



Long-term Acute Care  
Program for Evaluating Payment  
Patterns Electronic Report

User's Guide  
Thirteenth Edition



**Long-term Acute Care  
Program for Evaluating Payment Patterns Electronic Report User’s Guide**  
Thirteenth Edition, effective with the Q4FY18 release

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## Introduction

### What Is PEPPER?

The Office of Inspector General (OIG) encourages hospitals to develop and implement a compliance program to protect their operations from fraud and abuse.<sup>1,2</sup> As part of a compliance program, a hospital should conduct regular audits to ensure charges for Medicare services are correctly documented and billed. The Program for Evaluating Payment Patterns Electronic Report (PEPPER) can help guide the hospital's auditing and monitoring activities.

PEPPER is a data report that contains a single hospital's claims data statistics for Medicare-severity diagnosis related groups (DRGs) and discharges at high risk for improper payments due to billing, coding and/or admission necessity issues. Each PEPPER summarizes statistics for the most recent three federal fiscal years for each area at risk for payment errors (referred to in the report as "target areas"). Data in PEPPER are presented in tabular form, as well as in graphs that depict the hospital's target area percentages over time. PEPPER also includes reports on the hospital's top DRGs. PEPPER is developed and distributed by the RELI Group, along with its partners TMF Health Quality Institute and CGS, under contract with the Centers for Medicare & Medicaid Services (CMS).

All of the data tables, graphs and reports in PEPPER were designed to assist the hospital in identifying potential overpayments as well as potential underpayments.

PEPPER is available for short- and long-term acute care inpatient Prospective Payment System (PPS) hospitals, critical access hospitals, inpatient psychiatric facilities, inpatient rehabilitation facilities, hospices, partial hospitalization programs, skilled nursing facilities and home health agencies. LT PEPPER is the version of PEPPER developed specifically for long-term acute care hospitals. In LT

**PEPPER does not identify the presence of improper payments, but it can be used as a guide for auditing and monitoring efforts.** A hospital can use PEPPER to compare its claims data over time to identify areas of potential concern:

- Significant changes in billing practices
- Possible over- or under-coding
- Increasing length of stays

PEPPER, a hospital is compared to other long-term acute care hospitals in three comparison groups: nation, Medicare Administrative Contractor (MAC) jurisdiction and state. These comparisons enable a hospital to determine if it is an outlier, differing from other long-term acute care hospitals.

PEPPER determines outliers based on preset control limits. The upper control limit for all target areas is the national 80<sup>th</sup> percentile. Coding-focused target areas also have a lower control limit, which is the national 20<sup>th</sup> percentile. PEPPER draws attention to any findings that are at or above the upper

<sup>1</sup> Department of Health and Human Services/Office of Inspector General. 1998. "Compliance Program Guidance for Hospitals," *Federal Register* 63, no. 35, February 23, 1998, 8987–8998. Available at: <http://oig.hhs.gov/authorities/docs/cpghosp.pdf>

<sup>2</sup> Department of Health and Human Services/Office of Inspector General. 2005. "Supplementing the Compliance Program Guidance for Hospitals," *Federal Register* 70, no. 19, January 31, 2005, 4858–4876. Available at: <http://oig.hhs.gov/fraud/docs/complianceguidance/012705HospSupplementalGuidance.pdf>

control limit (high outliers) or at or below the lower control limit (low outliers, for coding-focused areas only).

Note that in PEPPER, the term “outlier” is used when the hospital’s target area percent is in the top twenty percent of all hospital target area percents in the respective comparison group (i.e. is at/above the 80<sup>th</sup> percentile) or is in the bottom twenty percent of all hospital target area percents in the respective comparison group (i.e. is at/below the 20<sup>th</sup> percentile (for coding-focused target areas)). Formal tests of significance are not used to determine outlier status in PEPPER.

Specifications for claims included in LT PEPPER are shown in the table below.

INCLUSION/EXCLUSION CRITERIA	DATA SPECIFICATIONS
Long-term acute care providers only	Third – sixth position of the CMS Certification Number is between “2000” and “2299”
Services provided during the time periods included in the report	Claim “Through Date” (discharge date) falls within the three fiscal years included in the report.
Claim with valid medical record number	UB04 FL 03a or 03b is not null (blank)
Medicare claim payment amount greater than zero	The hospital received a payment amount greater than zero on the claim ( <i>Note that Medicare Secondary Payer claims are included.</i> )
Final action claim	The patient was discharged; exclude claim status code “still a patient” (30) in UB04 FL 17
Exclude Health Maintenance Organization claims	Exclude claims submitted to a Medicare Health Maintenance Organization
Exclude cancelled claims	Exclude claims cancelled by the Medicare Administrative Contractor

The LT PEPPER is available to the LT Chief Executive Officer, Administrator, President or Compliance Officer through a secure portal on the PEPPER.CBRPEPPER.org website. Each long-term acute care hospital receives only its PEPPER. The PEPPER Team does not provide PEPPERS to other contractors, although the PEPPER Team does provide an Access database (the First-look Analysis Tool for Hospital Outlier Monitoring, or FATHOM) to MACs and Recovery Auditors. FATHOM can be used to produce a PEPPER.

### LT PEPPER CMS Target Areas

In general, the target areas are constructed as ratios and expressed as percents, with the numerators representing discharges that have been identified as problematic. For example, admission necessity-focused target areas generally include in the numerator the DRG(s) that have been identified as prone to unnecessary admissions, and the denominator generally includes all discharges for the DRG(s), or all discharges. DRG-coding-related target areas generally include in the numerator the DRG(s) that have been identified as prone to DRG coding errors, and the denominator includes these DRGs as well as DRGs to which the original DRG is frequently changed.

The LT PEPPER target areas are defined in the table below.

TARGET AREA	TARGET AREA DEFINITION
<b>Septicemia</b> (Septicemia) <i>*revised as of the Q4FY17 release</i>	<p><i>Numerator (N):</i> count of discharges for DRGs 870 (septicemia or severe sepsis with mechanical ventilation &gt;96 hours), 871 (septicemia or severe sepsis without mechanical ventilation &gt;96 hours with MCC), 872 (septicemia or severe sepsis without mechanical ventilation &gt;96 hours without MCC)</p> <p><i>Denominator (D):</i> count of discharges for DRGs 193 (simple pneumonia and pleurisy with MCC), 194 (simple pneumonia and pleurisy with CC), 195 (simple pneumonia and pleurisy without CC/MCC), 207 (respiratory system diagnosis with ventilator support 96+ hours), 208 (respiratory system diagnosis with ventilator support &lt;96 hours), 689 (kidney and urinary tract infections with MCC), 690 (kidney and urinary tract infections without MCC), 870, 871, 872</p>
<b>Excisional Debridement</b> (Excis Deb) <i>*revised as of the Q4FY18 release</i>	<p><i>N:</i> count of discharges for DRGs affected by ICD-10-PCS procedure codes for excisional debridement (see Appendix 1) that have an excisional debridement procedure code on the claim (see Appendix 2)</p> <p><i>D:</i> count of discharges for the DRGs (see Appendix 1)            Note: Based on changes related to ICD-10, Appendices 1 and 2 have been updated</p>
<b>Short Stays</b> (Short Stays)	<p><i>N:</i> count of discharges that were discharged on or the day after the short stay outlier threshold was met</p> <p><i>D:</i> count of all discharges</p>
<b>Short Stays for Respiratory System Diagnoses</b> (Short Stays Resp Syst Dx)	<p><i>N:</i> count of discharges for DRGs 177 (respiratory infections and inflammations with MCC), 189 (pulmonary edema and respiratory failure) or 193 (simple pneumonia and pleurisy with MCC), 207 (respiratory system diagnosis with ventilator support &gt;96 hours), 208 (respiratory system diagnosis with ventilator support &lt;96 hours) that occurred on the day of or day after the short stay outlier threshold was met</p> <p><i>D:</i> count of all discharges for DRGs 177, 189, 193, 207, 208</p>
<b>Outlier Payments</b> (Outlier Pmts)	<p><i>N:</i> count of discharges with a DRG outlier approved amount of greater than \$0</p> <p><i>D:</i> count of all discharges</p>
<b>30-day Readmissions to Same Hospital or Elsewhere</b> (Readm)	<p><i>N:</i> count of index (first) admissions during the 12-month time period for which a readmission occurred within 30 days of discharge to the same hospital or to another long-term acute care PPS hospital for the same beneficiary (identified using the Health Insurance Claim number), patient discharge status of the index admission is not equal to 63 (discharged/transferred to a long-term acute care hospital), 91 (discharged/transferred to a long-term acute care hospital with a planned acute care hospital inpatient readmission), 07 (left against medical advice)</p> <p><i>D:</i> count of all discharges excluding patient discharge status codes 63, 91, 07, 20 (expired)  <i>See Appendix 3 for how readmissions are identified.</i></p>

TARGET AREA	TARGET AREA DEFINITION
<b>STACH Admissions following LTCH Discharge</b> (STACH Admiss)	<p><i>N</i>: count of discharges where the beneficiary (identified using the Health Insurance Claim number) was discharged from the LTCH during the 12-month time period and admitted to a short-term acute care hospital within 30 days of discharge from the LTCH; excluding transfers to a short-term acute care hospital or a long-term acute care hospital within one day of discharge as evidenced by a subsequent claim; excluding patient discharge status codes 07 (left against medical advice), 20 (expired)</p> <p><i>D</i>: count of all discharges excluding transfers to a short-term acute care hospital or a long-term acute care hospital within one day of discharge as evidenced by a subsequent claim; and excluding patient discharge status codes 07, 20</p> <p><i>See Appendix 4 for how STACH admissions following LTCH discharge are identified.</i></p>

These LT PEPPER target areas were approved by CMS because they have been identified as prone to improper Medicare payments. Historically, some of these target areas were the focus of Office of Inspector General audits, while others were identified through the former Payment Error Prevention Program and Hospital Payment Monitoring Program, which were implemented by state Medicare Quality Improvement Organizations in 1999 through 2008. Please note there are changes in DRGs and DRG definitions from one fiscal year (FY) to the next that should be considered:

- Changes for FY 2018 are documented in the *Federal Register*, Volume 82, number 155, August 14, 2017, pages 37990-38589.
- Changes for FY 2017 are documented in the *Federal Register*, Volume 81, number 162, August 22, 2016, pages 56761-57438.
- Changes for FY 2016 are documented in the *Federal Register*, Volume 80, number 158, August 17, 2015, pages 49325-49886.

### How Hospitals Can Use PEPPER Data

The LT PEPPER allows long-term acute care hospitals to compare their billing statistics with national, jurisdiction and state percentile values for each target area with reportable data for the most recent three fiscal years included in PEPPER.

“Reportable data” in PEPPER means there are 11 or more numerator discharges for a given target area for a given time period. When there are fewer than 11 numerator discharges for a target area for a time period, statistics are not displayed in PEPPER due to CMS data restrictions.

To calculate percentiles, the target area percents for all LTCHs with reportable data for each target area and each time period are ordered from highest to lowest. The target area percent below which 80 percent of all LTCHs’ target area percents fall is identified as the 80<sup>th</sup> percentile. LTCHs whose target percents are at or above the 80<sup>th</sup> percentile (i.e., in the top 20 percent) are considered at risk for improper Medicare payments. Similarly, for areas at risk for undercoding, LTCHs whose target percents are at or below the 20<sup>th</sup> percentile (i.e., in the bottom 20 percent) are considered at risk for improper Medicare payments. Percentiles are calculated for each of the three comparison groups (nation, jurisdiction and state).

The PEPPER Team has developed suggested interventions that LTCHs may consider when assessing their risk for improper Medicare payments. Please note that these are generalized suggestions and will not apply to all situations. For all areas, assess whether there is sufficient volume (10 to 30 cases for the fiscal

year, depending on the hospital’s total discharges for the fiscal year) to warrant a review of cases. The following table can assist LTCHs with interpreting their percentile values, which are indications of possible risk of improper Medicare payments.

TARGET AREA	SUGGESTED INTERVENTIONS IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE	SUGGESTED INTERVENTIONS IF AT/BELOW 20 <sup>TH</sup> PERCENTILE
<b>Septicemia</b> (Septicemia)	This could indicate that there are coding or billing errors related to over-coding of DRGs 870, 871 or 872. A sample of medical records for these DRGs should be reviewed to determine if coding errors exist. Hospitals may generate data profiles to identify cases with a principal diagnosis code of ICD-10-CM code A41.9 (unspecified septicemia) to ensure documentation supports the principal diagnosis.	This could indicate that there are coding or billing errors related to under-coding of DRGs 870, 871 or 872. A sample of medical records for other DRGs, such as DRGs 689, 690, 193, 194, 195, 207 and 208 should be reviewed to determine if coding errors exist. Remember that a diagnosis of septicemia/sepsis must be determined by the physician. A coder should not code based on a laboratory finding without seeking clarification from the physician. Note: There is no ICD-10-CM code for urosepsis.
<b>Excisional Debridement</b> (Excis Deb)	This could indicate that there are coding or billing errors related to the coding of excisional debridement. A sample of medical records including excisional debridement procedure codes should be reviewed to ensure that the coding is supported by the documentation. Refer to <i>Coding Clinic</i> for specific guidelines regarding the coding of excisional debridement.	If your facility does not perform excisional debridement, low numbers in this target area would be expected. If the excisional debridement number is lower than expected, this could indicate that there are coding or billing errors related to under-coding for excisional debridement. A sample of medical records involving debridement should be reviewed to ensure that the coding is supported by the documentation. Refer to <i>Coding Clinic</i> for specific guidelines regarding the coding for debridement.
<b>Short Stays</b> (Short Stays)	This could indicate that there are unnecessary admissions related to inappropriate use of admission screening criteria. A sample of medical records for the appropriate DRG(s) should be reviewed to determine if inpatient admission was necessary or if care could have been provided more efficiently in another setting.	Not applicable, as this is an admission-necessity focused target area.
<b>Short Stays for Respiratory System Diagnoses</b> (Short Stays Resp Syst Dx)	This indicates that the hospital is submitting a high percentage of claims with outlier payments. Claims with outlier payments should be reviewed to ensure treatment provided was medically necessary.	Not applicable, as this is an admission-necessity focused target area.

TARGET AREA	SUGGESTED INTERVENTIONS IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE	SUGGESTED INTERVENTIONS IF AT/BELOW 20 <sup>TH</sup> PERCENTILE
<p><b>30-day Readmissions to Same Hospital or Elsewhere</b> (Readm)</p>	<p>A sample of readmission cases should be reviewed to identify appropriateness of admission, discharge, quality of care and DRG assignment and billing errors. The hospital is encouraged to generate data profiles for readmissions, such as patients readmitted the same day or next day after discharge. Suggested data elements to include in these profiles are: patient identifier, date of admission, date of discharge, patient discharge status code, principal and secondary diagnoses, procedure code(s) and DRG. Evaluate these profiles for the following indications of potential improper payments:</p> <ul style="list-style-type: none"> <li>• Patients discharged home (patient discharge status code 01) and readmitted the same or next day may indicate a potential premature discharge or incomplete care.</li> <li>• Patients readmitted for the same principal diagnosis as the first admission may indicate a potential premature discharge or incomplete care.</li> </ul> <p>LTCHs that are co-located within a short-term acute care hospital should verify that the correct provider number was billed (LTCH number vs. acute care number) for same-day readmissions. The second admission to a short-term acute care hospital should be billed to the short-term acute care hospital's number.</p>	<p>Not applicable, as this is an admission-necessity focused target area.</p>

TARGET AREA	SUGGESTED INTERVENTIONS IF AT/ABOVE 80 <sup>TH</sup> PERCENTILE	SUGGESTED INTERVENTIONS IF AT/BELOW 20 <sup>TH</sup> PERCENTILE
<b>STACH Admissions following LTCH Discharge</b> (STACH Admiss)	This could indicate that patients are not medically stable or prepared for discharge. The hospital may wish to ensure that patient discharge planning is initiated early during patients' admission and that patients and their families are prepared to handle patient care following discharge; this may include following-up with patients/families after discharge to assess compliance with post-discharge care. LTCHs co-located within short-term acute care hospitals may wish to identify admissions to their short-term acute care hospital within 30 days of discharge and review medical records for those patients.	Not applicable, as this is an admission-necessity focused target area.

Comparative data for consecutive years can be used to help identify whether the hospital's proportions changed significantly in either direction from one year to the next. This could be an indication of a procedural change in admitting, coding or billing practices, staff turnover or a change in medical staff.

## Using PEPPER

### Compare Targets Report

Hospitals can use the Compare Targets Report to help them prioritize areas for auditing and monitoring. The Compare Targets Report includes all target areas with reportable data for the most recent fiscal year included in PEPPER. For each target area, the Compare Targets Report displays the hospital's number of target discharges; percent; percentiles as compared to the nation, jurisdiction and state; and the "Sum of Payments."

**Navigate through PEPPER by clicking on the worksheet tabs at the bottom of the screen.** Each tab is labeled to identify the contents of each worksheet (e.g., Target Area Reports, Compare Targets Report).

The hospital's outlier status is indicated by the color of the target area percent on the Compare Targets Report. When the hospital is a high outlier for a target area, the hospital percent is printed in **red bold**. When the hospital is a low outlier (for coding-focused target areas only), the hospital percent is printed in *green italics*. When the hospital is not an outlier, the hospital's percent is printed in black. LT PEPPER identifies outliers as compared to all hospitals in the nation.

The Compare Targets Report provides the hospital's percentile value for the nation, jurisdiction and state for all target areas with reportable data in the most recent fiscal year. The percentile value allows a hospital to judge how its target area percent compares to all hospitals in each respective comparison group.

The hospital's national percentile indicates the percentage of all other hospitals in the nation that have a target area percent less than the hospital's target area percent.

The hospital's jurisdiction percentile indicates the percentage of all other hospitals in the jurisdiction that have a target area percent less than the hospital's target area percent. The jurisdiction percentile will be blank if there are fewer than 11 hospitals with reportable data for the target area in the MAC jurisdiction.

The hospital's state percentile indicates the percentage of all other hospitals in the state that have a target area percent less than the hospital's target area percent. The state percentile will be blank if there are fewer than 11 hospitals with reportable data for the target area in the state.

For more on percents versus percentiles, see the "Frequently Asked Questions" section on [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) for a short slide presentation with visuals to assist in the understanding of these terms.

When interpreting the Compare Targets Report findings, hospitals should consider their target area percentile values for the nation, jurisdiction and state. Percentile values at or above the 80<sup>th</sup> percentile (for all target areas) or at or below the 20<sup>th</sup> percentile (for coding-focused target areas) indicate that the hospital is an outlier. Outlier status should be evaluated in the priority order of 1) nation, 2) jurisdiction and 3) state. If a hospital is an outlier for nation (compared to all long-term acute care hospitals in the nation), this should be interpreted as the highest priority. If a hospital is an outlier for jurisdiction (compared to all long-term acute care hospitals in the jurisdiction) but not for nation, this is somewhat of

a lower priority. Lastly, if a hospital is an outlier for the state (compared to all long-term acute care hospitals in the state) but not for nation or jurisdiction, this would be the lowest priority, as the state has the smallest comparison group.

The “Sum of Payments” can also be used to help prioritize areas for review. For example, the Compare Report may show that the Short Stays target area has the highest “Sum of Payments,” but the hospital’s percent is at the 80<sup>th</sup> percentile as compared to the jurisdiction and at the 65<sup>th</sup> percentile as compared to the nation. The Septicemia target area may rank third in “Sum of Payments,” but is at the 80<sup>th</sup> percentile for the jurisdiction and the 90<sup>th</sup> percentile for the nation. In this scenario, the Septicemia target area might be given priority.

### **Target Area Reports**

PEPPER Target Area Reports display a variety of statistics for each target area summarized over three fiscal years. Each report includes a target area graph, a target area data table, comparative data, interpretive guidance and suggested interventions.

#### **Target Area Graph**

Each report includes a target area graph, which provides a visual representation of the hospital’s target area percent over three fiscal years. The hospital’s data is represented on the graph in bar format, with each bar representing a fiscal year. Hospitals can identify significant changes from one year to the next, which could be a result of changes in the medical staff, coding staff, utilization review processes or hospital services. Hospitals are encouraged to identify root causes of major changes to ensure that improper payments are prevented.

The graph includes trend lines for the percents that are at the 80<sup>th</sup> percentile (and the 20<sup>th</sup> percentile for coding-focused target areas) for the three comparison groups (nation, jurisdiction and state) so the hospital can easily identify when they are an outlier as compared to any of these groups. A table of these percents (“Comparative Data”) is included under the hospital’s data table. For more on percents versus percentiles, see the “Frequently Asked Questions” section on [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) for a short slide presentation with visuals to assist in the understanding of these terms.

For each time period, a hospital’s data will not be displayed in the graph if the numerator for the target area is less than 11. This is due to data use restrictions established by CMS. If there are fewer than 11 hospitals with reportable data for a target area in a state there will not be a trend line for the state comparison group in the graph. If there are fewer than 11 hospitals with reportable data for a target area in the jurisdiction, there will not be a trend line for the jurisdiction comparison group on the graph.

#### **Target Area Hospital Data Table**

PEPPER Target Area Reports also include a data table. Statistics in each data table include the total number of discharges for the target area (target area discharge count, which is the numerator), the denominator count of discharges, the proportion of the numerator and denominator (percent), average length of stay and Medicare payment data. The hospital’s percent will be shown in **red bold print** if it is at or above the national 80<sup>th</sup> percentile (high outlier); for coding-focused target areas it will be shown in

*green italics* if it is at or below the national 20<sup>th</sup> percentile (low outlier) (see “Percentile” in the Glossary, page 13). For each time period, a hospital’s data will not be displayed if the numerator for the target area is less than 11.

### **Comparative Data Table**

The Comparative Data Table provides the target area percents that are at the 80<sup>th</sup> and 20<sup>th</sup> percentiles (for coding-focused areas only) for the three comparison groups of nation, jurisdiction and state. These are the percent values that are graphed as trend lines on the Target Area Graph. State percentiles are zero when there are fewer than 11 hospitals with reportable data for the target area in the state. Jurisdiction percentiles are zero when there are fewer than 11 hospitals with reportable data for the target area in the jurisdiction.

### **Interpretive Guidance and Suggested Interventions**

Interpretive guidance is included on the target area report (to the left of the graph) to assist hospitals in considering whether they should audit a sample of records. Suggested interventions tailored to each target area are also included at the bottom of each report.

### **Top DRGs Report**

The Top DRGs report lists the top DRGs for all discharges for your hospital for the most recent fiscal year. It also includes the number of short-stay outliers, total hospital discharges, the proportion of short-stay outliers to total discharges and the average hospital length of stay for each DRG. Please note that this report is limited to the top DRGs (up to 20) for which there are a total of at least 11 discharges (for the respective DRG) during the most recent fiscal year.

### **Nationwide Top DRGs Report**

The Nationwide Top DRGs report lists the top DRGs for all discharges in the nation for the most recent fiscal year. It also includes the number of short-stay outliers, total discharges, the proportion of short-stay outliers to total discharges and the average length of stay for each DRG. Please note that this report is limited to displaying the top DRGs (up to 20) for which there are a total of at least 11 discharges during the most recent fiscal year.

### **System Requirements, Customer Support and Technical Assistance**

PEPPER is a Microsoft Excel workbook that can be opened and saved to a PC. It is not intended for use on a network but may be saved to as many PCs as necessary.

For help using PEPPER, please submit a request for assistance at [PEPPER.CBRPEPPER.org](http://PEPPER.CBRPEPPER.org) by clicking on the “Help/Contact Us” tab. This website also contains many educational resources to assist LTCHs with PEPPER in the Long-term Acute Care Hospital Training and Resources section.

Please do **not** contact your state Medicare Quality Improvement Organization or other association for assistance with PEPPER, as these organizations are not involved in the production or distribution of PEPPER.

## Glossary

<b>Average Length of Stay</b>	The average length of stay (ALOS) is calculated as an arithmetic mean. It is computed by dividing the total number of hospital (or inpatient) days by the total number of discharges within the time period. For the STACH Admission Following LTCH Discharge target area, the ALOS is calculated using the first (LTCH) admission's length of stay, not the second (STACH) admission's length of stay.
<b>Data Table</b>	The statistical findings for a hospital are presented in tabular form, labeled by time period and indicator.
<b>Fiscal Year</b>	For Medicare data, the fiscal year starts October 1 and ends September 30.
<b>Graph</b>	In LT PEPPER, a graph shows a hospital's percentages for the previous three years. The hospital's percentages are compared to the 80 <sup>th</sup> percentile for the state, jurisdiction and nation for all target areas, and also to the 20 <sup>th</sup> percentile for the state, jurisdiction and nation for coding-focused target areas. See <i>Percentile</i> .
<b>Length of Stay</b>	The length of stay (LOS) for an individual discharge is determined by subtracting the date of admission (Admission Date) from the date of discharge (Discharge Date). If the dates of admission and discharge fall on the same day, the LOS equals one day.
<b>Outlier</b>	In LT PEPPER, hospitals are identified as an outlier if their target area percent is at or above the national 80 <sup>th</sup> percentile (high outlier) or at or below the national 20 <sup>th</sup> percentile (low outlier) (coding-focused target areas only).
<b>Percentile</b>	<p>In PEPPER, the percentile represents the percent of hospitals in the comparison group below which a given hospital's percent value ranks. It is a number that corresponds to one of 100 equal divisions of a range of values in a group. The percentile represents the hospital's position in the group compared to all other hospitals in the comparison group for that target area and time period. For example, suppose a hospital has a target area percent of 2.3 and 80 percent of the hospitals in the comparison group have a percent for that target area that is less than 2.3. Then we can say the hospital is at the 80<sup>th</sup> percentile.</p> <p>Percentiles in PEPPER are calculated from the hospitals' percents so that each hospital percent can be compared to the statewide, jurisdiction-wide or nationwide distribution of hospital percents.</p> <p>For more on percents versus percentiles, please see the "Training and Resources" page in the Long-term Acute Care Hospital section on <a href="http://PEPPER.CBRPEPPER.org">PEPPER.CBRPEPPER.org</a> for a short slide presentation with visuals to assist in the understanding of these terms.</p>

## Acronyms and Abbreviations

ACRONYM/ ABBREVIATION	ACRONYM/ABBREVIATION DEFINITION
ALOS	The average length of stay (ALOS) is calculated as an arithmetic average, or mean. It is computed by dividing the total number of hospital (or inpatient) days by the total number of discharges within a given time period.
CC	Complication or Comorbidity (CC); patients who are more seriously ill tend to require more hospital resources than patients who are less seriously ill, even though they are admitted to the hospital for the same reason. Recognizing this, the diagnosis-related group (DRG) manual splits certain DRGs based on the presence of secondary diagnoses for specific complications or comorbidities.
CMS	The Centers for Medicare & Medicaid Services (CMS) is the federal agency responsible for oversight of Medicare and Medicaid. CMS is a division of the U.S. Department of Health and Human Services.
DRG	Diagnosis Related Group
FATHOM	First-look Analysis Tool for Hospital Outlier Monitoring (FATHOM) is a Microsoft Access application. It was designed to help Medicare Administrative Contractors (MACs) compare providers in areas at risk for improper payment using Medicare administrative claims data. FATHOM produces PEPPER.
FY	Fiscal Year; the Medicare federal fiscal year begins October 1 and ends September 30. For example, Q2FY10 (or Q2FY2010) refers to the second quarter of federal fiscal year 2010, which begins January 1, 2010, and ends March 31, 2010.
IPPS	The inpatient prospective payment system (IPPS) sets forth a system of reimbursement for the operating costs of acute care hospital inpatient stays under Medicare Part A (Hospital Insurance) based on prospectively set rates.
LOS	Length of Stay
MAC	The Medicare Administrative Contractor (MAC) is the contracting authority that replaced the fiscal intermediary (FI) and carrier in performing Medicare Fee-For-Service claims processing activities.
MCC	Major Complication or Comorbidity (MCC); before the introduction of MS-DRG system version 25, many CMS-DRG classifications were “paired” to reflect the presence of complications or comorbidities (CCs). A significant refinement of version 25 was to replace this pairing, in many instances, with a design that created a tiered system of the absence of CCs, the presence of CCs and a higher level of presence of Major CCs. As a result of this change, the historical list of diagnoses that qualified for membership on the CC list was substantially redefined and replaced with a new standard CC list and a new MCC list.
PEPPER	Program for Evaluating Payment Patterns Electronic Report (PEPPER) is an electronic data report in Microsoft Excel format that summarizes a single hospital’s claims data statistics for DRGs and discharges at high risk for improper payments due to billing, coding and/or admission necessity issues.

## Appendix 1: DRGs Affected by Excisional Debridement Procedure Codes (FY 2018)

<u>DRG</u>	<u>Description</u>
003	Ecmo or trach w mv >96 hrs or PDx exc face, mouth & neck w maj OR
040	Periph/cranial nerve & other nerv syst proc w MCC
041	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim
042	Periph/cranial nerve & other nerv syst proc w/o CC/MCC
115	Extraocular procedures except orbit
133	Other ear, nose, mouth & throat OR procedures w CC/MCC
134	Other ear, nose, mouth & throat OR procedures w/o CC/MCC
166	Other resp system OR procedures w MCC
167	Other resp system OR procedures w CC
168	Other resp system OR procedures w/o CC/MCC
264	Other circulatory system OR procedures
356	Other digestive system OR procedures w MCC
357	Other digestive system OR procedures w CC
358	Other digestive system OR procedures w/o CC/MCC
423	Other hepatobiliary or pancreas OR procedures w MCC
424	Other hepatobiliary or pancreas OR procedures w CC
425	Other hepatobiliary or pancreas OR procedures w/o CC/MCC
463	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC
464	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC
465	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC
513	Hand or wrist proc, except major thumb or joint proc w CC/MCC
514	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC
570	Skin debridement w MCC
571	Skin debridement w CC
572	Skin debridement w/o CC/MCC
579	Other skin, subcut tiss & breast proc w MCC
580	Other skin, subcut tiss & breast proc w CC
581	Other skin, subcut tiss & breast proc w/o CC/MCC
622	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC
623	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC
624	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC
673	Other kidney & urinary tract procedures w MCC
674	Other kidney & urinary tract procedures w CC
675	Other kidney & urinary tract procedures w/o CC/MCC
715	Other male reproductive system OR proc for malignancy w CC/MCC
716	Other male reproductive system OR proc for malignancy w/o CC/MCC
717	Other male reproductive system OR proc exc malignancy w CC/MCC
718	Other male reproductive system OR proc exc malignancy w/o CC/MCC
749	Other female reproductive system OR procedures w CC/MCC
750	Other female reproductive system OR procedures w/o CC/MCC
802	Other OR proc of the blood & blood forming organs w MCC
803	Other OR proc of the blood & blood forming organs w CC
804	Other OR proc of the blood & blood forming organs w/o CC/MCC
823	Lymphoma & non-acute leukemia w other proc w MCC
824	Lymphoma & non-acute leukemia w other proc w CC
825	Lymphoma & non-acute leukemia w other proc w/o CC/MCC

- 853 Infectious & parasitic diseases w OR procedure w MCC
- 854 Infectious & parasitic diseases w OR procedure w CC
- 855 Infectious & parasitic diseases w OR procedure w/o CC/MCC
- 856 Postoperative or post-traumatic infections w OR proc w MCC
- 857 Postoperative or post-traumatic infections w OR proc w CC
- 858 Postoperative or post-traumatic infections w OR proc w/o CC/MCC
- 876 OR procedure w principal diagnoses of mental illness
- 901 Wound debridements for injuries w MCC
- 902 Wound debridements for injuries w CC
- 903 Wound debridements for injuries w/o CC/MCC
- 906 Hand procedures for injuries
- 927 Extensive burns or full thickness burns w mv >96 hrs w skin graft
- 928 Full thickness burn w skin graft or inhal inj w CC/MCC
- 929 Full thickness burn w skin graft or inhal inj w/o CC/MCC
- 939 OR proc w diagnoses of other contact w health services w MCC
- 940 OR proc w diagnoses of other contact w health services w CC
- 941 OR proc w diagnoses of other contact w health services w/o CC/MCC
- 957 Other OR procedures for multiple significant trauma w MCC
- 958 Other OR procedures for multiple significant trauma w CC
- 959 Other OR procedures for multiple significant trauma w/o CC/MCC
- 969 HIV w extensive OR procedure w MCC
- 970 HIV w extensive OR procedure w/o MCC
- 981 Extensive OR procedure unrelated to principal diagnosis w MCC
- 982 Extensive OR procedure unrelated to principal diagnosis w CC
- 983 Extensive OR procedure unrelated to principal diagnosis w/o CC/MCC
- 987 Non-extensive OR proc unrelated to principal diagnosis w MCC
- 988 Non-extensive OR proc unrelated to principal diagnosis w CC
- 989 Non-extensive OR proc unrelated to principal diagnosis w/o CC/MCC

## Appendix 2: Excisional Debridement Procedure Codes

### ICD-10-PCS Codes, FYs 2016, 2017 and 2018

0JB13ZZ	Excision of Face Subcutaneous Tissue and Fascia, PERC approach
0JB10ZZ	Excision of Right Hand SQ/fascia, open approach
0JB13ZZ	Excision of Right Hand SQ/fascia, percutaneous approach
0JBK0ZZ	Excision of Left Hand SQ/ fascia, open approach
0JBK3ZZ	Excision of Left Hand SQ/ fascia, percutaneous approach
0HB9XZZ	Excision of perineum skin, external approach
0JB00ZZ	Excision of Scalp Subcutaneous Tissue and Fascia, Open Approach
0JB10ZZ	Excision of Face Subcutaneous Tissue and Fascia, Open Approach
0JB40ZZ	Excision of Right Neck Subcutaneous Tissue and Fascia, Open Approach
0JB50ZZ	Excision of Left Neck Subcutaneous Tissue and Fascia, Open Approach
0JB60ZZ	Excision of Chest Subcutaneous Tissue and Fascia, Open Approach
0JB70ZZ	Excision of Back Subcutaneous Tissue and Fascia, Open Approach
0JB80ZZ	Excision of Abdomen Subcutaneous Tissue and Fascia, Open Approach
0JB90ZZ	Excision of Buttock Subcutaneous Tissue and Fascia, Open Approach
0JBB0ZZ	Excision of Perineum Subcutaneous Tissue and Fascia, Open Approach
0JBC0ZZ	Excision of Pelvic Region Subcutaneous Tissue and Fascia, Open Approach
0JBD0ZZ	Excision of Right Upper Arm Subcutaneous Tissue and Fascia, Open Approach
0JBF0ZZ	Excision of Left Upper Arm Subcutaneous Tissue and Fascia, Open Approach
0JBG0ZZ	Excision of Right Lower Arm Subcutaneous Tissue and Fascia, Open Approach
0JBH0ZZ	Excision of Left Lower Arm Subcutaneous Tissue and Fascia, Open Approach
0JBL0ZZ	Excision of Right Upper Leg Subcutaneous Tissue and Fascia, Open Approach
0JBM0ZZ	Excision of Left Upper Leg Subcutaneous Tissue and Fascia, Open Approach
0JBN0ZZ	Excision of Right Lower Leg Subcutaneous Tissue and Fascia, Open Approach
0JBP0ZZ	Excision of Left Lower Leg Subcutaneous Tissue and Fascia, Open Approach
0JBQ0ZZ	Excision of Right Foot Subcutaneous Tissue and Fascia, Open Approach
0JBR0ZZ	Excision of Left Foot Subcutaneous Tissue and Fascia, Open Approach

### ICD-10-PCS Codes, FYs 2017 and 2018

0JB03ZZ	Excision of Scalp Subcutaneous Tissue and Fascia, PERC approach
0JB43ZZ	Excision of Right Neck Subcutaneous Tissue and Fascia, PERC approach
0JB53ZZ	Excision of Left Neck Subcutaneous Tissue and Fascia, PERC approach
0JB63ZZ	Excision of Chest Subcutaneous Tissue and Fascia, PERC approach
0JB73ZZ	Excision of Back Subcutaneous Tissue and Fascia, PERC approach
0JB83ZZ	Excision of Abdomen Subcutaneous Tissue and Fascia, PERC approach
0JB93ZZ	Excision of Buttock Subcutaneous Tissue and Fascia, PERC approach
0JBB3ZZ	Excision of Perineum Subcutaneous Tissue and Fascia, PERC approach
0JBC3ZZ	Excision of Pelvic Region Subcutaneous Tissue and Fascia, PERC approach
0JBD3ZZ	Excision of Right Upper Arm Subcutaneous Tissue and Fascia, PERC approach
0JBF3ZZ	Excision of Left Upper Arm Subcutaneous Tissue and Fascia, PERC approach
0JBG3ZZ	Excision of Right Lower Arm Subcutaneous Tissue and Fascia, PERC approach
0JBH3ZZ	Excision of Left Lower Arm Subcutaneous Tissue and Fascia, PERC approach
0JBL3ZZ	Excision of Right Upper Leg Subcutaneous Tissue and Fascia, PERC approach
0JBM3ZZ	Excision of Left Upper Leg Subcutaneous Tissue and Fascia, PERC approach
0JBN3ZZ	Excision of Right Lower Leg Subcutaneous Tissue and Fascia, PERC approach
0JBP3ZZ	Excision of Left Lower Leg Subcutaneous Tissue and Fascia, PERC approach
0JBQ3ZZ	Excision of Right Foot Subcutaneous Tissue and Fascia, PERC approach
0JBR3ZZ	Excision of Left Foot Subcutaneous Tissue and Fascia, PERC approach

ICD-10-PCS Codes, FYs 2016 and 2017

0HB0XZZ	Excision of Scalp Skin, External Approach
0HB1XZZ	Excision of Face Skin, External Approach
0HB4XZZ	Excision of Neck Skin, External Approach
0HB5XZZ	Excision of Chest Skin, External Approach
0HB6XZZ	Excision of Back Skin, External Approach
0HB7XZZ	Excision of Abdomen Skin, External Approach
0HB8XZZ	Excision of Buttock Skin, External Approach
0HBAXZZ	Excision of Inguinal Skin, External Approach
0HBBXZZ	Excision of Right Upper Arm Skin, External Approach
0HBCXZZ	Excision of Left Upper Arm Skin, External Approach
0HBDXZZ	Excision of Right Lower Arm Skin, External Approach
0HBEXZZ	Excision of Left Lower Arm Skin, External Approach
0HBFXZZ	Excision of Right Hand Skin, External Approach
0HBGXZZ	Excision of Left Hand Skin, External Approach
0HBHXZZ	Excision of Right Upper Leg Skin, External Approach
0HBJXZZ	Excision of Left Upper Leg Skin, External Approach
0HBKXZZ	Excision of Right Lower Leg Skin, External Approach
0HBLXZZ	Excision of Left Lower Leg Skin, External Approach
0HBMXZZ	Excision of Right Foot Skin, External Approach
0HBNXZZ	Excision of Left Foot Skin, External Approach

### Appendix 3: How Readmissions are Identified

Below is a table showing claims submitted for one beneficiary by long-term acute care hospitals over a one-year period. The claims are sorted in date order on the left side of the table. Each row includes two admissions: the "index admission" and the "next admission" which may be considered as a readmission. The "next admission" on one row becomes the "index admission" on the following row.

	Index Admission Provider	Index Admission Date	Discharge Date	Patient Discharge Status Code	Next Admission Provider	Next Admission Date	Discharge Date	Calendar Gap Days	Next Admission Counts as a Readmission against Index Admission?
1	LT #1	11/5/10	12/1/10	01	LT #2	12/20/10	1/2/11	19	Yes, to LT #1
2	LT #2	12/20/10	1/2/11	63	LT #1	1/2/11	1/30/11	0	No
3	LT #1	1/2/11	1/30/11	01	(no further admissions)				n/a

Detailed discussion:

- Row 1: The beneficiary was admitted to LT #1 on 11/5/10 and was discharged home (patient discharge status code 01) on 12/1/10). The beneficiary was admitted 12/20/10 to LT #2. This admission counts as a readmission within 30 days for LT #1 against the 11/5/10 index admission.
- Row 2: The beneficiary was admitted 12/20/10 to LT #2. The beneficiary was discharged/transferred to LT #1 (patient discharge status code 63) on 1/2/11. The admission to LT #1 does not count as a “30-day readmission” against the LT #2 index admission of 12/20/10 because the patient was discharged/transferred from LT #2 to LT #1 (patient discharge status code 63).
- Row 3: The beneficiary was admitted to LT #1 on 1/2/11 and was discharged home (patient discharge status code 01) on 1/30/11.

For the “30-day Readmissions” target area, if a beneficiary is discharged from a LT with a patient discharge status code of “63” (discharged or transferred to a long term care hospital), “91” (discharged/transferred to a long-term acute care hospital with a planned acute care hospital inpatient readmission) or “07” (left against medical advice) the next LT admission within 30 days will not be considered a readmission.

Note: Any admissions of beneficiaries to a short-term acute care hospital, critical access hospital or any other type of provider are not considered as a readmission for this measure. Only admissions to long-term acute care hospitals can be considered as a readmission.

## Appendix 4: How STACH Discharges Following LTCH Discharge are Identified

This example is provided to assist in understanding how STACH admissions following LTCH discharge are identified and counted in PEPPER. A STACH admission is considered a “STACH admission following LTCH discharge” only for the LTCH discharge immediately preceding the STACH admission (considering all claims for the beneficiary) if:

- The STACH admission occurs within 30 days of the LTCH discharge date, and
- The beneficiary discharged from the LTCH was not transferred to a short-term acute care hospital or a long-term acute care hospital within one day of discharge as evidenced by a subsequent claim, and
- The LTCH discharge does not have a patient discharge status code of “07” (left against medical advice) or “20” (expired).

Below is a table showing claims submitted for one beneficiary over a 1-year period. The claims are sorted in date order on the left side of the table. Each row includes two admissions: the "index admission" and the "next admission" which may be considered as a readmission. The "next admission" on one row becomes the "index admission" on the following row.

	<b>Index Admission Provider</b>	<b>Index Admission Date</b>	<b>Discharge Date</b>	<b>Patient Discharge Status Code</b>	<b>Next Admission Provider</b>	<b>Next Admission Date</b>	<b>Discharge Date</b>	<b>Calendar Gap Days</b>	<b>Next Admission Counts as a Readmission against Index Admission?</b>
<b>1</b>	LT #1	7/1/12	10/2/12	02	STACH #1	10/2/12	10/9/12	0	No
<b>2</b>	STACH #1	10/2/12	10/9/12	62	IRF #1	10/9/12	11/1/12	0	Not applicable as the index admission is not to a LT
<b>3</b>	IRF #1	10/9/12	11/1/12	01	LT #1	11/5/12	12/31/12	4	Not applicable as the index admission is not to a LT
<b>4</b>	LT #1	11/5/12	12/31/12	01	STACH #2	1/15/13	1/18/13	15	Yes, to LT #1
<b>5</b>	STACH #2	1/15/13	1/18/13	06	(no further admissions)				n/a

Detailed discussion:

- Row 1: The beneficiary was discharged from LT #1 on 7/1/12 and was transferred (patient discharge status code 02) to STACH #1 on 10/2/12. The admission to STACH #1 does not count against the index admission of 7/1/12 for LT #1 because the patient was transferred to STACH #1 from LT #1.
- Row 2: The beneficiary was admitted to STACH #1 on 10/2/12 and was transferred (patient discharge status code 62) to IRF #1 on 10/9/12. The index admission to STACH #1 is not considered; only index admissions to a LT are considered for this measure.
- Row 3: The beneficiary was admitted to IRF #1 on 10/9/12 and was discharged home (patient discharge status code 01) on 11/1/12. The beneficiary was admitted to LT #1 on 11/5/12. The index admission to IRF #1 is not considered; only index admissions to a LT are considered for this measure.
- Row 4: The beneficiary was admitted to LT #1 on 11/5/12 and was discharged home (patient discharge status code 01) on 12/31/12. The beneficiary was admitted to STACH #2 on 1/15/13. This admission counts as a “STACH admission within 30 days following LT discharge) against LT #1 index admission of 11/5/12.
- Row 5: The beneficiary was admitted to STACH #2 on 1/15/13 and was discharged home with home health (patient discharge status code 06) on 1/18/13.