Translating the syllabus into a curriculum

Developing training modules

What is the difference between a syllabus and a curriculum?

The syllabus represents a very high-level description of material that could be covered on a topic. Subsequent curricula developed from that syllabus contain the educational content reflecting the syllabus items tailored to particular categories and levels of audience. Curricula will address the range of potential educational methods that might be used.

Therefore, the syllabus is the content that allows for future changes and the personalised development of curricula to teach the concepts and tools of patient safety across many professions and many levels of seniority and responsibility within the NHS. This process is taking place over 2020-21.

Below are five exemplars of where content that might be expected to be included in the syllabus is described as part of detailed training modules that relate directly to the syllabus. These areas have been highlighted during consultation and discussion with stakeholders, and the document shows how they will be addressed and the capabilities they relate to in the syllabus.

1. NHS systems — alerts, reporting process, Datix, NRLS

Curriculum would include:

— Reporting using local reporting and learning systems (usually Datix)
— Group work to explore safety regulations and expectations in the participants’ local area, ward, speciality or pathway
— Understanding outputs from NRLS and updates
— Learning lessons from national reports (Francis, Morecambe Bay etc.)

Many capabilities relate to this. The points are explicitly included in Domain 1.1, The Safety Landscape and Domain 1.4, Patient safety regulations and improvement.

Key capabilities

From Domain 1.1 The Safety Landscape:

1. Has knowledge of national learning reports and can describe key findings
2. Applies lessons from key case studies in patient safety

From Domain 1.4 Patient safety regulations and improvement:

1. Outlines and explains key safety recommendations from professional bodies and regulators, including mandated safety practices
2. Ensures that recommendations such as national patient safety alerts are complied with.
3. Is aware of all indications of patient harm and risk, including incident reporting, complaints, and mortality reviews.
4. Identifies and monitors key areas where safety can be improved.
2. Communication skills - notably staff supporting and facilitating patient input especially after a serious incident

Curriculum would include:

- Communication skills training, including listening, raising concerns and the ability to engage with patients sensitively
- Involving patients and carers in investigations, engaging with families
- Duty of Candour responsibilities for staff.

Using a full and multidisciplinary team in investigations is covered in Domain 2, although patients are not explicitly mentioned. Raising concerns, listening to patients is included in the proposed capabilities at Fundamentals level, the first module for all NHS staff that will be available in April 2021.

Key capabilities

From Domain 3.3, Non-technical skills:

1. Uses case studies to understand the effect of non-technical skills on working practice
2. Carries out evaluation of personal non-technical skills (communication, situational awareness, stress management, teamwork and leadership)
3. Outlines and explains the hierarchy gradient and its effects
4. Applies strategies to improve non-technical skills.

3. Measurement/monitoring, QI methodologies

Curriculum would include:

- Link between reliability and clinical safety
- Reliability of safety-critical care processes
- Using metrics correctly and applying improvement cycles
- SPC charts
- Involving staff, sharing and visual communication.

Key capabilities

The key link to QI methodology in the syllabus is through process reliability and safety assurance.

From Domain 3.4, Process reliability and safety assurance.

1. Explains the relationship between clinical outcomes and process reliability
2. Identifies and maps safety-critical processes against clinical goals
3. Creates and applies metrics to assess process reliability and clinical outcomes
4. Evaluates and develops communication and feedback to improve process reliability.
4. Patient /family contribution

Curriculum would include:

- Ensuring full patient, family and carer involvement in any investigations
- Developing appropriate skills in all staff beyond listening to encouraging and facilitating patient, family and care engagement.

Key capabilities

This area will be developed further. At present, this is covered in communication and involvement in incident investigations in Domain 2.4. Patient and family involvement in investigations is addressed in Domain 2.1, sensitivity in communications and in Domain 3.3, non-technical skills.

5. Human Factors - design aspects

The role of humans in systems and in system-induced failures is central throughout the syllabus. This is often referred to as ‘system-based human factors’ to distinguish it from non-technical skills, or ‘person-based human factors’. A high proportion of Domains 3 and 4 relate specifically to system-based human factors analysis and design.

Curriculum would include:

- Understanding the system through consensus-based review and mapping
- Using key system tools to map the local system and its relations upstream and downstream (HTA and process mapping)
- Using FMEA to identify risks to patients systematically
- Designing safer systems using HTA and predictive human error analysis
- Designing out human error, equipment failures and environmental problems
- Using the hierarchy of control in designing safety interventions.

Key capabilities

From Domain 3.1, Human factors:

1. Outlines and explains the role and effect of humans in complex systems and the fundamentals of human factors.
2. Reflects on performance to explain human factors in practice.
3. Evaluates the key factors that affect human performance and relates them to local work systems.

From Domain 4.1, Risk evaluation in clinical practice:

1. Adopts a consensus-based approach to identifying risk, with multi-professional involvement.
2. Has knowledge of hazards and risks and can use standard methodology to assess risks to patients.
3. Applies formal risk analysis using Failure Mode and Effect Analysis (FMEA).
4. Identifies proximal and systemic causes of potential failures and develops strategies to address immediate risks.
From Domain 4.2, Mapping techniques to identify risks to patients:

1. Understands and applies Process Mapping to understand systems and to identify high-level risks to patients.
2. Applies Hierarchical Task Analysis (HTA) to decompose safety-critical tasks and identify specific task risks.
3. Takes outputs from mapping techniques to structure improvement programmes in safety and quality.
4. Uses Hierarchical Task Analysis as a tool to design goal-oriented safe clinical systems.

From Domain 4.3, Improving systems safety,

1. Leads on consensus-based evaluation of why things go wrong for patients.
2. Outlines and explains checklist design and uses safety checklists appropriately.
3. Outlines and explains weak and strong interventions in building safety.
4. Applies the Hierarchy of Control to design and implement effective barriers to patient harm.

Design, procurement and standardisation

Many of the points above apply directly to these issues, but in particular, we would suggest that safety-led design is based on the use of consensus groups to map and test human behaviour (where HTA and process mapping are the most useful tools) and to identify risk (where FMEA and consensus risk evaluation are best applied).

HTA is especially significant here, since it can be used not merely to map systems in detail but as a goal-oriented design tool. It allows the user to determine the essential safety requirements for each task and sub-task in a system or process and ensure that risks are addressed proactively.

Note – synergy between domains and a holistic syllabus

Many of the capabilities listed here in relation to specific points should not be taken in isolation. It would be impossible to respond adequately to a patient safety incident, for example, without a knowledge of how human behaviour is embedded in and influenced by the way we work – our systems. Similarly, to understand human-related failures in incident analysis or in the design of safe clinical systems, it is necessary to understand tasks, cognitive factors in task performance, and system-induced human “error” modes and management.

These relationships reflect a holistic approach to education in patient safety where the synergy between syllabus domains leads to a genuine expertise in patient safety. Therefore, in explaining how the syllabus covers specific issues, it becomes necessary to recognise how the four themes – systems expertise, risk expertise, human factors and safety culture – are connected.