

## A quality management system (QMS) approach to breast screening and developing breast screening standards

### Healthcare Improvement Scotland's Quality Management System

While QMS has its origins in manufacturing and industry, latterly there has been a spotlight on a quality management approach to health and social care systems.

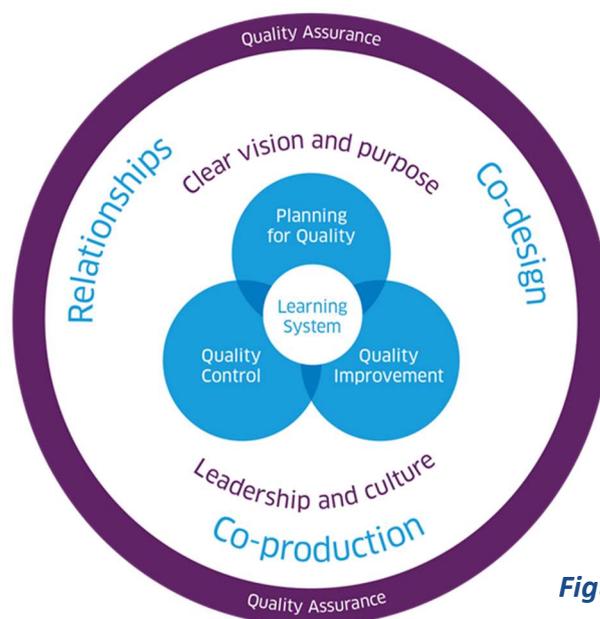
Healthcare Improvement Scotland (HIS) has been developing and testing a new approach to managing quality in healthcare. HIS' QMS describes key components and functions as a common framework that could be applied across different settings within the health and social care landscape to support delivery of high quality care.

Within a QMS, services take a holistic and evidence-informed approach to: plan for quality including assessing what needs to change; apply quality improvement approaches to measure that changes have delivered improvement; and to establish quality control mechanisms to ensure that changes are embedded and sustained in the system. A learning system is the way services use knowledge, evidence and evaluation to keep improving, measure how they are meeting their aims, and to learn and share with others.

It has been recognised that health and social care services are facing considerable financial and workforce challenges. These pressures increase the risk of poor quality care, this in turn increases the need for a consistent approach to the management of quality, built on evidence and best practice.

It should be noted that this is a conceptual framework. The intricacies and nuances of service delivery within specific programmes and services would be guided by the components and functions as set out in the QMS framework diagram (Figure 1).

In the context of the breast screening programme, a QMS can provide a roadmap toward better quality. It has the potential to provide a simple framework to guide quality activity including support for self-evaluation and internal assurance. Additionally, where change is required, a QMS is a helpful tool to support services to plot the evolution of different improvement approaches and implement successful change. Continual refinement of the breast screening programme using the QMS would enable the programme to pursue excellence at every level.



**Figure 1**

## Quality management principles applied to breast screening

There are a number of management principles that underpin a QMS. These principles are predominately used as a foundation to guide a service or organisation's development of a quality and improvement framework. There are different descriptions and interpretations of these guiding quality management principles. They have evolved over time and have varied according to the sector and setting where the principles have applied. However, it is well established and consistent across all sectors that 'customer' satisfaction is fundamental to quality management – quality and success cannot be achieved without taking care of the needs of the customer. Simply put, without sufficient uptake from informed participants and positive user experience there is no quality breast screening programme.

Seven quality management principles are described in *Figure 2*. The principles are supported by a quality statement and rationale that is applicable to the breast screening programme in Scotland. They echo the structure of the International Organization for Standardization (ISO) quality management principles guidance and have been provided as a conceptual guide to understanding a QMS through the lens of the breast screening programme. The breast screening programme has an overall aim to reduce the mortality from breast cancer through early detection. These principles provide a focus and theory around the ways this is achieved within the framework of a QMS.

### 7 quality management principles



*Figure 2*

## Example: the 7 quality management principles applied to the breast screening programme

### 1. Person-centred approach

#### Statement

The primary focus of quality management in breast screening is to understand, respond to and meeting screening participants current and future care needs and expectations.

#### Rationale

A person-centred approach is fundamental to achieving the quality ambition for people who experience breast screening services in Scotland as well as those who will become eligible. A breast screening programme that focuses on positive experiences of care and support, personal outcomes and an individual's needs and expectations can offer more effective care and a better experience for people using breast screening services.

### 2. Leadership

#### Statement

Leaders at all levels within breast screening should inspire, promote and support the service's culture of quality.

#### Rationale

Effective leadership within breast screening underpins a safe, effective and person-centred service. Strategies for continuous improvement, transparent accountability structures and promotion of positive cultures within the programme are fundamental tenets of quality leadership. Leaders establish and maintain an internal environment where employees can become fully involved in achieving the services aims and objectives.

### 3. Engagement

#### Statement

A quality breast screening service retains competent staff, encourages continuous development of their knowledge and skills, and empowers them through encouraging engagement and recognising achievements.

#### Rationale

Staff play a fundamental role in supporting the breast screening programmes quality objectives. Empowerment of staff to act autonomously, confidently and skilfully within their professional and organisational codes with opportunities to feedback on their experiences underpins high quality breast screening. Staff are provided with current and relevant information and guidance whilst reflecting on their practice to enable them to deliver high quality care.

## 4. Process approach

### Statement

Service performance is enhanced when integrated and multidisciplinary processes are implemented to unite different functions and specialities as one coherent quality management system across the breast screening pathway.

### Rationale

The quality management system consists of interrelated processes. Services can not only sustain but enhance their performance when leaders manage and assure processes, and the inputs and outputs that tie these processes together. Understanding how results are produced by this system enables the breast screening programme to optimise its system and its performance.

## 5. Continuous improvement

### Statement

A quality breast screening programme has a system that encourages learning and continuous improvement.

### Rationale

When they establish and sustain an ongoing focus on improvement breast screening services can maintain current levels of performance, respond to changing conditions, and create, identify and capitalise on new opportunities.

## 6. Evidence-informed decision making

### Statement

A quality breast screening programme has established evidence-informed decision making processes.

### Rationale

Standardisation of information indicates that data is collected more efficiently and information is transmitted more effectively within the service. Facts, evidence and data analysis lead to greater objectivity and confidence in decision making.

## 7. Mutually beneficial relationships

### Statement

A breast screening programme that manages its relationships with partners can nurture positive and productive involvement, support and feedback from those entities.

### Rationale

Third party services have a critical effect on the quality of breast screening services and their outcomes. Sustained success is more likely to be achieved when the programme manages relationships with all of its interested parties to optimise their impact performance.

## Quality management approach to developing breast screening standards

An effective QMS enables teams and services to deliver care that meets quality standards. Breast screening standards are essential to the governance and quality assurance of breast screening and for the purposes of quality improvement. Robust standards underpin both internal and external quality assurance processes.

Standards are developed using a methodology designed to ensure effective stakeholder engagement and deliver quality improvement. This approach reflects over 20 years of learning as well as world-wide thinking on standards development as promoted by the International Society for Quality in Health Care (ISQua). For information, we mapped ISQua standards development criteria alongside the 7 QMS quality principles (*Appendix A*).

The current standards development process in HIS consists of 4 main project stages – scoping, drafting, consultation and finalisation. Each project is run in accordance with good project management principles to ensure that the process is undertaken effectively and efficiently and risks are managed. There is an opportunity to further refine and build on the standards development methodology by developing standards in accordance with the 7 quality management principles as described above. It is anticipated that by taking this approach, HIS screening standards would focus the attention of standards on improving quality rather than addressing all the operational aspects of a given service.

The following elements are high level examples of what a quality management vision within HIS breast screening standards could enable:

- Recommendations for good leadership and governance
- A clear vision and purpose through national consistency
- Co-design, co-production and relationship building through partnership working and person-centred care
- Recommendations for a process to plan targeted improvements and evaluate the results of tests of change
- Recommendation of national benchmarking data, use of consistent information-gather, and national forums for sharing learning

## Future considerations

This paper has introduced some initial thinking around the applicability of a conceptual QMS framework to the breast screening programme and the associated standards. The National Screening Oversight Function's 2021-22 work plan outlines how the development of a national screening QMS will be taken forward, working in collaboration with the breast screening programme, based on a conceptual framework developed by HIS (2019). Additionally, there is a wealth of literature and guidance around how to develop a QMS within organisations and services – some links have been included in this paper.

The standards and indicators team within Healthcare Improvement Scotland are working with the NSOF to consider how best to implement the 2018 Review of Screening recommendations around external quality assurance and ensure there are robust and sustainable mechanisms to ensure the quality, safety and efficiency of breast screening services.

ISQua Criteria	ISQua Criteria Statement	QMS Principle
1.1 a	The need for new or revised standards is established taking into account environmental scanning of trends relevant to the specific standards area.	Principle 6: Evidence-informed decision making
1.1 b	The need for new or revised standards is established taking into account feedback from current and potential users, professional, purchaser, provider and patient/service user groups, government and other stakeholders.	Principle 7: Mutually beneficial relationships
1.1 c	The need for new or revised standards is established taking into account using evaluation data collated from previous editions.	Principle 5: Continuous improvement
1.1 d	The need for new or revised standards is established taking into account the knowledge and advice of experts.	Principle 2: Leadership & Principle 6: Evidence-informed decision making
1.2	Any relationships with the standards of other organisations, professional and regulatory requirements are identified and considered.	Principle 7: Mutually beneficial relationships
1.3	There is a planned process for the development or revision of standards.	Principle 4: Process approach
1.4 a	Standards are based on current available research evidence and experience.	Principle 6: Evidence-informed decision making
1.4 b	Standards are based on internationally recognised guidelines.	Principle 6: Evidence-informed decision making
1.4 c	Standards are based on recommendations from who and other national/international professional organisations.	Principle 7: Mutually beneficial relationships
1.4 d	Standards are based on input from technical experts.	Principle 7: Mutually beneficial relationships
1.4 e	Standards are based on legal requirements.	
1.4 f	Standards are based on other authoritative sources.	
1.5	Government, professional, purchaser, provider and service user interests are provided with adequate opportunity for input into the standards development process through direct or indirect representation and formal consultation.	Principle 3: Engagement
1.6 a	The scope of the standards are clear in terms of the type of health or social care organisation to which they apply.	

1.6 b	The scope of the standards are clear in terms of whether they are designed for use by the whole organisation or a specific service.	
1.6 c	The scope of the standards are clear in terms of the range of services covered.	
1.7 a	The purpose of the standards is clear in terms of setting a level of acceptable performance.	Principle 5: Continuous improvement
1.7 b	The purpose of the standards is clear in terms of facilitating quality improvement.	Principle 5: Continuous improvement
1.7 c	The purpose of the standards is clear in terms of for accreditation or certification.	
1.7 d	The purpose of the standards is clear in terms of licensing.	
1.7 e	The purpose of the standards is clear in terms of for insurance of public funding eligibility.	
1.8	There is a clear framework for the standards that makes them easy for organisations and surveyors to use.	Principle 1: Person-centred approach
1.9	The wording of the standards is clear and unambiguous.	Principle 1: Person-centred approach
1.10	Standards are tested and evaluation by providers and surveyors prior to approval to ensure that each standard is relevant, understandable, measurable, beneficial and achievable. Outcomes from the tests are used to determine any modifications to the standards and the process of application and assessment.	Principle 5: Continuous improvement
1.11	New and revised standards are approved by the standards setting body or appropriate authority before implementation.	Principle 2: Leadership
1.12	There is a process to determine the requirements under which the standards could be used by an independent assessment organisation, other than the body that develop the standards.	Principle 4: Process approach
1.13	Information and education are provided to users and surveyors of the new and revised standards to enable interpretation and implementation.	Principle 3: Engagement
1.14	There is a plan for the implementation of new and revised standards which includes: parameters, timeframes and any transitional arrangements.	Principle 4: Process approach
1.15	Feedback, (including satisfaction of users, surveyors and stakeholder groups) on the standards is obtained, documented and monitored. The data are analysed and evaluated to assist with improving the standards.	Principle 3: Engagement
1.16	The standards development process, for new or revised standards, is published and made available.	Principle 4: Process approach

