Flexible portfolio training

Quality improvement pathway

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This is made up of six capabilities, each of which is underpinned by descriptors, and followed by illustrative professional activities that might be used to evidence the outcome descriptors.[*]

The pathway describes a structured framework of activities a trainee might sample and undertake developing a range of experiences and is not intended to be exhaustive in its implementation.

The six capabilities are:

1. Understanding the system
2. Human elements of change
3. Measurement of change
4. Implementing change
5. Sustainability and spread
6. Leadership and teamworking

Outcome 1: Demonstrate an understanding of the system in which healthcare is delivered as it relates to QI work	
Capability descriptors	1A Knowledge of QI theories and methodologies 1B Knowledge of quantitative and qualitative analysis, and diagnostic tools to understand the system 1C Knowledge of complexity theory and how it applies to healthcare 1D Identify and prioritise improvement needs 1E Apply sustainable healthcare principles taking into account the financial, environmental and social impact of health services
	2 Knowledge of when and how to apply QI science to improve services and patient safety
Illustrative professional activities to evidence the capability descriptors	• Explore and diagnose the improvement need and set an improvement aim • Involvement in adverse incident and complaint reviews to identify potential system improvements • Use of process mapping to help understand the system, eg A3 method, swim lane diagrams • Keep in mind the whole system, inviting diverse opinions and perspectives • Involving patients, service users and their families and carers in co-production • Be able to define the system under consideration, its boundaries and interfaces with other systems or pathways • Benchmarking current service performance with other comparable systems and against standards documents, to include evidence-based best practice guidance, such as NICE and SIGN • Review current systems against sustainable healthcare principles • Knowledge of cause and effect analysis including root cause analysis, Pareto charts, driver diagrams, statistical process control and Kotter's model of change • Perform risk assessments and risk management as applied to safety and services • Participation in structured national audits and QI programmes
GPC domains 1, 2, 3, 4, 5, 6	

Outcome 2: Demonstrate knowledge of the impact of the human elements of change on QI efforts	
Capability descriptors	1A Knowledge of human factors theory, the interaction of people, technology and environment 1B Knowledge of factors that influence reliable care 1C Analysis of stakeholders impacted by potential change 1D Knowledge of the psychology of change
	2 Identify levers and drivers and the theory of change that can be used to develop a shared purpose and plan improvement project activities
Illustrative professional activities to evidence the capability descriptors	• Constructively question current practice, recognising opportunities for improvement, and potential barriers and enablers to change • Identify and consult with stakeholders; understand the emotions of change in a team and tools to manage this, eg motivational interviewing • Enable opportunities for wide-reaching patient involvement to facilitate patient-orientated outcomes and improved patient/carer experience and patient safety • Engage with multidisciplinary/multiprofessional teams to plan improvement of services • Develop a shared purpose, communication and engagement plan • Form a team to take forward improvements • Undertake formal human factors training including simulated high-risk scenario management • Knowledge of crisis resource management
GPC domains 1, 2, 3, 5, 6, 9	

Outcome 3: Demonstrate knowledge of measurement of change to evidence QI work	
Capability descriptors	1A Knowledge of / describe different types of measurement for improvement including run charts, statistical process control, and both quantitative and qualitative analysis, including an understanding of how to interpret whether a change has been a success 1B Knowledge of / describe variation: measurement, types of variation, and understanding expected and unwarranted variation 1C Choosing measures that matter to patients, service users and their families and carers
	2 Understand the difference between 'data for assurance' and 'data for improvement'
Illustrative professional activities to evidence the capability descriptors	• Promote the value of data collection and analysis for improving services • Work with data analysts to develop understanding of data definition, data capture, data storage, analysis and presentation • Work with patients, service users and their families and carers to capture data that matters to them • Formulate, prioritise and test solutions to data management • Undertake quantitative and qualitative assessment of services, improvement need and performance over time including during improvement projects • Evaluate the success of a project using different measurements including sustainable value-based healthcare measurement / measures that matter to patients
GPC domains 1, 2, 3, 6, 9	

Outcome 4: Demonstrate knowledge of the complexities involved with implementing change	
Capability descriptors	1A Knowledge of the interplay between psychology, system, process and technical knowledge to implement change 1B Knowledge of management and governance of projects/ programmes 1C Coaching and engagement skills 1D Marketing and communication skills
	2 Promote and demonstrate a collaborative approach to delivering QI by engaging with MDTs, patients and carers to deliver improvement of services
Illustrative professional activities to evidence the capability descriptors	• Implement QI projects using consistent methodology and appropriate governance • Use driver diagrams and/or other summary formats to structure thinking and projects in the context of change requirements • Perform process mapping and process redesign • Critically appraise merits and limitations of QI methods in a healthcare context • Apply rapid cycle testing and adaptation (PDSA) • Influence strategy and policy development which champions and incorporates QI in local, regional and national settings, eg establish QI training, support and mentorship for junior doctors • Incorporate new technologies into change ideas • Tell the story of the change in a compelling way • Demonstrate learning from projects that 'fail'
GPC domains 1, 2, 3, 4, 5, 6	

Outcome 5: Demonstrate knowledge of how to ensure sustainability and spread of QI work	
Capability descriptors	1A Knowledge of scale-up and spread mechanisms 1B Knowledge of how to sustain improvement including knowing potential barriers 1C Marketing and communication skills 1D Stakeholder management and Influencing skills 1E Dissemination
Illustrative professional activities to evidence the capability descriptors	• Adapt a successful change from one environment to another system • Demonstrate scale up of a change in improvement projects • Demonstrate sustainability planning in change interventions • Integrate a successful change into policy, practice and standard work • Complete a business case resulting from an improvement project including supporting it through local governance systems • Share good practice appropriately through presentations, publications/posters at conferences, regional and national networks, and collaboration through professional organisations
GPC domains 1, 2, 4, 5, 6, 8	

Outcome 6: Demonstrate knowledge of the importance of leadership and team working within QI work	
Capability descriptors	1A Recognise that the leadership styles adopted can lead to different attitudes and behaviours amongst others and can influence the outcomes of improvement work 1B Knowledge of team culture, behaviours and resilience and its impact on improvement work 1C Demonstrate personal flexibility when leading a team in improvement work 1D Demonstrate reflection to increase self-knowledge and to increase personal resilience
	2A Knowledge of human factors theory and reliability theory, as applied to teams 2B Features of effective teams and team management, including crisis resource management
Illustrative professional activities to evidence the capability descriptors	• Undergo training to facilitate working as part of a multiprofessional improvement team with involvement in team activities, eg chairing meetings or leading safety briefings • Coordinate, lead or support organisational change for the improvement of services • Design, manage and facilitate QI projects • Undertake formal personal leadership development programme • Critically reflect on own attributes, behaviours, role, capabilities and development needs for leading QI • Coach and mentor colleagues in analysis of quality and in setting an improvement aim and QI implementation • Presentation of improvement project during development and after delivery to different groups • Avail of situational leadership opportunities in QI • Develop personal and professional networks for sharing QI work to drive forward change culture • Engage in role modelling for and with other colleagues
GPC domains 1, 2, 3, 4, 5, 6, 8	

Abbreviations

GPC = generic professional capabilities; MDTs = multidisciplinary teams; NICE = National Institute of Clinical Excellence; PDSA = plan, do, study, act; QI = quality improvement; SIGN = Scottish Intercollegiate Guidelines Network.