



# Severe Hospital-Acquired Pressure Injury (AHRQ Patient Safety Indicator 3)

# 12

A. Schubert, C. Stanley, S. Didier, D. Bolton, T. Clesi,  
and B. Fleming

The Agency for Healthcare Research and Quality (AHRQ) patient safety indicator (PSI)-3 is extremely important to hospitals nationwide. PSI-3 reports the occurrence of hospital-acquired severe pressure injuries. Included are stage 3 and stage 4 pressure injuries, as well as unstageable pressure injuries. PSI-3 commands a substantial weight (16%) within the composite safety indicator PSI-90, which is used to determine if a hospital's annual Medicare revenue should be subject to the Centers for Medicare & Medicaid Services (CMS) Hospital-Acquired Condition Reduction Program penalty. The publicly reported CareChex quality measure uses PSI-3. It also is an important contributor to the Leapfrog hospital safety rating and the Safety of Care domain of CMS hospital star ratings. The ability to avoid the development and progression of pressure ulcers for its patients certainly can influence an

---

A. Schubert (✉)

Departments of Executive Administration and Anesthesiology, Ochsner Medical Center and University of Queensland, New Orleans, LA, USA  
e-mail: [aschubert@ochsner.org](mailto:aschubert@ochsner.org)

C. Stanley · S. Didier

Center for Quality and Patient Safety, Ochsner Health, New Orleans, LA, USA  
e-mail: [clay.stanley@ochsner.org](mailto:clay.stanley@ochsner.org); [shirley.didier@ochsner.org](mailto:shirley.didier@ochsner.org)

D. Bolton

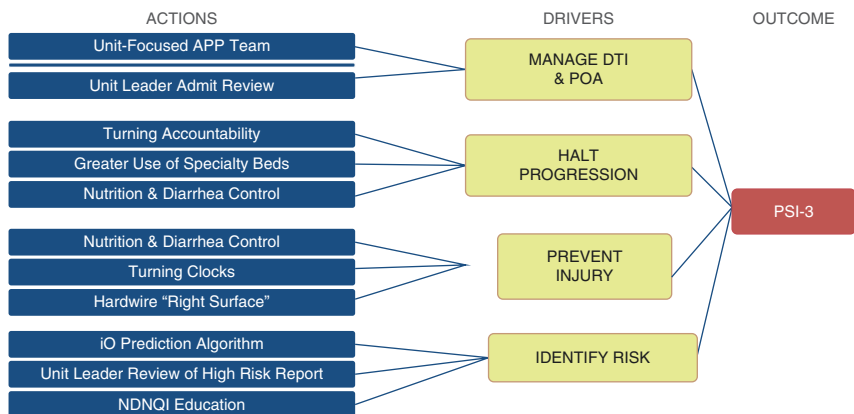
Department of Podiatry, Ochsner Medical Center, New Orleans, LA, USA  
e-mail: [dayna.boltonbarnes@ochsner.org](mailto:dayna.boltonbarnes@ochsner.org)

T. Clesi

Wound Ostomy Geriatric Department, Ochsner Medical Center, New Orleans, LA, USA  
e-mail: [tclesi@ochsner.org](mailto:tclesi@ochsner.org)

B. Fleming

Department of Nursing Administration, Ochsner Medical Center, New Orleans, LA, USA



**Fig. 12.1** Driver diagram for PSI-3. APP advanced practice provider, DTI deep tissue injury, iO Innovation Ochsner, NDNQI National Database of Nursing Quality Indicators, POA present on admission, PSI patient safety indicator. (© Ochsner Health)

organization's reputation. While the majority of PSIs have improved nationwide, PSI-3 is the only PSI whose performance has worsened nationally over time [1].

The primary drivers of PSI-3 are (1) accurate documentation, (2) measures to halt progression of the lesion, (3) preventive measures such as frequent turning and moisture control, and (4) identification of risk and early recognition of the skin lesion (see Fig. 12.1). Drivers #2–4 primarily relate to clinical practice, while driver #1 aims at optimal accuracy in describing and diagnosing the skin lesion. PSI-3 is one of a number of PSIs for whom an association with race or ethnicity has been reported. In a study of patients in the Veterans Administration health system, African Americans had higher risk-adjusted odds of experiencing severe pressure ulcers captured as PSI-3 events [2].

Discussing the intricacies of clinical prevention and management of pressure injuries is beyond the scope of this chapter. Instead, we focus here on appropriate diagnosis and documentation. Accurate diagnosis of the lesion is key to avoiding incorrectly reported PSI-3s. A substantive number of conditions can be mistaken for pressure injury, especially by incompletely trained and nonprovider personnel. Table 12.1 gives examples of alternative, and in some cases, much more accurate diagnoses for skin lesions referred to as pressure injury, deep tissue injury (DTI), or deep tissue pressure injury (DTPI) by busy clinicians.

The diagnosis and clinical analysis of pressure ulcers can be made and documented by both nurses and providers. However, the coding process is designed to work in a hybrid manner. Only the staging of the pressure injury or pressure ulcer can be coded from a nursing note; the final diagnosis of the skin injury must come from a provider's note in the patient's medical record.

**Table 12.1** Skin diagnoses that are and are not pressure injuries

Diagnosis	Pressure injury	Nonpressure injury
Moisture-associated dermatitis	No	Yes
Intertrigo (intertriginous dermatitis)	No	Yes
Gluteal cleft ulcer	No	Yes
Skin shearing	No	Yes
Surgical drain exit wound	No	No
Abrasion	No	Yes
Bruise or ecchymosis (especially in anticoagulated patients)	No	Yes
Skin tear	No	Yes
Skin injury	No	Yes
Lichenification of skin	No	Yes
Venous ulcer	No	Yes
Diabetic ulcer	No	Yes
Ischemic skin lesion (especially in patients with prolonged shock on vasopressors)	No	Yes
Skin changes at the end of life	Yes	No
Kennedy ulcer	Yes	No
Nonpressure skin injury (e.g., ischemic) in moribund patients	No	Yes
Pressure injury	Yes	No
Deep tissue injury	Possibly but at least half are not	Only if ruled out as a pressure injury by a provider
Deep tissue pressure injury	Yes	No
Unstageable pressure injury/ulcer	Yes	No
Device-related injury	Most often	Possibly

## 12.1 The Process of Arriving at an Accurate Code for the Skin Lesion

Accurate documentation and reporting of the diagnosis and management of skin injuries and pressure ulcers is a collaborative responsibility of nurses, providers, clinical documentation integrity (CDI) team members, and coders. After a review by CDI and coding teams to ensure accuracy, coding is finalized by professional coders. CDI team members must initiate a concurrent review of the documentation of the skin ulcer. While reviewing a case for DTI, the CDI and coder must be cognizant to review notes from floor nurses, wound care nurses, and providers. The overall clinical picture should be taken into consideration during a chart review and preliminary coding. Medical record queries should be written to clarify discrepancies among provider documentation or to seek further specificity of a diagnosis, as applicable. The review must emphasize achieving accuracy of the diagnosis consistent with documentation and clinical indicators present in the complete medical record, staging of the pressure skin wound where applicable, and the present on admission (POA) status.

It is extremely helpful to understand the patient's comorbidities and hospital course when attempting to clarify a skin injury diagnosis either verbally or through a formal written physician query. Where possible, the CDI team should make efforts to discuss the case compliantly with the physician to get the most accurate documentation for the true clinical diagnosis and picture. Caution should be exercised in cases where wounds appear not to have been POA, especially in patients who are at high risk for entering the hospital with a pressure-related injury. Based on our case review and experience, these are patients who have been recently discharged from a hospital, are transferred from a health-care facility, or are bed or wheelchair bound. We have instituted measures to identify and document such lesions on admission and follow up with notification to the clinical teams, managed by our performance improvement department. Inaccurate coding of the diagnosis and POA status can misrepresent the true clinical picture and mistakenly affect the PSI-3 metric because POA lesions are excluded from being counted as a PSI-3 event.

Another example is a patient with severe life-ending illness who is no longer responding to therapeutic interventions. Such patients may be described as being at the end of life, terminally ill, on comfort measures, on comfort care, and have consistent palliative care interactions or orders indicating comfort care, limitation of care (such as partial resuscitation), or withdrawal of care actions. Skin lesions that do not respond to care interventions, occur in multiple areas of the body, and indicate tissue decay could represent the diagnosis of SCALE (skin changes at the end of life) as mentioned in Table 12.1. It should be recognized that the documentation of such lesions or that of a "Kennedy ulcer" commits coders to represent a pressure injury diagnosis. Only if such skin changes are described as non-pressure can coders avoid the diagnostic codes leading to a PSI-3 designation.

### Key Concept

Appreciating the clinical context is key to identifying the most accurate diagnosis of a skin lesion. An example is the diagnosis of skin changes at the end of life, which may or may not represent a pressure injury. Careful clinical examination and medical record documentation can result in greater diagnostic accuracy that might prevent some of these lesions from being included in PSI-3 counts.

## 12.2 Identifying Patients with Skin Lesions at Risk for Being Reported as PSI-3

The hospital should have ways to identify patients for whom a severe pressure injury is likely to be reported. The most effective way to do this is to identify patients at risk for developing pressure injuries early during their hospital stay. This is traditionally done by assigning the patient a clinical risk score such as the Braden score. Our experience has been that certain patients are at particularly high risk of

developing severe pressure injuries. Examples are patients who have been recently discharged, patients admitted from postacute facilities, patients who are bedbound, and patients who have prolonged hospital stays, refuse mobilization, or who undergo procedures of long duration. Systems should be in place to assure that skin lesions are appropriately diagnosed and documented. To facilitate this, the medical record can be reviewed for the presence of partial thickness skin lesions, pressure injury, pressure ulcer, DTI, or DTPI. It is equally important to know in real time (i.e., while the patient is still in the hospital) whether a stage has been assigned to a skin pressure injury.

The reasons for hospitals to have such early warning systems are clear. First, such skin lesions, when identified early, can often be prevented from becoming a true pressure injury or from becoming more severe; the latter is referred to as progressing to a higher stage. Second, when it is known that certain documentation exists that may lead to coding a pressure injury, additional effort can be directed to come to a conclusion about the correct diagnosis and document the same. This process should then also result in the most accurate assignment of diagnosis codes. For clinical personnel, a report identifying such patients might include their location within the hospital, the description of the skin lesion (location, color, size, skin thickness, etc.), presumed POA status, date of admission, and dates of first observation and treatment (such as wound care consultation). Our teams have found it useful to generate such a report from our Epic electronic health records. Nursing unit leaders sort this report first by their unit's location and then by lesion description to focus on prevention of progression (e.g., from partial to full thickness). Patients who exhibit lesions of concern receive unit nursing leader attention via in-person rounding, wound consultation, and communication to the medical team about the lesion.

---

### 12.3 Concurrent Review

When a high-severity pressure injury case appears in the facility-specific report or work queue, a medical record review should occur within 24–48 h. This review should address the following points.

1. *Establish whether the skin lesion was present on admission.*

#### **Low-Hanging Fruit Alert**

Establishing that a diagnosis of severe pressure ulcer was present on admission will prevent this lesion from being represented as a PSI-3 event.

This is typically done by reviewing the medical record for pertinent documentation at the time of admission and before. Taking a photograph of the skin lesion at the time of admission represents good practice. However, this activity alone cannot establish the diagnosis or the POA status. Clinical indicators of POA status need to

be specifically identified. This entails looking for evidence of a preexistent lesion in emergency department and admission notes, scans, and nursing flow sheets. Recently, it has become possible for clinical documentation improvement specialists to take into consideration clinical indicators from medical records entries predating the current admission [3], such as a discharge summary from a recent admission documenting a prior pressure injury. Such information may be used in determining the need for a physician query. Initial review for POA status can easily be done by a nonprovider team member with clinical background.

## 2. *Is the diagnosis correct and clinically significant?*

PSI-3 events can occur if a nurse documents a stage for a DTI lesion. This creates the need for a physician query since only pressure injuries should be staged. To clarify then if the DTI was indeed a pressure injury, a medical record query is issued for providers to determine whether a pressure injury existed. Because coders can code from the stage documented by a nurse, once the provider confirms a pressure injury, the code will reflect the presence of a staged pressure ulcer. Frequently, skin lesions such as pressure injuries are first noticed by a nurse or patient care technician (aide) or through interactions with the hospital's wound care team. Given the complexity of definitions and coding rules pertaining to these lesions, we have learned that the best way to establish the most accurate final diagnosis is for nonprovider team members to document by describing only what they see. For example, the skin lesion is described as 3 × 4 cm in size, located along the lateral thigh, and having a purplish hue.

### **Key Concept**

Documenting pressure injury, such as DTI or DTPI, by nonprovider personnel early during hospitalization may lead to a PSI-3 designation. Providers may unwittingly include such terms in their notes, unaware that it leads to a serious publicly reported safety event.

Nonproviders should be discouraged to document skin lesions as a DTI, DTPI, or unstageable pressure injury (some use this term mistakenly to describe their inability to identify the exact nature of the skin injury). The reason for this is that coders are obligated to act on what is documented in the medical record. Coding guidelines specify that such terms be treated as clinical indicators (or evidence) for the presence of a pressure injury. Therefore, in most instances, CDI team members will issue a medical record (or physician) query to the provider who may not be familiar with the diagnostic criteria for pressure-related skin lesions. Worse yet is if the provider unwittingly copies nursing or wound care documentation into their own note. In this case, a diagnosis of pressure injury may be entered into the patient's coding profile without the need to clarify with the provider via query. If the nurse or wound care team member unwittingly made an assessment (gaining the status of a diagnosis if copied into a provider note) that was incomplete or incorrect, a false-positive report of PSI-3 would result (see PSI-3 Case Illustration).

**PSI-3 Case Illustration: Severe Pressure Ulcer Complication Avoided by Eliminating Backstaging**

*Reason for concurrent chart review:* This patient's chart was reviewed for PSI-3. The event was identified by 3M. The trigger code for PSI-3 was L89150 pressure ulcer of sacral region, unstageable. The code was identified as not present on admission.

*Review summary:* A middle-aged woman was transferred from an outside facility for evaluation and treatment of hepatic encephalopathy. Her mentation gradually improved, but she developed hypotension and required vasopressor support for suspected sepsis. She continued to decline and suffered a cardiac arrest and required multiple applications of resuscitate measures. Thereafter, vasopressor requirements continued to increase to maximum dosing; discussions were held regarding her poor prognosis. She was transitioned to comfort care per family wishes. The patient was terminally extubated and expired shortly afterward.

*Proposed coding (pre-billing):* L89150 – pressure ulcer of sacral region, unstageable with a POA status of “no.” L89153 – pressure ulcer of sacral region, stage 3 POA status of “yes.”

*Quality review reasoning and request:* The medical record was reviewed for PSI-3 – pressure ulcer rate with a trigger code of L89150 pressure ulcer of sacral region, unstageable with a POA of “no.” The coding profile also documented L89153 pressure ulcer of sacral region, stage 3 POA status “yes.” On comprehensive review, the history and physical documented that the sacral wound was present on admission and had the severity level of a stage 3 pressure injury. The wound became covered in exudate with tissue sloughing. A new lesion was then added to the patient coding profile and was coded as an unstageable pressure ulcer of the sacral region, now with a POA status of “no,” thus capturing the perceived change in wound status. The history and physical also documented that the wound had recently cultured positive for ESBL and *E. coli*. The case was sent for further review by a senior coder. A request was made to remove L89150 from coding profile. The request was based on coding guidelines that indicate only the highest stage of the wound should be reported if present on admission. PSI-3 or -4 are considered higher stages than unstageable.

*Referral for senior physician review:* The case was referred for senior physician review. It was agreed that a query should be requested to further clarify the nutritional status of the patient during hospital course, and that the apparent back staging of the pressure ulcer be reviewed.

*Coding outcome:* The account was reviewed by a senior coder at the request of the quality department. The determination was that changes to the coding profile were warranted. The coding for L89150 pressure ulcer of sacral region, unstageable, was removed. The coding for L89153 pressure ulcer of sacral region, stage 3 was reported with a POA status of “yes.” Coding for L89150

with a POA of “yes” does not result in the reporting of PSI-3 event [AHRQ denominator exclusions: all secondary ICD-10-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable pressure ulcer) or deep tissue injury present on admission with POA status of yes].

Even when a query is issued, providers may be unaware of the reason for the query or the consequences of their answers. At our organization, providers predominantly feel that they should defer to the documentation of wound care specialists. Providers may also be inclined not to question the characterization in the record of a “suspected pressure injury.”

In general, even with repeated education efforts, providers find the subject of pressure injuries confusing because they encounter these diagnoses very infrequently. First and foremost, providers should pause to establish the correct diagnosis. They may look for clinical indicators that clarify whether the skin lesion is either pressure or nonpressure related. Evidence of nonpressure injury exists when the skin is affected by ischemic, traumatic, or inflammatory processes. Therefore, nonpressure skin lesions may be diagnosed by providers as ischemic ulcers, venous ulcers, skin tears, dermatitis such as moisture-related dermatitis, bruises, or ecchymoses (see Table 12.1). If a lesion is mucosal only, it is important to consider how it could be pressure-related injury without nearby cartilage or bone. Mucosal injuries generally should not be staged [4, 5].

Once a pressure ulcer has been treated with a surgical flap, it should no longer be represented as a pressure ulcer but rather as a surgical wound [4]. If there is evidence of both pressure- and nonpressure-related skin injury, providers should determine which is the primary cause of the skin injury [4]. For example, if the patient has extensive moisture-associated dermatitis but also some areas suggestive of pressure injury, a good question to answer is whether the pressure injury would have occurred without the moisture-associated dermatitis. If the skin lesion is so minor that it is clinically insignificant, the provider should document this. Generally, unless more than routine care measures are deployed (such as routine preventive care), and MEAT criteria were not met, the lesion is considered clinically insignificant. MEAT criteria are met when there is medical record evidence that the condition required repeated Monitoring, Evaluation, Assessment, and Treatment. A diagnostic review must always be done by a provider.

#### **Low-Hanging Fruit Alert**

Skin maceration can be caused by moisture from incontinence or diarrhea. A skin lesion that is primarily caused by moisture and documented as such by the provider will not be represented as a pressure injury diagnosis.



### 3. *Establish whether exclusionary diagnoses are present.*

For PSI-3, AHRQ recognizes only two relevant exclusion diagnoses, exfoliation due to erythematous condition involving >20% of body surface. Burns involving a significant portion of body surface are also exclusionary diagnoses. Providers should look for and document any exfoliative rash, raw skin, peeling, etc., conditions that cover >20% of body surface (this area generally has to cover at least the surface area the size of one leg). Initial review for exclusion diagnoses can easily be done by a nonprovider team member with a clinical background and should be confirmed by a provider.

---

## 12.4 Recently Adopted 6 and 9 Codes: Changes in AHRQ Definition

In October 2019, AHRQ released new codes that allow representation of deep tissue injuries in the patient's coding profile without the need to identify a stage. These ICD-10 codes end in the number 6 and are referred to as pressure-induced deep tissue damage (PIDTD). The 2020 AHRQ definitions of PSI-3 do not include these six codes. As of early 2020, some public rating services such as IBM Watson Health (formerly Truven) were still reporting PSI-3 occurrences and rates that include patients with six codes. Others, such as Vizient, did not include them.

Hospitals have seen an increase in the use of pressure injury codes ending in 6. This seems to have its origin in coding guidelines that no longer stipulate the need for further staging beyond what is documented by a provider as a suspected, possible, or probable DTI or DTPI. This code is also used for mucosal injuries that cannot be staged. It is recommended that medical staff not commit to the diagnosis of DTI or DTPI early during the patient's hospital course as a large number of these lesions may be incorrectly diagnosed because their true nature does not reveal itself until later. The correct diagnosis can be arrived at by observing the clinical course of the lesion; more than 50% of DTIs and DTPIs may not represent a pressure injury or ulcer (defined as injury from crushing soft tissue against bony prominences).

The 2020 release of AHRQ PSI specifications [6] includes only pressure injury codes ending in 3, 4, and 0. Therefore, PSI-3 events were only reported if final coding reflects any diagnosis of stage 3, 4, or unstageable pressure injury. Codes ending in 6 (deep tissue pressure damage) or 9 (unspecified tissue damage) were not included in PSI-3 tallies for organizations, regardless of POA status.

Reviewers should be aware, however, that coding of a stage 3, 4, or unstageable pressure ulcer could still result if the initially described POA DTI lesion is documented as a stage 3, 4, or unstageable pressure injury later in the patient's hospital course. In this situation, coders might assign a 6 code in addition to another code representing the lesion that will trigger a PSI-3. A recent publication [7] describes the dilemma faced by CDI and coding professionals with respect to these new 6 and 9 codes. Three possible ways to handle coding are described for the situation where

a nonspecific pressure injury is documented on admission but later is described as a stage 3, 4, or unstageable pressure injury. The first involves the coding of a nonspecific DTI with POA status. In addition, a stage 3, 4, or unstageable pressure injury is coded. Another option described is to code only the initial DTI. A third option is to code the stage 3, 4, or unstageable pressure ulcer with POA status. After receiving input from peer organizations as well as guidance from coding clinic, our organization adopted the latter approach.

The 2020 update of AHRQ PSI specifications includes nonspecific deep tissue pressure injury (“6” codes) into the PSI-3 definition. Codes describing pressure injury with unspecified stage (“9” codes) remain excluded from being counted as a PSI-3. Reviewers and educators should be aware of this nuance for situations when a skin lesion’s stage cannot be determined.

#### **Key Concept**

A pressure injury diagnosis cannot be coded without provider documentation. Once a pressure injury is documented by a provider, coding professionals can use nurses’ notes to establish the stage, including staging that would lead to a PSI-3.

---

## **12.5 Medical Staff Education**

Medical staff frequently rely on nursing or wound care documentation to identify wound diagnoses. Providers should not copy and paste a nursing-generated entry into their progress or discharge notes unless it accurately reflects the patient’s skin lesion diagnosis. In some environments, this could lead to many skin lesions being misdiagnosed and potentially even subpar treatment plans being developed if the diagnosis is not correct. Therefore, medical staff need to have a basic understanding of their capability to make a wound diagnosis and the consequences of doing this accurately or not. In academic medical centers and large hospitals, it may be possible to develop a medical consultation service that assists with correct diagnostics and direction of treatment for skin lesions. We educate our medical staff to consult our organization’s resources to assure an accurate diagnosis, before committing to a pressure injury diagnosis in the medical record (or on physician query). One such resource is an identification badge insert (see Table 12.2).

#### **Key Concept**

Provider documentation determines coding. Before committing to a pressure injury diagnosis in the medical record (or on physician query), medical staff should consult their organization’s resources to assure an accurate diagnosis.

**Table 12.2** Medical staff identification badge insert resource for accurate documentation of potential pressure injury

<i>Tips for Provider Skin Integrity Diagnosis &amp; Documentation</i>
<i>STOP:</i> When getting a query relating to Pressure Injury, DTI or DTPI
<i>GET HELP</i> to answer the query correctly
<i>FIRST</i> – Need to determine accurate dx: Is skin lesion is “pressure” or not? Determine if the lesion could be a non-pressure diagnosis such as moisture associated dermatitis, intertrigo, tear, shear injury, venous ulcer, intergluteal cleft ulcer, diabetic skin lesions, etc.
Don’t commit to pressure diagnosis too quickly as the true nature of the lesion may not yet be evident
<i>SECOND:</i> Document on query if skin lesion was likely, possibly, probably present on admit (“POA”)
<i>Never pull in a wound “LDA” into your note</i> from nursing or wound care nursing; determine the diagnosis yourself after consultation
<i>Never delegate making the diagnosis to nursing</i> – in Louisiana this is not in the nursing scope of practice
When in doubt, describe appearance of the skin lesion before committing to a pressure diagnosis

At the very least, providers should be aware of the consequences of false-positive pressure injury diagnoses and be able to question such a diagnosis when it is suggested by a member of the care team (see Table 12.1). When uncertain, a brief discussion with an expert team member is advisable. This could include specially trained wound care champions [8], who are often specially trained unit nurses, such as exemplified by the Ostomy Wound Liaison (OWL) program at University of Florida [9], specially trained wound care nurses, or members of the medical staff with interest and experience in this area. At our hospital, a dedicated skin integrity advanced practice provider and medical director of wound care function in this role.

Specific education regarding diagnostic approaches to documenting skin lesions may also be helpful. For example, we emphasize that providers must document their findings and clinical indicators for coders to represent the diagnosis in the patient’s coding profile. We frequently hear from providers that they often are not certain of their diagnosis. Teaching that it is not necessary to be 100% certain of the finding or diagnosis has helped. Even if a diagnosis is deemed probable or likely or even suspected, it will be sufficient for coders to take into consideration when establishing the final coding profile [10]. For example, when a provider writes “sacral pressure injury likely present on admission, per conversation with family member,” coders will code the condition as POA unless there is other provider documentation to the contrary, in which case a query to the provider in charge is still required to clarify the accuracy of the diagnosis. To assure that such diagnoses are coded without further query, we emphasize that providers should briefly document the reasons (i.e., clinical indicators) for their diagnostic impression.

### Key Concept

For coding purposes, it is sufficient that the provider documents suspected, probable, or likely diagnoses. When such qualifiers are used (such as in “likely represent moisture dermatitis” or “sacral pressure injury likely present on admission”), it is helpful to include supporting clinical evidence, such as mentioning the role of incontinence or documenting “per conversation with family member.”

## References

1. Padula WV, Black JM, Davidson PM, Kang SY, Pronovost PJ. Adverse effects of the Medicare PSI-90 hospital penalty system on revenue-neutral hospital-acquired conditions. *J Patient Saf.* 2020;16:e97–102.
2. Shen JJ, Cochran CR, Mazurenko O, Moseley CB, Shan G, Mukalian R, Neishi S. Racial and insurance status disparities in patient safety indicators among hospitalized patients. *Ethn Dis.* 2016;26:443–52.
3. Association of clinical documentation improvement specialists: physician queries and the use of prior information. 2015. <https://acdis.org/system/files/resources/physician-queries-prior-information.pdf>. Accessed 12 Dec 2020.
4. Ayello EA. Pressure ulcer staging. 2014. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/Downloads/IRF-QRP-Training-%E2%80%93PrU-Staging-May-12-2014-.pdf>. Accessed 5 May 2021.
5. National pressure injury advisory panel. <https://npiap.com>. Accessed 5 May 2021.
6. AHRQ quality indicators™ (AHRQ QI™) ICD-10-CM/PCS specification v2020: patient safety indicator 03 (PSI 03) pressure ulcer rate. 2021 [https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI\\_03\\_Pressure\\_Ulcer\\_Rate.pdf](https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI_03_Pressure_Ulcer_Rate.pdf). Accessed 12 Dec 2020.
7. Baris L. The dilemma of coding and reporting deep tissue pressure injuries. 2020. <https://www.icd10monitor.com/the-dilemma-of-coding-and-reporting-deep-tissue-pressure-injuries>. Accessed 10 May 2021.
8. Hiser B, Rochette J, Philbin S, Lowerhouse N, Terburgh C, Pietsch C. Implementing a pressure ulcer prevention program and enhancing the role of the CWOCN: impact on outcomes. *Ostomy Wound Manage.* 2006;52:48–59.
9. Jax B, Danek G. Pressure ulcer prevention: resource nurse model to foster staff leadership and improve patient and fiscal outcomes. <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj3jLDs9vDtAhVOY6wKHXECC-IQFjACegQIBBAC&url=https%3A%2F%2Fana.confex.com%2Fana%2Fndnqi10%2Frecordingredirect.cgi%2Fid%2F821&usq=AOvVaw0xDbhyfaQCXzUWgvpGI-xv>. Accessed 12 Dec 2020.
10. <https://www.cms.gov/medicare/icd-10/2021-icd-10-cm>