2017

SPSP Acute Adult

Harm reduction measurement plan

The Improvement Hub (ihub) is part of Healthcare Improvement Scotland.

As part of Healthcare Improvement Scotland's Improvement Hub (ihub), SPSP activities support the provision of safe, high quality care, whatever the setting.

Version	Date	Brief Description	Person Responsible
1.1	November 2017	Review of full measurement plan following 90 Day process and formation of the Acute Care portfolio. Issue via email to Chief Executives, Executive Sponsors and Programme Managers.	Alison Hunter

Contents

Link to Scottish Patient Safety Programme website http://ihub.scot/spsp/acute-adult/

Background – As part of Healthcare Improvement Scotland's Improvement Hub (ihub), the Scottish Patient Safety Programme (SPSP) coordinates activity to increase awareness of and support the provision of safe, high quality care, whatever the setting.

SPSP Acute Adult and the Older People in Acute Care programmes have aligned work streams within the Acute Care Portfolio. The portfolio will continue to develop and deliver improvement support for harm reduction with a strengthened focus on system factors that support teams to improve outcomes for people in any care setting.

This measurement plan is accompanied by a reporting template and a self-assessment proforma. These three documents work together to form the method of reporting and feedback for data relating to **the established harm reduction work streams** of SPSP Acute Adult.

The Acute Care portfolio and wider ihub have a number of other offerings, including Frailty at the Front Door. Acute Kidney Injury and Improvement Fund projects that have separate reporting mechanisms.

The purpose of this measurement plan – This measurement plan supports national reporting of outcome measures relating to harm reduction, including medicines, which are routinely reported as part of board engagement with SPSP Acute Adult.

Process measurement and reliability is a key component of improvement work. National support for testing of process measures will concentrate on the development of guidance on potential process measures and, where required, advice on which ones to test. Therefore, *with the exception of process measures for medicines,* this measurement plan sets out process measures for the purpose of guidance rather than national reporting. National reporting of these measures is not supported by the reporting template.

Measures for national reporting – Through the self-assessment process, boards have identified their priority work streams. Therefore, although national submission of the following measures is supported by the reporting template, boards will report according to their identified priorities. This measurement plan does not identify national aims as these are being set by boards based on their existing baseline data.

Identifier	Measure name	Scope of reporting	Comment
AHO2	Unadjusted inpatient mortality	Hospital and board	
GWO1	Crash Call rate	Hospital and board	
DPO2	Cardiac Arrest rate	Hospital and board	
PUO3	Pressure Ulcer rate (grade 2-4)	Hospital and board	
PUO4	Pressure Ulcer rate (grade 3 and 4)	Hospital and board	Optional – as a subset of PUO3
FO1b	All Falls rate	Hospital and board	
FO2b	Falls with Harm rate	Hospital and board	
CAUTIO4	Catheter usage	Ward/hospital/board	The unit of reporting will vary depending on spread
MMO1a	Accurate in-patient prescription chart within 24 hours of admission	Ward/hospital/board	The unit of reporting will vary depending on spread
MMO1b	Accurate medicines list on the Interim Discharge Letter (IDL)	Ward/hospital/board	The unit of reporting will vary depending on spread
MMP1a	% of patients with medication reconciliation performed within 24 hours of **admission**	Ward/hospital/board	The unit of reporting will vary depending on spread
MMP1b	% of patients with medication reconciliation performed **on discharge**	Ward/hospital/board	The unit of reporting will vary depending on spread

Measures for guidance and local testing – All other measures in this plan are intended to support local improvement work. Operational definitions and data collection guidance have been developed by subject matter and improvement experts based on evidence, testing and feedback from boards. In many cases, this is an iterative process which will be informed by a number of routes including the narrative within self-assessments.

Use of data – This data is collected and posted quarterly on the password protected SPSP Data Dashboard for improvement purposes. (http://www.scottishpatientsafetyprogramme.scot.nhs.uk/my-account) It is primarily used to support local teams/NHS boards in making improvements to patient safety. The data enables NHS boards and the national programme team to understand and report overall progress in relation to the aims of SPSP. This includes helping to identify where improvements have been made and sustained, and thus where there might be useful transferable learning to share across the wider system.

Excellence in Care – Work is underway to support reporting of data relating to nursing indicators via the Excellence in Care CAIR system. When this process is established, those measures will be removed from the reporting template. We will continue to support improvement in these areas by reviewing data in CAIR and narrative submitted in self-assessments.

VTE – Healthcare Improvement Scotland has supported a project in NHS Borders to better understand the barriers and enablers to reliable delivery of VTE prophylaxis. The output of this is a learning report accompanied by a revised driver diagram, change package and measurement plan. These are available at http://ihub.scot/spsp/acute-adult/venous-thromboembolism-vte-project-in-nhs-borders/ as a resource for boards to support their improvement work. The acute care team will continue to offer support on request.

N.B. NHS boards have undertaken significant work and achieved considerable gains in previous work streams of SPSP. While these work streams are no longer reviewed for purpose of assessment, boards will wish to monitor outcome measures and prioritise these work streams for local improvement support according to their context. Ongoing support in these areas is available on request from the national team.

Measures for national reporting

National reporting of the following measures is supported by the reporting template.

Measure Name	Identifier	Operational Definition	Data Collection Guidance
HSMR		HSMR data is produced by ISD per hospital and will continue to support NHS boards to monitor their progress on reducing hospital mortality over time.	
Percent unadjusted inpatient mortality	AHO2	This percentage is defined as the monthly unadjusted or "raw" mortality. It is computed as follows: 1. Determine the numerator: the total number of in-hospital deaths (TD) for the current month (excluding stillbirths and A and E-only cases). 2. Determine the denominator: the current month's total number of deaths (TD excluding stillbirths and A and E-only cases) plus live discharges (LD). 3. Calculate the percent unadjusted mortality by dividing (TD) by (TD plus LD) and then multiplying the result by 100.	
Crash call rate	GWO1	1. Determine the numerator: The total number of crash calls in the current month (TC) 2. Determine the denominator: The total number of deaths plus live discharges in the current month (TD plus LD) 3. Calculate the actual crash call rate by dividing the numerator (TC) by the denominator (TD plus LD) and multiplying the result by 1000 to get the crash call rate per 1000 discharges	Track the number of crash calls occurring each month and include crash calls occurring both in the ICU and HDU and out of the ICU and HDU. You should exclude crash calls in the A and E.

Measure Name	Identifier	Operational Definition	Data Collection Guidance
Cardiac arrest		Definition - all individuals in eligible clinical areas receiving chest compressions and/or defibrillation and attended by the hospital-based resuscitation team (or equivalent) in response to the 2222 call.	
Cardiac arrest rate (per 1,000 discharges)	DPO2	**Numerator:** The total number of cardiac arrests in the ward/dept./unit for the month	In areas with higher frequency a rate measure will be useful to track improvement
		Denominator: Determine the denominator: The total number of deaths plus live discharges in the current month (TD plus LD)	For Rare events – Data can be presented as a days between
		Calculate the actual cardiac arrest rate by dividing the numerator (TC) by the denominator (TD plus LD) and multiplying the result by 1000 to get the crash call rate per 1000 discharges	Excluded areas (numerator and denominator): Emergency departments, Coronary Care Units, Intensive Care Units, Maternity Units, Outpatients and Day case procedures

Measure Name	Identifier	Operational Definition	Data Collection Guidance
Pressure Ulcers NB: 'Expert Assessment' will be defined locally.		• All newly developed pressure ulcers of Grade 2 or above • All new pressure ulcers acquired after admission/transfer in a healthcare setting where expert assessment and clinical history does not ascertain damage started prior to admission	
Pressure ulcer rate (grade 2-4)	PUO3	1. Determine the numerator – the total number of in-patient pressure ulcers (grade 2-4) for the month. 2. Determine the denominator – the total number of acute occupied bed days for the month (excluding out patients and day cases) 3. Calculate the pressure ulcer rate by dividing the numerator by the denominator and then multiply this figure by 1000 to give the number of pressure ulcers per 1000 acute occupied bed days (OBDs).	Report the numerator and denominator monthly. Provide annotations as appropriate to reflect any interventions you made during the month. For Rare events – Data can be presented as a days between Exclusions: • Pressure ulcers present of day of admission/transfer in a healthcare setting and those where damage began prior to admission • Grade 1 pressure ulcers (as their presentation may not be a clear pressure ulcer) • Skin damage from moisture, for example, incontinence dermatitis
Pressure ulcer rate (grade 3-4)	PUO4	1. Determine the numerator – the total number of in-patient pressure ulcers (grade 3 & 4) for the month. 2. Determine the denominator – the total number of acute occupied bed days for the month (excluding out patients and day cases) 3. Calculate the pressure ulcer rate by dividing the numerator by the denominator and then multiply this figure by 1000 to give the number of pressure ulcers per 1000 acute occupied bed days (OBDs).	Report the numerator and denominator monthly. Provide annotations as appropriate to reflect any interventions you made during the month. For Rare events – Data can be presented as a days between Exclusions: • Pressure ulcers present of day of admission/transfer in a healthcare setting and those where damage began prior to admission • Grade 1 and 2 pressure ulcers Skin damage from moisture, for example, incontinence dermatitis

Measure Name	Identifier	Operational Definition	Data Collection Guidance
Falls and Falls with Harm		**Definition of a Fall with Harm:** Any instance where a fall with harm is identified. Harm will be where another secondary care intervention is necessary (steri-strip, suture, and/or management of dislocation, fracture, head injury, death), and/or a patient has fallen and received harm or injury requiring radiological investigation (x-ray, ultrasound, MRI or CT) with a confirmed harm. NB: Occurrence of a radiological investigation should not lead to an automatic categorisation of 'harm' (harm must be confirmed by the investigation). Minor harms (for example, grazes, light bruising, and small cuts) would be excluded.	
All Falls rate	FO1b	1. Determine the numerator – the total number of in-patient falls (excluding Out-patients and Day Cases) for month. 2. Determine the denominator – the total number of acute occupied bed days for the same time period (excluding Out-patients and Day Cases) 3. Calculate the falls rate by dividing the numerator by the denominator and then multiply this figure by 1000 to give the number of falls per 1000 acute occupied bed days (OBDs).	Report the numerator and denominator monthly. Provide annotations as appropriate to reflect any interventions you made during the month. For Rare events – Data can be presented as a days between
Falls with harm rate	FO2b	1. Determine the numerator – the total number of in-patient falls with harm (as per definition, excluding Out-patients and Day Cases) for month 2. Determine the denominator – the total number of acute occupied bed days for the same time period (excluding Out-patients and Day Cases) 3. Calculate the falls with harm rate by dividing the numerator by the denominator and then multiply this figure by 1000 to give the number of falls with harm per 1000 acute occupied bed days (OBDs).	Report the numerator and denominator monthly. Provide annotations as appropriate to reflect any interventions you made during the month. For Rare events – Data can be presented as a days between

Measure Name	Identifier	Operational Definition	Data Collection Guidance
CAUTI		A CAUTI is defined as: Urethral urinary catheter insitu removed within the previous 48 hours CAUTI defined as: Temp <36∘c or >37.9∘c OR 1.5> baseline on 2 occasions in last 12 hours and 1 or more of the following: Shaking chills (rigors) New costovertebral (central lower back) tenderness New onset or worsening delirium (confusion) **AND:** on antibiotics for treatment of UTI For the purposes of improvement, catheter usage has been selected as a proxy outcome measure that can be collected by clinical teams to inform their improvement plans.	
CAUTI-catheter usage	CAUTIO4	1. Determine the numerator: The total number of in patients with a urinary catheter on a ward. 2. Determine the denominator: The total number of in patients on a ward.	Report the numerator and denominator monthly. Provide annotations as appropriate to reflect any interventions you made during the month. N.B. reducing the number of indwelling urinary catheters days is a key element of CAUTI improvement. This measure may aid capture of this information. **Exclusions: patients with suprapubic catheters. Caveats around 'hospital acquired infection' prevail.**

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Medication Reconciliation			Note: Medication reconciliation is defined as "*The process that the healthcare team undertakes to ensure that the list of medication, both prescribed and over the counter that I am taking is exactly the same as the list that I or my carers, GP, Community Pharmacist and hospital team have. This is achieved in partnership with me through obtaining an up-to-date and accurate medication list that has been compared with the most recently available information and has documented any discrepancies, changes, deletions or additions resulting in a complete list of medicines accurately communicated*".	
Percent of patients with an accurate in-patient prescription chart within 24 hours of admission	MMO1a	Outcome reliability at 95% or greater	1. Determine the numerator: the total number of patients with an accurate in-patient prescription chart within 24 hours of admission

2. Determine the denominator: the total number of patients in the sample

3. Calculate compliance by dividing the numerator by the denominator and then multiplying the resulting proportion by 100 | This is a monthly measure that essentially can be done concurrently. Each week a random sample of five patient case notes should be selected for admission. The objective is to have at least 20 opportunities in the denominator each month. The same set of case notes should be used for measure MMP1a and MMO1a each month.

Case note review should include patients who have been admitted more than 24 hours.

The case notes should be reviewed to determine if there has been a safe and accurate transcription of clinically appropriate medicines on in-patient prescription chart within 24 hours of admission.

It is good practice for case note reviews to be completed by two practitioners ideally from different disciplines, for example, nurse / doctor / pharmacist. |
| Percent of patients with an accurate medicines list on the Interim Discharge Letter (IDL) | MMO1b | Outcome reliability at 95% or greater | 1. Determine the numerator: the total number of patients with an accurate an accurate medicines list on the Interim Discharge Letter (IDL)

2. Determine the denominator: the total number of patients in the sample

3. Calculate compliance by dividing the numerator by the denominator and then multiplying the resulting proportion by 100 | This is a monthly measure that essentially can be done concurrently. Each week a random sample of five patient case notes should be selected for discharge. The objective is to have at least 20 opportunities in the denominator each month. The same set of case notes should be used for measure MMP1b and MMO1b.

Case note review should include patients who have been admitted more than 24 hours.

The case notes should be reviewed to determine if there has been safe and accurate prescribing of clinically appropriate medication on Interim Discharge Letter.

It is good practice for case note reviews to be completed by two practitioners ideally from different disciplines, for example, nurse / doctor / pharmacist |

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent of patients with medication reconciliation performed within 24 hours of **admission**	MMP1a	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients with medication reconciliation performed **within 24 hours of admission** 2. Determine the denominator: the total number of patients in the sample 3. Calculate compliance by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	This is a monthly measure that essentially can be done concurrently. Each week a random sample of five patient case notes should be selected for admission and discharge. The objective is to have at least 20 opportunities in the denominator each month. The same set of case notes should be used for measure MMP1a and MMO1a each month. The case notes should be reviewed to determine if all measures are present within the required timeframe: **Admission** – case note review should include patients who have been admitted more than 24 hours and include • Patient demographics documented • Allergy status on admission documented • Two or more sources, one of which should be the patient / carer, used on admission to give the best possible medicines history • Medicines Plan documented for each medicine, that is, continue, withhold, stop It is good practice for case note reviews to be completed by two practitioners ideally from different disciplines, for example, nurse / doctor / pharmacist

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent of patients with medication reconciliation performed **on discharge**	MMP1b	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients with medication reconciliation performed **on discharge** 2. Determine the denominator: the total number of patients in the sample 3. Calculate compliance by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	This is a monthly measure that essentially can be done concurrently. Each week a random sample of five patient case notes should be selected for admission and discharge. The objective is to have at least 20 opportunities in the denominator each month. The same set of case notes should be used for measure MMP1b and MMO1b. Case note review should include patients who have been admitted more than 24 hours. The case notes should be reviewed to determine if all measures are present within the required timeframe: **Discharge** – case note review should take place once the discharge process is complete and include • Patient demographics documented • Allergy status on discharge documented • Changes from admission medicines documented to include changes, discontinuations and new medicines started It is good practice for case note reviews to be completed by two practitioners ideally from different disciplines, for example, nurse / doctor / pharmacist

Measures for guidance and local testing

Guidance on the following process measures is included below to support local improvement work. Operational definitions and data collection guidance have been developed by subject matter and improvement experts based on evidence, testing and feedback from boards. In many cases, this is an iterative process which will be informed by a number of routes including the narrative within self-assessments. National reporting of the following measures is not supported by the reporting template.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Deteriorating Patient (including cardiac arrest and sepsis)				Please see associated Driver Diagram and Change Package
Percent compliance with National Early Warning Score (NEWS) – **Correct frequency of observations**	GWP1b	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients with observations performed at the correct frequency as per local policy 2. Determine the denominator: the total number of patients reviewed 3. Calculate the percent compliance by dividing the numerator by the denominator and multiplying by 100	**Inclusion Criterion:** Patients admitted > 24 hours. The National Early Warning Score (NEWS) is An evidence based tool for bedside evaluation based on six physiological parameters: respiratory rate, oxygen saturation, temperature, systolic blood pressure, pulse rate, and AVPU score. NEWS provides a standardised score to determine illness severity and support consistent clinical decision making and effective communication across the pathway of care. • Check frequency of observations per patient, using a random sample of 20 patients per month per unit (sample 5 patients per week). When looking at all five observations for one patient, this is an all or nothing measure. • Check for correct frequency of observations according to local policy. • Review should be conducted for no more than the previous three days of the patients stay.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with Structured Response	SSRP1b	Goal - process reliability at 95% or greater	**Numerator:** The number of patients with complete structured responses within the sample **Denominator** The number of patients in the sample **Compliance** Calculate the percent achievement of structured response by dividing the numerator by the denominator and multiplying the result by 100	**Inclusion Criteria** Patients who trigger NEWS (locally defined trigger point) **Data Collection** Sample five triggering patients weekly per ward/department or include all triggering patients if numbers less than 20/month **Primary data source**: The patient's medical and nursing notes and EWS chart. *The following are suggested elements of a structured response process. These may be combined and amended locally to support adaption to context.* • Screen for cause of deterioration, including sepsis, and initiate Sepsis Six if appropriate • Appropriate care givers meet, agree and document a plan including frequency of observations and review time • Timely review by appropriate decision maker according to local triggers • Monitor accurate fluid balance • Document treatment escalation plan (after discussion with patient and family where appropriate) including resuscitation status, senior review and goals of care.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with Structured Review	SSRP2	Goal - process reliability at 95% or greater	**Numerator:** The number of patients with complete structured reviews within the sample **Denominator** The number of patients in the sample **Compliance** Calculate the percent achievement of structured review by dividing the numerator by the denominator and multiplying the result by 100	**Inclusion Criteria** All patients in appropriate admitting and downstream wards **Data Collection** Sample 20 patients per month (five per week) and count number of completed structured reviews. **Primary data source**: The patient's medical and nursing notes *The following are suggested elements of a structured response process. These may be combined and amended locally to support adaption to context.* • Risk of deterioration is reviewed and appropriate care plan documented • Limited reversibility assessed in people at risk of acute deterioration • Treatment escalation plan reviewed and updated, including DNACPR where appropriate • Communication with patient and family on management plan

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent of patients who are commenced on IV antibiotics within 1 hour of time zero	SSP5	Goal - process reliability at 95% or greater	**Numerator:** The total number of patients that have commenced IV antibiotic therapy within 1 hour of time zero. **Denominator:** The total number of patients in the sample. **Compliance:** (Numerator / Denominator) * 100	**Inclusion Criteria** Patients who score 5 or more on NEWS (or locally defined trigger) with a suspicion of infection **Time Zero =** ACUTE – triage time SPECIALTY – time of meeting inclusion criteria **Data Collection** Sample five patients weekly per ward/department or include all patients if numbers less than 20/month In specialty ward areas it will be helpful to batch similar wards together to ensure a denominator of >10 **Primary data source**: The patient's medical notes, medication chart, NEWS chart, and fluid balance chart. **Documents:** Use the Sepsis Six *Data Collection* and *Data Aggregation* form available on the Community website

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent of patients with Sepsis Six performed within 1 hour of time zero	SSP9	Goal - process reliability at 95% or greater	**Numerator:** The total number of patients that have all elements of Sepsis Six completed within 1 hour of time zero. • Oxygen therapy to target saturation • Blood culture performed • Commenced on IV antibiotics • IV fluid challenge • Serum lactate and full blood count • Accurate assessment of urinary output **Denominator:** The total number of patients in the sample. Compliance: (Numerator / Denominator)* 100	**Inclusion Criteria** Patients who score 5 or more on NEWS (or locally defined trigger) with a suspicion of infection **Time Zero =** ACUTE – triage time SPECIALTY – time of meeting inclusion criteria **Data Collection** Sample five patients weekly per ward/department or include all patients if numbers less than 20/month In specialty ward areas it will be helpful to batch similar wards together to ensure a denominator of >10 **Primary data source**: The patient's medical notes, medication chart, NEWS chart, and fluid balance chart. **Documents:** Use the Sepsis Six *Data Collection* and *Data Aggregation* form available on the Community website

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
		Please see associated Driver Diagram and Change Package		
Falls		*The following bundles (FP1 – FP4) are suggested process measures. These may be combined and amended locally to support local adaption to context.*		
Percent compliance with Falls bundle for all patients	FP1	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients in the sample who have all six elements of the '**Falls bundle for all patients'** 2. Determine the denominator: the total number of patients reviewed 3. Calculate the percent compliance by dividing the numerator by the denominator and then multiplying the result by 100	'Falls Bundle for all patients' is measured by a randomly selecting five patients in the ward per week to determining bundle compliance. *Use Core Documentation as the primary data source; review each sheet for implementation of the 'Falls bundle for all patients'. This is a simple YES/NO Outcome.* Only patients with all six aspects of 'Falls Bundle for All patients' in place are recorded as being compliant **For All Falls Bundles**: Report monthly but report each week's prevalence at local ward level including annotation around improvement efforts. This means that there should be four data points for each month unless the volume is low. **NB.** At the start of improvement you may wish to collect data each day to understand how your system is performing and where to target improvement effort. *Observing data on each bundle element demonstrates where to target improvement efforts **Note: Falls bundle for all patients (completed within 24 hours or within agreed board parameters)** 1. Complete and document the screen for more vulnerable patients (5Qs) *2.* On admission immediate documented assessment of mobility 3. Provision of Walking aid as required and is within reach 4. Call bell in reach and working 5. Appropriate footwear available and in use. 6. If glasses and hearing aid are worn, they are available and in use. ***5Qs (If answers 'yes' to any of the five question, the patient is identified as 'more vulnerable')*** *1. Has the patient fallen in the last six months – including during this admission?* *2. 'Does that patient have cognitive impairment (for example, AMT<8 or 4AT>1) or possible delirium (for example, 4AT or above)?* *3. Does the patient attempt to walk alone although unsteady or unsafe?* *4. Does the patient or their relative/s have fear or anxiety re falling?* *5. Based on your clinical judgement, is this patient at high risk of falling?*

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with safety bundle for more vulnerable patients (and all patients in older peoples' wards)	FP2	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients in the sample who have all five elements of the 'Safety bundle for more vulnerable patients (and all patients in older peoples' wards)' in place 2. Determine the denominator: the total number of patients reviewed 3. Calculate the percent compliance by dividing the numerator by the denominator and then multiplying the result by 100	'Safety bundle for more vulnerable patients (and all patients in older peoples' wards)' is measured by a randomly selecting five eligible patients in the ward per week to determining bundle compliance. Use daily goal sheet or Core Documentation as the primary data source, review each sheet for implementation of this bundle. This is a simple YES/NO Outcome. Only patients with all five aspects of this bundle in place are recorded as being compliant. Note: Safety bundle for more vulnerable patients (and all patients in older peoples' wards) 1. Communicate mobility status for walking and transfers (safety brief) 2. Chair and bed consistently at best height for individual, to enable safe transfers. 3. Identify patients with cognitive impairment and/or with poor mobility and known not to ask for assistance, and provide close observation whilst using commode, toilet, in bath or shower. 4. For patients known to take risks with mobility, clearly document intensity of observation required, for example, positioning of bed; cohorting of at risk patients; 1:1 observations; care and comfort rounds 5. Assess for bed rails using a decision making tool/ algorithm and use if indicated

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with Multi-disciplinary assessment and intervention bundle for more vulnerable patients (and all peoples' in older patients wards)	FP3	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients in the sample who have all five elements of the **'Multi-disciplinary Assessment and intervention bundle for more vulnerable patients (and all patients in older peoples wards)**'in place 2. Determine the denominator: the total number of patients reviewed 3. Calculate the percent compliance by dividing the numerator by the denominator and then multiplying the result by 100	'Multi-disciplinary Assessment and intervention bundle for more vulnerable patients (and all patients in older peoples' wards) 'is measured by a randomly selecting five eligible patients in the ward per week to determining bundle compliance. *Use daily goal sheet or Core Documentation as the primary data source, review each sheet for implementation of this bundle This is a simple YES/NO Outcome.* Only patients with all five aspects of the bundle in place are recorded as being compliant. **Note: Multi-disciplinary Assessment and intervention bundle for more vulnerable patients (and all patients in older peoples' wards)** 1. A documented cognitive assessment and delirium screen, with findings recorded and action plan initiated. 2. A documented assessment of continence problems, with findings and management plan recorded. 3. A documented assessment of postural hypotension and arrhythmias, with management plan recorded. 4. A documented medication review for medication that can increase the risk of falls, with management plan recorded. Multi-disciplinary review of further falls risk factors, with management plan recorded.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with Post Fall bundle	FP4	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients in the sample who have all five elements of the **'Post Fall Bundle'** in place 2. Determine the denominator: the total number of patients reviewed 3. Calculate the percent compliance by dividing the numerator by the denominator and then multiplying the result by 100	'Post Fall Bundle' is measured by randomly selecting five patients in the ward per week who have fallen to determine bundle compliance. *Use Core Documentation as the primary data source, review each sheet for implementation of this bundle. This is a simple YES/NO Outcome.* Only patients with all five aspects of this bundle in place are recorded as being compliant. **Note: Post Fall Bundle** 1. Assess for signs and symptoms of fracture or potential spinal injury before the patient is moved. 2. Safe manual handing methods for patients with signs and symptoms of fracture or potential for spinal injury. 3. Frequency and duration of neurological observations for all patients where head injury has occurred or cannot be excluded (for example, unwitnessed falls) based on guidance. 4. Adhere to agreed timescales for medical examination following a fall or high vulnerability to injury, or who have been immobilised. 5. Conduct a post fall review/rapid root cause analysis (to learn how further falls can be prevented for the patient and annotate during report of incident for wider learning).

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Pressure Ulcers		**Please see associated Driver Diagram and Change Package** NB: The expectation is that a ward will use <u>either</u> PUP1 or PUP2		
Percent compliance with pressure ulcer prevention risk assessment (for all patients) which includes skin condition assessment documented, **within 6 hours of admission to hospital** using a risk assessment tool. This can include the Scottish PURA tool.	PUP1	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients with a fully completed risk assessment within 6 hours of admission to the hospital 2. Determine the denominator: the total number of patients 3. Calculate the percent compliance by dividing the numerator by the denominator and multiplying the result by 100	Rotate the days of the week and shifts within a day. On the randomly selected day, a random sample of five patients should be audited for evidence of complete risk assessment. Aggregate data and report monthly Data Source: patients notes **NB** At the start of improvement you may wish to collect data more frequently to understand how your system is performing and where to target improvement effort.

Measure Name	identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with pressure ulcer prevention risk assessment (for all patients) which includes skin condition assessment documented, **within 6 hours of admission or transfer to your ward /department** using a risk assessment tool. This can include the Scottish PPURA tool.	PUP2	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients with a fully completed risk assessment within 6 hours of admission to your ward/department 2. Determine the denominator: the total number of patients 3. Calculate the percent compliance by dividing the numerator by the denominator and multiplying the result by 100	Rotate the days of the week and shifts within a day. On the randomly selected day, a random sample of five patients should be audited for evidence of complete risk assessment. Aggregate data and report monthly Data Source: patients notes **NB** At the start of improvement you may wish to collect data more frequently to understand how your system is performing and where to target improvement effort.

Measure Name	identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with at least daily repeat assessments, with documented evidence (for all patients)	PUP3	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients with evidence of at least daily repeat assessments 2. Determine the denominator: the total number of patients 3. Calculate the percent compliance by dividing the numerator by the denominator and multiplying the result by 100	Rotate the days of the week and shifts within a day. On the randomly selected day, a random sample of five patients should be audited for evidence of complete risk assessment. Aggregate data and report monthly Data Source: patients notes **NB** At the start of improvement you may wish to collect data more frequently to understand how your system is performing and where to target improvement effort.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with all elements of the SSKIN care bundle for at risk patients.	PUP4	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients assessed as at risk of developing a pressure ulcer or who have a pressure ulcer receiving all five components of the SSKIN bundle 2. Determine the denominator: the total number of patients with a Pressure ulcer or at risk 3. Calculate the percent compliance with the SSKIN bundle by dividing the numerator by the denominator and multiplying the result by 100	Rotate the days of the week and shifts within a day. On the randomly selected day, all patients assessed as at risk of developing or who have a pressure ulcer should be examined for evidence of SSKIN bundle compliance. If measuring on a random day include all patients assessed as at risk of developing a pressure ulcer or who have a pressure ulcer. If, however, there is a high volume of at risk patients, you could select a random sample of five patients weekly on the day you select. Aggregate data and report monthly. Note: if a patient is not eligible for one of the bundle elements for medical reasons and that exclusion is documented, that patient is considered compliant for that element of the bundle **Note: the SSKIN bundle includes**: **Surface** • Ensure patient is on the correct surface (mattress/ cushion) **Skin Inspection –** • Inspect skin/pressure areas regularly to identify pressure damage **Keep Moving –** • Ensure patients are encouraged/assisted to move positions regularly dependent on individuals' needs **Incontinence (increased moisture) –** • Manage the moisture of patients whose skin is exposed to increased moisture (wound drainage/continence issues/ leaks/discharge/excessive sweating) **Nutrition –** • Nutritional needs are met to maximise skin health

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
CAUTI Please see associated Driver Diagram and Change Package				
Percent compliance with Urinary Catheter **Insertion** bundle	CAUTIP1	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients who have all five elements of the Urinary Catheter **Insertion** bundle in place 2. Determine the denominator: the total number of patients with a Urinary Catheter insitu that have been reviewed 3. Calculate the percent compliance with the Urinary Catheter insertion bundle by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	Use medical /nursing notes as the primary data source. Review each sheet for implementation of the Urinary Catheter Insertion bundle. Rotate the days of the week and shifts within a day. On the randomly selected day, all patients with urinary Catheters should be examined for evidence of urinary Catheter insertion bundle compliance. There is no sampling with this measure; include all patients with Urinary Catheters. If, however, there is a high volume of urinary Catheters you could select a random sample of five patients with Urinary Catheters on the day you select for the study. Only patients **with all five aspects** of Urinary Catheter insertion bundle in place are recorded as being in compliance. **Note**: **The Urinary Catheter Insertion bundle includes** 1. Alternatives to urethral catheterisation have been considered and the clinical reason is clearly documented 2. Aseptic technique is performed at insertion of indwelling urinary catheter 3. The indwelling urinary catheter was the smallest gauge, once inserted, the balloon was filled to the recommended level, that is, 10mls (unless clinically indicated) 4. The urethral meatus was cleaned with sterile saline and single use sterile lubricant was used prior to inserting the indwelling urinary catheter 5. Aseptic technique was applied/maintained when connecting the indwelling urinary catheter to a sterile closed drainage system. **Exclusions: patients with suprapubic catheters**

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with Urinary Catheter **Maintenance** Bundle	CAUTIP2	Goal - process reliability at 95% or greater	1. Determine the numerator: the total patients with a urinary catheter receiving all six components of the Urinary Catheter **maintenance** bundle 2. Determine the denominator: the total number of patients with a urinary catheter insitu that have been reviewed 3. Calculate the percent compliance with the CAUTI maintenance bundle by dividing the numerator by the denominator and multiplying the result by 100	Use medical /nursing notes as the primary data source. Review each sheet for implementation of the Urinary Catheter Maintenance Bundle. Rotate the days of the week and shifts within a day. On the randomly selected day, all patients with urinary catheters should be examined for evidence of Urinary Catheter maintenance bundle compliance. If measuring on a random day include all patients with Urinary Catheters If, however, there is a high volume of Urinary Catheters; you could select a random sample of five patients weekly with urinary catheters on the day you select for the study. Aggregate data and report monthly. **Note:** If a patient is not eligible for one of the bundle elements for medical reasons and that exclusion is documented, that patient is considered compliant for that element of the bundle **Note: the CAUTI maintenance bundle includes**: 1. Does patient still require indwelling urinary catheter? Remove if possible 2. Is the indwelling urinary catheter continuously connected to the drainage system and changed in line with manufacturers' recommendations? 3. Meatal hygiene has been performed? 4. Is the drainage bag emptied when clinically indicated using a clean, disposable container for each patient? 5. Is hand hygiene performed immediately prior to access or manipulation of the indwelling urinary catheter? 6. Is the drainage bag situated below the bladder level and the tap is not in contact with any surface, for example, floor? At the start of improvement you may wish to collect data more frequently to understand how your system is performing and where to target improvement effort. **Exclusions: patients with suprapubic catheters**

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Surgical Site Infection (SSI)				
Percent compliance with SSI **ward** bundle	SSIP1	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of surgical ward patients all five components of the SSI ward bundle 2. Determine the denominator: the total number of patients in the sample. 3. Calculate the percent compliance by dividing the numerator by the denominator and multiplying the result by 100	Use a random sample of 20 patients per month per unit (sample five patients per week). Rotate the days of the week and shifts within a day. Aggregate data and report monthly. Note: if a patient is not eligible for one of the bundle elements for clinical reasons and that exclusion is documented, and the patient is considered compliant for that element of the bundle. The HPS/SPSP SSI ward Bundle includes: • Ensure that a clinical risk assessment for Methicillin resistant Staphylococcus aureus (MRSA) has taken place • Hair is not removed if possible. Razors were not used if hair was removed • Patient has showered (or bathed/washed if unable to shower) on day of or day before surgery using soap • The wound dressing remains intact for 48 hours post operatively unless clinically indicated • Aseptic technique is used if there is excessive leakage and need for dressing change
Percent compliance with SSI **theatre** bundle	SSIP2	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of surgical ward patients all four components of the SSI theatre bundle 2. Determine the denominator: the total number of patients in the sample. 3. Calculate the percent compliance by dividing the numerator by the denominator and multiplying the result by 100	Use a random sample of 20 patients per month per unit (sample five patients per week). Rotate the days of the week and shifts within a day. Aggregate data and report monthly. Note: if a patient is not eligible for one of the bundle elements for clinical reasons and that exclusion is documented, and the patient is considered compliant for that element of the bundle. The HPS/SPSP SSI **theatre** Bundle includes: • The appropriate prophylactic antibiotic is administered within 60 minutes before the operation (blade to skin) • 2% chlorhexidine gluconate in 70% isopropyl alcohol solution – if patient sensitive use povidine-iodine solution • The patient's body temperature is maintained ≥ 36° in the peri-operative period (exclude cardiac patients) • Known diabetic patients' glucose level kept at < 11mmols/l throughout the operation **N.B**. There is a robust evidence base for use of 2% chlorhexidine gluconate in 70% isopropyl alcohol solution (CHG 2%) to reduce surgical site infections (SSI). The availability of this product has cost implications for NHSS Boards and Health Protection Scotland will work with national procurement to mitigate this. Recognising the current financial implications and resulting limitation on availability, it will be appropriate for teams working to reduce SSI to focus improvement activity on other elements and document CHG 2% as not available in the interim.