan	Corporate Secretary
Colm Henry	Chief Clinical Officer and Directorate member
Liam Woods	Chief Operations Officer and Directorate member
Rosarii Mannion	National Director - HR and Directorate member
Philip Crowley	ND-QID
Patrick Lynch	ND-QAV
Jennifer Martin	QID Evidence for Improvement Lead and Quality Improvement facilitator

Project Team	
Michael Carton	Project Manager/ QID Lead
John Fitzimons	QID Clinical Director and Quality Improvement facilitator
Jennifer Martin	QID Evidence for Improvement Lead and Quality Improvement facilitator
Maureen Flynn	QID lead - QI Connections and Quality Improvement facilitator
Karen Reynolds	QID Lead - QI for Boards and Quality Improvement facilitator
Gemma Moore	Directorate Patient and Staff Engagement Working Group Lead
Gráinne Cosgrove	Directorate Quality Profile Working Group Lead
Alison Cronin	QI Project Data curator
Data owners/ managers	(as required)

Directorate Quality Profile Working Group	
Core Membership*:	
Gráinne Cosgrove	Working Group Lead
Michael Carton	Project Manager/ QID Lead
Emma Hogan	Quality Profile Sustainable Production Project Lead

Directorate Patient and Staff Engagement Working Group	
Core Membership*:	
Gemma Moore	Working Group Lead
TBC	Service User Representative
Michael Carton	Project Manager/ QID Lead

*Other members can be co-opted onto the working group for specific pieces of work or PDSA cycles

Table 1 Cycle of meetings and work to be undertaken in preparation and following Directorate meetings to be held from November to April 2019 (inclusive)

Activity	Time-point	Objective
Project Team Review Meeting	Day after Directorate Meeting (4 weeks before next directorate meeting)	Plan the tests of change to be carried out at next Directorate Meeting
2 week window for Working Groups to prepare draft Documentation (Directorate Quality Profile and Directorate Patient and Staff Engagement PDSA documentation)		
Project Team Planning Meeting	2 weeks before Directorate meeting	Plan the tests of change to be carried out at next Directorate Meeting
1 week window for Working Groups to complete documentation and preparations before submitting documents to the Advisory Group		
Send Documentation to Advisory Group	1 week before Directorate Meeting	To give enough time for Advisory group to review documents before Teleconference
Advisory Group T/C (45 mins)	The week before Directorate Meeting	To review the learning from tests of change carried out at previous Directorate meeting and to provide feedback on the documents and planned tests of change prior to next Directorate meeting.
2 day window to make final changes to documentation for next Directorate meeting		
Project Manager to send documents for the pack to secretary of the Directorate	By 14:30 on the Friday before the Directorate Meeting	To have relevant documents included in the Directorate meeting pack
Directorate Meeting	Third Tuesday of every month	Conduct test of change at meeting and Project Manager to observe and gather feedback on the PDSA cycle

Advisory Group		
Role (examples only)	***Name***	***RACI***
Sponsor	Anne O'Connor (DG)	
National QI Team lead and Project Manager	Michael Carton	
Directorate members	Colm Henry, Rosarii Mannion and Liam Woods	
Secretary to Directorate	Jim O'Sullivan	
ND-QAVD	Patrick Lynch	
ND-National QI Team	Philip Crowley	
Quality Improvement Facilitator	Jennifer Martin	

Project Charter – Stage 2

Model for Improvement Q1	What are we trying to accomplish?

Aim statement – outline the measureable objectives for the project

To design and test a picture of quality of care, that includes both quantitative and qualitative information, that supports the Directorate in understanding the quality of services and in leading the organisation in improving quality by end of May 2019

Identify high level milestones, timelines and person responsible

Milestones	Who's responsible – RACI Matrix	When
• *HSE Directorate Quality Profile* (picture) co-designed with Directorate members	QID and Directorate members	October 2019
• Quality and Safety first substantive item on meeting agenda	DG and Directorate Secretary	November 2018
• Format and presentation of HSE Directorate Quality profile agreed with Directorate	All Directorate members	November 2018
• Directorate make decisions and request actions for improvement based on the *HSE Directorate Quality Profile* and monthly patient and staff engagement information	DG, Directorate Secretary and Directorate members	Monthly to finish in May 2019
• Patient and front line staff voice is a standing item within the first substantive item on the meeting agenda	DG , Directorate Secretary	Monthly to finish in May 2019
• Directorate members agree the most effective method(s) for them to understand and be aware of patient and front-line staff experiences in their assessments of the quality and safety of care	DG, Directorate Secretary and Directorate members	May 2019
• The collective leadership of the Directorate in the operation of the meeting agenda item for quality and safety and focus on improvement is implemented and sustained	Board Chair, Board Secretary DG and board members	June 2019
• The learning from this Directorate QI project informs the establishment, induction, orientation and practices of the new HSE Board	Chair of Board and members	TBC
Final Complete Version 1 Directorate Quality Profile		June 2019

Problem to be addressed (Defines WHAT broadly)

Currently the Directorate does not have a comprehensive picture of the quality of services provided by HSE and funded organisations, on which to provide oversight of quality and lead its improvement.

Reason for the effort (Defines WHY broadly)

Patient Safety has a high, and growing, profile with the Irish government, regulators and the public. The HSE DG and Directorate have identified quality improvement as a priority. By undertaking this project, the Directorate are demonstrating a commitment to quality improvement and leading by example across the Irish Health System.

Evidence shows that every member of the board needs sufficient information at a high enough level to be confident that the organisation is well run, but not so much information that it becomes difficult to tell what is important (Rowell et al., 2006).

The probability of harm (adverse events) in healthcare is significant and is estimated between 3% and 17% of all hospital admissions in Ireland (Rafter et al., 2017) and lies between 8% and 11%, internationally (Vincent, 2011). Poor care costs money, for example, infections, pressure ulcers and adverse drug events alone cost the NHS approximately 5 billion per year (Monitor, 2010). In
a time of austerity, adverse events in adult inpatients in Ireland were estimated to cost over €194
million (Rafter et al., 2017).

Evidence shows that what Boards and Senior management teams pay attention to matters:

- International evidence that there is scope for improvement in capacity and capability in Quality Improvement at every level of hospital care, not least at board of director level (Rowell et al., 2006; Conway, 2008, 2018; Freskoe Rubenstein, 2013)
- Evidence that where hospital boards prioritise quality and lead on improving it, there are meaningful improvements in quality (Heenan, Khan e Binkley, 2010; Pronovost, 2018)

The Directorate sets the agenda, investment level, culture and strategy, and its members are individually and collectively accountable for quality within the Irish health system.

What are the Expected outcomes/benefits of the project?

- Brings important Quality information together into one Quality Agenda Item and supports Directorate oversight of quality and its improvement.
- The inclusion of qualitative information together with quantitative information enhances discussions by grounding the Directorate in real life experience of patients and staff, and by providing context and/ or triangulation to the quantitative information
- Provides a basis for monitoring important aspects of quality of care
- Supports learning from trends and variation
- Supports senior national leaders in developing their skills in relation to measurement for improvement
- Helps identify areas for Quality Improvement
- will provide the senior executives of HSE to hold grounded and evidence based discussion with HSE Board

What is not included in the scope of the project?

- Responsibility or capacity is not built into the project team to follow up on operational variances identified and the reasons for those variances. The responsibility for this rests with the relevant directorate member.
- Work with boards such as hospital group boards.
- In relation to the incoming national Board of the HSE it is anticipated that this project would provide learning and a case study for how the new board could approach its quality and safety information and learning. However, this would be a separate project that would be considered and co-designed at the request of that Board (if initiated).

Is there a commitment to share the results of the project/ share the learning?

- Yes, Directorate members agreed at their workshop in October to share learning from this QI project with the in-coming Board of the HSE and wider with healthcare boards and executives.

- QID are committed to developing outputs from this project to share the learning nationally and internationally.

Are the parties aware of potential project risks, what can be done to mitigate the risks?

- Time to review and understand the complexity of quality and safety information
- Ongoing corporate changes that might impact on timescales and completion of the project
- Planning of the structure and function of Directorate/leadership team following establishment of the HSE Board
- The QI project would benefit from being at an advanced stage prior to handover to the incoming HSE board
- Insufficient connection and links with other levels of oversight e.g. NPOG
- Underestimation of the amount of work and time required to avoid overlap or duplication with other information planning work at other levels
- Missing the opportunity to use the information for action and improvement
- Directorate willingness to engage in QI approach and PDSA methods
- QID capacity to support the project

Model for Improvement Q2	**How do we know that a change is an improvement?**

Measures that will be used to monitor the impact of this improvement effort – prompt

- **Process**
  Measure of the amount of information provided to the Directorate and the amount of time given to discussing the quality and safety of care monthly.
- **Outcomes**
  Feedback from the Directorate members (qualitative information) that the information provided on quality is understandable and useful
  Review of minutes of meetings to assess impact of inclusion of quality information (qualitative and quantitative) and close out of directorate requested actions included on action log of the directorate meeting minutes
- **Balancing Measures**
  Feedback from the Directorate members (qualitative information) and review of minutes of meetings to confirm other important aspects of the Directorate agenda are not adversely affected

Model for Improvement Q3	**What changes can we make that will lead to improvement? (And how will this be done)**

- Define the currently available quantitative quality information and include in a Directorate Quality Profile
- Identify additional data required for the Directorate Quality Profile and establish systems and process to capture this, with a view to evolving the Profile based on engagement and testing with Directorate members
- Test options for including Qualitative Information as a Directorate meeting agenda item and implement the best approach
- Establish the process on how the qualitative and quantitative information is routinely included as a standing item in directorate meetings

Resources (detail & quantify e.g. IT, HR, facilities)	***Project Costs***
Time of project manager, subgroup leads and EFI team time	2.3 WTE
Time of project group members	6 hours per month (includes 2 meetings, pre reading and actions arising)
Time of advisory group members	One hour per month
Time of directorate members	Two hours per month (including pre reading and survey completion)

Project Assumptions

- The resources outlined above will be committed to the project for its duration
- The Project is in keeping with the mission and values of the service
- Publication of project material will not occur without the prior approval of the project sponsor.

Project Sponsor Sign Off:

Signed: _____ **Date:** _____

Appendix B: Evaluation Interview Themes

Four main themes emerged from the analysis of the feedback from the post-project workshop and follow-up interviews with directors. These themes were the start of the QI governance journey, a worthwhile methodology, the power of stories and a shift to QI mind-sets.

1. Commencing the QI governance journey

The Directorate quality agenda item was perceived as the start of the QI governance journey for the Directorate and Irish Health system. This was articulated by one director as:

> "*this was never about putting in place a robust quality and safety assurance arrangement, it was about, can we tighten up what we have to a degree".*

The agenda item project was the first step in understanding the risks and there is a need to consolidate these results further in future by integrating it with other processes so that management is aware of the measures the Directorate is interested in. Only when it is integrated into routine practices will it be sustainable. This was described by one director as:

> *"link it to the core organisational process and help shape that and improve that, I think will give the sustainability to this work".*

2. A worthwhile methodology

Participants found collectively designing the quality agenda and using the QI approach useful:

> "*It went through a good process in trying to determine what were the measures that should be used and how they were presented, how the narrative supported the information that was shown diagrammatically*".

The project brought together senior level directors together into the workshops to discuss quality and safety which was a unique event. However, one downside of the process was the time commitment it required from the directors and the project team. Use of PDSA cycles enabled the Directorate to improve the agenda item gradually over time highlighting the usefulness of the methodology. The use of SPC methodology added to increased robustness of the process in the eyes of the Directorate:

> "*the way you have presented the information and the statistical rigour in presentation I think is a thing that I will certainly learn from and it's good to know that we have that skill set in the organisation".*

3. The power of stories

The element of patient and staff stories highlighted issues that do not usually show up in the metrics and provided additional insights. This aspect was appreciated by all directors. It grounds the quality agenda in human experience as described by one director:

"*it's very easy for us all to get lost in numbers and paperwork and everything else and forget why we are doing this".*

According to one director, the patient story may have been the turning point in the entire project:

"*I've seen so many examples of where the patient input has transformed everything entirely that I wouldn't be surprised if that was partly what changed the game here as well".*

Similarly, another director acknowledged the responsibility of the Directorate to act of patient/staff experiences:

"*When people take the time to provide very valuable insights that we may not get ourselves, we have a responsibility to hear those and convert that into intelligence*"

4. A shift to QI mindsets

The quality agenda item project was instrumental in shifting mindsets of directors about the governance of quality. Before the project, discussion on quality was often driven by external pressures, demands and overshadowed by discussions on finance, audit. Over the course of the project, the Directorate moved from a mindset of

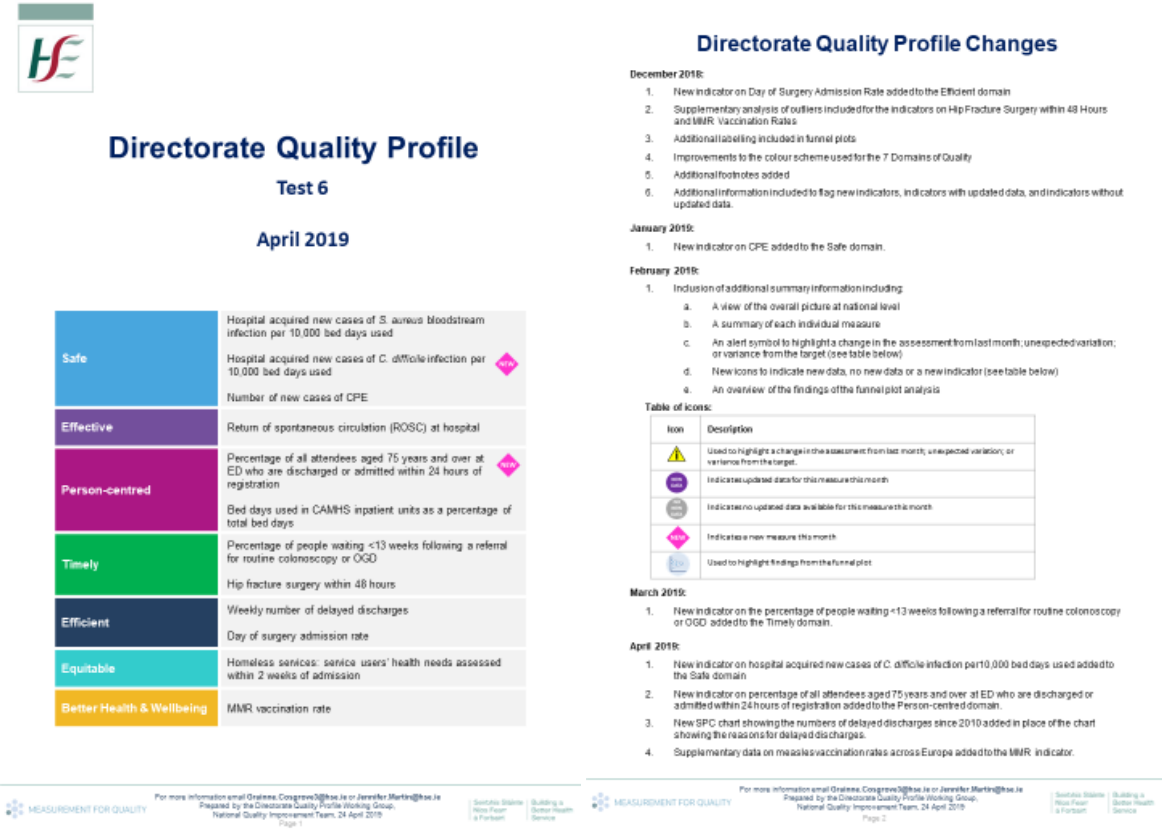
"*could we leave that off, the next meeting?"* about the quality agenda item to *"the point where if you left it off the agenda they'd be saying, where's the quality stuff?*".

Some negative perceptions about the agenda item melted away after a few PDSA cycles and were replaced by enthusiasm and engagement. There were honest and open discussions about quality on a wide range of topics in a safe space. The project advanced the discourse on quality and brought patient care to the forefront. It has also changed the way the Directorate looks at quality:

"My sense is, it has achieved a change in mindset, maybe not a change in culture yet, massively long project to do that. But it is achieving more than one might have expected in that, while on the surface it was just purely getting quality onto the agenda and having some kind of a discussion about quality, which could have been done very tick-box, superficially."

From the perspective of the project team, the learning from the planning phase was the importance of understanding international best practices and aligning those with the local context and concerns and expectations of the directors. Support and agreement from all directors to co-design and participate in PDSA cycles was another important project enabler. During the testing phase, project team realised the importance of having a participant-observer present in the Directorate meeting. The participant-observer provided support to directors in interpreting data, facilitating learning also gathered important feedback around reactions of the directors. Evaluation forms as a mode of feedback were less beneficial than observations and face to face interviews. Additionally, including patient and staff stories emerged as the most engaging element of the project as it 'people-ised' the data.

Appendix C: Final Version of Directorate Quality Profile



Directorate Quality Profile

Test 6

April 2019

Safe	Hospital acquired new cases of S. aureus bloodstream infection per 10,000 bed days used
	Hospital acquired new cases of *C. difficile* infection per 10,000 bed days used
	Number of new cases of CPE
Effective	Return of spontaneous circulation (ROSC) at hospital
Person-centred	Percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 24 hours of registration
	Bed days used in CAMHS inpatient units as a percentage of total bed days
Timely	Percentage of people waiting <13 weeks following a referral for routine colonoscopy or OGD
	Hip fracture surgery within 48 hours
Efficient	Weekly number of delayed discharges
	Day of surgery admission rate
Equitable	Homeless services: service users' health needs assessed within 2 weeks of admission
Better Health & Wellbeing	MMR vaccination rate

For more information email Grainne.Cosgrove3@hse.ie or Jennifer.Martin@hse.ie
Prepared by the Directorate Quality Profile Working Group,
National Quality Improvement Team, 24 April 2019

Directorate Quality Profile Changes

December 2018:

1. New indicator on Day of Surgery Admission Rate added to the Efficient domain
2. Supplementary analysis of outliers included for the indicators on Hip Fracture Surgery within 48 Hours and MMR Vaccination Rates
3. Additional labelling included in funnel plots
4. Improvements to the colour scheme used for the 7 Domains of Quality
5. Additional footnotes added
6. Additional information included to flag new indicators, indicators with updated data, and indicators without updated data.

January 2019:

1. New indicator on CPE added to the Safe domain.

February 2019:

1. Inclusion of additional summary information including:
   a. A view of the overall picture at national level
   b. A summary of each individual measure
   c. An alert symbol to highlight a change in the assessment from last month; unexpected variation; or variance from the target (see table below)
   d. New icons to indicate new data, no new data or a new indicator (see table below)
   e. An overview of the findings of the funnel plot analysis

Table of icons:

Icon	Description
	Used to highlight a change in the assessment from last month; unexpected variation; or variance from the target.
	Indicates updated data for this measure this month
	Indicates no updated data available for this measure this month
	Indicates a new measure this month
	Used to highlight findings from the funnel plot

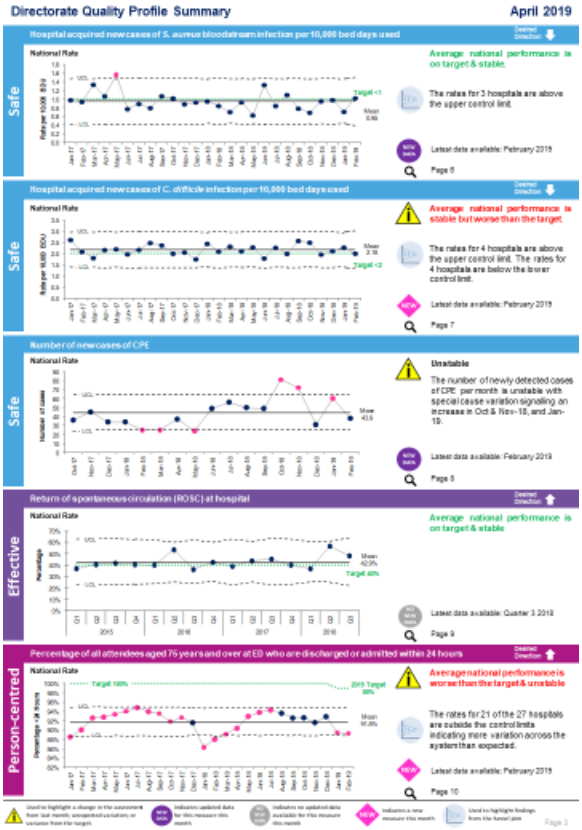
March 2019:

1. New indicator on the percentage of people waiting <13 weeks following a referral for routine colonoscopy or OGD added to the Timely domain.

April 2019:

1. New indicator on hospital acquired new cases of C. difficile infection per10,000 bed days used added to the Safe domain
2. New indicator on percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 24 hours of registration added to the Person-centred domain.
3. New SPC chart showing the numbers of delayed discharges since 2010 added in place of the chart showing the reasons for delayed discharges.
4. Supplementary data on measles vaccination rates across Europe added to the MMR indicator.

For more information email Grainne.Cosgrove3@hse.ie or Jennifer.Martin@hse.ie
Prepared by the Directorate Quality Profile Working Group,
National Quality Improvement Team, 24 April 2019



Directorate Quality Profile Summary — April 2019

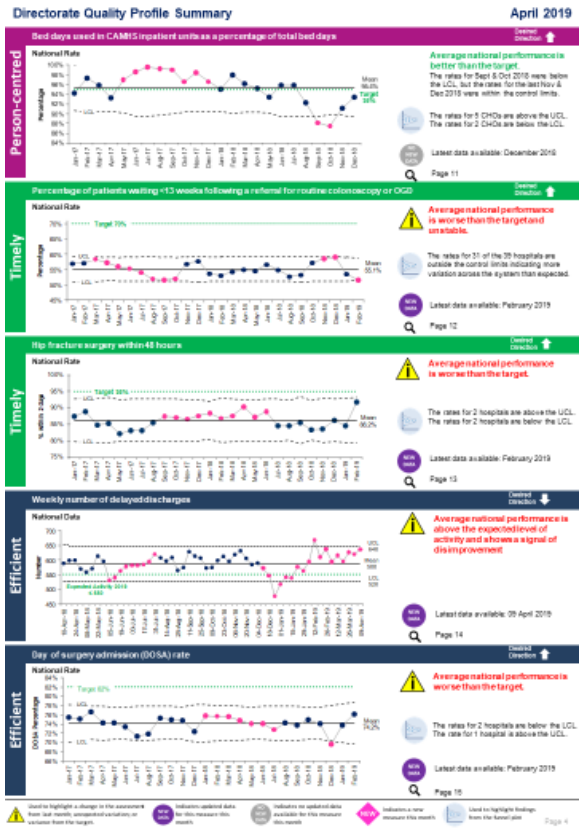
Safe — Hospital acquired new cases of S. aureus bloodstream infection per 10,000 bed days used
Average national performance is on target & stable.
The rates for 3 hospitals are above the upper control limit.
Latest data available: February 2019
Page 6

Safe — Hospital acquired new cases of C. difficile infection per 10,000 bed days used
Average national performance is stable but worse than the target
The rates for 4 hospitals are above the upper control limit. The rates for 4 hospitals are below the lower control limit.
Latest data available: February 2019
Page 7

Safe — Number of new cases of CPE
Unstable
The number of newly detected cases of CPE per month is unstable with special cause variation signalling an increase in Oct & Nov-18, and Jan-19.
Latest data available: February 2019
Page 8

Effective — Return of spontaneous circulation (ROSC) at hospital
Average national performance is on target & stable
Latest data available: Quarter 3 2018
Page 9

Person-centred — Percentage of all attendees aged 75 years and over at ED who are discharged or admitted within 24 hours
Average national performance is worse than the target & unstable
The rates for 21 of the 27 hospitals are outside the control limits indicating mere variation across the system than expected.
Latest data available: February 2019
Page 10



Directorate Quality Profile Summary — April 2019

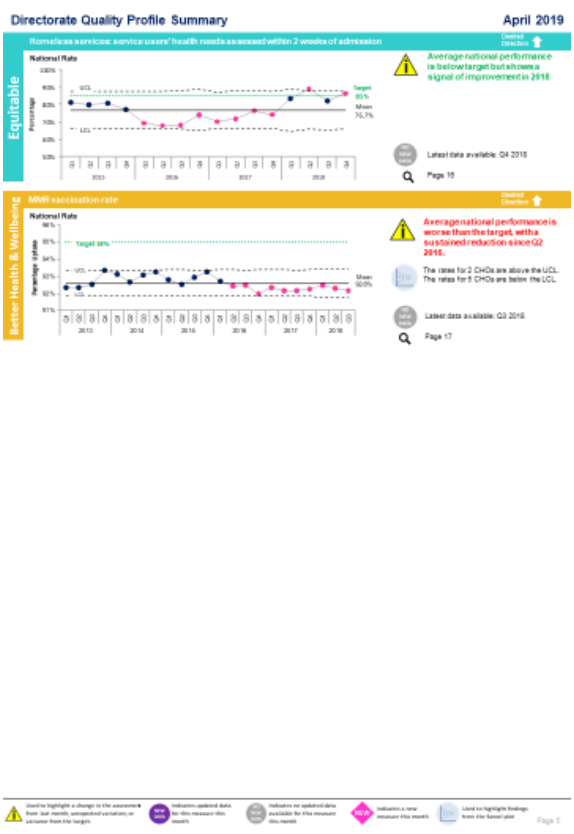
Person-centred — Bed days used in CAMHS inpatient units as a percentage of total bed days
Average national performance is better than the target.
The rates for Sept & Oct 2018 were below the LCL, but the rates for the last Nov & Dec 2018 were within the control limits.
The rates for 5 CHOs are above the UCL. The rates for 2 CHOs are below the LCL.
Latest data available: December 2018
Page 11

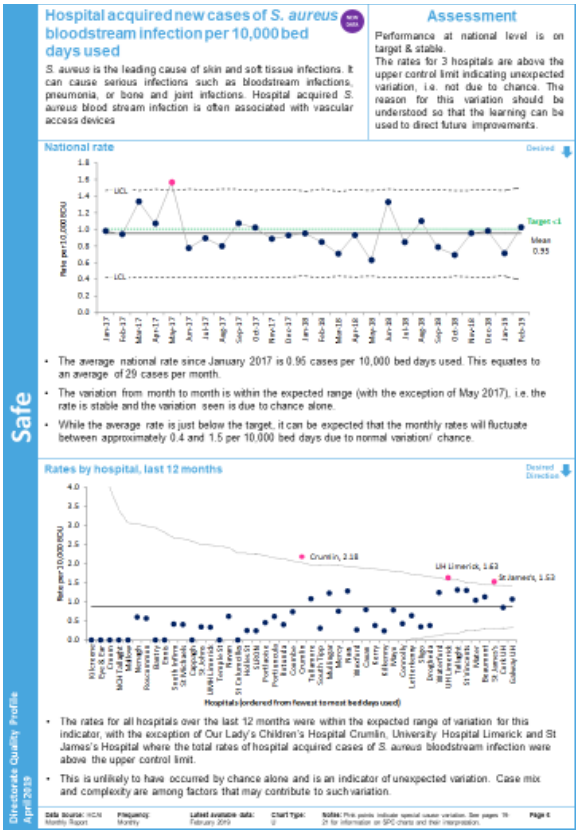
Timely — Percentage of patients waiting <13 weeks following a referral for routine colonoscopy or OGD
Average national performance is worse than the target and unstable.
The rates for 31 of the 39 hospitals are outside the control limits indicating more variation across the system than expected.
Latest data available: February 2019
Page 12

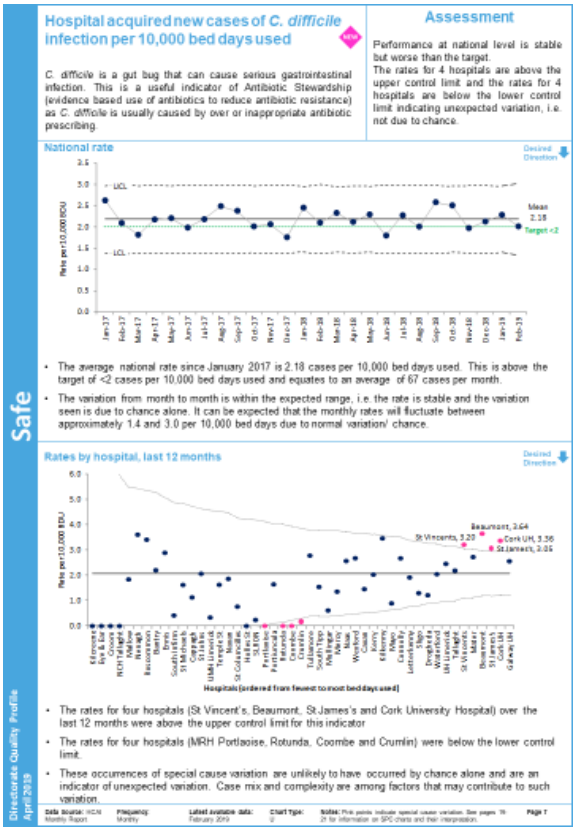
Timely — Hip fracture surgery within 48 hours
Average national performance is worse than the target.
The rates for 2 hospitals are above the UCL. The rates for 2 hospitals are below the LCL.
Latest data available: February 2019
Page 13

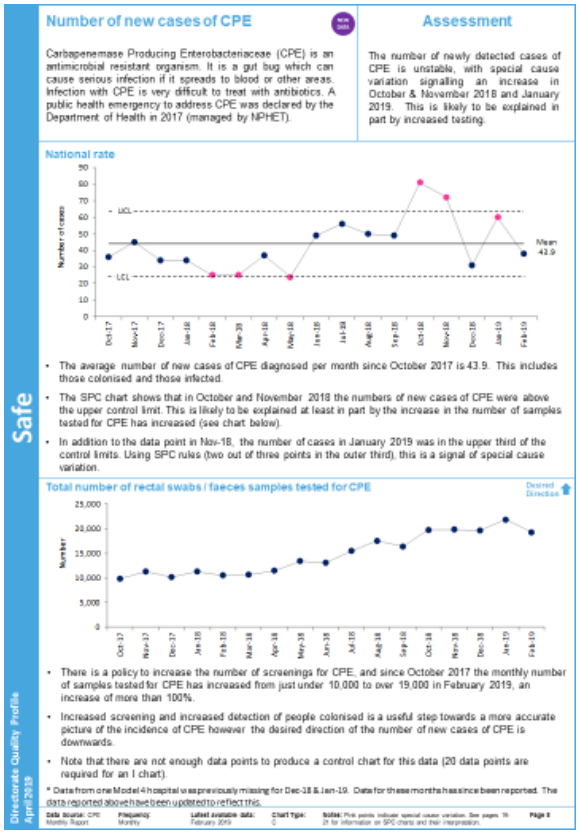
Efficient — Weekly number of delayed discharges
Average national performance is above the expected level of activity and shows a signal of disimprovement
Latest data available: 08 April 2019
Page 14

Efficient — Day of surgery admission (DOSA) rate
Average national performance is worse than the target.
The rates for 2 hospitals are below the LCL. The rate for 1 hospital is above the UCL.
Latest data available: February 2019
Page 15


Directorate Quality Profile Summary
April 2019
Equitable
Homeless services: service users' health needs assessed within 2 weeks of admission
Average national performance is below target but shows a signal of improvement in 2018
Latest data available: Q4 2018
Page 16
Better Health & Wellbeing
MMR vaccination rate
Average national performance is worse than the target, with a sustained reduction since Q2 2016.
The rates for 2 CHOs are above the UCL. The rates for 5 CHOs are below the LCL.
Latest data available: Q3 2018
Page 17
Page 5


Safe
Hospital acquired new cases of S. aureus bloodstream infection per 10,000 bed days used
S. aureus is the leading cause of skin and soft tissue infections. It can cause serious infections such as bloodstream infections, pneumonia, or bone and joint infections. Hospital acquired S. aureus blood stream infection is often associated with vascular access devices
Assessment
Performance at national level is on target & stable.
The rates for 3 hospitals are above the upper control limit indicating unexpected variation, i.e. not due to chance. The reason for this variation should be understood so that the learning can be used to direct future improvements.
National rate
Target <1
Mean 0.95
The average national rate since January 2017 is 0.95 cases per 10,000 bed days used. This equates to an average of 29 cases per month.
The variation from month to month is within the expected range (with the exception of May 2017), i.e. the rate is stable and the variation seen is due to chance alone.
While the average rate is just below the target, it can be expected that the monthly rates will fluctuate between approximately 0.4 and 1.5 per 10,000 bed days due to normal variation/ chance.
Rates by hospital, last 12 months
Crumlin, 2.18
LH Limerick, 1.63
St James's, 1.53
Hospitals (ordered from fewest to most bed days used)
The rates for all hospitals over the last 12 months were within the expected range of variation for this indicator, with the exception of Our Lady's Children's Hospital Crumlin, University Hospital Limerick and St James's Hospital where the total rates of hospital acquired cases of S. aureus bloodstream infection were above the upper control limit.
This is unlikely to have occurred by chance alone and is an indicator of unexpected variation. Case mix and complexity are among factors that may contribute to such variation.
Directorate Quality Profile April 2019


Safe
Hospital acquired new cases of C. difficile infection per 10,000 bed days used
C. difficile is a gut bug that can cause serious gastrointestinal infection. This is a useful indicator of Antibiotic Stewardship (evidence based use of antibiotics to reduce antibiotic resistance) as C. difficile is usually caused by over or inappropriate antibiotic prescribing.
Assessment
Performance at national level is stable but worse than the target.
The rates for 4 hospitals are above the upper control limit and the rates for 4 hospitals are below the lower control limit indicating unexpected variation, i.e. not due to chance.
National rate
Mean 2.18
Target <2
The average national rate since January 2017 is 2.18 cases per 10,000 bed days used. This is above the target of <2 cases per 10,000 bed days used and equates to an average of 67 cases per month.
The variation from month to month is within the expected range, i.e. the rate is stable and the variation seen is due to chance alone. It can be expected that the monthly rates will fluctuate between approximately 1.4 and 3.0 per 10,000 bed days due to normal variation/ chance.
Rates by hospital, last 12 months
Beaumont, 2.64
St Vincents, 3.20
Cork UH, 3.36
St James's, 3.66
Hospitals (ordered from fewest to most bed days used)
The rates for four hospitals (St Vincent's, Beaumont, St James's and Cork University Hospital) over the last 12 months were above the upper control limit for this indicator
The rates for four hospitals (MRH Portlaoise, Rotunda, Coombe and Crumlin) were below the lower control limit.
These occurrences of special cause variation are unlikely to have occurred by chance alone and are an indicator of unexpected variation. Case mix and complexity are among factors that may contribute to such variation.
Directorate Quality Profile April 2019


Safe
Number of new cases of CPE
Carbapenemase Producing Enterobacteriaceae (CPE) is an antimicrobial resistant organism. It is a gut bug which can cause serious infection if it spreads to blood or other areas. Infection with CPE is very difficult to treat with antibiotics. A public health emergency to address CPE was declared by the Department of Health in 2017 (managed by NPHET).
Assessment
The number of newly detected cases of CPE is unstable, with special cause variation signalling an increase in October & November 2018 and January 2019. This is likely to be explained in part by increased testing.
National rate
Mean 43.9
The average number of new cases of CPE diagnosed per month since October 2017 is 43.9. This includes those colonised and those infected.
The SPC chart shows that in October and November 2018 the numbers of new cases of CPE were above the upper control limit. This is likely to be explained at least in part by the increase in the number of samples tested for CPE has increased (see chart below).
In addition to the data point in Nov-18, the number of cases in January 2019 was in the upper third of the control limits. Using SPC rules (two out of three points in the outer third), this is a signal of special cause variation.
Total number of rectal swabs / faeces samples tested for CPE
There is a policy to increase the number of screenings for CPE, and since October 2017 the monthly number of samples tested for CPE has increased from just under 10,000 to over 19,000 in February 2019, an increase of more than 100%.
Increased screening and increased detection of people colonised is a useful step towards a more accurate picture of the incidence of CPE however the desired direction of the number of new cases of CPE is downwards.
Note that there are not enough data points to produce a control chart for this data (20 data points are required for an I chart).
* Data from one Model 4 hospital was previously missing for Dec-18 & Jan-19. Data for these months has since been reported. The data reported above has been updated to reflect this.
Directorate Quality Profile April 2019

Effective

Return of spontaneous circulation (ROSC) at hospital

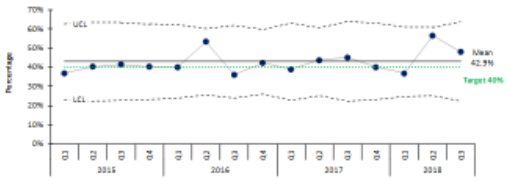
This indicator is based on the rate of return of spontaneous circulation following cardiac arrest on arrival at the receiving hospital using the Utstein comparator group calculation. This is a measure of clinical performance in management of out of hospital cardiac arrest.

Assessment

The average national performance is better than the target.

The variation between quarters is within the expected range.

National rate



- The average national rate of return of spontaneous circulation on arrival at ED is 42.9% since 2015. This is better than the target of 40%.
- The variation from quarter to quarter is within the expected range, i.e. the rate is stable.
- While the average rate is above the target, it can be expected that the quarterly rates will fluctuate between approximately 24% and 62% due to normal variation.

Notes:

- The control limits of the SPC chart above have been updated based on the numerators and denominators used to calculate the ROSC percentage.
- In 2017 there were 1,908 of out-of-hospital cardiac arrests (OHCAs) confirmed and attended by the National Ambulance Service where resuscitation was attempted. 13% (256 cases) were in the Utstein subgroup.
- The Utstein Comparator group includes patients aged over 17, with presumed cardiac cause (i.e. excluding patients with evidence of another cause e.g. trauma, asphyxiation, drug overdose), bystander witnessed collapse, and an initially shockable cardiac arrest rhythm
- There is wide variation in patient characteristics and circumstances of OHCA. The use of the Utstein comparator group subset facilitates a more standardised comparison of patient outcomes between systems and over time
- Utstein factors have been shown to account for approximately 50% of variation in survival from OHCA internationally. This means that there are unmeasured factors outside of a resuscitation attempt that may affect the chances of a patient having ROSC at hospital arrival.[1]

1. Dyson K, Brown SP, Illay S, et al. International variation in survival after out-of-hospital cardiac arrest: a validation study of the Utstein template. Resuscitation 2019;138:168-81. doi: 10.1016/j.resuscitation.2019.03.018 [published Online First: 2019/03/23]

Person-centred

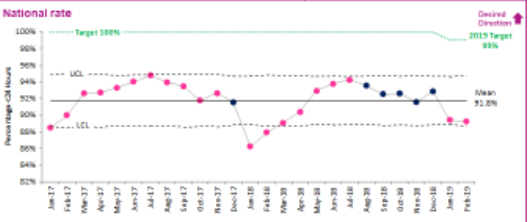
Percentage of attendees aged over 75 at ED who are in ED <24 hours

This indicator measures the percentage of attendees aged over 75 at ED who have a patient experience time of less than 24 hours. Long waiting times in ED are linked to poorer outcomes, including death and poor patient experience. Patients waiting more than 24 hours should be cared for in a more appropriate care setting than an ED.

Assessment

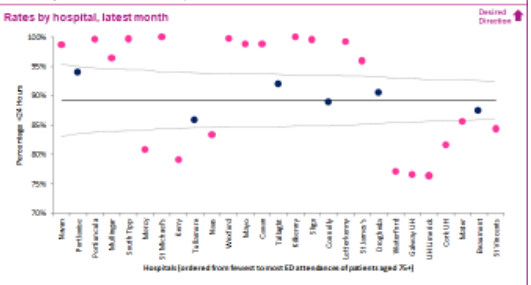
Average national performance is worse than the target and is unstable. There was a signal of improvement between January and July 2018, however data for January and February 2019 indicates that this improvement has not been sustained.

National rate



- Since January 2017, 91.8% of attendees aged over 75 at ED have been waiting in ED for less than 24 hours. This is worse than the current target of 99%, and equates to over 1,000 patients aged over 75 per month in ED for more than 24 hours.
- Performance over time is unstable, with a number of occurrences of unexpected (special cause) variation. There was a signal of improvement between January and July 2018, however data for January and February 2019 indicates that this improvement has not been sustained.

Rates by hospital, latest month



- Data for February 2019 shows that the rates for 21 of the 27 hospitals are outside the control limits.
- This is overdispersion, and indicates that the variation across the system is greater than expected.
- The reasons for the variation across the system should be understood so that the learning can be used to guide future improvements.

Person-centred

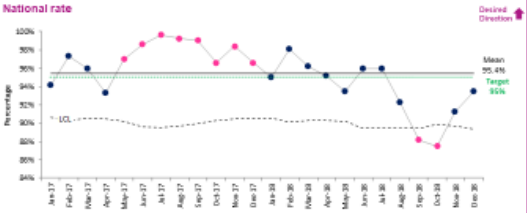
Bed days used in CAMHS inpatient units as a percentage of total bed days

This indicator measures the proportion of time spent in a dedicated child and adolescent mental health unit for children who require admission to mental health services. Children and adolescent mental health is effectively managed in CAMHS units and stays in adult mental health units are not appropriate or person centred.

Assessment

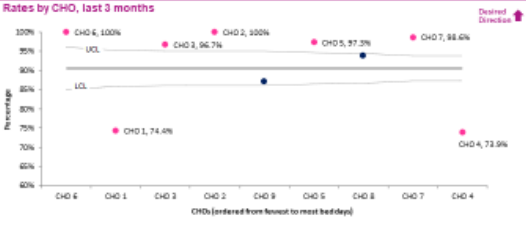
Average national performance is better than the target. The rates for Sept & Oct 2018 were below the lower control limit indicating unexpected poor performance, however the rates for the most Nov & Dec 2018 were within the control limits.

National rate



- Since January 2017, 95.4% of bed days used by children have been in CAMHS inpatient units (target 95%). This equates to an average of around 1,620 bed days of children per month in HSE mental health inpatient units, with 75 of these spent in adult mental health inpatient units each month.
- The rates for September 2018 (88.2%) and October 2018 (87.6%) were below the lower control limit. This is an indication of unexpected variation and suggests that something unusual occurred during these months. The reasons for this should be investigated as there may be an opportunity to learn from the cause of the variation.

Rates by CHO, last 3 months



- The variation in the proportion of bed days used in CAMHS units among CHOs over the last 3 months is greater than expected, with the rates for 7 of the 9 CHOs falling outside the control limits.
- The rates for CHOs 2, 3, 5, 6 and 7 were above the upper control limit indicating performance that is better than expected relative to the national average.
- The rates for CHO 4 (73.9%) and CHO 1 (74.4%) were below the lower control limit indicating an unexpectedly low rate of bed days used in CAMHS units as a percentage of total bed days in these CHOs. This variation is unlikely to have occurred by chance alone.

Timely

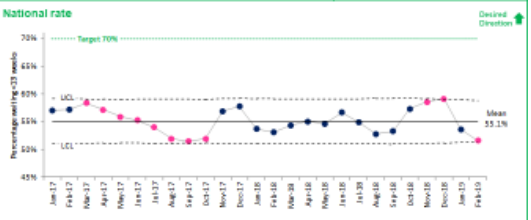
Percentage of patients waiting <13 weeks following a referral for routine colonoscopy or OGD

This indicator measures the number of patients waiting to be seen for less than 13 weeks as a proportion of the total number of patients waiting to be seen following a referral for a colonoscopy or OGD. 70% of patients should wait no more than 13 weeks for routine colonoscopy or OGD

Assessment

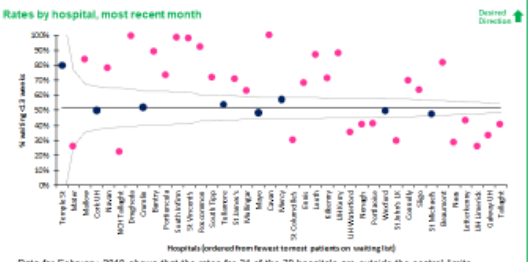
Average performance at national level is worse than the target and since November 2018 shows more variation than expected between months. The funnel plot shows more variation among hospitals than expected.

National rate



- Since January 2017, 55% of patients referred for a routine colonoscopy or OGD have been waiting less than 13 weeks. This is worse than the target of 70%.
- There was a signal of disimprovement in 2017, although this was not sustained.
- There was a signal of improvement in the last 2 months of 2018 where the rates for November and December were in the upper third of the control limits. However the rate for February 2019 was in the lower third of the control limits. This indicates that the variation between these months is greater than expected.

Rates by hospital, most recent month



- Data for February 2019 shows that the rates for 31 of the 39 hospitals are outside the control limits.
- This is overdispersion, and indicates that the variation across the system in the percentage of patients waiting <13 weeks following a referral for routine colonoscopy or OGD is greater than expected.
- The reasons for the variation across the system should be understood so that the learning can be used to guide future improvements.

Timely

Hip fracture surgery within 48 hours

This indicator measures the proportion of patients aged over 65 with a hip fracture who have surgery within 2 days of admission. Delay in time to hip fracture surgery of more than 48 hours is associated with increased mortality and impairment of quality of life. Timely access to surgery is dependent on multidisciplinary care pathway including emergency admission, diagnostics and surgery.

Assessment

Average performance at national level is worse than the target. The rates for 2 hospitals are better than expected. The rates for 2 hospitals are below the expected level. The reasons behind these variations could be used to direct future improvements.

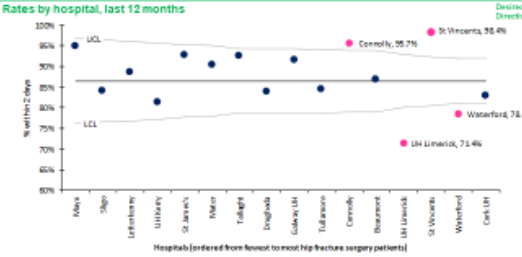
National rate

Desired Direction

- Since January 2017, 86.2% of patients aged over 65 with a hip fracture had surgery within 2 days of admission. The rate can be expected to fluctuate between 79% and 93% due to normal variation. This is below the target of 95%.
- There was a signal of improvement between September 2017 and June 2018 that has not been sustained. The reason for this should be understood as it may provide an opportunity to learn from the cause of the variation.

Rates by hospital, last 12 months

Desired Direction



- Over the last 12 months, the rates for 2 hospitals (Connolly and St Vincent's) were above the upper control limit. This is a signal that the performance in these hospitals is better than expected.
- The rates for 2 hospitals (University Hospital Limerick and University Hospital Waterford) were below the lower control limit. This is a signal that the performance in this hospital over the past 12 months was below the expected level.
- These occurrences of unexpected (special cause) variation should be examined so that the learning can be used to direct future improvements.

Efficient

Weekly number of delayed discharges

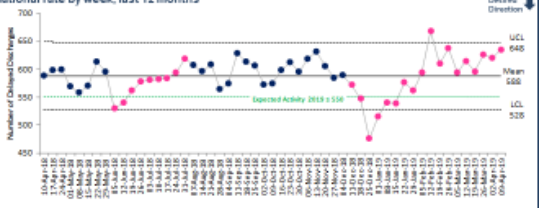
Achieving safe, timely and person centred discharge from hospital to home is an important indicator of quality and a measure of efficient and integrated care. Delayed discharges are used in assessment of quality of care, costs and efficiency.

Assessment

The average national number of delayed discharges is above the expected level and is unstable. While there was an improvement in Dec-18/Jan-19, the latest data shows a signal of disimprovement in the number of delayed discharges since February 2019.

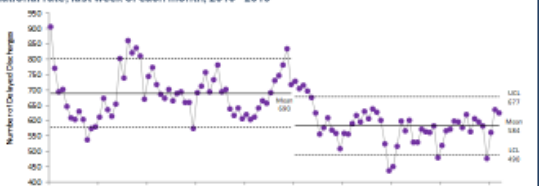
National rate by week, last 12 months

Desired Direction



- The average weekly number of delayed discharges over the past 12 months is 588. This is above the expected activity in 2019 of ≤ 550.
- There was a signal of improvement in the number of delayed discharges during December 2018 and January 2019 (a series of 8 points below the mean).
- However the latest data since February 2019 shows a series of 10 consecutive weeks above the mean. This is unlikely to have occurred by chance alone, and using SPC rules is a signal of special cause variation, i.e. a signal that the number of delayed discharges was higher than expected during those weeks.

National rate, last week of each month, 2010 - 2019



- The SPC chart above shows the monthly number of delayed discharges (based on the last week of each month) between January 2010 and March 2019.
- Between 2010 and 2014 the average number of delayed discharges was 690. Using SPC rules there was a signal of improvement, and between 2015 and to date in 2019 the average number of delayed discharges is 584.
- While there have been some signals of improvement in the number of delayed discharges since 2015 (usually during December each year), there are no signals of a sustained improvement in the number of delayed discharges since 2015.

Efficient

Day of surgery admission (DOSA) rate

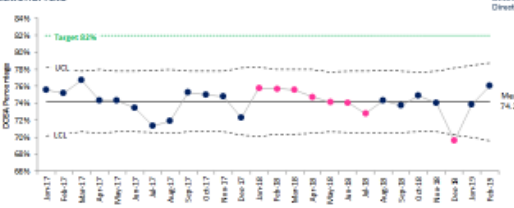
This indicator refers to the percentage of elective surgical inpatients who had their principal procedure carried out on the day of admission. This indicator allows for the measurement of the effect of improved pre-admission assessment services which facilitate day of surgery admission.

Assessment

Performance at national level is below target. In 2018 there was a signal of disimprovement although has since resolved. The rates for 2 hospitals are below the lower control limit indicating unexpected variation. The rate for 1 hospital was above the upper control limit.

National rate

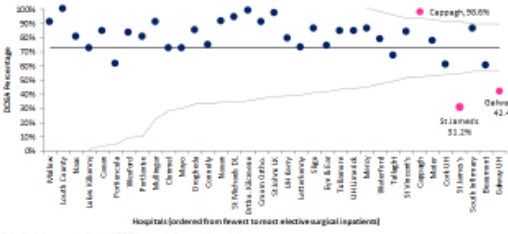
Desired Direction



- The average rate of elective surgical inpatients who had their principal procedure carried out on the day of admission since January 2017 is 74.2%. The target / expected activity is 82%.
- The rate for December 2018 was below the lower control limit. This is unlikely to have occurred by chance alone, and indicates that the DOSA rate for that month was unexpectedly low. However the rates for January and February 2019 were within the control limits.

Rates by hospital*, last 3 months

Desired Direction



* Note that there are individual DOSA targets for each hospital

- The rates for 2 hospitals (St James's and Galway University Hospitals) are below the lower control limit. This is a signal that the performance in these hospitals is lower than expected relative to the national average. Note however that the 2019 target is 36.5% for St James's and 51.4% for Galway University Hospitals.
- The rate for Cappagh National Orthopaedic Hospital is above the upper control limit. This is a signal that performance is better than expected relative to the national average. Note that 2019 target for this hospital is 98.1%.

Equitable

Homeless services: service users' health needs assessed within 2 weeks of admission

This indicator refers to the percentage of service users admitted to homeless emergency accommodation hostels / facilities whose health needs have been assessed within two weeks of admission. Completion of a health needs assessment is required to facilitate the effective operation of a care planning system to address the health and care needs of homeless people.

Assessment

Performance at national level is below target. However the latest data for 2018 shows a signal of improvement. The reasons for this should be understood to direct further improvements.

National rate

Desired Direction

- The number of service users admitted to homeless emergency accommodation hostels / facilities since 2015 averages around 1,400 per quarter. The target is that 85% of people will receive a health needs assessment within 2 weeks of admission.
- Since 2015, an average of 76.7% of people have received a health needs assessment within 2 weeks of admission, below the target of 85%.
- In Quarter 2 2018 the percentage of people who received a health needs assessment within 2 weeks of admission was above the upper control limit. This is unlikely to have occurred by chance alone. In addition, in Quarter 4 2018 the rate was in the outer third of the control limits (near the upper control limit). Using SPC rules this a signal of improvement in this measure.

Note: Data are not currently displayed at CHO or LHO level due to data gaps.

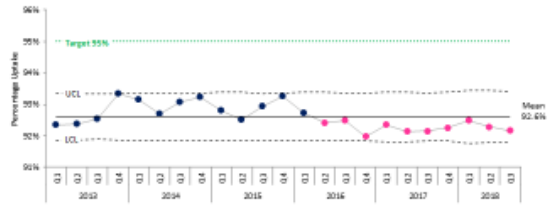
MMR vaccination rate

This indicator refers to the percentage of children who have received the MMR vaccine at 24 months of age. MMR vaccination prevents measles, mumps and rubella infection. 95% of the population must be vaccinated to provide population immunity. There is a measles outbreak due to pockets of population with low vaccination rates.

Assessment

Performance at national level is below target since 2013, with a further sustained disimprovement since Q2 2016. There is more variation among LHOs than would be expected by chance. Understanding this variation may provide opportunities for improvement.

National rate



- MMR uptake rates are below the target level of 95% since 2013. The average rate is 92.6%, and it can be expected that the rate will vary between 91.8% and 93.4% by chance alone.
- Since Quarter 2 2016 there have been a series of 10 consecutive quarters where the rate was below average. This is unlikely to have occurred by chance and is a signal of special cause variation, in this case a reduction in the uptake rate.

Rates by LHO, latest quarter (Q3 2018)

- Data by LHO for the latest available quarter show that 2 LHOs (Dublin North West and Galway) had uptake rates that were above the upper control limit indicating performance that was better than expected.
- The rates for 5 LHOs (Dublin South City, Wicklow, Donegal, Dublin West and Dublin North) were below the lower control limit indicating uptake rates that were lower than expected.

Data Source: Performance Profile | Frequency: Quarterly in arrears | Latest available data: Q3 2018 | Chart Type: 9 Primes I-P | Notes: Red points indicate special cause variation. See pages 19-21 for information on SPC charts and their interpretation.

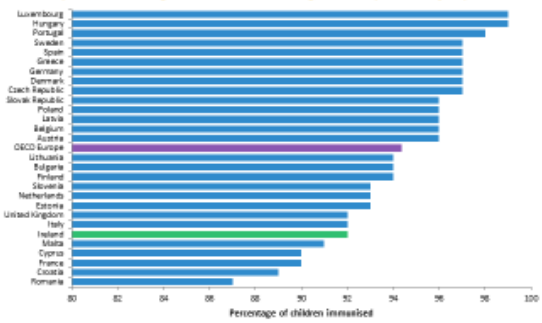
Page 17

Better Health & Wellbeing

Directorate Quality Profile April 2019

MMR vaccination rate: supplementary data

OECD Europe: Vaccination against measles, children aged 1, 2017 (or nearest year)



Source: OECD Health at a Glance: Europe 2018

- Comparable data at international level on MMR vaccination rates at 24 months of age are not available.
- The OECD reports data on measles vaccination rates for children based on the percentage of children under one year old who have received at least one dose of measles-containing vaccine in a given year.
- The latest available data from the OECD shows that among European countries in the OECD the average percentage of children vaccinated against measles aged 1 was 94.4%.
- 14 of the 28 countries for which data are available achieved vaccination rates of over 95%.
- Note that the data are not always strictly comparable across countries.

Page 18

Better Health & Wellbeing

Directorate Quality Profile April 2019

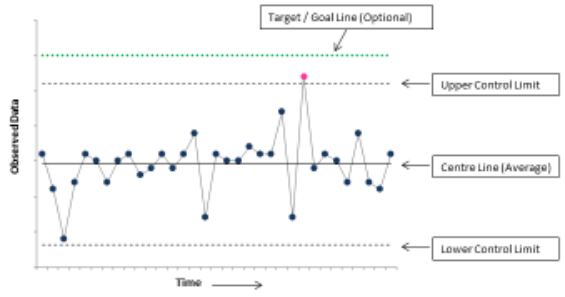
Anatomy of a Statistical Process Control Chart

A **Statistical Process Control** (SPC) Chart consists of data plotted in order, usually over time (weeks, months etc). It includes a centre line based on the average (mean) of the data. It also includes upper and lower control limits based on statistical calculations (3 sigma deviations from the average).

The control limits are based on the variation in the observed data. The control limits reflect the expected range of variation within the data, and do not reflect the desired range of variation in terms of quality of care. The probability of any data point falling outside of the control limits by chance alone is very small.

Points that are above or below the control limits are an indication of special cause variation. In addition to a data point outside of the control limits, there are four other rules that indicate non-random (special cause) variation.

The target / goal line is interpreted differently to the other lines in the chart. It is not determined by the data and so is not normally part of an SPC chart, but it can be useful to display it to help focus improvement efforts.

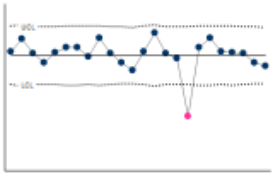


References

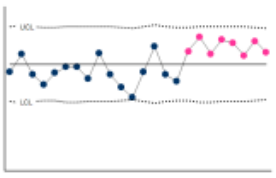
Provost L, Murray S. The Healthcare Data Guide: Learning from Data for Improvement. San Francisco: Jossey-Bass, Publication, 2011

Rules for detecting special cause variation using statistical process control charts

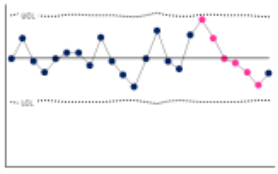
1. A single point outside the control limits (this doesn't include points exactly on the limit)



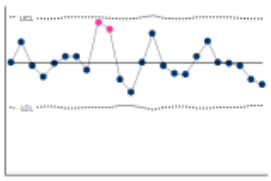
2. A run of 8 or more consecutive points above or below the centre line



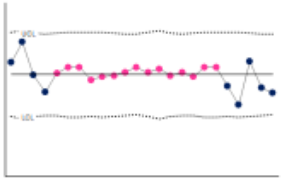
3. A trend of at least 6 consecutive points all going up or down



4. Two out of three consecutive points in the outer third (or beyond)



5. A series of 15 consecutive points close to the centre line (in the inner one-third)

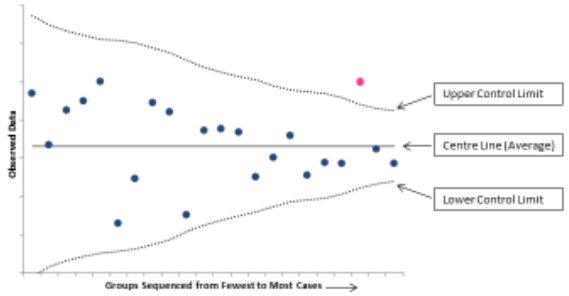


Anatomy of a Statistical Process Funnel Plot

A **Statistical Process Control** (SPC) Chart consists of data plotted in order, including a centre line based on the average of the data and upper and lower control limits based on statistical calculations (3 sigma deviations from the average).

SPC charts are commonly used to display data over time. However it is also possible to use SPC charts to display data for different groups (such as hospitals) within control limits. The control limits are calculated in the same way as an SPC chart over time, but the data are ordered by denominator size rather than by time. This gives a funnel shape to the SPC chart. Points that are above or below the control limits in a funnel plot are an indication of special cause variation. The other rules for detecting special cause variation in SPC charts do not apply to funnel plots.

The control limits are based on the variation in the observed data. The control limits reflect the expected range of variation within the data, and do not reflect the desired range of variation in terms of quality of care. The probability of any data point falling outside of the control limits by chance alone is very small.



References

Provost L, Murray S. The Healthcare Data Guide: Learning from Data for Improvement. San Francisco: Jossey-Bass, Publication, 2011

HSE Directorate Quality Profile: Directorate Meeting discussion prompt sheet

From November 2018, the HSE Directorate is testing how they receive and monitor a *HSE Directorate Quality Profile* comprising quality of clinical care indicators incrementally introduced over six months. For this quality improvement project, Directorate members use *Discussion, Decisions and Actions* as a useful way to structure their discussion around the *Quality Profile* during monthly directorate meetings.

Receipt of HSE Directorate Quality Profile:
***Directorate members** receive documents prepared by Chief Clinical Officer (CCO) (in Directorate monthly meeting pack in advance of each meeting)*

At the Directorate meeting the steps below are used by the Directorate members to discuss the Directorate Quality Profile

Discussion:
CCO/Nominee facilitates discussion on each indicator presented in the quality profile
- Are there internal or external factors impacting the indicator?

Decision:
Directorate members collectively agree a decision based on the information presented and their discussion

1. *Further analysis*
   - More data analysis needed to make a decision
2. *Performance attainment*
   - Normal variation (within an acceptable range)
   - Special cause providing signal of improvement
3. *Improvement opportunity*
   - Normal variation outside the acceptable range
   - Special cause (unusual event) indicating dis-improvement

Action:
Directorate members collectively request action of the relevant Director

1. *Request further analysis*
   - Request further data analysis from CCO
2. *Congratulate Directors and staff*
   - What can we learn?
   - Opportunities for further improvement?
3. *Request operational response*
   - Request further information on cause of dis-improvement from relevant Director
   - Request improvement plan
   - Request other

Directorate decisions and actions recorded in meeting minute and action log

Appendix: Initial list of proposed indicators for the Directorate Quality Profile as identified at the Directorate Workshop in October 2018
Indicators in bold are included in the Directorate Quality Profile for April 2019

Safe: Avoid harm to patients from the care that is intended to help them.	
Apex Indicators	Health and social care acquired pressure ulcers[1]
	Hospital acquired Staph. aureus bloodstream infection
	CPE infection
	Hospital acquired C. difficile
Supporting Indicators	Category 1 Serious Incidents
	Serious Reportable Events
	Falls in health and social care settings
	Rate of medication incidents that are major / extreme
	Hospital antimicrobial consumption
	Community antimicrobial consumption
	Community acquired C. difficile
Priority for Development	
Effective: Provide services based on scientific knowledge to all who could benefit and refrain from providing services to those not likely to benefit (i.e. avoid underuse and misuse of services, respectively)	
Apex Indicators	Survival for breast cancer
	Survival for cervical cancer
	Survival for colorectal cancer
	Return of spontaneous circulation (ROSC) at hospital
	Caesarean section[1]
Supporting Indicators	In-hospital mortality following stroke
	In-hospital mortality following AMI
	% compliance with regulations following HIQA inspection of disability residential services
	% compliance with regulations following HIQA inspection of older persons residential services
	Hospital admission COPD[1]
Priority for Development	Suicide post discharge
Person-centred: Provide care that is respectful of and responsive to individual patient preferences, needs, and values and ensure that patient values guide all clinical decisions.	
Apex Indicators	% of all attendees at ED who are discharged or admitted within 6 hours of registration
	% of all attendees at ED who are in ED <24 hours[2]
	Staff absenteeism
	Number of complaints
Supporting Indicators	% bed days used in CAMHS units as total of bed days used by children in mental health acute inpatient units
Priority for Development	Patient experience (monthly)
	Staff experience (monthly)
Timely: Reduce waits and sometimes harmful delays for both those who receive and those who give care.	
Apex Indicators	**Hip fracture surgery within 48 hours**
	% of accepted referrals/ re-referrals offered 1st appointment and seen within 12 weeks by CAMHs team
	% of people waiting < 13 weeks following referral for routine colonoscopy or OGD

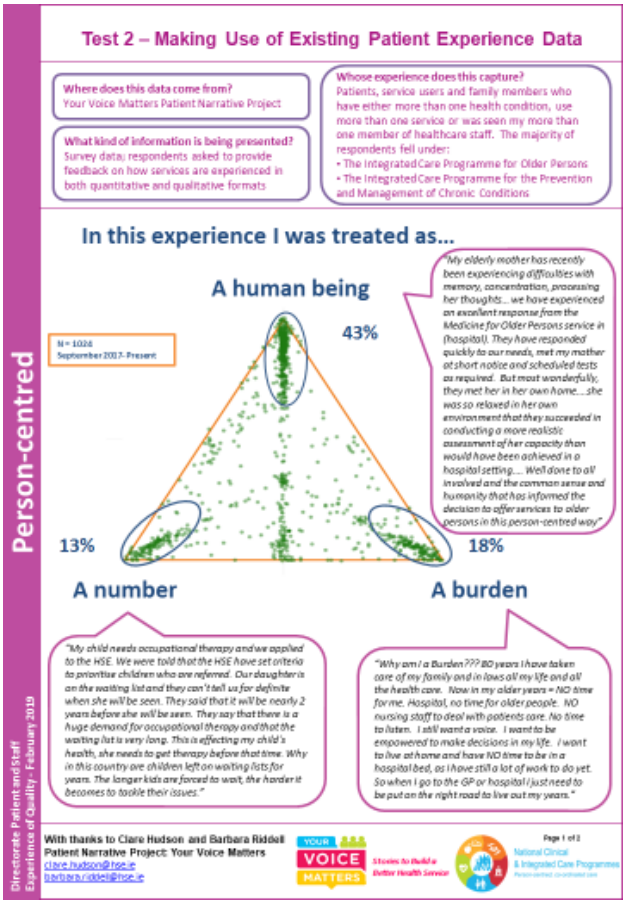
1. These apex indicators are not existing KPIs and so require indicator specifications to be agreed before inclusion in the Profile
2. Following feedback from the Project Advisory Group the measure included refers to patients aged 75 and over

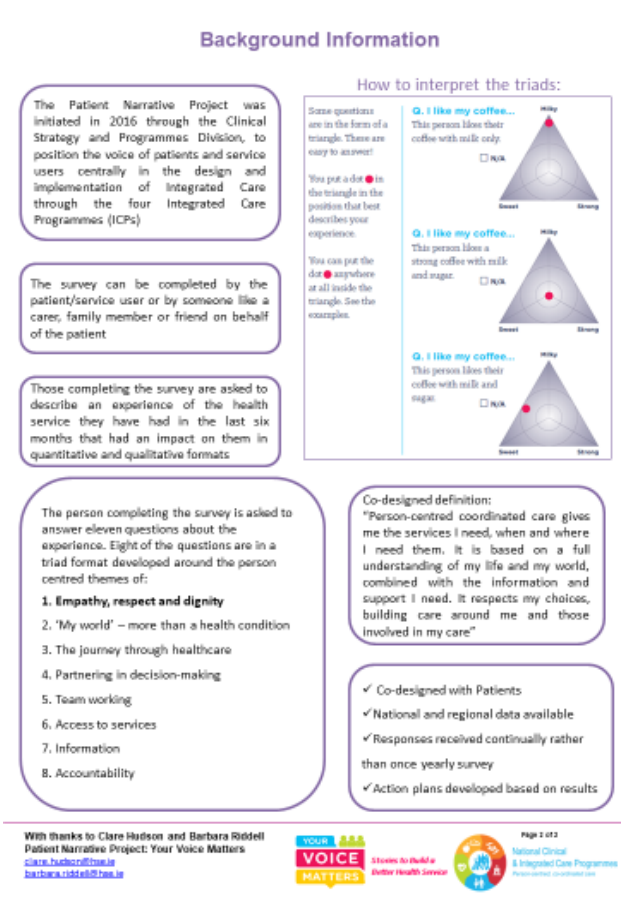
Timely: Reduce waits and sometimes harmful delays for both those who receive and those who give care.	
Supporting Indicators	% of patients attending lung rapid access clinic who attended or were offered an appointment within 10 days
	% of patients triaged as urgent who adhered to the standard of 2 weeks for referrals
	% of patients attending prostate rapid access clinic, who attended or were offered an appointment within 28 days
	% of patients undergoing radical radiotherapy treatment who commenced treatment within 15 working days of being deemed ready to treat
Priority for Development	Referral to treatment for cancer - whole journey measure
	Diagnostic waiting times for 4 scopes, CT and MRI
	Waiting time for first access to OPD services
	Waiting time for first access to inpatient elective procedure
Efficient: Avoid waste, including waste of equipment, supplies, ideas, and energy.	
Apex Indicators	**Number of weekly delayed discharges**
	Day of surgery admission rate
Supporting Indicators	Readmission rate medicine
	Readmission rate surgery
Priority for Development	Compliance against BADS directory of day cases
Equitable: Reduce inequalities between patients with respect to their ability to access health services, and reduce inequalities between patients with respect to the outcomes achieved for them by the provision of health services.	
Apex Indicators	**Homeless services: service users health needs assessed within 2 weeks of admission**
Supporting Indicators	Substance Misuse: No. and % of substance misusers for whom treatment has commenced within one calendar month following assessment
Priority for Development	Access to mainstream services for disadvantaged or marginalised groups
	Health outcomes for disadvantaged or marginalised groups
Better Health & Wellbeing: Provide care that seeks to identify and take opportunities to support patients in improving their own health and wellbeing	
Apex Indicators	HPV vaccination rate
	MMR vaccination rate
	% of eligible women with at least one satisfactory CervicalCheck screening in a 5 year period
Supporting Indicators	Staff flu vaccination rate long term care
	Staff flu vaccination rate acute hospitals
	% BowelScreen uptake rate
	% BreastCheck screening uptake rate
	% of smokers on cessation programmes who were quit at one month
Priority for Development	Childhood obesity
	Alcohol use and outcomes

Note:

- Apex indicators were identified at the Directorate workshop (Oct 2018) and a subsequent meeting with the DG as the most important areas for inclusion in the Quality Profile
- Supporting indicators are indicators that would be useful for occasional review to support the apex indicators.
- Priorities for development are indicators recognised as important but where there is no appropriate data currently available and future development of these is considered worthwhile.

Appendix D: Making Use of Existing Patient Experience Data





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