National Wound Care Strategy Programme

Pressure Ulcers

Secondary Care Pressure Ulcer Surveillance using Model Health System Metrics

Health Innovation Network

NHS

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NWCSP publications are regularly updated. For the latest version, always refer to the NWCSP website.

Glossary

Clinical Coder: is a health information professional whose main duties are to analyse clinical statements and assign standardized codes using a classification system.

Finished Consultant Episodes: the time a patient spends in the continuous care of one consultant or, in the case of shared care, in the care of two or more consultants.

ICD-10: International Statistical Classification of Diseases and Related Health Problems 10th Revision.

Model Health System: a data-driven improvement tool that enables NHS health systems and trusts to benchmark quality and productivity.

Nosocomial conditions: those conditions acquired during a hospital stay.

Patient Safety Incident Response Framework (PSIRF): the NHS's approach to developing and maintaining effective systems and processes for responding to patient safety incidents for the purpose of learning and improving patient safety.

Pressure ulcer (PU): localised damage to the skin and/or underlying tissue, usually over a bony prominence (or related to a medical or other device), resulting from sustained pressure (including pressure associated with shear). The damage can be present as intact skin or an open ulcer and may be painful.

Safety Thermometer: a measurement tool for improvement in health care, which focused on the four most common harms to patients.

Secondary Uses Service (SUS): a secure data warehouse that stores patient-level information in line with national standards and codes.

Spell (Hospital Provider): the total continuous stay of a patient using a hospital bed during which medical care is the responsibility of one or more consultants, or the patient is receiving care under one or more nursing episodes or midwife episodes in a ward.

Introduction

Pressure Ulcer (PU) data collection has been standard practice in NHS England Trusts since 2012. Safety Thermometer audit was used often alongside incident reporting data collection. Both of these activities take clinicians away from clinical practice and neither are particularly accurate at reflecting incidence.

The new pressure ulcer surveillance system within the Model Health System (Figure 1) is available for use by secondary care Trusts. This standardised approach will reduce variation and improve national data accuracy following recommendations made by Lord Carter (1).

This briefing has been developed to support Acute Trusts to understand

- how data flows into Model Hospital,
- how to view pressure ulcer metrics in the Model Hospital System and
- what can be done locally to improve and assure the quality of that data to gain confidence in what it shows.

The system has been piloted with 8 acute Trusts since September 2021 which has helped the understanding of how these metrics can be used.

This briefing consists of an implementation pack for organisations to follow, which also includes some simple instructions on how to access the metrics, key lines of enquiry and a FAQ section.

Figure 1: Model Health System

1.0 Background information

From April 2012 to February 2020, Trusts within NHS England reported pressure ulcer data using Safety Thermometer. This was a monthly audit undertaken by clinicians that reported patients with pressure ulcers present within the organisation, whether they were classed as old or new (acquired after 72 hours of being admitted to the organisation) and their category of damage. In 2018, a Definitions and Measurement Guidance document (2) was launched to further help Trusts understand how pressure ulcers should be clinically recorded and captured for purposes of reporting. This guidance has since been reviewed in light of additional areas for clarification which evolved during the first 3 years of implementation.

The National Wound Care Strategy Programme (NWCSP) and the National Stop the Pressure Programme jointly agreed in 2020/2021 to use existing national data sets as the data source for reporting pressure ulcer prevalence / incidence (3) (4) (5). This means a move away from using audit or other practices that take clinicians away from patient facing activity to the use of data that is collected secondary to clinical practice i.e. data that is collected via clinical records as written by clinicians at the time of delivering care.

In secondary care, clinical records are coded by clinical coders using national coding and data sets, which is then fed into Secondary Uses Services (SUS). This data can then be hosted within the Model Hospital System. Data for Community Trusts and Mental Health Trusts, when developed, will be visible in Model Community Health and Model Mental Health respectively. All are within the umbrella Model Health System.

1.1 Current Sources of PU data:

Currently, the number of people with pressure ulcers as well as the number of pressure ulcers, is captured via clinical incident reporting systems, serious incident investigations, safeguarding reviews and clinical records, be they paper or electronic.

Using clinical incident reporting to monitor pressure ulcer incidents, both acquired in care and admitted with, can be useful for tissue viability nurses (TVNs) to gain real time information about the current patient population with pressure ulcers. Clinical incident reporting's prime focus is to initiate understanding about an event, following an investigation, around the root causes. Other examples of clinical incidents are falls, medication errors and never events. Tissue Viability teams have been investigating their organisations PU incidents for over a decade now and have a very good understanding of the commonest themes behind the development of pressure ulcers. Unfortunately, however, many teams have generated a new 'industry' around verification of PU category, differential diagnosis, body location and site of acquisition often making changes within the clinical incident system to ensure accurate data. On occasion, these same changes are not made in the clinical record, perhaps because the patient died or was discharged. The aim must be to ensure accurate clinical records in the first instance and to use this as a focus for quality improvement.

The newly launched Patient Safety Incident Response Framework (6) (PSIRF) offers guidance about changing the way incidents are investigated and the response to these, providing a focus on quality improvement as a result of learning rather than keep learning the same lessons.

With this in mind, and to support the principle that data capture is secondary to operational practice, the NWCSP recommends that PU data captured via clinical coding within SUS is used for secondary care. This will then be presented within Model Hospital.

2.0 The Model Health System and PU Surveillance

2.1 Data and the Model Health System PU surveillance

When a person has a hospital stay, for however long, this is called a spell (7). Within a spell, there can be one or more Finished Consultant Episodes, (an episode within a spell relating to the episode of care assigned to a particular consultant). Model Health System uses spells to report data related to pressure ulcers.

During a patient's stay, clinicians will be recording in different clinical records relating to diagnoses, treatments and investigations, care interventions, symptoms and so on. Following the patient's stay, these clinical records are scrutinised by clinical coders who are highly trained to read clinical records and assign codes, using 2 coding systems (8) (Table 1), related to clinical diagnosis, treatment and interventions.

System used	**Used for**
ICD-10	Clinical diagnosis
OPCS-4	Treatments and interventions

Table 1: Coding systems used by clinical coding teams

ICD-10 is the WHO International Statistical Classification of Diseases and Related Health Problems 10th Revision 2010 (9). "*The purpose of the ICD is to permit systematic recording, analysis, interpretation and comparison of mortality and morbidity data collected in different countries or areas and at different times. The ICD is used to translate diagnoses of diseases and other health problems from words into an alphanumeric code, which permits easy storage, retrieval and analysis of the data*."

There are strict standards that clinical coders must follow, the prime one being that they can only assign codes to diagnosis, treatments and investigations that are documented clearly, definitively and unambiguously in the clinical records. If a clinical entry states "*query pressure ulcer*" then the clinical coder will not record the pressure ulcer because they cannot make diagnostic assumptions.

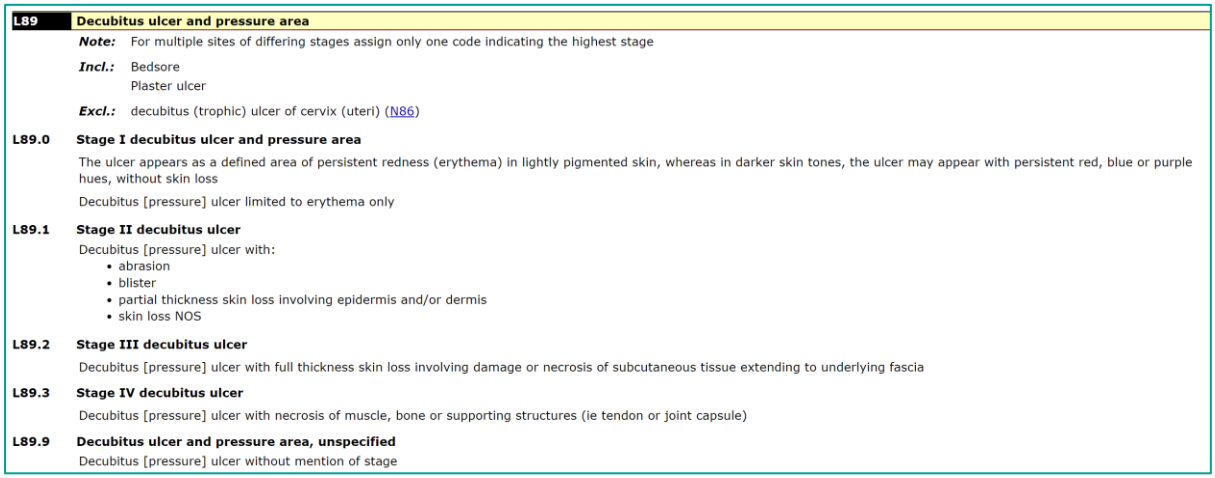
2.2 Pressure Ulcer diagnostic codes

The ICD-10 code assigned to a pressure ulcer is L89 (10) (Figure 2). If the patient has more than one pressure ulcer, this code will **only be assigned to the pressure ulcer with the highest category**.

There are some language differences between ICD-10 and the NHS Definitions and Measurement Guidance. In the NHS, we recommend pressure ulcers are recorded by category and ICD uses stage as its equivalent terminology.

Each pressure ulcer category 1 through to 4 is then assigned a sub-category number to the L89 code (Figure 2).

There is no sub-category code for unstageable, mucosal or deep tissue injury therefore L89.9 unspecified will be assigned by coders. This will also be assigned if no category of damage was recorded in the clinical records and the clinical notes only stated pressure ulcer or device related pressure ulcer.



L89 **Decubitus ulcer and pressure area**

Note: For multiple sites of differing stages assign only one code indicating the highest stage

Incl.: Bedsore
Plaster ulcer

Excl.: decubitus (trophic) ulcer of cervix (uteri) (N86)

L89.0 **Stage I decubitus ulcer and pressure area**

The ulcer appears as a defined area of persistent redness (erythema) in lightly pigmented skin, whereas in darker skin tones, the ulcer may appear with persistent red, blue or purple hues, without skin loss

Decubitus [pressure] ulcer limited to erythema only

L89.1 **Stage II decubitus ulcer**

Decubitus [pressure] ulcer with:
- abrasion
- blister
- partial thickness skin loss involving epidermis and/or dermis
- skin loss NOS

L89.2 **Stage III decubitus ulcer**

Decubitus [pressure] ulcer with full thickness skin loss involving damage or necrosis of subcutaneous tissue extending to underlying fascia

L89.3 **Stage IV decubitus ulcer**

Decubitus [pressure] ulcer with necrosis of muscle, bone or supporting structures (ie tendon or joint capsule)

L89.9 **Decubitus ulcer and pressure area, unspecified**

Decubitus [pressure] ulcer without mention of stage

Figure 2 ICD-10 Pressure ulcer codes[10]

2.3 Secondary Uses Service.

The Secondary Uses Service (11) (SUS) is the single, comprehensive repository for secondary care healthcare data in England which enables a range of reporting and analyses to support the NHS in

the delivery of healthcare services. SUS also supports payment by results and allows hospitals to be paid for the care they deliver. Following a patient's spell in hospital, data about diagnosis, interventions and procedures is gathered from clinical records by clinical coders and added to SUS (See Figure 3 (4)). Because this data is not used for direct or primary clinical care and are used for non-clinical purposes, they are called secondary uses. Submitting data to SUS is a mandatory requirement for hospital-based services. Therefore, this is the data source that will be used for PU metrics.

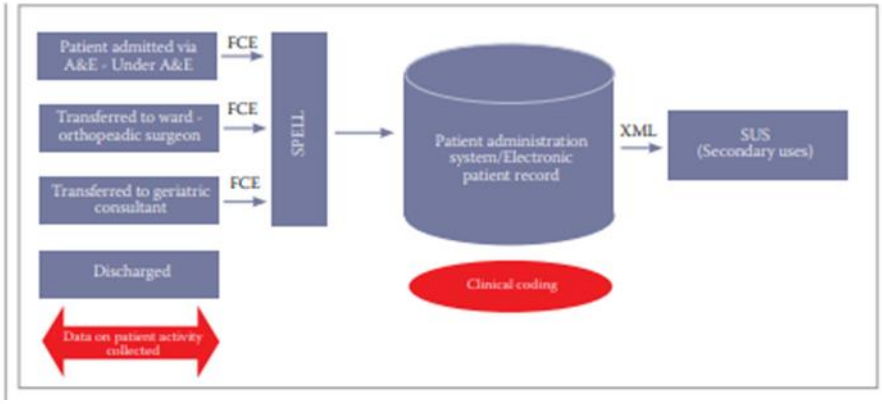


Figure 3: Flow of information from clinical notes into SUS (4)

Data capture differences to be aware of:

- Only the PU with the highest category of damage is coded. Therefore, metrics seen in Model Hospital may look very different to any seen previously, in other reporting systems, especially if all pressure ulcers per patient have been reported in the past.
- Historically, category 1 PU have not been captured for reporting purposes. Under the new system, if a category 1 PU is recorded in clinical notes and it is the highest category of PU recorded then it will be coded by coders and it will be included in data for Model Hospital.
- In coding terms, any version of Non-Blanching Erythema / NBE will be coded as Category(stage) 1.
- Because coding takes place after a patient's stay in hospital (their spell), the PU data is not coded at the time of it being clinically recorded. Therefore, there will be a delay in reporting the PU metrics.
- It is also possible that one patient may have had 2 spells within one month. If the records have been coded both times within that month then that patient will be included within the data as 2 spells. See Appendix 1 to support understanding of this. This may create a small level of duplication within the data.
- Dates are not assigned to clinical coding as they are assigned to the spell. A spell may be one day or one year and anything in between. Multiple admissions lead to multiple spells. The clinical records are coded at the end of the spell and submitted to SUS within a pre-defined timescale. Therefore, the month of data visible within Model Hospital is related to those spells uploaded to SUS in that month.

2.4 Differentiating between hospital acquired and present on admission

ICD-10 does include a code, **Y95** (12)**,** for nosocomial conditions and clinical coders will assign this to a pressure ulcer data capture entry if it is clearly defined in the clinical records that the PU was hospital acquired, or nosocomial. If the PU was not recorded on admission and developed 5 days into the spell and the clinical records do not state hospital acquired or nosocomial, the coders WILL NOT assign the Y95 code to the PU.

There is no code within ICD-10 for assigning present on admission to a diagnosis therefore, currently this cannot be presented within Model Hospital.

2.5 Getting clinical records to a standard that allows for accurate clinical coding

All too often, clinical documentation of pressure ulcers is poor. Examples include:

- incorrect categorisation,
- site of acquisition might be incorrect i.e. it may be defined as present on admission when it was acquired within our care or
- a wound that is not pressure related might be categorised as a PU.

This has led to an 'industry' of validation of pressure ulcers reported via clinical incident and other reporting systems. TVNs informed of the clinical incident will assess either the patient or a photo of the wound and determine if the original incident report was accurately described. If not, it will be changed accordingly. If the patient has been assessed face to face, they should add an entry into the clinical records that correctly describes the wound. They cannot, of course, change the previously recorded documentation. This means that clinical documentation may have the same PU described differently in different sections of the clinical records.

Rather than TVNs spending time validating all entries into clinical records, the right thing to do is to get the quality of clinical documenting of pressure ulcers accurate. By focusing on clinical documentation, alongside rigorous education and training, over time it will improve the quality of clinical record keeping. This in time will support accurate clinical coding and data collection that will automatically improve the data flowing into SUS and provide more accurate PU surveillance metrics in the Model Health System.

The most important action for organisations as they move to using Model Health is

- to review clinical documentation and consider how it can be improved to better capture accurate PU information. The time spent by TVNs on validation activity can then be spent on training and educating staff to clinically record accurate information in the first place.

In addition, organisations should

- consider how clinical coders can recognise which documented pressure ulcer category is the one to be coded where there is discrepancy in the record and
- seek agreement between clinicians and clinical coders about which clinical record and which clinicians within these records provides the best record for coding purposes, where more than 1 option exists. For example, if a ward nurse writes category 4 even though it is a higher category, if the TVN has written category 2, and this is about the same PU, the coders will code category 2 as long as this is the agreed procedure.

2.6 What metrics will the surveillance reports include

Model Health System metrics, visible for secondary care within Model Hospital System, provides the following metrics:

- percentage of spells with a PU as a proportion of all spells,
- number of spells with a PU present,
- spells with a PU acquired in hospital,
- spells with a PU by age bandings,
- spells by PU category.

The metrics are presented numerically and in chart form. Three types of charts are currently available

1. Variation chart: a bar chart that allows an organisation to benchmark against peer and national medians at a point in time,
2. Trendline: showing the metrics plotted within a trendline over time which can also be used to benchmark against peer and national medians,
3. Statistical Process Control charts: useful to understand any real improvements or shifts from normal variation within your own organisation. If you are not familiar with the use of statistical process control, an easy guide can be found in the Making Data Count resources (13).

3.0 Frequently Asked Questions

3.1 About the change

Q1: Why is this change happening?

A: At present, there is no national reporting on PU following the cessation of Safety Thermometer. There is a need to improve consistency and accuracy in national reporting between providers and to align to the principle that data capture should be secondary to clinical practice. The proposed change is a phased approach and successive phases will allow us to capture the whole patient journey.

Q2: Why are we using the Model Health System to obtain our PU metrics?

A: The Model Health System is a data-driven improvement tool that enables NHS health systems and trusts to benchmark quality and productivity. By identifying opportunities for improvement, the Model Health System empowers NHS teams to continuously improve care for patients. The Model Health System incorporates the Model Hospital, which provides hospital provider-level benchmarking.

https://www.england.nhs.uk/applications/model-hospital/

Q3: How do I register for Model Health System to see my organisations PU Surveillance?

Access to the Model Health System is currently available for all NHS commissioners and providers in England. If you are employed by an NHS organisation within England, you can register for access. Registering gives you access to additional services, depending on the organisation where you work.

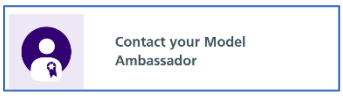
Register via this link http://model.nhs.uk/

There are currently 4 arms within Model Health: Model Hospital, Model Community Health, Model Mental Health and Model Ambulance.

Q4: What is a 'Model Ambassador' and how do I find them?

A: A Model Ambassador is your expert local contact for the Model Health suite of tools.

You can find yours on the home page of the Model Health System when you log into your account for your provider, if you scroll down the page, you will find a tile entitled 'Contact your Model Ambassador'.



Click on this to find out who your Model Ambassador is. If there is no name or box that looks like this, then it's likely your organisation does not yet have an Ambassador. The MHS's aim is to have 2 Ambassadors per organisation. You can see your organisation's Ambassador vacancies here.

The role of the Ambassador is described further here. If you identify someone in your Trust who would like to be an Ambassador then email help@model.nhs.uk to notify them of their interest.

3.2 About the data

Q5: What is Hospital Episodes Statistics?

A: Hospital Episode Statistics (HES) is a data warehouse containing details of all admissions, outpatient appointments and Accident and Emergency attendances at NHS hospitals in England. SUS serves as a data source for Commissioning Data Sets (CDS) from which Hospital Episode Statistics (HES) data is extracted (4).

https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics

Q6: Why use SUS and not HES?

A: SUS is the 1st version of the data and can change over the period of time whilst HES takes SUS data, cleanses it and then fixes it so it never changes. SUS is available sooner (see Q22 for dates).

Q7: What is SNOMED CT?

A: SNOMED CT is a structured clinical vocabulary for use in an electronic health record. It is the most comprehensive and precise clinical health terminology product in the world. All NHS healthcare providers in England must now use SNOMED CT for capturing clinical terms within electronic patient record systems.

https://digital.nhs.uk/services/terminology-and-classifications/snomed-ct

Q8: What is CSDS?

Community Services Data Set is a secondary uses dataset that re-uses clinical and operational data for purposes other than patient care. It sets out national definitions for the extraction of data about children and adults in the community. This can include personal and demographic data, social data, care event and screening activity data, diagnoses and scored assessments.

3.3 About the surveillance metrics

Q9: What PU Metrics will we get?

A: In the first phase (in acute organisations) and during the pilot period, the PU data will present **spells where a patient had a pressure ulcer**. The ICD-10 code L89 will be used to capture those patients with one or more PU, but the Model Hospital System will present patient associated spells and not pressure ulcers. In phase I of our project, we reported nationally on presence of pressure ulcers. Now into phase II, we can report on categories of PU and the ages of the people who have them. We can also report on those that were hospital acquired.

We are currently understanding how we can use the community services data set to gather PU metrics for community providers.

Q10: Are all pressure ulcers documented clinically visible in the metrics?

No, it is not possible to see all pressure ulcers. Only the highest category PU will be reported.

Pressure ulcers described as Unstageable, DTI or mucosal will only be coded if the phrase Pressure Ulcer is attached to them and these will appear within the L89.9 Unspecified category.

The ICD 10 guidance for coding states: *For multiple sites of differing stages assign only one code indicating the highest stage.* This means only one PU, the one assigned the highest category, will be recorded into SUS. ICD-10 provides codes for categories 1 to 4 and unspecified. ICD-10 offers no code for deep tissue injury so these will not be coded and captured if the wording pressure ulcer isn't also used to describe them. If the clinical documentation states pressure ulcer deep tissue injury, it will be coded as pressure ulcer unspecified. Unstageable, mucosal and uncategorised pressure ulcers will also be coded as unspecified.

https://icd.who.int/browse10/2010/en#/L89

Q11: The ICD-10 code Y95 is used for any hospital acquired (nosocomial) conditions. If someone was admitted to us from another hospital with a pressure ulcer Present On Admission (POA) and we know it was acquired in that other hospital, do we assign the Y95 code?

A: If it is clear in the clinical records that the PU was acquired in another hospital, or in a previous hospital stay, or it is documented as hospital acquired then coders will assign the Y95 code to this PU. They cannot make assumptions of diagnosis or acquisition. The Y95 code is associated with the diagnosis and not necessarily the admission. The words hospital acquired (or nosocomial) must be written in the clinical documentation and be clearly associated with the pressure ulcer for clinical coders to be able to use the Y95 code.

Q12: Should we use the 'Present on admission' indicator code?

A: This indicator is found in CDS V6.3 which is a dataset that clinical coding teams do not use. The NHS England patient safety team is currently trying to understand how 'present on admission' can be captured to be seen in MHS. Further information about this will be published once this issue is resolved.

Q13: Can we create local codes to use with our pressure ulcer reporting?

A: Local codes should not be created. The ICD-10 National Clinical Coding Standards (NCCS) and SNOMED should provide adequate examples of codes that can be used. If a code is not present, then request this nationally rather than creating a local code here https://isd.digital.nhs.uk/rsp-snomed/

Q14: Why can't I get historical PU data using Model Hospital?

A: It is possible to see some historical data in the Model Hospital, as pressure ulcer data fed into SUS since July 2018 will be pulled through into Model Hospital. What might not be visible is the proportion and number of spells where the pressure ulcer was acquired in hospital because these codes may not have been used for pressure ulcer reporting before.

3.4 Other activity around PU Surveillance

Q15: Why can't we continue to use incident reporting for national PU surveillance?

A: Our ambition is to be able to have a transparent system for reporting pressure damage rates at system (Integrated Care Boards) and national level and for this, we need to use nationally mandated datasets. Clinical incident systems are appropriate for capturing incidents, learning from these to improve patient safety and to report on more serious incidents that lead to harm. However, clinical incident reporting systems are not routinely used to capture all patient activity and data relating to pressure damage and are not shared with local shared records systems or national datasets. This means that clinical incident reporting systems do not reliably inform national data sets. Using clinical incident reporting data locally for your organisation and teams can be helpful as a measure of safety and activity around learning but is not a complete record and should not to be used for the purposes of CQC, CCG and national reporting.

Q16: Do we still need to report PU as a clinical incident using our incident reporting system?

A: Clinical incident reporting for pressure ulcers helps teams providing care to understand the reasons behind pressure ulcers developing and provides an opportunity for learning to achieve improvement where relevant. In August 2022, NHS England (6) launched the new Patient Safety Incident Response Framework. PU are no longer mentioned in here as a separate incident to consider however, there is an exemplar of how they may be investigated. The PSIRF now recommends, where a clinical incident group is well understood, that focus is given to quality improvement rather then continued and repeated investigation that does not produce new learning.

Q17: As TVNs, we spend a lot of time each week verifying pressure ulcers reported in our clinical incident reporting system and validating the data. Do we need to continue doing this?

We need to ensure patients' clinical records are accurate. Altering information regarding a PU within the incident reporting system but not in the clinical records is not best practice for good record keeping. Our focus and drive need to be on improving the quality of our clinical documentation in order to improve the quality of the data gathered from this source. Both PSIRF and NWCSP are supportive of TVNs spending time on quality improvement programmes to both reduce the incidence of PU and improve the quality of data capture. Consideration could be given to improving clinicians' skills and knowledge around categorising and documenting PU accurately, making changes to documentation to improve data capture related to PU and designing QI programmes centred on the learning from clinical and serious incidents to reduce the likelihood of patients developing PU in similar situations in the future.

3.5 Making Changes to support accurate PU data surveillance within Model hospital

Q18: The PU metrics in Model Hospital for my organisation seem very different to the ones we are used to using, why is this?

There are several reasons for this:

1. Coding teams only code for the highest category of PU documented in the clinical records for a patient's spell. You may have been capturing all PU, including where a patient has more than one PU or has a new PU develop when they have existing.
2. Category one PU are included in the Model Hospital metrics and you may not be including these in your current data.
3. You will not see category unstageable, deep tissue injury or mucosal PU separated within Model Hospital. These categories of PU will be recorded within unspecified along with those PU that are recorded with no assigned category. Deep Tissue Injury, unstageable and device related will not be coded by clinical coders at all unless the words pressure ulcer have been associated with them, in which case it will be coded as unspecified if this was deemed to be the highest category.
4. If you are an integrated Trust that has a community hospital site/s, and if the patients' clinical records are coded by clinical coders and added to SUS, the PU data gathered from these sites may also be included in Model Hospital metrics. Ask your clinical coding team if community hospitals are included in the SUS submission.
5. PU are only coded at the end of the patient's spell so if the patient is still in your care they will not appear in your data.

Q19: What do we need to do as an organisation to improve the quality of our PU data within Model Hospital?

There are several things you can do to improve the quality of the data presented within Model Hospital. Exactly which of these you undertake depends upon what you have in place already. [See also the Key Lines of Enquiry paper].

Documentation

Improving the accuracy and quality of our clinical records must be the cornerstone of any improvements being made. For pressure ulcer recording, you might need to consider the following:

Ensuring clinical coding teams know where they can find PU information in the clinical records. Having PU clinical documentation in a standard part of the clinical documentation can make it easier for clinicians to record information and for coders to find it.

Reviewing clinical documentation to ensure it includes capture of whether a PU was hospital acquired or present on admission.

Reviewing clinical documentation to ensure clinical coders know where they can find recording of verified categories when a category has been changed following TVN or other senior staff reassessment.

Education

Educating clinicians with regards to the work that clinical coders do so that they understand how to document to ensure coders can code.

Educating clinicians to improve their ability to diagnose and categorise PU. What can be done to enhance their knowledge, skills and confidence when assessing and categorising PU? Is there a wound management digital system that might support this?

Data Quality

You can use the metrics visible in Model Hospital to measure improvements in both clinical record keeping and subsequent coding.

For example:

Our hospital acquired percentage is much lower than expected and usual. This could be because the wording to associate hospital acquired with a PU was not used in the clinical records therefore coders could not code it.

It might be that the highest category documented in the clinical records was not a PU that was hospital acquired. For instance, if a person was admitted with a category 4 PU and then went onto develop a category 3 PU on another site, only the category 4 would be coded and added to SUS and therefore into Model Hospital.

We have more unspecified PU than any other category and we are used to having more category 2 than any other category.

This could be because clinicians aren't clearly categorising the PU in the records and coders are coding as unspecified.

You could consider asking clinicians to record unstageable PU as unstageable (minimum of category 3) PU and coders could agree that this is sufficient for them to code this as category 3 rather than unspecified. [This advice may change once the consultation for new national PU recommendations has been agreed]

3.6 Benchmarking within Model Health

Q20: How reliable is Model Health for benchmarking our PU surveillance against other organisations?

Until all organisations are achieving a high standard of PU data capture, there is limited reliability in benchmarking. For example, we know there are some organisations whose coding teams only code medical clinical records and not nursing. In these cases, it is probable that most pressure ulcers are not being coded as they are more likely to be documented in nursing records than medical records. We know from the pilot sites that it can take at least 6 months from making changes to clinical documentation and coding practices to capture PU codes before there is an initial change within MHS. Due to the time delay from clinical recording to discharge to coding to submission to SUS to uploading onto MHS, it is more realistic to expect to see changes at 12 months.

As PU surveillance is relatively new within Model Hospital, it will be some time before benchmarking metrics will be reliable. Currently not all organisations are working towards improving their clinical record keeping and coding to capture PU data as accurately as possible which means their PU metrics within Model Hospital may not be a true reflection of PU prevalence.

Q21: How easy is benchmarking within Model Health?

Benchmarking is very easy. The variation and trendline chart views both provide you with provider and peer medians.

You can start by viewing your ICB – all organisations within your ICB will be visible here and you can enter their sites to view their metrics. Of note though, is if you have an organisation within your ICB who has been awarded a contract in your area when their core business sits within another ICB area, they will only be visible within their core business ICB.

You can select who your peers are and can choose CQC good, Shelford group or any organisations of interest to you. Detail is provided about an organisation's size, the number of sites, beds and staff. CQC rating and a link to the organisation's website are also provided.

Access Peer groups and select pre-determined groups of **Manage my peers** to create a bespoke list via this link found at the top left of the PU page.

Q22: When does the PU surveillance metric get updated in Model Hospital?

Update timings for Model Hospital PU Surveillance are reliant upon SUS submission timings. The SUS submission timetable link can be found on this page https://digital.nhs.uk/services/secondary-uses-service-sus/payment-by-results-guidance#submission-timetables

As of 12/04/2023, the timetable is as below

SUS+ Submission Timetable 2023/24

SUBMISSIONS MUST BE RECEIVED BY SUS+ BEFORE 5.00PM ON INCLUSION DATE

	Reconciliation		Post-Reconciliation		HES: APC / OP / A&E	Annual HES Refresh
Activity Month	Inclusion	Delivery	Inclusion	Delivery	Deadline	Inclusion
April	Thu 18 May 23	Wed 24 May 23	Mon 19 Jun 23	Thu 22 Jun 23	Thu 18 May 23	
May	Mon 19 Jun 23	Thu 22 Jun 23	Wed 19 Jul 23	Mon 24 Jul 23	Mon 19 Jun 23	
June	Wed 19 Jul 23	Mon 24 Jul 23	Thu 17 Aug 23	Tue 22 Aug 23	Wed 19 Jul 23	
July	Thu 17 Aug 23	Tue 22 Aug 23	Tue 19 Sep 23	Fri 22 Sep 23	Thu 17 Aug 23	
August	Tue 19 Sep 23	Fri 22 Sep 23	Wed 18 Oct 23	Mon 23 Oct 23	Tue 19 Sep 23	
September	Wed 18 Oct 23	Mon 23 Oct 23	Fri 17 Nov 23	Wed 22 Nov 23	Wed 18 Oct 23	
October	Fri 17 Nov 23	Wed 22 Nov 23	Mon 18 Dec 23	Thu 21 Dec 23	Fri 17 Nov 23	
November	Mon 18 Dec 23	Thu 21 Dec 23	Thu 18 Jan 24	Tue 23 Jan 24	Mon 18 Dec 23	
December	Thu 18 Jan 24	Tue 23 Jan 24	Mon 19 Feb 24	Thu 22 Feb 24	Thu 18 Jan 24	
January	Mon 19 Feb 24	Thu 22 Feb 24	Tue 19 Mar 24	Fri 22 Mar 24	Mon 19 Feb 24	
February	Tue 19 Mar 24	Fri 22 Mar 24	Thu 18 Apr 24	Tue 23 Apr 24	Tue 19 Mar 24	
March	Thu 18 Apr 24	Tue 23 Apr 24	Mon 20 May 24	Thu 23 May 24	Thu 18 Apr 24	Mon 20 May 24

* SUS+ will endeavour to publish ahead of the Delivery date

The SUS+ Submission timetable has been constructed to support the monthly commissioning (data reconciliation) cycle. Healthcare providers are reminded that data submissions to SUS+ are to be provided more frequently than monthly. With effect from April 2021, all acute providers of NHS commissioned care (both NHS and Independent Sector Providers) are required to submit according to the following frequencies:

- Emergency Care Dataset – daily
- Admitted Patient Care Dataset – weekly
- Outpatient attendance Dataset – weekly

There may be delays to the submissions to SUS which can lead to delays in the surveillance being seen in Model Hospital.

Uploading to Model Hospital is expected to be around one week later with estimated dates as below:

Activity Month	Visible on Model Hospital
Apr-23	Between 22nd and 28th June 2023
May-23	Between 24th and 30th July 2023
Jun-23	Between 22nd and 28th August 2023
Jul-23	Between 22nd and 28th September 2023
Aug-23	Between 23rd and 29th October 2023
Sep-23	Between 22nd and 28th November 2023
Oct-23	Between 21st and 27th December 2023
Nov-23	Between 23rd and 29th January 2024
Dec-23	Between 22nd and 28th February 2024
Jan-24	Between 22nd and 28th March 2024
Feb-24	Between 23rd and 29th April 2024
Mar-24	Between 23rd and 29th May 2024

Q23: When will the PU surveillance metrics visible be the most accurate?

It may take several months before the PU metrics within Model Health reflect the actual levels of PU occurrence within your organisation. The metric end point date will be 3 months behind current date (hence, in January, October is visible) and it will take time for clinical documentation changes and staff knowledge to reach a level to capture accurate information.

PU metrics visible may be one or two months behind depending on when they are reviewed. For instance in February, you could see December early on and January later on.

4.0 Key Lines of Enquiry

There may be information within the PU Metrics seen in MHS that can be used to lead you to enquire about how metrics can be improved. These key lines of enquiry can be used to question the metrics, the data or the clinical recording.

1. **Consistent increase in numbers** (it's not helpful to consider a rise or drop in one month as anything other than normal variance, unless it is substantial). During the first 6 months to one year, this may be due to improved clinical record keeping with regards to PU enabling clinical coders to better code PU. Cross check the numbers in MHS with what you know are your average numbers and see if they correlate.
2. **Spells with a PU acquired in hospital is 0% or lower than expected -** Consider is this accurate? Do you know there have been no PU acquired during your care. If so, well done everyone. If not, then consider is this being accurately recorded in the clinical records and are clinical coding able to capture this? It might be that a documentation review is needed to enable capturing of when the PU is hospital acquired.
3. **The number (count) of spells seems very different to what you might expect.** Remember, only the highest category PU will be coded per patient per spell. Whilst it is recognised some people have more than one PU, this number is usually small. If the number of spells seems much higher than expected, then it might be that clinical coding teams cannot code because of poor clinical documentation. Consider reviewing the documentation that is

capturing the PU and determine if clinical coding teams can and are able to code from this. If it seems much lower, it might be that clinicians are not adequately documenting pressure ulcers in the clinical records or coders are not coding them (because they don't look where they are, they haven't been documented in a way the coders can code them or they are not documented).
Discuss the data with the clinical coding team to gain some understanding of why the data may look very different. Consider clinical record keeping amongst clinicians, how and where they are recording pressure ulcers in the clinical records and whether documentation needs to be improved to better capture PU.

4. **The spells with a PU diagnosis present (count) is different to the spells with a category PU diagnosis present (count).** The number of spells with a PU by different category, should be equal to the number of spells with a PU present. This is because clinical coders only code one PU per spell. See example below.

Pressure ulcer overview	Data period	Provider value
Spells with a pressure ulcer diagnosis present as proportion of all spells (%)	Jun 2022	0.3%
Spells with a pressure ulcer diagnosis present (count)	Jun 2022	70

- The total number of spells as a count is 70 in this example.
- The total of all the spells by category is 70. [6+41+9+3+11].

Pressure ulcer by category The below metrics provide a breakdown by category of all hospital spells with at least one pressure ulcer diagnosis. If there are multiple pressure ulcers within a diagnosis, then the highest category pressure ulcer has been recorded below.	Data period	Provider value
Spells with a category 1 pressure ulcer diagnosis present (%)	Jun 2022	9%
Spells with a category 1 pressure ulcer diagnosis present (count)	Jun 2022	6
Spells with a category 2 pressure ulcer diagnosis present (%)	Jun 2022	59%
Spells with a category 2 pressure ulcer diagnosis present (count)	Jun 2022	41
Spells with a category 3 pressure ulcer diagnosis present (%)	Jun 2022	13%
Spells with a category 3 pressure ulcer diagnosis present (count)	Jun 2022	9
Spells with a category 4 pressure ulcer diagnosis present (%)	Jun 2022	4%
Spells with a category 4 pressure ulcer diagnosis present (count)	Jun 2022	3
Spells with a pressure ulcer diagnosis present where category is unknown or unspecified (%)	Jun 2022	16%
Spells with a pressure ulcer diagnosis present where category is unknown or unspecified (count)	Jun 2022	11

If there is a discrepancy here, discuss with clinical coding where this might have come from.

5. **The percentage split of any particular category group seems unusual compared to what you would expect.** For example, the number of category 4 is higher than category 2. This may be due to accuracy of clinical documentation and where clinical coders are coding PU information from within the clinical records. Organisations will be very familiar with their percentage split between categories from clinical incident data and it is expected the MHS metrics would be similar. If anything looks different to expected, then consider both clinical recording of categories and coders coding practice. Over time, you may expect the count of unspecified to reduce and the category 3 to increase as national recommendations bring about change and clinical coders are able to code unstageable as category 3 (if wording in clinical records reflects this – see FAQs Q26: Data quality).

5.0 Summary of actions for the organisation

1. Identify the Trust Ambassador for Model Health.
2. Ensure clinical coding departments are aware of this work and how their important work is then presented in the Model Hospital System.
3. Negotiate designated specialists whose judgement on category may override that of other clinicians within the clinical documentation and ensure clinical coders know who these clinicians are.
4. Review documentation to ensure clinicians can accurately capture pressure ulcer information to include
    a. Category of pressure ulcer.
    b. Site of acquisition (in hospital or present on admission).
5. Ensure documentation allows for correction of incorrectly recorded PU information so that clinical coders will be aware of where to find the most accurate information (see KLOE 3 above).
6. Ensure clinical coding teams know where to look in clinical records for accurate PU information.
7. Develop a programme of staff education and training to support increased accuracy of clinical recording of PU.
8. Consider utilising digital tools that may better support clinician accuracy when recording PU.

6.0 Other useful resources

1. **About the Model Health System https://www.england.nhs.uk/applications/model-hospital/**
2. **Upcoming Model Health webinars https://www.england.nhs.uk/applications/upcoming-webinars/ Previous webinars can be found within Model Health, access to which you will need to be logged in for at https://model.nhs.uk/**
3. **Making data count webinars. Useful webinars to understand the use of data. Log into NHS Futures is required https://future.nhs.uk/connect.ti/MDC/view?objectId=910865**
4. **Once logged into the Model Health System, there are many resources available to help you understand how to navigate the system https://knowledge.model.nhs.uk/**

7.0 Appendices

Appendix 1

Appendix 1
Reporting period spe

This guide has been produced to support you with understanding the PU metrics within MHS.

8.0 References

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