

A Framework for Perioperative Services in Scotland





Running and staffing operating theatres is one of the most resource intensive areas within the NHS. Undergoing surgery requires multiple steps to fall seamlessly into place, so that on the day of surgery the best possible experience and outcome is delivered for both the patient and the staff, with minimal waste. Unfortunately, there are occasions when this is not always the case, and this Framework provides a systematic approach that optimises the steps that when sequenced correctly ensure a high quality of service.

The Modernising Patient Pathways Programme (MPPP), a component of the Centre for Sustainable Delivery (CfSD) is a national resource, which supports NHS Boards with redesign of services to maximise value for patients by avoiding waste, prioritising patient empowerment, and ensuring patients access support when required with the most appropriate person.

It's Perioperative Delivery Group (PDG) brought together key multidisciplinary stakeholders with the shared goal of agreeing a national approach to perioperative services by maximising flow and productive time, thereby reducing the time patients wait for perioperative services.

The PDG agreed that the basis for successful improvement and redesign was the establishment of a national Framework, encompassing key principles for perioperative services for Scotland. This Framework aims: to provide the best clinical outcomes for patients via services which are safe, sustainable, patient-focused, efficient, considerate of environmental impact, affordable, accessible, delivered as locally as possible and adaptable to change over time.

This Framework is the result of coproduction between the wide range of professions and experts required to successfully deliver the perioperative pathway, who have come together to collaborate with the shared goal of improving perioperative services for the people of Scotland.

The Framework brings together resources within the one interactive electronic document, with links to further relevant information and an accompanying self-assessment to support action planning. Key to successful implementation will be the endorsement and leadership at a senior level within NHS Scotland Health Boards.

Brenda Wilson, Clinical Lead, Perioperative Delivery Group Rory Mackenzie, Deputy National Clinical Director, Centre for Sustainable Delivery



During 2023, the Scottish Government commissioned the Centre of Sustainable Delivery (CfSD) to address the challenges within perioperative services in Scotland. As a result, the Perioperative Delivery Group (PDG) was established by the Modernising Patient Pathways Programme (MPPP) in November 2023, with the aim of developing a national approach to:

- maximising flow through perioperative services
- maximising productive time in theatres
- reducing the amount of time patients wait for perioperative services.

The PDG comprises of clinical, operational and managerial experts from across perioperative services in Scotland, as well as representatives from a number of other key stakeholder organisations.

The PDG's remit was to agree a Framework to help drive efficiency and productivity, and support the future proofing of perioperative services across Scotland. The Framework aims to deliver high quality, safe, effective, person-centred and sustainable perioperative care for the people of Scotland, while building on and supporting existing national approaches to service delivery.

Modernising Patient Pathways Programme



- This Framework has been co-designed in collaboration with clinical, operational and managerial experts from perioperative services across NHS Scotland.
- This Framework brings together a set of national principles centred around <u>Scheduling</u>, <u>Pre-operative Assessment</u>, <u>Protecting</u>
 <u>Planned Care</u>, <u>Wider Perioperative Team Development</u>, High-Volume High-Flow Surgery and Data for Improvement. These principles support the delivery of high-quality, safe, effective, person-centred and sustainable perioperative services for the people of Scotland.
- Health boards should seek senior executive sponsorship to support any service redesign or local improvement programme.
- Senior teams, clinicians and managers should review the Framework in full and use local data to identify the greatest opportunities for improvement.
- As well as the key actions in the Framework, teams are required to access the embedded links within each section. These links provide further detail, to support the practical application of each of the focus areas, as well as additional resources.
- A <u>self-assessment tool</u> is available to benchmark each Health Board's current position and assist in the development of local action plans to support implementation. A Word version is also available <u>here</u> for you to download and complete.
- An Equality Impact Assessment (EQIA) also accompanies this programme.



Values underpinning the framework

Services are evidence-based to deliver the best clinical outcomes for patients.

Services are safe and sustainable.

Services are patient-focused.

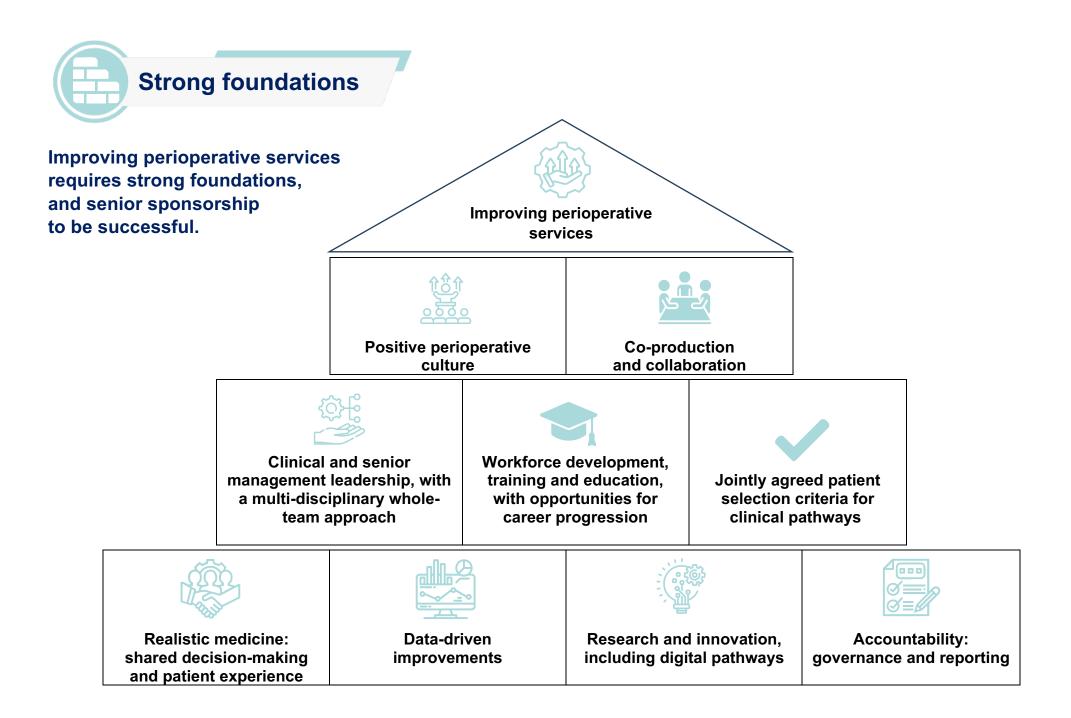
Services are efficient, making best use of resources.

Services are affordable and delivered within available funding.

Services are accessible and provided as locally as possible.

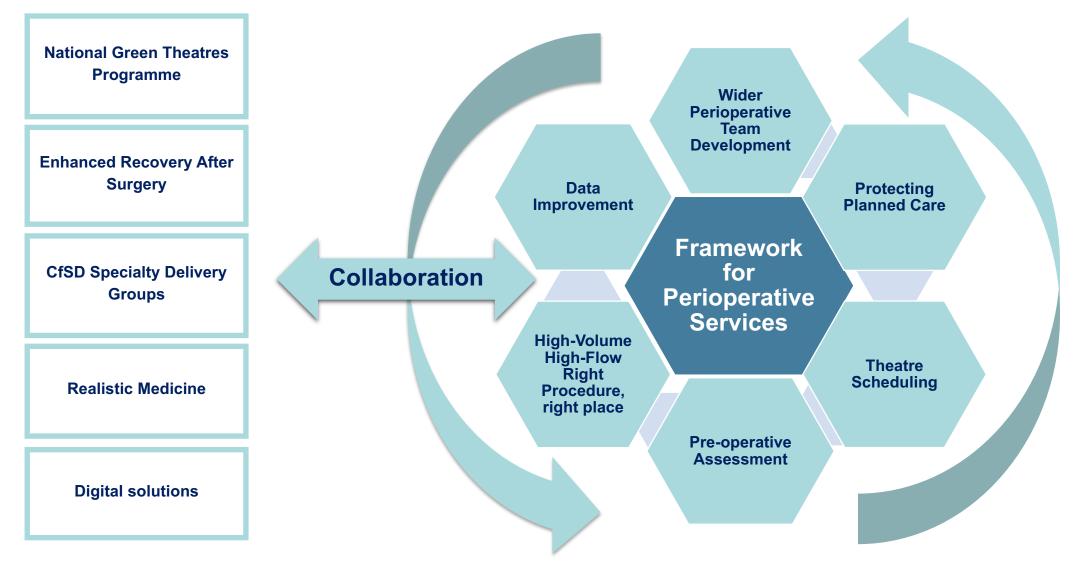
Services minimise environmental impact.

Services are adaptable achieving change over time.



Sustainable improvement

The following diagram highlights the relationship of the Framework to the supporting Principles documents, as well as links to other key national programmes aimed at driving sustainable improvement.



Perioperative pathway

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2. Consultation

3. Pre-operative assessment

4. Theatre scheduling

5. Day of surgery admission

6. Surgery

7. Post-operative care

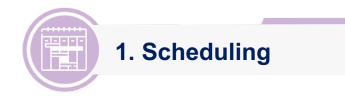
8. Discharge and follow-up

Key opportunities to improve the perioperative pathway

1. Referral	2. Consultation	3. Pre-operative assessment	4. Theatre scheduling
 Active Clinical Referral Triage (ACRT). Manage patient expectations. Use clear patient referral letters. 	 Patient selection. Early screening at surgical decision to treat. Refer to pre-operative assessment before surgery date arranged. Apply Realistic Medicine principles. 	 Proactively triage to the correct level of pre-assessment. Minimum 8 weeks between pre-operative assessment date and To Come In (TCI) date. Utilise national guidelines for pre-operative assessment. Extend test validity period to 6 months. Signpost to Waiting Well resources. Provide prehabilitation and self-directed rehabilitation resources. 	 Digital scheduling. Understand capacity and demand. Waiting List Validation. Apply 6-4-2-1-0 modelling. Right Procedure, Right Place. Use Pooled and Standby lists. Use Backfilling lists. Utilise flexible session capacity. Plan and allocate beds effectively. Give patients certainty their surgery will go ahead as scheduled.

Key opportunities to improve the perioperative pathway

5. Day of surgery admission	6. Surgery	7. Post-operative care	8. Discharge and follow-up
 Confirm patient attendance pre- admission. Identify "Golden Patient". Proceed without delay. 	 High-Volume High-Flow Surgery. Right Procedure, Right Place. Use lean surgical trays. Ensure bed availability. Allocate a dedicated, competent and specialised team with clear roles and responsibilities. Surgical briefing. Agree time-stamps. Prepare for unexpected events and emergencies. Enter data into local theatre management systems. 	 Enhanced Recovery After Surgery (ERAS) principles. Debrief to capture learning. Ensure OPSC4 clinical coding is correct. 	 Use criteria-led discharge. Provide clear arrangements and information on post-operative complications. Complete discharge summary. Provide discharge packs and medications. Offer Patient Initiated Review (PIR). Review performance data.



Scheduling Principles

Key actions		
1.1	Develop local Standard Operating Procedures (SOPs) to support theatre scheduling processes with clearly defined expectations, roles and responsibilities.	
1.2	Implement digital scheduling solutions to maximise booking capacity, improve theatre efficiency and enhance data quality.	
1.3	Undertake regular Waiting List Validation to ensure on-going management of inpatient and daycase lists.	
1.4	Adopt 6-4-2-1-0 principles to avoid cancellations, empty theatre sessions and ensure all available slots are booked.	
1.5	Hold regular scheduling and speciality planning meetings to review bookable theatre capacity, maximise productivity, minimise delays and prevent cancellations.	
1.6	Review and update Pooled Patient Lists and Standby Lists on a regular basis.	
1.7	Identify a senior responsible person with the authority to do so to reallocate resources as needed to reduce unnecessary waste.	
1.8	Strengthen multi-disciplinary collaboration across scheduling, clinical, and operational teams to improve allocation of theatre capacity and resources, and monitor list utilisation.	
1.9	Ensure clear communication frameworks are in place for sharing information and supporting decision-making between all key stakeholders involved in scheduling.	
1.10	Agree local considerations for listing patients to take account of operational factors, clinical factors and list position, including criteria for identifying the first patient on the list ("Golden Patient") to make sure theatre lists start on time.	
1.11	Agree clear communication processes to ensure patients receive all of the necessary information for their surgical procedure, inclusive of the To Come In (TCI), which should not be allocated until pre-assessment is complete.	
1.12	Use data to monitor performance against key utilisation metrics, provide feedback, and identify areas for learning and improvement.	



Scheduling Principles

Resources

- British Orthopaedic Association (BOA), 14 November 2014, Position Statement on Pooled Waiting Lists, British Orthopaedic Association, https://www.boa.ac.uk/static/518c2a65-d9a7-4e99-9b4afc9b81fcf9af/pooled-waiting-lists.pdf, Accessed 30 May 2025
- Getting it Right First Time (GIRFT) July 2024, Theatre Productivity Programme Practical Guides Module 1: Theatre Booking, GIRFT, <u>https://gettingitrightfirsttime.co.uk/wp-content/uploads/2024/07/Practical-Guide-Theatre-booking-guide-FINAL-V3-July-2024.pdf</u>, Accessed 30 May 2025
- Getting it Right First Time (GIRFT) July 2024, Theatre Productivity Programme Practical Guides Module 2: Theatre Waiting List Management and List Allocation, GIRFT, <u>https://gettingitrightfirsttime.co.uk/wp-content/uploads/2024/07/Theatre-List-Management-and-Allocation-Practical-Guide-FINAL-V3-July-2024-1.pdf</u>, Accessed 30 May 2025
- Getting it Right First Time (GIRFT) July 2024, Theatre Productivity Programme Practical Guides Module 3: Theatre scheduling, GIRFT, https://gettingitrightfirsttime.co.uk/wp-content/uploads/2024/07/Theatre-scheduling-V2-July-2024-1.pdf, Accessed 30 May 2025
- Healthcare Improvement Scotland (HIS), 7 December 2023, Technology-Enabled Theatre Scheduling Systems, Scottish Health Technologies Group (SHTG), <u>https://shtg.scot/our-advice/technology-enabled-theatre-scheduling-systems/</u>, Accessed 30 May 2025
- National Elective Coordination Unit (NECU), Waiting List Validation, Centre for Sustainability (CfSD), NHS Golden Jubilee, https://nhscfsd.co.uk/our-work/national-elective-coordination-unit/waiting-list-validation, Accessed 30 May 2025
- Public Health Scotland (PHS), 27 February 2024, Scottish health service costs Summary for financial year 2022/23, Public Health Scotland, <u>https://publichealthscotland.scot/publications/scottish-health-service-costs/scottish-health-service-costs-summary-for-financial-year-2022-to-2023/</u>, Accessed 30 May 2025
- Scottish Government, 27 October 2021, Digital health and care strategy, Digital Health and Care Directorate (DHAC), https://www.gov.scot/publications/scotlands-digital-health-care-strategy/, Accessed 30 May 2025
- Scottish Government, 4 December 2023, NHS Scotland waiting times guidance: November 2023, Chief Operating Office, NHS Scotland Directorate, <u>https://www.gov.scot/publications/nhsscotland-waiting-times-guidance-november-2023/</u>, Accessed 30 May 2025



Pre-operative Assessment Principles

Key actions		
2.1	Follow the NICE guidelines for Routine Pre-operative Tests for Elective Surgery (NG 45) 2016.	
2.2	Plan services so as patients can be confident their surgery will go ahead on the To Come In (TCI) date offered in nearly all cases.	
2.3	Minimise the number of hospital visits for patients pre-operatively to reduce unnecessary travel.	
2.4	Screen patients at the point of surgical decision to treat to enable early optimisation of chronic conditions.	
2.5	Record patient preferences and availability for surgery, including at other local hospitals and health board locations, so as to facilitate early transfer to available resources and support efficient use of capacity.	
2.6	Signpost patients to Waiting Well advice and resources that will help them to begin preparing for surgery. Promote the concept of moving from a passive 'waiting list' to a proactive 'preparation list'.	
2.7	Undertake regular Waiting List Validation to ensure patients still require and wish to proceed with their procedure prior to referral for pre-assessment.	
2.8	Triage patients to the appropriate level of pre-operative assessment, for example, virtually, by telephone or face to face.	
2.9	Ensure pre-operative assessment occurs prior to the To Come In (TCI) date provided to allow as much time as possible for timely pre-operative management of any health conditions, reduce surgical risk and improve recovery outcomes.	
2.10	Develop local Standard Operating Procedures (SOPs) to support the move towards a service in which no patient receives a To Come In (TCI) date prior to pre-operative assessment being completed.	
2.11	Extend the validity period of pre-operative assessment to 6 months from the date pre-assessment is completed. Recent trials have demonstrated no impact on late cancellations or loss of perioperative capacity by extending this to 6 months.	
2.12	Use data to monitor performance against key metrics to improve access to surgery and reduce delays for patients waiting for surgery e.g. by identifying causes of late cancellations.	

2. Pre-operative Assessment

Pre-operative Assessment Principles

Resources

- British Hypertension Society (BHS), March 2016, The measurement of adult blood pressure and management of hypertension before elective surgery 2016, The Association of Anaesthetists of Great Britain & Ireland (AAGBI), <u>https://anaesthetists.org/Home/Resources-publications/Guidelines/Measurement-of-adult-blood-pressure-and-management-of-hypertension-before-elective-surgery</u>, Accessed 30 May 2025
- British Thoracic Society, (BTS), 2018, Position Statement Driving and Obstructive Sleep Apnoea (OSA), British Thoracic Society, <u>https://www.brit-thoracic.org.uk/document-library/governance-and-policy-documents/position-statements/position-statements-on-driving-and-obstructive-sleep-apnoea/</u>, Accessed 30 May 2025
- Centre for Perioperative Care, (CPOC), March 2025, Perioperative Management of Obstructive Sleep Apnoea in Adults, CPOC, https://cpoc.org.uk/guidelines-and-resources/guidelines/perioperative-management-osa-adults, Accessed 30 May 2025
- Centre for Perioperative Care, (CPOC), May 2025, Guideline for the Management of Anaemia in the Perioperative Pathway, CPOC https://cpoc.org.uk/sites/cpoc/files/documents/2025-05/CPOC-AnaemiaGuideline2025.pdf, Accessed 30 May 2025
- Centre for Perioperative Care, (CPOC), October 2023, Perioperative Care of People with Diabetes Undergoing Surgery, CPOC, https://www.cpoc.org.uk/guidelines-and-resources/guidelines/guideline-diabetes, Accessed 30 May 2025
- European Society of Cardiology (ESC), 26 August 2022, ESC Guidelines on cardiovascular assessment and management of patients undergoing non cardiac surgery, ESC, <u>https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/ESC-Guidelines-on-noncardiac-surgery-cardiovascular-assessment-and-managem</u>, Accessed 30 May 2025
- National Elective Coordination Unit (NECU), Waiting List Validation, Centre for Sustainability (CfSD), NHS Golden Jubilee, <u>https://nhscfsd.co.uk/our-work/national-elective-coordination-unit/waiting-list-validation</u>, Accessed 30 May 2025
- NICE, 5 April 2016, Routine preoperative tests for elective surgery, NICE Guideline (NG 45), <u>https://www.nice.org.uk/guidance/ng45/resources/routine-preoperative-tests-for-elective-surgery-pdf-1837454508997</u>, Accessed 30 May 2025
- Royal College of Anaesthetists, (RCoA), January 2018, Scottish Standard Guideline for the Optimisation of Preoperative Anaemia Pathway, RCoA, <u>https://www.cpoc.org.uk/sites/cpoc/files/documents/2021-07/CSQ-Optimisation-Preop-Anaemia.pdf</u>, Accessed 30 May 2025
- UCLA Health, Anaesthesiology Risk Stratification, UCLA Health, <u>https://www.uclahealth.org/departments/anes/referring-providers/risk-stratification</u>, Accessed 30 May 2025



3. Protecting Planned Care

Protecting Planned Care Principles

Key actions		
3.1	Encourage the use of data to understand local demand and capacity, monitor performance against key metrics, provide feedback, and identify areas for learning and improvement.	
3.2	Agree the number of beds to protect (3-5% of overall acute, adult bed capacity) to allow planned surgery to continue. Establish senior sign-off so the protected footprint is reflected in escalation procedures.	
3.3	Follow scheduling processes and procedures that will optimise perioperative capacity, including adopting technology-enabled scheduling solutions to provide intel on theatre session availability.	
3.4	Undertake a review of procedures currently delivered within each individual specialty, particularly those with a growing evidence base which questions clinical effectiveness.	
3.5	Promote day surgery as the norm for all procedures identified as appropriate to be undertaken as day cases, to help reduce the demand for in-patient beds.	
3.6	Be innovative about space and consider converting the use of areas to increase or create elective bed and trolley footprint. Start small and scale up.	
3.7	Gain consensus on which procedures can be moved outwith of a traditional operating theatre into an alternative environment, for example, treatment room, out-patient setting in accordance with GIRFT's Right Procedure, Right Place (RPRP) principles.	
3.8	Decide on which procedures can be converted from General Anaesthetic (GA) to Local Anaesthetic (LA) for undertaking outwith a traditional operating theatre environment. This also reduces reliance on the need for anaesthetic cover.	
3.9	Manage patient expectations for surgery through early discussion and shared-decision making by using and adopting a shared language that promotes surgery being undertaken outwith of the traditional theatre environments.	
3.10	Create a culture of "proceeding without delay" for the first patients of the day in each operating theatre. It should be expected that the list will start at the allocated time, without waiting to be informed that a list can start.	
3.11	Establish a formal local process for escalation prior to cancellation of any planned care activity, which is supported by senior leadership teams, and is inclusive of a review process to return to normal planned care delivery as soon as possible.	
3.12	Encourage the development of a wide range of skills across the multi-disciplinary team to allow staff to be more flexible and adaptable across services, whilst supporting staff to practice at a level appropriate to their knowledge, skills and experience.	



3. Protecting Planned Care

Protecting Planned Care Principles

Resources

- Centre for Perioperative Care, (CPOC), Day Surgery: National Day Surgery Delivery Pack, CPOC, <u>https://www.cpoc.org.uk/guidelines-and-resources/guidelines/day-surgery</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), 2022, The Day Surgery Pathway: A Blueprint for day surgery in Scotland, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/zg3ivpgi/day-surgery-blueprint-v2.pdf</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), December 2022, The Arthroplasty Day Surgery Pathway: A blueprint for day surgery in Scotland, Version 1.0, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/plqdrihp/arthroplasty-day-surgery-blueprint-v10.pdf</u>, Accessed 30 May 2025
- Getting it Right First Time (GIRFT), November 2024, GIRFT Practical Guide to Right Procedure, Right Place, FutureNHS, GIRFT, https://future.nhs.uk/GIRFTNational/view?objectID=177805157, Accessed 30 May 2025
- Healthcare Improvement Scotland (HIS), 7 December 2023, Technology-Enabled Theatre Scheduling Systems, Scottish Health Technologies Group (SHTG), <u>https://shtg.scot/our-advice/technology-enabled-theatre-scheduling-systems/</u>, Accessed 30 May 2025
- Public Health Scotland (PHS), 27 February 2024, Scottish health service costs Summary for financial year 2022/23, Public Health Scotland, <u>https://publichealthscotland.scot/publications/scottish-health-service-costs/scottish-health-service-costs-summary-for-financial-year-2022-to-2023/</u>, Accessed 30 May 2025
- Public Health Scotland (PHS), Discovery Overview, PHS, <u>https://publichealthscotland.scot/resources-and-tools/medical-practice-and-pharmaceuticals/discovery/overview/what-is-discovery/</u>, Accessed 30 May 2025
- Scottish Government, Health Workforce, Health Workforce Directorate, <u>https://www.gov.scot/policies/health-workforce/</u>, Accessed 30 May 2025
- Scottish Government, 22 February 2023, Health and Care (Staffing) (Scotland) Act 2019: overview, Chief Nursing Office Directorate, https://www.gov.scot/publications/health-and-care-staffing-scotland-act-2019-overview/, Accessed 30 May 2025
- Scottish Government, 4 December 2023, NHS Scotland waiting times guidance: November 2023, Chief Operating Office, NHS Scotland Directorate, <u>https://www.gov.scot/publications/nhsscotland-waiting-times-guidance-november-2023/</u>, Accessed 30 May 2025



4. Wider Perioperative Team Development

Wider Perioperative Team Development Principles

Key actions		
4.1	Foster a culture of shared leadership where all team members are involved in decision-making and contribute to decision-making processes.	
4.2	Ensure all perioperative team members understand their own role and responsibilities, as well as that of other team members.	
4.3	Uphold a team culture based on mutual respect, trust, and inclusivity.	
4.4	Create an environment based on psychological safety where team members are empowered to ask questions, raise concerns and report incidents.	
4.5	Ensure clear and consistent communication frameworks are in place for information sharing, especially during critical transitions, and resource planning.	
4.6	Conduct daily pre- and post-operative briefings and debriefings, which include an improvement element as well as clinical reflection.	
4.7	Establish a system for continuous education, professional and skills development, including training in emerging technologies and scenario-based training.	
4.8	Provide opportunities for multi-professional team building, collaboration and education, with the whole team engaged and having a role in choosing potential topics.	
4.9	Take account of the optimum skill mix required as part of workforce planning to enhance workflow.	
4.10	Incorporate programmes to support the physical and emotional well-being of team members. Wellness initiatives can help maintain high performance and reduce staff turnover.	
4.11	Apply Human Factors Ergonomics (HFE) to enhance communication, decision-making, team working, situational awareness and patient safety.	
4.12	Encourage the use of data and analytics to monitor team performance, track patient outcomes, provide feedback, and identify areas for learning and improvement.	



4. Wider Perioperative Team Development/

Wider Perioperative Team Development Principles

Resources – Resource Hub Team Toolkit

- <u>NHS Employers : team toolkit | Turas | Learn</u>
- Do OD TEAM toolkit | NHS Employers
- Stages of team development | Turas | Learn (nhs.scot)
- <u>Meredith Belbin : team roles | Turas | Learn (nhs.scot)</u>
- Belbin team roles | Turas | Learn (nhs.scot)
- Effective Team Working | Turas | Learn (nhs.scot)

Resources – Communication and Team Coordination

- Develop high-performance teams | Turas | Learn (nhs.scot)
- SBAR | Turas | Learn (nhs.scot)
- <u>Structured Handover Education Project | Turas | Learn (nhs.scot)</u>

Resources – Interprofessional Collaboration and Education

- Careers | Turas | Learn (nhs.scot)
- Perioperative Workforce Guide | Turas | Learn (nhs.scot)
- HighPTeam RCSE 2014.pdf
- Human Factors Educational Resources | Turas | Learn (nhs.scot)
- <u>NMaHP Perioperative Event Maintaining Strength education enhancing the perioperative workforce, pandemic and beyond video by Jerry Morse | Turas | Learn (nhs.scot)</u>
- In-situ Sim Poster.pdf
- Resources Patient Safety and Quality of Care
- Patient Safety e-modules | Turas | Learn (nhs.scot)
- Quality Improvement journey | Turas | Learn (nhs.scot)

Wider Perioperative Team Development Principles

Resources – Leadership and Shared Decision-making

- <u>Managing your team | Turas | Learn (nhs.scot)</u>
- Managing peoples' performance | Turas | Learn (nhs.scot)
- Delegation and empowerment | Turas | Learn (nhs.scot)
- <u>Managing conflict | Turas | Learn (nhs.scot)</u>
- Do I empower my team? | Turas | Learn (nhs.scot)
- How to empower your team | Turas | Learn (nhs.scot)
- Self-leadership | Turas | Learn (nhs.scot)
- <u>Understanding 'set-up-to fail' syndrome | Turas | Learn (nhs.scot)</u>
- Leadership and management: leading for the future | Turas | Learn (nhs.scot)
- Shared Decision Making (DECIDE) | Turas | Learn (nhs.scot)

Resources – Team Culture and Psychological Safety

- Home | Civility Saves Lives
- <u>Cultures, leadership and teamwork for high quality care in NHSScotland | Turas | Learn</u>
- High-performing teams need psychological safety : here's how to create it | Turas | Learn (nhs.scot)
- Identify your team's wellbeing goals exercise | Turas | Learn (nhs.scot)
- Wellbeing for Workplace Joy | Turas | Learn (nhs.scot)
- IHI Framework for Improving Joy in Work | Institute for Healthcare Improvement
- Why we all need to practice emotional first aid | Turas | Learn (nhs.scot)
- Psychologically Safe Workplaces National Wellbeing Hub

Wider Perioperative Team Development Principles

Resources – Technology Integration and Competence

- Quality Improvement Zone | Turas | Learn (nhs.scot)
- Getting Started with AI | Turas | Learn (nhs.scot)

Resources – Cultural Humility

<u>Cultural humility | Turas | Learn (nhs.scot)</u>

Resources – Feedback and continuous improvement

- Non-technical skills structured observational marker system overview and guidance | Turas | Learn (nhs.scot)
- Non-technical skills structured observational marker system tool | Turas | Learn (nhs.scot)

5. High-Volume High-Flow

Key actions		
5.1	Identify a senior executive sponsor with time and authority to lead service redesign, influence decisions, monitor progress and resolve issues.	
5.2	Standardise pathways to facilitate High-Volume High-Flow activity. Day surgery should be the default.	
5.3	Optimise opportunities to undertake procedures under Local Anaesthetic (LA) that can safely and effectively be delivered outwith of a traditional theatre environment, in accordance with GIRFT Right Procedure Right Place (RPRP) principles.	
5.4	Review how the environment is being used and where space could potentially be freed up and re-purposed. Aim to create a smoother flow for the patient throughout their journey.	
5.5	Form partnerships with peripheral teams that support and supply theatres such as estates, facilities, infection control and pharmacy. These teams will also need to adapt to meet any new demand. Ensure everyone understands the whole of the pathway.	
5.6	Adopt 6-4-2-1-0 principles to maximise effectiveness. Plan for full day theatre lists as the norm, with enough resource to continue without breaks. Monitor theatre utilisation.	
5.7	Consider patient suitability when listing for High-Volume High-Flow lists, and remain mindful of safeguarding patients who may be unintentionally disadvantaged.	
5.8	Reduce unwarranted variation by identifying processses, procedures and protocols that can be standardised for maximum efficiency, e.g. session times and start times.	
5.9	Standardise equipment, supplementaries and consumables.	

5. High-Volume High-Flow

Key actions		
5.10	Reduce the turnaround time (positive gap time) between procedures. The next patient should be ready to enter the operating room as the previous patient is exiting.	
5.11	Ensure there are sufficient and standardised instrument sets, supplementaries and consumables so that lists are not delayed for sterilisation. Consider rationalising tray sets.	
5.12	Map out how many staff are needed to deliver a high-volume list, and what role they will need to fulfil, based on the correct level of skills and competencies.	
5.13	Promote a positive working environment that enhances team performance. Specialised, well-coordinated and motivated teams with clear roles, responsibilities and goals are essential for fast-paced, high-volume lists.	
5.14	Develop career pathways for the whole perioperative team. Invest in training and education, and identify opportunities to upskill staff to maximise productivity. Seek new ways to deliver surgical training for surgical trainees if considered a barrier to high flow.	
5.15	Manage patient expectations for surgery through clear communications, shared decision-making and involving the patient in their perioperative journey. Embed the principles of Realistic Medicine.	
5.16	Apply the principles from high impact programmes such as ARISE and ERAS.	
5.17	Agree and embed criteria-led discharge. Discharge planning should begin early in the pathway. Provide clear discharge arrangements and post-operative information, including information regarding potential post-operative complications.	
5.18	Use data to embed a culture of continuous learning, share best practice, provide feedback and improve performance and drive efficiency.	

Resources – High-Volume High-Flow

- Centre for Perioperative Care, (CPOC), Day Surgery: National Day Surgery Delivery Pack, CPOC, https://www.cpoc.org.uk/guidelinesand-resources/guidelines/day-surgery, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), 2022, The Day Surgery Pathway: A Blueprint for day surgery in Scotland, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/zg3ivpgi/day-surgery-blueprint-v2.pdf</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), September 2022, Improving the Delivery of Cataract Surgery in Scotland; A Blueprint for Success, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/5sofmknr/cataract-surgery-blueprint-2022.pdf</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), December 2022, The Arthroplasty Day Surgery Pathway: A blueprint for day surgery in Scotland, Version 1.0, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/plqdrihp/arthroplasty-day-surgery-blueprint-v10.pdf</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), January 2024, Day Surgery: Criteria Led Discharge for Registered Practitioners Clinical Competence Workbook, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/bt5ltm0h/day-surgery-criteria-led-discharge-for-registered-practitioners-clinical-competence-workbook.pdf</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), July 2024, Lean Surgical Trays, CfSD, NHS Golden Jubilee, https://www.nhscfsd.co.uk/media/w4mbzqxh/ngtp-lean-surgical-trays-v1-july-2024.pdf, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), July 2024, Lean Surgical Trays Toolkit, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/dt11414/lean-tray-toolkit-april-2025.pdf</u>, Accessed 30 May 2025
- Centre for Sustainable Delivery (CfSD), July 2024, Lean Surgical Tray Workbook, CfSD, NHS Golden Jubilee, https://www.nhscfsd.co.uk/media/hxdijn1l/lean-tray-workbook-clinician-audit-tool-v10-mar25.xlsx, Accessed 30 May 2025
- Getting it Right First Time (GIRFT), May 2021, Elective Recovery High Volume Low Complexity (HVLC) guide for systems, NHS England, GIRFT, <u>https://www.gettingitrightfirsttime.co.uk/wp-content/uploads/2021/05/GIRFT-HVLC-Guide-Final-V6.pdf</u>, Accessed 30 May 2025
- Getting it Right First Time (GIRFT), November 2021, Elective Recovery High Volume Low Complexity (HVLC) guide for systems, 2nd Edition, NHS England, GIRFT, <u>https://www.gettingitrightfirsttime.co.uk/wp-</u> <u>content/uploads/2023/06/GIRFT HVLC Guide Edition 2 updated-June-2023.pdf</u>, Accessed 30 May 2025
- Getting it Right First Time (GIRFT), May 2022, Hand surgery: Guidelines for operating outside of main theatres, British Society for Surgery of the Hand (BSSH), GIRFT, https://gettingitrightfirsttime.co.uk/wp-content/uploads/2022/08/2022-08-09 Hand surgery Guidance Hand-surgery-outside-of-main-theatres.pdf, Accessed 30 May 2025
- Getting it Right First Time (GIRFT), July 2024, Theatre Productivity Programme Practical Guides Module 5: Surgical discharge, NHS England, GIRFT, <u>https://gettingitrightfirsttime.co.uk/wp-content/uploads/2024/07/Surgical-discharge-Practical-Guide-V3-July-2024-1.pdf</u>, Accessed 30 May 2025
- Getting it Right First Time (GIRFT), November 2024, GIRFT Practical Guide to Right Procedure, Right Place, FutureNHS, GIRFT, https://future.nhs.uk/GIRFTNational/view?objectID=177805157, Accessed 30 May 2025

6. Data for Improvement

Public Health Scotland, Discovery:

https://publichealthscotland.scot/resources-and-tools/phs-planning-tools/discovery/

Key actions		
6.1	Analyse and interpret local demand and capacity.	
6.2	Understand local utilisation – in terms of total hours, or as a proportion of total time. Reflect on where time is lost (e.g. by theatre, specialty, start and finish times, turnaround times, over-runs and under-runs, cancellations and fallow theatres).	
6.3	Seek to identify, challenge and eliminate unwarranted variation. While some variation is warranted, in other cases it can highlight opportunities for improvement.	
6.4	Interrogate the data (e.g. is a reduction in the number of patients due to increased clinical complexity or a higher number of co- morbidities?).	
6.5	Ensure the whole perioperative team is engaged with, and familiar with, the data. Consider sharing local utilisation data through notice boards or information boards outside theatres.	
6.6	Agree time-stamps and metrics at the team debrief (e.g. reasons for late starts or early finishes).	
6.7	Guarantee operations are coded correctly using OPCS4 codes.	
6.8	Enter data accurately into local theatre management systems to safeguard data quality.	
6.9	Implement processes to review local and national performance data e.g. via PHS Discovery.	
6.10	Establish balancing measures to reduce incidence of risk. Any changes made should not negatively impact on other parts of the system.	
6.11	Participate in local audit and peer review processes.	
6.12	Undertake patient experience and feedback surveys. Consider including patient feedback into test of change cycles – an important opportunity to capture input from both patients and staff.	



Robust governance for perioperative improvement programmes at local level will be essential to ensure success. Local arrangements will vary, but the following will be consistent factors:

Agree a measurement framework and analyse data regularly – embed SOPs into existing systems.

Benchmark with national data sets – use national reporting and review with local accountability.

Use quantitative and qualitative data for continuous improvement e.g. audit, peer review, observational studies.

Ensure staff competency and compliance with professional codes of conduct.

Utilise existing risk assessment and incident reporting processes.

Adopt digital opportunities e.g. PAS, theatre management systems and digital scheduling to review data.



Resources

- Centre for Sustainable Delivery (CfSD), February 2022, Active Clinical Referral Triage (ACRT) & Discharge Patient Initiated Review (PIR) TOOLKIT, CfSD, NHS Golden Jubilee, <u>https://www.nhscfsd.co.uk/media/i4zmi4eh/active-clinical-referral-triage-and-discharge-patient-initiated-review-toolkit.pdf</u>, Accessed 30 May 2025
- Public Health Scotland (PHS), 6 May 2025, Scottish Atlas of Healthcare Variation (Latest Release), PHS, <u>https://www.publichealthscotland.scot/publications/scottish-atlas-of-healthcare-variation/scottish-atlas-of-healthcare-variation-6-may-2025/data-summary/</u>,Accessed 30 May 2025
- Scottish Government, 22 February 2023, Health and Care (Staffing) (Scotland) Act 2019: overview, Chief Nursing Officer Office, Health and Social Care, <u>https://www.gov.scot/publications/health-and-care-staffing-scotland-act-2019-overview/</u>, Accessed 30 May 2025
- Scottish Government, 31 March 2025, NHS Scotland operational improvement plan, Chief Operating Office, NHS Scotland Directorate, https://www.gov.scot/publications/nhs-scotland-operational-improvement-plan/, Accessed 30 May 2025
- The Royal College of Surgeons, Edinburgh (RCSEd), 12 June 2024, RCSEd Unveils 10 Step Plan for Surgery, RCSEd, https://www.rcsed.ac.uk/news-resources/rcsed-news/2024/june/rcsed-unveils-10-step-plan-for-surgery, Accessed 30 May 2025



Useful websites

- Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) <u>https://www.nss.nhs.scot/departments/antimicrobial-resistance-and-healthcare-associated-infection-scotland/</u>
- Association for Perioperative Practice (AfPP) <u>https://www.afpp.org.uk/home</u>
- British Association of Day Surgery (BADS) <u>https://bads.co.uk/</u>
- Centre for Perioperative Care (CPOC) <u>https://cpoc.org.uk/</u>
- Centre for Sustainable Delivery (CfSD) <u>https://www.nhscfsd.co.uk/</u>
- FutureNHS <u>https://future.nhs.uk/</u>
- Getting It Right First Time (GIRFT) <u>https://gettingitrightfirsttime.co.uk/</u>
- Healthcare Improvement Scotland (HIS) <u>www.healthcareimprovementscotland.org/</u>
- National Services Scotland (NSS) <u>https://www.nss.nhs.scot/</u>
- NHS Education for Scotland (NES) <u>https://www.nes.scot.nhs.uk/</u>
- NHS Scotland Academy (NHSSA) <u>https://www.nhsscotlandacademy.co.uk/</u>
- Public Health Scotland (PHS) https://publichealthscotland.scot/
- Realistic Medicine https://www.realisticmedicine.scot/
- The Royal College of Anaesthetists (RoCA) <u>https://www.rcoa.ac.uk/</u>
- The Royal College of Nursing (RCN) <u>https://www.rcn.org.uk/</u>
- The Royal College of Surgeons (RCSEd) <u>https://www.rcsed.ac.uk/</u>
- The Scottish Government <u>www.gov.scot</u>
- TURAS <u>https://turasdashboard.nes.nhs.scot/</u>



Perioperative Delivery Group (PDG) membership

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- Rory Mackenzie, Interim Deputy National Clinical Director, CfSD (Deputy Chair)
- Laurence Keenan, Associate National Director, MPPP, CfSD
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Wider Perioperative Team Development	Clair Graham, Head of Programme, NHS Scotland Academy Darren Middleton, Principle Educator, NHS Scotland Academy



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