

**SPSP Acute Adult Programme Deteriorating Patient Change Package**

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**Published March 2024**

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Contents

[Introduction 4](#_Toc160488047)

[Deteriorating Patient Driver Diagram 2023 5](#_Toc160488048)

[What are we trying to achieve… 5](#_Toc160488049)

[We need to ensure… 5](#_Toc160488050)

[Which requires… 5](#_Toc160488051)

[Essentials of Safe Care 6](#_Toc160488052)

[Primary Driver: Person centred care 7](#_Toc160488053)

[Secondary driver: Shared decision making (SDM) 7](#_Toc160488054)

[Secondary driver: Person centred care planning 8](#_Toc160488055)

[Secondary driver: Future Care Planning 9](#_Toc160488056)

[Secondary driver: Treatment escalation planning (TEP) 10](#_Toc160488057)

[Primary Driver: Recognition of acute deterioration 11](#_Toc160488058)

[Secondary driver: Use of NEWS2 and clinical judgement 11](#_Toc160488059)

[Secondary driver: Action on patient, family or carer concern 12](#_Toc160488060)

[Secondary driver: Identification of people at higher risk of deterioration 13](#_Toc160488061)

[Primary Driver: Standardised, structured response and review 14](#_Toc160488062)

[Secondary driver: A structured response to deterioration 14](#_Toc160488063)

[Secondary driver: Senior clinical decision maker review 15](#_Toc160488064)

[Secondary driver: Regular review and reassessment 16](#_Toc160488065)

[Primary Driver: Safe communication within and between teams 17](#_Toc160488066)

[Secondary driver: Interdisciplinary teamwork and collaboration 17](#_Toc160488067)

[Secondary driver: Safe transitions in care 18](#_Toc160488068)

[Secondary driver: Psychological safety to support escalation of concerns 19](#_Toc160488069)

[Primary Driver: Leadership to support a culture of high quality care 20](#_Toc160488070)

[Secondary driver: Visible leadership at all levels 20](#_Toc160488071)

[Secondary driver: Safe staffing and resources to enable delivery of safe care 21](#_Toc160488072)

[Secondary driver: System for learning to support continuous improvement 22](#_Toc160488073)

[Secondary driver: Staff wellbeing 23](#_Toc160488074)

[Contact 24](#_Toc160488075)

[END 24](#_Toc160488076)

# Introduction

Background

This publication is the latest version of the Scottish Patient Safety Programme (SPSP) Deteriorating Patient change package, first published in 2021. This update has drawn on the latest evidence and guidance including [SIGN 167 Care of Deteriorating Patients guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf) (June 23). The change package provides an evidence-informed resource to support teams with improvement in the early recognition and structured response to patient deterioration.

Overview

The **main driver diagram** page includes a National aim, Primary Drivers and Secondary Drivers.

Each **primary driver** is broken down to include **secondary drivers** and associated **change ideas**.

**Evidence, guidelines, tools, and resources** are included for each secondary driver.

Additional Resources

* Shorter version without tools and resources
* Accessible version with tools and resources
* Measurement framework

# Deteriorating Patient Driver Diagram 2023

## What are we trying to achieve…

A reduction in Cardiopulmonary Resuscitation rate, in acute care, by March 2024

## We need to ensure…

* Person-centred care
* Recognition of acute deterioration
* Standardised, structured response and review
* Safe communication within and between teams
* Leadership to support a culture of high quality care and patient safety

## Which requires…

### Person-centred care

* Shared decision making
* Person centred care planning
* Future care planning
* Treatment escalation planning

### Recognition of acute deterioration

* Use of NEWS2 and clinical judgment
* Action on patient, family, or carer concern
* Identification of people at higher risk of deterioration

### Standardised, structured response and review

* A structured responses to deterioration
* Senior clinical decision maker review
* Regular review and reassessment

### Safe communication within and between teams

* Interdisciplinary teamwork and collaboration
* Safe transitions in care
* Psychological safety to support escalation of concerns

### Leadership to support a culture of high quality care and patient safety

* Visible leadership at all levels
* Safe staffing and resources to enable delivery of safe care
* System for learning to support continuous improvement
* Staff wellbeing

# Essentials of Safe Care

Elements of SPSP Essentials of Safe Care are integrated throughout this driver diagram. The sections of this driver diagram which directly link to the SPSP Essentials of Safe care are:

Primary Driver: Person-centred care

* Shared decision making
* Person centred care planning

Primary Driver: Safe communication within and between teams

* Psychological safety to support escalation of concerns

Primary Driver: Leadership to support a culture of high quality care and patient safety

* Safe staffing and resources to enable safe delivery of care
* System for learning to support continuous improvement
* Staff wellbeing

For further information, please see the [Essentials of Safe Care](https://ihub.scot/improvement-programmes/scottish-patient-safety-programme-spsp/spsp-essentials-of-safe-care/).

# Primary Driver: Person centred care

## Secondary driver: Shared decision making (SDM)

### Change ideas:

* Use of ‘what matters to you’ approach to plan and deliver care
* A shared decision-making approach is used for all care discussions
* Early involvement of those close to the person including care partners, families, Power of Attorney/Guardians
* Process for engaging current specialist and community teams involved in the person’s care
* Reliable SDM is supported by health literacy tools, a range of communication aids and independent patient advocacy

### Evidence and Guidelines:

* Gans EA, van Mun LAM, de Groot JF, et al. [Supporting older patients in making healthcare decisions: The effectiveness of decision aids; A systematic review and meta-analysis](https://pubmed.ncbi.nlm.nih.gov/37716242/). Patient Educ Couns. 2023;116:107981
* Pel-Littel et al. [Barriers and facilitators for shared decision making in older patients with multiple chronic conditions: a systematic review](https://pubmed.ncbi.nlm.nih.gov/33549059/). BMC Geriatr. 2021;21:112.
* Realistic Medicine. [What Realistic Medicine is and what it isn’t.](https://realisticmedicine.scot/) 2024.

### Tools and Resources:

* Scottish Government. [Realistic Medicine – National toolkit for professionals](https://rightdecisions.scot.nhs.uk/realistic-medicine-national-toolkit-for-professionals/). 2024.
* Healthcare Improvement Scotland. [What matters to you?](https://www.youtube.com/watch?v=0XX9K8ZqOSg) 2021.
* NHS Education for Scotland (NES). [Think capacity think consent. Supporting application of the Adults with Incapacity (Scotland) Act (2000) in Acute General Hopsitals.](https://learn.nes.nhs.scot/28332) 2017.
* NHS Education for Scotland (NES). [Shared Decision Making](https://learn.nes.nhs.scot/63069). 2022.
* NHS Inform. [Communication and involving you](https://www.nhsinform.scot/care-support-and-rights/health-rights/communication-and-consent/communication-and-involving-you). 2023.

Primary Driver: Person centred care

## Secondary driver: Person centred care planning

### Change ideas:

* Existing complex care plans, e.g. patient passports, used to inform acute care planning
* Early understanding of person’s usual baseline, and presentation when unwell/deteriorating
* Care planning includes clinicians, carers and teams who have expertise about a person's needs
* Post-acute illness follow-up conversations with recovering patients, their family, and carers
* Person centred discussions consider cultural or other diverse needs

### Evidence and Guidelines:

* Islam Z, Pollock K, Patterson A, et al. [Thinking ahead about medical treatments in advanced illness: a qualitative study of barriers and enablers in end-of-life care planning with patients and families from ethnically diverse backgrounds](https://pubmed.ncbi.nlm.nih.gov/37464868/). Health Soc Care Deliv Res. 2023;11(7):1-135.
* Pearse W, Oprescu F, Endacott J, Goodman S, Hyde M, O'Neill M. [Advance care planning in the context of clinical deterioration: a systematic review of the literature](https://pubmed.ncbi.nlm.nih.gov/30718959/). Palliat Care. 2019;12:1178224218823509.

### Tools and Resources:

* NHS Education for Scotland (NES). [Equality and Diversity zone](https://learn.nes.nhs.scot/72773).
* NHS Education for Scotland (NES). [Once for NES: Learning Disabilities](https://learn.nes.nhs.scot/59009).
* NHS Education for Scotland (NES). [Person-centred resources](https://learn.nes.nhs.scot/18920).

Primary Driver: Person centred care

## Secondary driver: Future Care Planning

### Change ideas:

* Care teams access future care plan e.g. digital ReSPECT on admission and other interfaces
* Use of framework to support discussions e.g. REDMAP
* Iterative planning in acute setting informs updates to future care plan during hospital stay and at discharge
* Information available to support people creating new Future Care Plans in acute care
* Use of citizen-facing technology to support person held care plans e.g. via the Digital Front Door

### Evidence and Guidelines:

* Scottish Government. [Digital Health and Care Strategy](https://www.gov.scot/publications/scotlands-digital-health-care-strategy/pages/1/). 2021.
* Supportive and Palliative Care Indicators Tool (SPICT). [REDMAP framework](https://www.spict.org.uk/red-map/). 2023.

### Tools and Resources:

* NHS Inform. [Future Care Planning](https://www.nhsinform.scot/care-support-and-rights/decisions-about-care/future-care-planning/). 2024.
* Resuscitation Council UK. [ReSPECT](https://www.resus.org.uk/respect).
* NHS Education for Scotland (NES). [Anticipatory Care Planning (REDMAP)](https://learn.nes.nhs.scot/60446). 2022

Primary Driver: Person centred care

## Secondary driver: Treatment escalation planning (TEP)

### Change ideas:

* Locally agreed criteria for completion of person centred TEP
* Locally agreed processes for future care plans to inform, and be informed by, TEP discussions
* Processes support timely person centred planning by person’s own care team to guide decision making out of hours

### Evidence and Guidelines:

* Scottish Intercollegiate Guidelines Network. [SIGN 167 Care of deteriorating patients. A national clinical guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf). 2023.
* Taylor DR, Lightbody CJ, Venn R, Ireland A. [Responding to the deteriorating patient: The rationale for treatment escalation plans](https://pubmed.ncbi.nlm.nih.gov/36147009/). J R Coll Physicians Edinb. 2022;52(2):172-9.
* Warner BE, Lound A, Grailey K, Vindrola-Padros C, Wells M, Brett SJ. [Perspectives of healthcare professionals and older patients on shared decision-making for treatment escalation planning in the acute hospital setting: a systematic review and qualitative thematic synthesis](https://pubmed.ncbi.nlm.nih.gov/37588625/). EClinicalMedicine. 2023;62:102144

### Tools and Resources:

* NHS Education for Scotland (NES). [Treatment Escalation Planning (TEP) REDMAP Masterclass Toolkit](https://learn.nes.nhs.scot/60446). 2022.

# Primary Driver: Recognition of acute deterioration

## Secondary driver: Use of NEWS2 and clinical judgement

### Change ideas:

* Timely and reliable use of NEWS2 to identify physical deterioration
* Use of clinical judgement to identify physical deterioration
* NEWS2 parameters adjusted to reflect individual physiological baseline
* Assessment recognises variation in presentation, e.g. considerations of ethnicity in pulse oximetry, deterioration in optimal posture

### Evidence and Guidelines:

* Bucknall TK, Considine J, Harvey G, et al. [Prioritising Responses Of Nurses To deteriorating patient Observations (PRONTO): a pragmatic cluster randomised controlled trial evaluating the effectiveness of a facilitation intervention on recognition and response to clinical deterioration](https://pubmed.ncbi.nlm.nih.gov/35450936/). BMJ Qual Saf. Published online April 21, 2022.
* National Institute for Health and Care Excellence. [National Early Warning Score systems that alert to deteriorating adult patients in hospital](https://www.nice.org.uk/advice/mib205/resources/national-early-warning-score-systems-that-alert-to-deteriorating-adult-patients-in-hospital-pdf-2285965392761797).
* Scottish Intercollegiate Guidelines Network. [SIGN 167 Care of deteriorating patients. A national clinical guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf).
* Scottish Intercollegiate Guidelines Network. [SIGN 157 Risk reduction and management of delirium. A national clinical guideline](https://www.sign.ac.uk/media/1423/sign157.pdf).
* Velhuis LI, Ridderikhof ML, Bergsma L, et al. [Performance of early warning and risk stratification scores versus clinical judgement in the acute setting: a systematic review](https://emj.bmj.com/content/39/12/918). EMJ. 2022; 39:918-923

### Tools and Resources:

* NHS Education for Scotland (NES). [National early warning score (NEWS) in NHS Scotland](https://learn.nes.nhs.scot/2983). 2021.

Primary Driver: Recognition of acute deterioration

## Secondary driver: Action on patient, family or carer concern

### Change ideas:

* Locally agreed process for patients, families and carers to raise concerns about acute deterioration
* Patient, family and carer view of illness and concerns consistently sought e.g. asking ‘how well are you feeling compared to the last time we asked you?’
* Locally agreed process for staff to document and escalate concerns raised by patients, families and carers
* Process to reliably provide feedback to the person who raised concern

### Evidence and Guidelines:

* Bucknall T, Quinney R, Booth L, McKinney A, Subbe CP, Odell M. [When patients (and families) raise the alarm: Patient and family activated rapid response as a safety strategy for hospitals](https://pubmed.ncbi.nlm.nih.gov/34888450/). Future Healthc J. 2021;8(3):e609-e612.
* McCoy L, Lewis JH, Simon H, et al. [Learning to Speak Up for Patient Safety: Interprofessional Scenarios for Training Future Healthcare Professionals](https://pubmed.ncbi.nlm.nih.gov/32647749/). J Med Educ Curric Dev. 2020;7:2382120520935469.
* McKinney A, Fitzsimons D, Blackwood B, McGaughey J. [Patient and family involvement in escalating concerns about clinical deterioration in acute adult wards: A qualitative systematic review](https://pubmed.ncbi.nlm.nih.gov/33345386/). Nurs Crit Care. 2021;26(5):352-362.

### Tools and Resources:

* NHS Inform. [Communication and involving you](https://www.nhsinform.scot/care-support-and-rights/health-rights/communication-and-consent/communication-and-involving-you). 2023.
* Patient Safety Commissioner. [Martha’s Rule working group holds first meeting](https://www.patientsafetycommissioner.org.uk/). 2024

Primary Driver: Recognition of acute deterioration

## Secondary driver: Identification of people at higher risk of deterioration

### Change ideas:

* Proactive identification of presentations at higher risk of deterioration e.g. sepsis
* Process to identify people with significant co-morbidities, frailty or complex care needs at higher risk of deterioration
* Identify people on a deteriorating health trajectory with an advanced condition who may benefit from earlier care planning discussions e.g. SPICT tool

### Evidence and Guidelines:

* Goodacre S, Fuller G, Conroy S, Hendrikse C. [Diagnosis and management of sepsis in the older adult](https://www.bmj.com/content/382/bmj-2023-075585). BMJ. 2023;382:e075585.
* National Institute for Health and Care Excellence. [National Early Warning Score systems that alert to deteriorating adult patients in hospital. Medtech innovation briefing](https://www.nice.org.uk/advice/mib205/resources/national-early-warning-score-systems-that-alert-to-deteriorating-adult-patients-in-hospital-pdf-2285965392761797).
* Scottish Intercollegiate Guidelines Network. [SIGN 167 Care of deteriorating patients. A national clinical guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf).
* Wood C, Chaboyer W, Carr P. [How do nurses use early warning scoring systems to detect and act on patient deterioration to ensure patient safety? A scoping review](https://pubmed.ncbi.nlm.nih.gov/31002971/). Int J Nurs Stud. 2019;94:166-178.

### Tools and Resources:

* [SPSP Acute Adult Programme Sepsis Change Package](https://ihub.scot/media/10431/20231213-spsp-acute-adult-2023-sepsis-driver-diagram-v30.pdf)
* NHS Education for Scotland (NES). [Sepsis](https://learn.nes.nhs.scot/1010/patient-safety-zone/sepsis). 2017.

# Primary Driver: Standardised, structured response and review

## Secondary driver: A structured response to deterioration

### Change ideas:

* Locally agreed standardised approach to structured response to deterioration
* Structured response aligns with patient wishes included in TEP and Future Care Plan
* Locally agreed process for contacting next of kin or identified key contact at point of deterioration
* Effective use of system-wide escalation capacity e.g. outreach team, electronic NEWS2 and decision support

### Evidence and Guidelines:

* Burke JR, Downey C, Almoudaris AM. [Failure to Rescue Deteriorating Patients: A Systematic Review of Root Causes and Improvement Strategies](https://journals.lww.com/journalpatientsafety/abstract/2022/01000/failure_to_rescue_deteriorating_patients__a.28.aspx). J Patient Safety. 2022. 18(1): e140-e155
* Scottish Intercollegiate Guidelines Network. [SIGN 167 Care of deteriorating patients. A national clinical guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf). 2023.
* Sujan M, Bilbro N, Ross A, et al. [Failure to rescue following emergency surgery: a FRAM analysis of the management of the deteriorating patient](https://www.sciencedirect.com/science/article/abs/pii/S0003687021002556). Applied Ergonomics. 98 (Jan 22) 103608

### Tools and Resources:

* Healthcare Improvement Scotland. [Right Decision Service. Response to deterioration](https://rightdecisions.scot.nhs.uk/care-of-deteriorating-patients-sign/response-to-deterioration/). 2023.
* Healthcare Improvement Scotland. [SPSP Acute Adult. Structured response to Deterioration. Principles](https://ihub.scot/media/9263/spsp-principles-of-structured-response-to-deterioration-v10.pdf). 2022.
* Healthcare Improvement Scotland. [SPSP Acute Adult. Structure Response to Deterioration Mapping Tool.](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fihub.scot%2Fmedia%2F10397%2F20231025-spsp-structured-response-mapping-tool-v16.docx&wdOrigin=BROWSELINK) 2023.
* NHS Education for Scotland (NES). [Recognising and responding when a person is deteriorating](https://learn.nes.nhs.scot/29201/coronavirus-covid-19/support-workers/recognising-and-responding-when-a-person-is-deteriorating). 2022.

Primary Driver: Standardised, structured response and review

## Secondary driver: Senior clinical decision maker review

### Change ideas:

* Local escalation processes enable early involvement of a senior clinical decision maker
* Locally agreed process for critical care review
* Timely first Consultant review within 14hrs of hospital admission and daily thereafter
* Local escalation processes include who to contact during specific time periods e.g. day shift, evening, night shift

### Evidence and Guidelines:

* Hong JQY, Chua WL, Smith D, Huang CM, Goh QLP, Liaw SY. [Collaborative practice among general ward staff on escalating care in clinical deterioration: A systematic review.](https://pubmed.ncbi.nlm.nih.gov/37154497/) J Clin Nurs. 2023;32(17-18):6165-6178.
* Hotta S, Ashida K, Tanaka M. [Night-time detection and response in relation to deteriorating inpatients: A scoping review](https://pubmed.ncbi.nlm.nih.gov/37095606/). Nurs Crit Care. 2023;1‐13.doi:10.1111/nicc.12917
* National Institute for Health and Care Excellence. [Emergency and acute medical care in over 16s. Quality standard [QS174]](https://www.nice.org.uk/guidance/qs174/chapter/quality-statement-3-consultant-assessment-and-review). 2018.
* Scottish Intercollegiate Guidelines Network. [SIGN 167 Care of deteriorating patients. A national clinical guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf). 2023.

### Tools and Resources:

* Healthcare Improvement Scotland. [Right Decision Service. Response to deterioration](https://rightdecisions.scot.nhs.uk/care-of-deteriorating-patients-sign/response-to-deterioration/). 2023.
* Healthcare Improvement Scotland. [SPSP Acute Adult. Structured response to Deterioration. Principles](https://ihub.scot/media/9263/spsp-principles-of-structured-response-to-deterioration-v10.pdf). 2022.
* Healthcare Improvement Scotland. [SPSP Acute Adult. Structure Response to Deterioration Mapping Tool.](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fihub.scot%2Fmedia%2F10397%2F20231025-spsp-structured-response-mapping-tool-v16.docx&wdOrigin=BROWSELINK) 2023.

Primary Driver: Standardised, structured response and review

## Secondary driver: Regular review and reassessment

### Change ideas:

* Reassessment criteria documented as part of the management plan, including who to contact
* Review working diagnosis and treatment goals at every reassessment
* Patients, families, and carers are given advice to support identification of further deterioration using agreed communication method

### Evidence and Guidelines:

* Bucknall T, Quinney R, Booth L, McKinney A, Subbe CP, Odell M. [When patients (and families) raise the alarm: Patient and family activated rapid response as a safety strategy for hospitals](https://pubmed.ncbi.nlm.nih.gov/34888450/). Future Healthc J. 2021;8(3):e609-e612.
* Scottish Intercollegiate Guidelines Network. [SIGN 167 Care of deteriorating patients. A national clinical guideline](https://www.sign.ac.uk/media/2091/sign-167-care-of-deteriorating-patients.pdf).

### Tools and Resources:

* Healthcare Improvement Scotland. [SPSP Acute Adult. Structured response to Deterioration. Principles](https://ihub.scot/media/9263/spsp-principles-of-structured-response-to-deterioration-v10.pdf). 2022.
* NHS Inform. [Communication and involving you](https://www.nhsinform.scot/care-support-and-rights/health-rights/communication-and-consent/communication-and-involving-you).

# Primary Driver: Safe communication within and between teams

## Secondary driver: Interdisciplinary teamwork and collaboration

### Change ideas:

* Clarity of team roles and responsibilities in acute deterioration
* Handovers highlight high acuity patients at risk of deterioration
* Multidisciplinary structured ward rounds
* Local process to identify deteriorating patients within a clinical area and hospital wide e.g. at safety huddles, and team briefs
* Local induction processes for all staff include introduction to MDT and local handover tools

### Evidence and Guidelines:

* Care Quality Commission. [PEOPLE FIRST: Escalation](https://www.cqc.org.uk/publications/people-first/escalation). 2023.
* Hong JQY, Chua WL, Smith D, Huang CM, Goh QLP, Liaw SY. [Collaborative practice among general ward staff on escalating care in clinical deterioration: A systematic review](https://pubmed.ncbi.nlm.nih.gov/37154497/). J Clin Nurs. 2023;32(17-18):6165-6178.
* McLaney E, Morassaei S, Hughes L, Davies R, Campbell M, Di Prospero L. [A framework for interprofessional team collaboration in a hospital setting: Advancing team competencies and behaviours](https://journals.sagepub.com/doi/full/10.1177/08404704211063584). Healthcare Management Forum. 2022;35(2):112-117.
* Merriman C, Freeth D. [Conducting a good ward round: How do leaders do it?.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9305892/) J Eval Clin Pract. 2022;28(3):411-420. doi:10.1111/jep.13670

### Tools and Resources:

* Institute for Healthcare Improvement. [Patient Safety Essentials Toolkit](https://www.ihi.org/resources/tools/patient-safety-essentials-toolkit). 2019.

Primary Driver: Safe communication within and between teams

## Secondary driver: Safe transitions in care

### Change ideas:

* Structured handovers within and between teams e.g. use of SBAR
* Including future care plan and/or TEP in all communication between teams
* Local process for safe transfer of care of deteriorating patients
* Patient, family and carers are included handovers e.g. bedside handovers in partnership with patients
* Patient placement decisions informed by clinical condition and level of care

### Evidence and Guidelines:

* Cho S, Lee JL, Kim KS, Kim EM. [Systematic Review of Quality Improvement Projects Related to Intershift Nursing Handover](https://pubmed.ncbi.nlm.nih.gov/34231504/). J Nurs Care Qual. 2022;37(1):E8-E14.
* Clari M, Conti A, Chiarini D, Martin B, Dimonte V, Campagna S. [Barriers to and Facilitators of Bedside Nursing Handover: A Systematic Review and Meta-synthesis](https://pubmed.ncbi.nlm.nih.gov/33852530/). J Nurs Care Qual. 2021;36(4):E51-E58.

### Tools and Resources:

* Healthcare Improvement Scotland. [SPSP Acute Adult. Structured response to Deterioration. Principles](https://ihub.scot/media/9263/spsp-principles-of-structured-response-to-deterioration-v10.pdf). 2022.
* NHS Education Scotland (NES). [SBAR](https://learn.nes.nhs.scot/3408/quality-improvement-zone/qi-tools/sbar%20Accessed%2013th%20October%202023). 2017.

Primary Driver: Safe communication within and between teams

## Secondary driver: Psychological safety to support escalation of concerns

### Change ideas:

* Processes to support a culture which supports staff and students to raise concerns
* Process for managers at all levels to effectively recognise and respond to patient safety concerns
* Promotion of Speak Up advocates and ambassadors to encourage staff to raise concerns
* Structured process for multidisciplinary hot and cold debriefs

### Evidence and Guidelines:

* Hong JQY, Chua WL, Smith D, Huang CM, Goh QLP, Liaw SY. [Collaborative practice among general ward staff on escalating care in clinical deterioration: A systematic review](https://pubmed.ncbi.nlm.nih.gov/37154497/). J Clin Nurs. 2023;32(17-18):6165-6178.
* NHS Providers. [Psychological Safety and Why It Matters](https://nhsproviders.org/news-blogs/blogs/psychological-safety-and-why-it-matters).
* O’Donovan R, Mcauliffe E. [A systematic review of factors that enable psychological safety in healthcare teams. International Journal for Quality in Health Care](https://academic.oup.com/intqhc/article/32/4/240/5813852?login=true). 2020. 32(4):240-250
* Pian-Smith MC, Simon R, Minehart RD, et al. [Teaching residents the two-challenge rule: a simulation-based approach to improve education and patient safety](https://pubmed.ncbi.nlm.nih.gov/19444045/). Simul Healthc. 2009;4(2):84-91.

### Tools and Resources:

* Healthcare Improvement Scotland. [Maternity and Children Quality Improvement Collaborative (MCQIC), Safety Culture Webinar Series. Theme: Psychological Safety](https://youtu.be/aUGOoz8CBis?si=AotFphOaa9No1RYz). 2022.
* TURAS Learn. [National Whistleblowing Standards training](https://learn.nes.nhs.scot/40284/national-whistleblowing-standards-training). 2021.
* TURAS Learn. [Speaking up: national whistleblowing guidance for nursing and midwifery students in Scotland](https://learn.nes.nhs.scot/51465/future-nurse-and-midwife/speaking-up-or-raising-concerns/speaking-up-national-whistleblowing-guidance-for-nursing-and-midwifery-students-in-scotland). 2021.

# Primary Driver: Leadership to support a culture of high quality care and patient safety

## Secondary driver: Visible leadership at all levels

### Change ideas:

* Conduct and share learning from leadership walkrounds
* Access to clinical and improvement leadership time e.g. deteriorating patient lead
* Opportunity for senior leaders to review deteriorating patient related data and trends
* Deteriorating patient improvement priorities align with organisational priorities
* Improvement team includes clinical and QI expertise e.g. resus and QI colleagues

### Evidence and Guidelines:

* Churruca K, Ellis LA, Pomare C, et al. [Dimensions of safety culture: a systematic review of quantitative, qualitative and mixed methods for assessing safety culture in hospitals](https://pubmed.ncbi.nlm.nih.gov/34315788/). BMJ Open. 2021;11(7):e043982

### Tools and Resources:

* Institute for Healthcare Improvement. [Leading a Culture of Safety: A Blueprint for Success](https://www.ihi.org/resources/publications/leading-culture-safety-blueprint-success). 2017
* NHS Education for Scotland. [Safety Culture Discussion Cards](https://learn.nes.nhs.scot/61108/human-factors-hub/human-factors-tools/safety-culture-discussion-cards/safety-culture-discussion-cards.). 2018.
* The King’s Fund. [The practice of collaborative leadership: Across health and care services](https://www.kingsfund.org.uk/publications/practice-collaborative-leadership). 2023.

Primary Driver: Leadership to support a culture of high quality care

## Secondary driver: Safe staffing and resources to enable delivery of safe care

### Change ideas:

* Identify and mitigate staffing needs using real time staffing tools, including acuity assessment
* Process to escalate staffing shortfalls
* Education and induction includes local processes for structured response to deterioration
* Identify and mitigate time periods where escalation response is less reliable

### Evidence and Guidelines:

* Hotta S, Ashida K, Tanaka M. [Night-time detection and response in relation to deteriorating inpatients: A scoping review](https://pubmed.ncbi.nlm.nih.gov/37095606/). Nurs Crit Care. Published online April 24, 2023. doi:10.1111/nicc.12917
* Liu Q, Zheng X, Xu L, Chen Q, Zhou F, Peng L. [The effectiveness of education strategies for nurses to recognise and manage clinical deterioration: A systematic review.](https://pubmed.ncbi.nlm.nih.gov/37172445/) Nurse Educ Today. 2023;126:105838.
* Scottish Government. [Health and Care (Staffing) (Scotland) Act 2019: overview](https://www.gov.scot/publications/health-and-care-staffing-scotland-act-2019-overview/). 2024.

### Tools and Resources:

* Healthcare Improvement Scotland. [Workforce capacity and capability](https://ihub.scot/improvement-programmes/scottish-patient-safety-programme-spsp/spsp-essentials-of-safe-care/person-centred-care/workforce-capacity-and-capability/). 2021.
* Healthcare Improvement Scotland. [Inclusion and involvement](https://ihub.scot/improvement-programmes/scottish-patient-safety-programme-spsp/spsp-essentials-of-safe-care/person-centred-care/inclusion-and-involvement/). 2021.
* Healthcare Improvement Scotland. [Staffing level (workload) tools and methodology.](https://www.healthcareimprovementscotland.org/our_work/patient_safety/healthcare_staffing_programme/staffing_workload_tools.aspx)
* NHS Education for Scotland. [Health and Care Staffing in Scotland](https://learn.nes.nhs.scot/61827). 2022.

Primary Driver: Leadership to support a culture of high quality care

## Secondary driver: System for learning to support continuous improvement

### Change ideas:

* Develop reliable data collection process e.g. through process mapping
* Share, and act on reliable data and learning between teams, hospitals, and boards
* Identify and share learning through existing processes e.g. MDT morbidity and mortality meetings
* Forums for staff, patients, and carers to identify areas for improvement
* Education and simulation to support improvement in communication and technical skills

### Evidence and Guidelines:

* Healthcare Improvement Scotland. [Learning from adverse events through reporting and review. A national framework for Scotland: December 2019](https://www.healthcareimprovementscotland.org/our_work/governance_and_assurance/management_of_adverse_events/national_framework.aspx).
* Institute for Healthcare Improvement. [Leading a Culture of Safety: A Blueprint for Success](https://www.ihi.org/resources/publications/leading-culture-safety-blueprint-success). 2017.
* Theilan U, Fraser L, Jones P, et al. [Regular in-situ simulation training of paediatric Medical Emergency Team leads to sustained improvements in hospital response to deteriorating patients, improved outcomes in intensive care and financial savings](https://doi.org/10.1016/j.resuscitation.2017.03.031). Resuscitation. 2017;115:61-67.

### Tools and Resources:

* Healthcare Improvement Scotland. SPSP MCQIC Safety Culture Webinar Series, Systems for Learning. [Part 1](https://youtu.be/eSvdrq8lNXU?si=2GLiAXYTRM3Teten). [Part 2](https://youtu.be/WcP9sSeU4gM?si=8Wtq12aZGTYdDn4f). 2022.
* Healthcare Improvement Scotland. [Quality Management System](https://ihub.scot/improvement-programmes/quality-management-system/). 2022.
* Healthcare Improvement Scotland. [The Essentials of Safe Care: System for Learning](https://ihub.scot/improvement-programmes/scottish-patient-safety-programme-spsp/spsp-essentials-of-safe-care/leadership-and-culture/system-for-learning/). 2021.

Primary Driver: Leadership to support a culture of high quality care

## Secondary driver: Staff wellbeing

### Change ideas:

* Use of effective health and wellbeing conversations to identify and mitigate risks to wellbeing
* Prioritise civility through communication and teamwork, e.g. use of TeamSTEPPS
* Support job satisfaction through evidence based interventions e.g., Professional Identity Development Programme
* Access to senior support and discussion for all staff, e.g. through clinical supervision

### Evidence and Guidelines:

* Cohen C, Pignata S, Bezak E, Tie M, Childs J. [Workplace interventions to improve well-being and reduce burnout for nurses, physicians and allied healthcare professionals: a systematic review.](https://bmjopen.bmj.com/content/13/6/e071203) BMJ Open. 2023;13(6):e071203.
* Tulleners T, Campbell C, Taylor M. [The experience of nurses participating in peer group supervision: A qualitative systematic review](https://pubmed.ncbi.nlm.nih.gov/36989698/). Nurse Educ Pract. 2023;69:103606.

### Tools and Resources:

* Agency for Healthcare Research and Quality. [Team STEPPS. Team Strategies & Tools to Enhance Performance & Patient Safety](https://www.ahrq.gov/teamstepps-program/index.html).
* Healthcare Improvement Scotland. [The Essentials of Safe Care: Staff Wellbeing](https://ihub.scot/improvement-programmes/scottish-patient-safety-programme-spsp/spsp-essentials-of-safe-care/leadership-and-culture/staff-wellbeing/).
* [National Wellbeing Hub](https://wellbeinghub.scot/).
* NHS Education for Scotland (NES). [Staff Wellbeing Resources](https://www.nes.scot.nhs.uk/news/staff-wellbeing-resources/).
* NHS Employers. [Health and wellbeing conversations](https://www.nhsemployers.org/articles/health-and-wellbeing-conversations).

# Contact

You can get in touch to provide feedback or share your plans for using the Deteriorating Patient Driver Diagram and change package by:

Email: his.acutecare@nhs.scot

X, formerly known as Twitter: [SPSP Acute Adult X profile](https://twitter.com/SPSP_AcuteAdult) [ihub X profile](https://twitter.com/ihubscot)

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If this accessible version of our driver diagram does not fulfil your needs, please get in touch with us via email at his.acutecare@nhs.scot

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Published March 2024

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or email his.contactpublicinvolvement@nhs.scot

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Healthcare Improvement Scotland

|  |  |
| --- | --- |
| Edinburgh OfficeGyle Square1 South Gyle CrescentEdinburghEH12 9EB0131 623 4300 | Glasgow OfficeDelta House50 West Nile StreetGlasgowG1 2NP0141 225 6999 |

www.ihub.scot