Acute Adult Safety Programme (Point of Care) v1.4 Measurement Plan 2015

Version	Date	Brief Description	Person Responsible
1.0	6th December 2013	Issued via email to Chief Executive and Programme Managers	Alison Hunter
1.1	17th January 2014	Amendment made to p.45, '4 and 5' removed from the data collection guidance section for INR measure.	Kathryn Paterson
1.2	7th April 2014	Headings added to introduction. DPO1and DPO2 (Cardiac Arrest count and rate) – clarification of exclusions for numerator and denominator. GWP1b (frequency of EWS)– amendment of numerator, denominator and data collection guidance VTEP 3 and YTEP4 – amendments to denominator and operational guidance. AHO2 – exclusions added to denominator. 'Category' replaced with 'Grade' for pressure ulcers measures, and note around 'expert assessment' added. FO1b and FO2b – exclusions added to the denominator. Expectations around measurement of PUP1 and PUP2 added. Revised PVC bundled moved to 'Testing and Improvement' section and this now PVC1a. Content of 2008 PVC bundle added under the essentials of safety PVC measure, and this is now PVC1. SSP10 – antibiotic choice compliant with local policy – removal of within an hour of time zero.	Kathryn Paterson and Alison Hunter
1.3	1st September 2014	Revised CAUTI definition included. Addition of measure with 'Acute occupied bed days' as optional CAUTI denominator. SPSI 3 identifier, operational definition and data collection guidance included. SPSI introduction section updated. GWP1b denominator amended to include 'patients reviewed' Addition of pressure ulcer rate measure PUO3.	Kathryn Paterson, Alison Hunter and Ross Davies
1.4	1st July 2015	Removal of process and outcome measures related to the Essentials of Safety (CEL19) Division of core and supplementary work stream measures Clarification of requirements for reporting of SPSI 3 – unique patients and scope of metric Amendment of Pressure Ulcer outcome measure - rate and aim Condensing of process measures related to pressure ulcers Decision on single definition of CAUTI outcome Addition of measure of catheter days for CAUTI Inclusion of outcome measure for medicines Inclusion of process measures for each element of Heart Failure Bundle	Alison Hunter, Claire Mavin, David Maxwell and Ross Davies

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Link to Acute Adult Patient Safety Programme community shared space: http://www.knowledge.scot.nhs.uk/aapsp.aspx

Introduction

The current aims of the Acute Adult Safety Programme are

- Reduce HSMR by 20% by December 2015
- 95% of people in acute adult health care free from the three harms of the Scottish Patient Safety Indicator (SPSI 3)
    - Cardiac Arrest
    - Pressure Ulcers
    - Falls with harm

At this time, Catheter Associated Urinary Tract Infection (CAUTI) has been excluded from the SPSI metric to allow testing and establishment of the outcome measure in NHS boards. Testing and reporting of process and outcome measures for CAUTI remains a priority for the Acute Adult programme .

Completion of the Reporting Template

We foresee completion of the reporting template being led by the SPSP Programme Manager, with close collaboration and support of Leading Better Care, Falls and Healthcare Associated Infection colleagues who are key partners in this work. Local integration of these improvement programmes is essential to deliver improved processes and outcomes for patients. Completion of this template is an essential step to support production of the National Data Platform (NDP), which has been developed to assist improvement teams and boards to understand their progress against the aims of the programme.

Transition from Clinical Quality Indicators (CQIs) to SPSP

Following consultation and agreement from the Scottish Executive Nurse Directors, the CQIs for Falls and Pressure Ulcers are being phased out, with NHS boards reporting process and outcome measures relating to these harms via the SPSP. To ensure a smooth transition to this new approach the following process has been agreed:

The existing process for reporting CQIs for Falls and Pressure Ulcers will continue until a clinical area has tested and implemented the revised SPSP interventions outlined in the driver diagrams and change package. The clinical area will then change to reporting via the SPSP Scottish Patient Safety Indicator (SPSI).

It will be important that incidents of all harms from all relevant clinical areas are entered into an agreed local incident management systems to support the production of SPSI.

The Essentials of Safety

- Hand Hygiene
- Leadership Walkrounds
- Surgical Brief and Pause
- General Ward Safety Brief
- Intensive Care Unit (ICU) Daily Goals
- VAP Bundle
- Early Warning Scoring
- CVC Insertion Bundle
- CVC Maintenance Bundle
- PVC Maintenance Bundle

These 10 Safety Essentials are evidence based processes that have achieved a level of spread and reliability across acute hospitals in Scotland since the launch of SPSP in 2008. CEL 19, published in September 2013, describes a progression from testing to universal implementation of these interventions.

Version 1.0 of this measurement plan, published in December 2013, supported the implementation of CEL 19 with a number of suggestions for processes to validate data and provide self assurance of reliable delivery of the essentials of safety.

Since that time, there has been significant progress at NHS board level in relation to CEL 19 including reporting of validated data and descriptions of ongoing processes for self assurance via the assessment process. This work supports a move to board ownership and monitoring the reliable delivery of the essentials of safety through local governance mechanisms.

In recognition of the progress made by NHS boards, this revision of the measurement plan no longer includes process or outcome data in relation to the essentials of safety. NHS boards that have yet to complete data validation and describe processes for self assurance will be supported to undertake this via the assessment process. Future external scrutiny and assurance of the reliable implementation and universal spread of the essentials of safety will be delivered through the new Quality of Care reviews.

Point of Care priorities

The driver diagram and measurement plan for the Acute Adult programme was published in December 2013. This described nine point of care priorities for action:

- Cardiac Arrest (Deteriorating Patients)
- Falls
- Pressure Ulcers
- Catheter Associated Urinary Tract Infection (CAUTI)
- Medicines
- Sepsis
- Heart Failure
- Surgical Site Infection (SSI)
- Venous Thromboembolism (VTE)

In response to feedback from NHS boards on the challenges in providing adequate support across this broad agenda, this version of the measurement plan supports a focus on elements of work which will best support the aims of reduction in mortality and harm.

To facilitate this, measures have been separated in to **core** and **supplementary** for the purpose of national reporting.

Core: for assessment of progress against trajectory

- Outcome measures relating to the harms of SPSI (including CAUTI)
- Process measures relating to the harms of SPSI (including CAUTI and Sepsis)
- Measures relating to Medicines

Supplementary

- Process measures relating to VTE, Heart Failure and Surgical Site Infection

N.B. NHS boards have undertaken significant work and achieved considerable gains in these supplementary areas. While these work streams are now considered as non - core for purposes of assessment against trajectory, NHS boards will wish to prioritise these work streams for local improvement support according to their context. Ongoing measurement in these supplementary areas will continue to be facilitated by the reporting and assessment processes with improvement support available on request from the national team.

Scottish Government are exploring ways in which progress against these supplementary areas might be self assessed as part of annual reviews, building on the safety improvement aims of Local Delivery Plans.

Scottish Patient Safety Indicator (SPSI)

Over 2014, NHS boards have made significant progress with reporting of process and outcome measure of the SPSI. Data submitted has supported an understanding of the current level of harm across the three measures currently included in SPSI 3. This, in turn, prompts important clarifications included in this measurement plan.

- Unique patients – the initial concept of the SPSI was that the measure would relate to patients who have suffered one or more harm in acute care. This requires the attachment of a unique identifier to each reported incident which in turn requires significant work to be done to local reporting systems. Data at hospital and board level indicates that the current percentage of patients discharged free from the harms of SPSI 3, before removal of duplicate incidents, is greater than 95%. The removal of duplicate incident will serve to increase the percentage of patients discharged free from harms. Therefore, the requirement for a unique identifier is removed from this version of the measurement plan with SPSI 3 being considered a suitable proxy of patients discharged free from harms.

- Scope of SPSI – It is acknowledged that an essential component of improvement is to track process and associated outcome measure at the level of a test ward. Data on the harms of SPSI 3 has been historically been reported in Scotland's acute hospitals at hospital/board level via incident management systems. Therefore, the expectation of reporting against the outcome measures of SPSI 3 is at ward, hospital and board level to support the production of a national metric.

Outcome Measures

Measure Name	Identifier	Goal	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	Goal	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.			
Clinical Areas should display either DP01, DP02 **or** DP03 depending on the number of cardiac arrests in their ward/department and availability of denominator				
Cardiac Arrest Count	DPO1		The total number of cardiac arrests in the ward/dept/unit for the month	Excluded areas: Emergency departments, Coronary Care Units, Intensive Care Units, Maternity Units, Outpatients and Day case procedures
Cardiac Arrest Rate (per 1,000 discharges)	DPO2	50% reduction	**Numerator:** The total number of cardiac arrests in the ward/dept/unit for the month **Denominator:** Determine the denominator: The total number of deaths plus live discharges in the current month (TD plus LD) 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	In areas with higher frequency a rate measure will be useful to track improvement Excluded areas (numerator and denominator): Emergency departments, Coronary Care Units, Intensive Care Units, Maternity Units, Outpatients and Day case procedures
Days between cardiac arrests	DPO3	300 days between	This measure is a count of the number of days that have gone by with no true cardiac arrests. Every time a cardiac arrest occurs the count is started over again. In this case, we are plotting successes between events. The longer the run of success (days with no cardiac arrests) the better the outcome.	Whenever events occur that are relatively rare in nature or when a ward or pilot area has sufficiently small numbers of events, the preferred way to analyse the data is to plot: (1) successes between events, or (2) time between events. Both of these techniques will be used in the SPSP work. For rare events, 300 days or more between true cardiac arrests is the goal. If an intervention is initiated, however, and the period between events is greater than two times the baseline period average this is also significant. In this case, it may be possible to show a true improvement before going 300 days without a cardiac arrest. Excluded areas: Emergency departments, Coronary Care Units, Maternity Units, Intensive Care Units, Outpatients and Day case procedures

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Pressure Ulcers • 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 NB: 'Expert Assessment' will be defined locally.				
Clinical Areas should display either PU01, PU02 or PU03 depending on the number of pressure ulcers in their ward/department and availability of denominator				
Pressure ulcer count	PUO1	50% reduction in pressure ulcers by Dec 2017	This measure is a count of the number of new pressure ulcers developed in the last month.	Number of hospital acquired pressure ulcers (grade 2-4) developed on the ward/department in the last month 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
Days between a hospital acquired pressure ulcer (grades 2-4)	PUO2	0 or 300 days between	This measure is a count of the number of days that have gone by with no new pressure ulcers found. Every time a new pressure ulcer occurs in the ward/dept, the count is started over again. The longer the run of success (days with no new pressure ulcers occurring) the better the outcome.	This can be collected using the NHS Scotland Pressure Ulcer Safety Cross and/or a Run Chart. 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 2-4)	PUO3	50% reduction in pressure ulcer rate by Dec 2017	1. Determine the numerator – the total number of in-patient pressure ulcers 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

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Falls	**Scottish Patient Safety Indicator (SPSI) 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, small cuts) would be excluded.				
All Falls count	FO1a		This measure is a count of the number of all inpatient falls (excluding Out-patients and Day Cases) in the last month.	Number of falls on the ward /department in the last month
All Falls rate	FO1b	25% Reduction	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 count	FO2a		This measure is a count of the number of all inpatient falls with harm (as defined by the SPSI, excluding Out-patients and Day Cases) in the last month.	Number of falls with harm on the ward /department in the last month
Falls with harm rate	FO2b	20% Reduction	1. Determine the numerator – the total number of in-patient falls with harm (as defined by the SPSI, 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).	

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
CAUTI	As defined by: 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 There are two options for denominator for measuring CAUTI rate. Teams may report either CAUTIO2a or CAUTIO2b.			
CAUTI count	CAUTIO1		This measure is a count of the number of new CAUTI developed in the last month.	Number of CAUTI in the last month **Inclusion: infection arises after insertion of a catheter or within 48 hours of removal of the catheter.** **Exclusions: patients with suprapubic catheters. Caveats around 'hospital acquired infection' prevail.**
CAUTI rate (catheter days)	CAUTIO2a	30% reduction by December 2015	1. Determine the numerator: The total number of CAUTI for the month 2. Determine the denominator: The total number of Urinary Catheter days for the month 3. The CAUTI rate is calculated by dividing the total numerator by the denominator and multiplying the result by 1000 to get the CAUTI rate per 1000 catheter days	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. Wards/units undertaking this work will benefit from developing a process to capture this information. **Inclusion: infection arises after insertion of a catheter or within 48 hours of removal of the catheter.** **Exclusions: patients with suprapubic catheters. Caveats around 'hospital acquired infection' prevail.**

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
CAUTI rate (occupied. bed days)	CAUTIO2b	30% reduction by December 2015	1. Determine the numerator: The total number of CAUTI 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. The CAUTI rate is calculated by dividing the total numerator by the denominator and multiplying the result by 1000 to get the CAUTI rate per 1000 acute occupied bed days	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. Wards/units undertaking this work will benefit from developing a process to capture this information. **Inclusion: infection arises after insertion of a catheter or within 48 hours of removal of the catheter.** **Exclusions: patients with suprapubic catheters. Caveats around 'hospital acquired infection' prevail.**
CAUTI – days between	CAUTIO3	0 or 300 days between	This measure is a count of the number of days that have gone by with no CAUTI being reported. Every time a CAUTI occurs the count is started over again. In this case, we are plotting successes between events. The longer the run of success (days with no CAUTI occurring) the better the outcome.	Whenever events occur that are relatively rare in nature or when a ward or pilot area has sufficiently small numbers of events, the preferred way to analyse the data is to plot: (1) successes between events, or (2) time between events. Both of these techniques will be used in the SPSP work. **Inclusion: infection arises after insertion of a catheter or within 48 hours of removal of the catheter.** **Exclusions: patients with suprapubic catheters. Caveats around 'hospital acquired infection' prevail.**
CAUTI - catheter usage	CAUTI04		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

Core Process Measures

***Core Process Measures are essential reportable measures that are central to demonstrating process improvement that will lead to reduction of the harms of the Scottish Patient Safety Indicator (SPSI*)

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Deteriorating Patient – Cardiac Arrest Please see associated Driver Diagram and Change Package				
Percent compliance with Early Warning Score Assessment – **Correct frequency of observations**	GWP1b	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of 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 Early Warning Score (EWS) is a tool for bedside evaluation based on five physiological parameters: systolic blood pressure, pulse rate, respiratory rate, temperature and AVPU score. The ability of a modified EWS, including relative deviation from patients' normal blood pressures to identify patients at risk from deterioration and who would potentially benefit from more intensive monitoring from nursing and medical staff has been demonstrated. Check frequency of five 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.
Clinical Areas should report **either** SSRP1a **or** SSRP1b depending on the number of triggering patients in their ward/department				
Structured Response Count	SSRP 1a		The number of structured responses within the month	Count the number of structured responses (within locally agreed time of triggering EWS) that have occurred in the ward that week / month. This is the main process that will, as it increases, drive down cardiac arrest. *The following are suggested elements of a structured response process. These may be combined and amended locally to support local adaption to context and should be described as part of the regular assessment process*. • Nurse in charge informed • Screened for sepsis • Appropriate care givers have met and discussed plan • ePCS/eKIS reviewed (acute admission wards only) • Documentation of active problems, working diagnosis, management plan and review time • Frequency of observations reviewed and documented • Escalation plan/goals of care recorded • Early referral to higher level of care considered and documented • DNACPR considered and completed if appropriate

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 complete structured responses 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** Patients who trigger EWS (locally defined) **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 local adaption to context and should be described as part of the regular assessment process*. • Nurse in charge informed • Screened for sepsis • Appropriate care givers have met and discussed plan • ePCS/eKIS reviewed (acute admission wards only) • Documentation of active problems, working diagnosis, management plan and review time • Frequency of observations reviewed and documented • Escalation plan/goals of care recorded • Early referral to higher level of care considered and documented • DNACPR considered and completed if appropriate

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with Structured Review	SSRP2	Goal - process reliability at 95% or greater	Percent compliance with Structured Review	**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 local adaption to context and should be described as part of the regular assessment process*. • Risk of deterioration reviewed and documented • Limited reversibility assessed (for example, with SPICT tool) • Management plan reviewed and updated • Anticipatory Care plan considered • DNACPR reviewed and updated • Communications with patient and family on management plan
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 4 or more on EWS (or locally defined trigger) with two or more Systemic Inflammatory Response Syndrome (SIRS) criteria and there is a suspicion of sepsis **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, EWS 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 four or more on EWS (or locally defined trigger) with two or more Systemic Inflammatory Response Syndrome (SIRS) criteria and there is a suspicion of sepsis **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, EWS 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
Falls **Please see associated Driver Diagram and Change Package** *The following bundles (FP1 – FP4) are suggested process measures. These may be combined and amended locally to support local adaption to context and should be described as part of the regular assessment process*.				
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 (within 24 hours of admission or transfer)** 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 should report either 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 hrs 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 (this can include the Scottish PPURA tool). 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 hrs 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 (this can include the Scottish PPURA tool). 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.
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 (this can include the Scottish PPURA tool). 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 Further guidance can be sourced from the change package http://www.widgetlibrary.knowledge.scot.nhs.uk/media/WidgetFiles/1008501/Prevention%20of%20Pressure%20Ulcers_Driver%20Diagram%20and%20Change%20Package%20v2.0.pdf
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. Report monthly to SPSP but report each week's prevalence. This means that there should be four data points for each month unless the volume is low (for example, some weeks there are no urinary catheters in place) in which case the results for all urinary Catheter insertion bundle compliance for the month will need to be aggregated. **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**. *Data for each separate element of the Bundle should be observed for compliance.* **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**

Safer use of Medicines **Please see associated Driver Diagram and Change Package** 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 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
Percent of INRs >6	MMP3c	30% reduction	The numerator for each measure will be the number of INRs>6 and the denominator will be the number of INR draws.	This is a monthly measure that essentially can be done concurrently. • Each week you should obtain a list of INR values from the laboratory system. • Review the results to identify patients receiving warfarin. • Of those, identify patients with INRs>6. Each level offers greater risk for bleeding and may be an indicator of poor processes.

Supplementary Process Measures

Supplementary process measures are recommended elements of the Acute Adult Safety Programme which boards are actively working on. These measures support a flexible approach to reporting and assessment with ongoing work acknowledged and supported via the assessment process.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Heart Failure **Please see associated Driver Diagram** Local services should define what is covered by each of the three elements of the care bundle. Using the evidence used within the SIGN guidelines and Clinical Standards, it is suggested that consideration should be given to including the following				
Percent compliance with Heart Failure Bundle	HFP1	Goal - process reliability at 95% or greater	**Numerator:** The total number of patient records with compliance with all elements of the Heart Failure Bundle delivered **Denominator:** The total number of patient records considered **Compliance** Divide the numerator by the denominator and multiplying by 100	**Inclusion Criterion**: All patients with heart failure secondary to left ventricular systolic dysfunction Use a random sample of 20 patients per month per unit (sample five patients per week). Only patients with all aspects of HF bundle in place are recorded as being compliant. Note: The Heart Failure Bundle includes • Expert review during admission • Evidence based drugs prescribed during in-patient stay • Referral to specialist Heart Failure Nurse service before or at time of discharge
Percent compliance with expert review during admission	HFP2	Goal - process reliability at 95% or greater	**Numerator:** Number of patients with a Heart Failure diagnosis (secondary to LVSD) for which an expert review is documented in this admission. **Denominator:** Total number of eligible patients in the sample who should have had an expert review on this admission. **Compliance:** Divide the numerator by the denominator and multiply by 100.	**Inclusion Criterion**: All patients with heart failure secondary to left ventricular systolic dysfunction Use a random sample of 20 patients per month per unit (sample five patients per week). *The definition of 'Expert' will be made locally. It is anticipated that in the majority of Boards, the designated will be a cardiologist - where not an option, Boards should define locally here:* • Review and confirmation of the diagnosis and aetiology • Further investigations to exclude reversible causes • Review of medications for potential interactions, side effects and unnecessary drugs • Consideration of DVT prophylaxis and the need for long term anticoagulant therapy • Use of intravenous and oral diuretics • Consideration of device therapies (ICD, CRT) • Consideration of advanced heart failure therapies (LVAD, transplant) • Consideration of palliative care involvement

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent compliance with evidence based drugs	HFP3	Goal - process reliability at 95% or greater	**Numerator:** Number of patients with a Heart Failure (secondary to LVSD) diagnosis and who were considered for evidence based drugs in this admission and this was documented. **Denominator:** Total number of eligible patients in the sample who should have had evidenced based drugs considered (and documented) in this admission. **Compliance:** Divide the numerator by the denominator and multiply by 100	**Inclusion Criterion**: All patients with heart failure secondary to left ventricular systolic dysfunction Use a random sample of 20 patients per month per unit (sample five patients per week). Consideration or prescription of evidence based drugs • ACE inhibitor • Beta blocker (or ivabradine if not tolerated/contraindicated and in sinus rhythm), • MRAs (mineralocorticoid antagonists) • Angiotensin receptor blocker
Percent compliance with referral to Heart Failure nurse service	HFP4	Goal - process reliability at 95% or greater	**Numerator:** Number of eligible patients with a Heart Failure (secondary to LVSD) diagnosis for which referral to a specialist Heart Failure Nurse (HFN) service is documented in this admission. **Denominator:** Number of eligible patients in the sample who should have had referral to HFN during this admission. **Compliance:** Divide the numerator by the denominator and multiply by 100	**Inclusion Criterion**: All patients with heart failure secondary to left ventricular systolic dysfunction Use a random sample of 20 patients per month per unit (sample five patients per week). Consider a care package that address all of the following: • Smoking cessation advice and counselling • activity level • diet, including salt intake • discharge medications • self-care - weight monitoring, oedema monitoring adjusting diuretics • advice on what to do if symptoms worsen • regular blood chemistry checks • optimisation of drug therapy • consideration of device therapies (ICD, CRT) • links to patient support groups

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 hrs 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.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
VTE Please see associated Driver Diagram and Change Package				
Percent of patients who had a documented VTE risk assessment for **patient and admission related risks and contraindication** within 24 hours of admission	VTEP1	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients who had a documented VTE risk assessment for patient and admission related risks and contraindications completed 2. Determine the denominator: the total number of patients in your sample Sample 20 case notes drawn from your ward/area population 3.Calculate the actual percent of eligible patients receiving VTE risk assessment by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	Data collection can be from patients notes Review at least 20 randomly selected charts/patients, with an admission duration of >24 hours, each month (or five per week) from your ward/area **N.B. This measure applies to all patients with an admission duration of >24 hours - denominator will be ≥ 20**
Percent of patients who had the correct pharmacological /mechanical thromboprophylaxis administered	VTEP3	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients who had the correct pharmacological/mechanical thromboprophylaxis administered according to the standardised VTE risk assessment. 2. Determine the denominator: the total number of patients in your sample who had a risk assessment completed and were assessed as being at risk. 3. Calculate the actual percent of patients administered correct pharmacological/mechanical thromboprophylaxis according to the standardised VTE risk assessment by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	The data collection should be taken from current prescription sheet - check for administration of correct thromboprophylaxis according to risk assessment. Review at least 20 randomly selected charts/patients with an admission duration of >24 hours, each month (or five per week) from your ward/area **N.B. This measure applies to patients assessed as at risk of VTE in the measure VTEP1. Denominator may be < 20**

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Percent of patients with documented reassessment of VTE risk as per local policy (< 72 hours)	VTEP4	Goal - process reliability at 95% or greater	1. Determine the numerator: the total number of patients hospitalised > 72 hrs who had a documented reassessment of VTE risk as per local policy 2. Determine the denominator: the total number of patients hospitalised > 72 hrs in your sample 4. Calculate the actual percent of eligible patients receiving reassessment of VTE risk by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	Data collection can be from patients notes or conversation with patient Review at least 20 randomly selected charts/patients, with an admission duration of >24 hours, each month (or five per week) from your ward/area SIGN 122 recommends reassessment should occur at least every 48 hours. The application of this in practice will vary and can be supported as part of a structured ward round. As teams measure their improvement they should allow a 72 hour period for reassessment. **N.B. This measure applies to patients hospitalised > 48 hours - denominator may be < 20**
Percent of patients informed of risks and benefits of VTE prophylaxis	VTEP5	Goal - process reliability at 95% or greater	1.Determine the numerator:: The number of patients given written information on risks and benefits of VTE prophylaxis within 24 hours of admission 2. Determine the denominator: the total number of patients in your sample. Sample 20 case notes drawn from your ward/area population 3. Calculate the actual percent of patients receiving written information by dividing the numerator by the denominator and then multiplying the resulting proportion by 100	Data collection can be from patients notes or conversation with patient Review at least 20 randomly selected charts/patients with an admission duration of >24 hours, each month (or five per week) from your ward/area

Scottish Patient Safety Indicator (SPSI 3)

The SPSI is a composite measure, that is, it aims to demonstrate the percentage of patients discharged free from any of the harms of the indicator. As such, it is expected that boards will report SPSI 3 at pilot ward, hospital and board level.

Boards are ***no longer required*** to record all harms of SPSI with a unique patient identifier, for example, CHI number. However, in order to enhance the intelligent use of data at a local level, boards may wish to continue to record data using this method.

The following Measurement Plan describes the process for production of SPSI 3 metric.

Measure Name	Identifier	Goal	Operational Definition	Data Collection Guidance
Scottish Patient Safety Indicator 3	SPSI3	Goal – 95% of patients discharged from ward/hospital/board without any of the three harms	**Numerator:** Determine the numerator: The total number of deaths plus live discharges in the month minus the total number of harms (pressure ulcers, falls with harm or cardiac arrests) in the month **Denominator:** Determine the denominator: The total number of deaths plus live discharges in the month from ward*/hospital/board SPSI 3: (Numerator / Denominator)*100	**Inclusion Criteria** Acute Adult Inpatients Only For definitions of harm see individual harm measures **Data Collection** This is not a sample, all incidence in acute adult inpatients to be recorded **Notes** Measure is to be reported at ward, site and board level. *When reporting pilot ward data, the denominator should include transfers out, not only discharges home.