



Hospice Program for Evaluating Payment Patterns Electronic Report

User Guide

Fiscal Year 2025 Release

June 2026

Table of Contents

What's new in this edition?	3
1. What is PEPPER?	3
1.1 Hospice PEPPER Target Areas	5
1.2 How Hospices Can Use PEPPER Data	11
2. Using PEPPER	14
2.1 Compare Targets Report	14
2.2 Target Area Data Tables	15
2.2.1 Hospice and Jurisdiction Top Terminal Diagnoses Reports	16
2.2.2 Hospice and Jurisdiction Live Discharges by Type Reports	16
2.3 System Requirements, Customer Support, and Technical Assistance	17
Appendix A: Terms and Abbreviations	18
Appendix B: Clinical Classification Software Refined (CCSR) Categories for Top Terminal Diagnoses	23

List of Tables

Table 1: Eligible Claims Specifications for Hospice PEPPER	4
Table 2: Target Area and Target Area Definitions	6
Table 3: Suggested Interventions for Outliers by Target Area	11
Table 4: Terms and Abbreviations	18
Table 5: CCSR Category Terminal Diagnosis Groupings	23

What's new in this edition?

The top terminal diagnosis categories have been updated from the former Agency for Healthcare Research and Quality (AHRQ) Cost-to-Charge Ratio (CCR) categories to the more current Clinical Classifications Software Refined (CCSR) diagnosis categories. The terminal CCSR diagnosis categories are:

- **Cancer:** CCSR categories NEO001-NEO073, END015, FAC006, SYM017
- **Circulatory or heart disease:** CCSR categories CIR001-019, CIR026-039, DIG014, DIG025, FAC009, GEN003, GEN006, INJ030, INJ069, MAL001, MUS024, RSP003, SYM012
- **Dementia:** CCSR categories MBD009, MBD013, NVS011, SYM010, SYM016
- **Respiratory disease:** CCSR categories FAC012, FAC025, MAL007, RSP002, RSP004-017, SYM013
- **Neurodegenerative disease or Stroke:** CCSR categories CIR020-025, EYE006, NVS004-008, NVS012-013, NVS020, NVC022

More information can be found at https://hcup-us.ahrq.gov/toolssoftware/ccsr/ccs_refined.jsp.

One target area has been removed: *Continuous Home Care (CHC) Provided in an Assisted Living Facility (ALF)*.

One target area has been updated: *Long Length of Stays* includes episodes with length of stay equal to or greater than 180 days, previously only episodes with a length of stay greater than 180 days met the numerator criteria.

1. What is PEPPER?

The Government Accountability Office (GAO) has designated Medicare as a program at high risk for fraud, waste, and abuse. Medicare spending for hospice care has increased significantly in recent years, and the Medicare hospice benefit has been identified as particularly vulnerable to misuse. In 1999, the Office of Inspector General (OIG) encouraged hospices to develop and implement compliance programs to protect their operations from fraud and abuse. As part of an effective compliance program, hospices should conduct regular audits to ensure that charges for Medicare services are accurately documented and billed. The Program for Evaluating Payment Patterns Electronic Report (PEPPER) supports these efforts by helping hospices identify potential billing vulnerabilities and prioritize areas for auditing and monitoring.

National hospice claims data was analyzed to identify areas within the hospice benefit that may be at risk for improper Medicare payments. These areas are referred to as "target areas." PEPPER is a data report that provides a single hospice's claims-based data statistics, derived from UB-04 claims submitted to the Medicare Administrative Contractor [MAC] for each of these target areas. Each hospice receives a PEPPER, which includes statistics for all target areas, regardless of whether the hospice's data indicate potential concern. The report shows how the hospice's data compare to national, jurisdiction, and state statistics. Data in PEPPER is presented in tabular format and graphical displays that show the hospice's target area percentages over time. All data tables, graphs, and reports in PEPPER are designed to support hospices in identifying potential improper payments. Index Analytics (IA), together with its partners Integrity Management Services, Inc. (IntegrityM) and GovCon Growth Solutions, LLC, develops and distributes PEPPER under contract with the Centers for Medicare & Medicaid Services (CMS).

All data tables, graphs, and reports in PEPPER are designed to help hospices identify potential overpayments as well as potential underpayments.

PEPPER does not identify the presence of payment errors, but it can be used as a guide for auditing and monitoring efforts. A hospice can use PEPPER to compare its claims data over time to identify potential areas of concern and to identify changes in billing practices.

PEPPER is available for Short-Term Acute Care Hospitals (STACH), Long-Term Acute Care Hospitals (LTACHs), Critical Access Hospitals (CAHs), Inpatient Psychiatric Facilities (IPFs), Inpatient Rehabilitation Facilities (IRFs), Hospices, Partial Hospitalization Programs (PHPs), Skilled Nursing Facilities (SNFs), and Home Health Agencies (HHAs). Each *Hospice PEPPER* summarizes claims data statistics, derived from paid hospice Medicare UB-04 claims, for the three most recent federal fiscal years. A federal fiscal year spans October 1 through September 30. A hospice is compared to other hospices in three comparison groups: the nation, the Medicare MAC jurisdiction, and the state in which the hospice operates. These comparisons help a hospice determine whether it is an outlier, meaning its billing patterns differ from those of other hospices, and whether it may be at risk for improper Medicare payments.

Hospices provide palliative care and support services for terminally ill beneficiaries who have a life expectancy of six months or less, assuming the terminal illness follows its normal course. Beneficiaries must elect the Medicare hospice benefit; by doing so, they agree to forgo Medicare coverage for curative treatment related to the terminal illness and any associated conditions.

PEPPER identifies areas at risk for improper Medicare payments based on preset control limits. The upper control limit for all target areas is the national 80th percentile. Coding-focused target areas also include a lower control limit, set at the national 20th percentile. Because the *Hospice PEPPER* does not include any coding-focused target areas, it highlights only those findings that are at or above the national 80th percentile.

In order to be included in the *Hospice PEPPER*, claims must meet the specifications shown below.

Table 1 provides specifications for claims eligible for inclusion in *Hospice PEPPER*.

Table 1: Eligible Claims Specifications for Hospice PEPPER

Inclusion/Exclusion Criteria	Data Specifications
Claim facility type equal to "8"	UB-04 Form Locator (FL) 04 Type of Bill, second digit (Type of Facility) = 8 (Special facility or Ambulatory Surgery Center (ASC) surgery)
Include claim service classification type of "Hospice"	UB-04 FL 04 Type of Bill, third digit (Bill Classification) = 1 (Hospice [non-hospital based]) or 2 (Hospice [hospital based])
Final action claim	A final action claim is a non-rejected claim for which a payment has been made. All disputes and adjustments have been resolved and details clarified.
Services provided during the time period used to create the episode of service	Claim "From Date" and claim "Through Date" fall within the three fiscal years included in the report. Additional claims for the two previous years will be included for episodes of service beginning prior to the reporting period. See below for more explanation of the episode of service.

Inclusion/Exclusion Criteria	Data Specifications
Medicare claim payment amount greater than zero	The hospice received a payment amount greater than zero on the claim (Note that Medicare Secondary Payer claims are included)
Exclude Health Maintenance Organization claims	Exclude claims submitted to a Medicare Advantage (Health Maintenance Organization) plan
Exclude cancelled claims	Exclude claims cancelled by the MAC
Exclude claims for the Medicare Care Choices Model	Exclude claims with Treatment Authorization code = 73

Hospices receive PEPPER files through a secure portal on the [CMS CBR PEPPER](#) website on an annual basis.

To be eligible for the hospice benefit, a beneficiary must be terminally ill with a life expectancy of six months or less, assuming the illness follows its normal course. A beneficiary may receive hospice services for varying lengths of time, which may be reflected in one or multiple claims. The PEPPER target areas are designed to report on services provided during the specified time period (the federal fiscal year). Claims-based target areas summarize statistics for claims that end within the report period. Episode-based target areas summarize services provided to beneficiaries whose episodes of service end during the report period. An episode of service is created from the claims submitted by a provider for each beneficiary as follows:

- All claims submitted by a hospice for a beneficiary are collected and sorted from the earliest “Claim From” date to the latest.
- If the latest claim in a series indicates that the beneficiary was discharged or did not return for continued care within 60 days, then that beneficiary’s episode of service is included in the time/report period in which the latest “Through Date” falls.
- If there is a gap between one claim’s “Through Date” to the next claim’s “From Date” of more than 60 days, then that is considered the ending of one episode of service and the beginning of a new episode of service.
- Each episode of service is included in the time/report period in which the latest “Through Date” falls.

1.1 Hospice PEPPER Target Areas

In general, the target areas are constructed as ratios and expressed as percentages. The numerator represents the episodes or days of service that may indicate a risk for improper Medicare payment, while the denominator represents the larger comparison group of episodes or days of service. The target area definitions below reflect how the Fiscal Year (FY) 2025 *Hospice PEPPER* metrics are calculated. Users may notice slight differences from prior years’ *Hospice PEPPER*s due to updates in the claims data used to compute these metrics.

Table 2 identifies the definitions for the *Hospice PEPPER* target areas.

Table 2: Target Area and Target Area Definitions

Target Area	Target Area Definition
Live Discharges No Longer Terminally ill	<p>Numerator: Count of beneficiary episodes who were discharged alive by the hospice.</p> <p>Numerator Exclusions: Exclude episodes where the patient discharge status code is one of the following:</p> <ul style="list-style-type: none"> • 40 (expired at home), • 41 (expired in a medical facility), • 42 (expired place unknown), • 50 (discharged / transferred to a hospice for routine or continuous home care), or • 51 (discharged / transferred to a hospice for general inpatient care). <p>Exclude episodes with the occurrence code: 42 (beneficiary revocations).</p> <p>Exclude episodes with condition codes:</p> <ul style="list-style-type: none"> • H2 (beneficiaries discharge for cause) • 52 (beneficiaries who moved out of the service area) <p>Denominator: Count of all beneficiary episodes ending during the report period (obtained by considering all claims billed for a beneficiary by that hospice).</p>
Live Discharge - Revocations	<p>Numerator: Count of beneficiary episodes who were discharged alive by the hospice with occurrence code 42.</p> <p>Numerator Exclusions: Exclude episodes where the patient discharge status code is one of the following:</p> <ul style="list-style-type: none"> • 40 (expired at home), • 41 (expired in a medical facility), or • 42 (expired place unknown). <p>Denominator: Count of all beneficiary episodes ending during the report period (obtained by considering all claims billed for a beneficiary by that hospice).</p>
Live Discharges with a Length of Stay (LOS) 61 - 179 Days	<p>Numerator: Count of beneficiary episodes who were discharged alive by the hospice with a LOS of 61 – 179 days.</p> <p>Numerator Exclusions: Exclude episodes where the patient discharge status code is one of the following:</p> <ul style="list-style-type: none"> • 40 (expired at home), • 41 (expired in a medical facility), or • 42 (expired place unknown). <p>Denominator: Count of all beneficiary episodes discharged alive by the hospice during the report period (obtained by considering all claims billed for a beneficiary by that hospice).</p> <p>Denominator Exclusions: Exclude episodes where the patient discharge status code is one of the following:</p> <ul style="list-style-type: none"> • 40 (expired at home), • 41 (expired in a medical facility), or • 42 (expired place unknown).

Target Area	Target Area Definition
Long Length of Stay	<p>Numerator: Count of beneficiary episodes discharged by the hospice during the report period whose combined days of service at the hospice is greater than or equal to 180 days (obtained by considering all claims billed for a beneficiary by that hospice).¹</p> <p>Denominator: Count of all beneficiary episodes ending during the report period (obtained by considering all claims billed for a beneficiary by that hospice).</p>
Routine Home Care Provided in an Assisted Living Facility	<p>Numerator: Count of Routine Home Care (RHC) days (revenue code = 0651) provided on claims ending during the report period that indicate the beneficiary resided in an ALF (HCPCS code = Q5002).</p> <p>Denominator: Count of all RHC days (revenue code = 0651) provided by the hospice on claims ending during the report period.</p>
Routine Home Care Provided in a Nursing Facility (NF)	<p>Numerator: Count of RHC days (revenue code = 0651) provided on claims ending during the report period that indicate the beneficiary resided in a nursing facility (NF) (HCPCS code = Q5003).</p> <p>Denominator: Count of all RHC days (revenue code = 0651) provided by the hospice on claims ending during the report period.</p>
Routine Home Care Provided in a Skilled Nursing Facility	<p>Numerator: Count of RHC days (revenue code = 0651) provided on claims ending during the report period that indicate the beneficiary resided in a Skilled Nursing Facility (SNF) (HCPCS code = Q5004).</p> <p>Denominator: Count of all RHC days (revenue code = 0651) provided by the hospice on claims ending during the report period.</p>
Claims with Single Diagnosis Coded	<p>Numerator: Count of claims ending during the report period that have only one diagnosis coded.</p> <p>Denominator: Count of all claims ending during the report period with one or more diagnoses coded.</p>
No General Inpatient Care or Continuous Home Care	<p>Numerator: Count of beneficiary episodes ending during the report period that had no amount of General Inpatient Care (GIP) (revenue code = 0656) or CHC (revenue code = 0652).</p> <p>Denominator: Count of all beneficiary episodes ending during the report period (obtained by considering all claims billed for a beneficiary by that hospice).</p>
Long General Inpatient Care Stays	<p>Numerator: Count of general inpatient care (GIP) stays (revenue code = 0656) with number of service units greater than five consecutive days within episodes ending during the report period.</p> <p>Denominator: Count of all GIP stays, identified as 1+ consecutive days of revenue code 0656, within episodes ending during the report period.</p>

¹ The numerator now includes episodes with a length of stay equal to 180 days to account for episodes with a length of stay that are exactly 180 days. This is a change from historical Hospice PEPPERs.

Target Area	Target Area Definition
Average Number of Medicare Part D Claims for Beneficiaries Residing at Home	<p>Numerator: Count of Medicare Part D claims within episodes lasting at least three days and ending during the report period for beneficiaries residing at home (HCPCS code = Q5001).</p> <p>Denominator: Count of hospice episodes of at least three days and ending during the report period for beneficiaries residing at home (HCPCS code = Q5001).</p> <p><i>Note: reported as a rate, not a percent</i></p>
Average Number of Medicare Part D Claims for Beneficiaries Residing in an Assisted Living Facility	<p>Numerator: Count of Medicare Part D Claims within episodes lasting at least three days and ending during the report period for beneficiaries residing in an ALF (HCPCS code = Q5002).</p> <p>Denominator: Count of hospice episodes of at least three days and ending during the report period for beneficiaries residing in an ALF (HCPCS code = Q5002).</p> <p><i>Note: reported as a rate, not a percent</i></p>
Average Number of Medicare Part D Claims for Beneficiaries Residing in a Nursing Facility	<p>Numerator: Count of Medicare Part D claims within episodes of at least three days and ending during the report period for beneficiaries residing in an NF (HCPCS code = Q5003).</p> <p>Denominator: Count of hospice episodes of at least three days and ending during the report period for beneficiaries residing in an NF (HCPCS code = Q5003).</p> <p><i>Note: reported as a rate, not a percent</i></p>
Average Number of Medicare Part B Claims for Beneficiaries Residing at Home	<p>Numerator: Count of Medicare Part B claims within hospice episodes of at least three days and ending during the report period for beneficiaries residing at home (HCPCS code = Q5001).</p> <p>Denominator: Count of hospice episodes of at least three days and ending during the report period for beneficiaries residing at home (HCPCS code = Q5001).</p> <p><i>Note: reported as a rate, not a percent</i></p>
Average Number of Medicare Part B Claims for Beneficiaries Residing in an Assisted Living Facility, Nursing Facility, or Skilled Nursing Facility	<p>Numerator: Count of Medicare Part B claims within hospice episodes of at least three days and ending during the report period for beneficiaries residing in an ALF (HCPCS code = Q5002), NF (HCPCS code = Q5003), or SNF (HCPCS code = Q5004).</p> <p>Denominator: Count of hospice episodes of at least three days and ending during the report period for beneficiaries residing in an ALF (HCPCS code = Q5002), NF (HCPCS code = Q5003), or SNF (HCPCS code = Q5004).</p> <p><i>Note: reported as a rate, not a percent</i></p>

CMS approved these *Hospice PEPPER* target areas because they have been identified as being at higher risk for improper Medicare payments.

The hospice benefit is designed to provide palliative and supportive care for terminally ill beneficiaries. Beneficiaries may be discharged alive from hospice care for the following reasons:

- The beneficiary is determined to be no longer terminally ill
- The beneficiary moves out of the service area
- The beneficiary is discharged for cause

- The beneficiary revokes the hospice benefit

Hospices that discharge alive a high proportion of beneficiaries may be admitting individuals who do not meet hospice eligibility criteria. Elevated rates of live discharges may also signal potential quality-of-care concerns or suggest that financial considerations are influencing hospice service delivery. All three target areas related to live discharges are designed to monitor for these issues.

A beneficiary may choose to revoke the election of hospice care at any time and may re-elect hospice coverage at a later date. The hospice cannot revoke a beneficiary's election, nor can it request or require that the beneficiary revoke his or her election. CMS has identified concerns regarding patterns of revocations and subsequent re-elections of the Medicare hospice benefit that may be used to avoid costly hospitalizations or expensive procedures, drugs, or services. Such patterns of discharge, hospital admission, and hospice readmission do not support a comprehensive, coordinated care experience for terminally ill beneficiaries. For this reason, a target area is included to monitor live discharges related to beneficiary revocations.

As of October 1, 2015 (fiscal year 2016), CMS implemented a higher RHC payment rate for the first 60 days of care, after which the RHC payment rate decreases. This change in payment structure may create an incentive for hospices to discharge beneficiaries after the first 60 days once the lower payment rate takes effect. Therefore, a target area to monitor the percentage of beneficiaries discharged alive with a LOS of 61 - 179 days. Hospices with a high proportion of beneficiaries in this LOS range may be admitting individuals who do not meet hospice eligibility criteria. In addition, the Medicare Payment Advisory Commission (MedPAC) has raised concerns about longer lengths of stays and higher frequencies of beneficiaries being discharged alive from hospice.² The hospice average length of stay (ALOS) has not changed significantly over the past few years.³

The OIG reviewed hospice services provided to beneficiaries residing in ALFs.⁴ The OIG identified concerns related to the overutilization of hospice services for beneficiaries residing in an ALF. Hospice services provided to beneficiaries residing in SNFs or NFs are also at risk for overutilization. As a result, target areas have been established to monitor these patterns.

Hospice claims should include the appropriate selection of principal diagnoses, as well as any additional or coexisting diagnoses related to the terminal illness and associated conditions. Coding guidelines specify that "all of a patient's coexisting or additional diagnoses" related to the terminal illness and related conditions should be reported on the hospice claim. The expectation is that hospices report all diagnoses related to the terminal illness and related conditions on the hospice claim to ensure accurate and complete information about the beneficiaries receiving hospice services. To address this concern, a target area is included to monitor the percentage of claims that contain only one diagnosis code. Debility, failure to thrive, and unspecified dementia diagnosis codes are not accepted as principal hospice diagnoses on

² Medicare Payment Advisory Commission. "Report to Congress: Medicare and the Health Care Delivery System." Available at: <https://www.medpac.gov/document/june-2025-report-to-the-congress-medicare-and-the-health-care-delivery-system/>.

³ Medicare Payment Advisory Commission. "Report to Congress: Medicare Payment Policy." March 2019. Available at: <https://www.medpac.gov/document/march-2025-report-to-the-congress-medicare-payment-policy/>

⁴ U.S. Department of Health and Human Services Office of Inspector General. "Medicare Hospices Have Financial Incentives to Provide Care in Assisted Living Facilities." January 2015. Available at: <https://oig.hhs.gov/reports/all/2015/medicare-hospices-have-financial-incentives-to-provide-care-in-assisted-living-facilities/>

a hospice claim form. When any of these diagnoses, or a diagnosis code that cannot be used as the principal diagnosis according to the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Coding Guidelines, is reported as the principal diagnosis, the claim will be returned to the provider for submission with a more definitive hospice diagnosis.⁵

The Medicare Conditions of Participation (CoPs) require hospices to demonstrate their ability to provide all four levels of care, RHC, GIP, CHC, and inpatient respite care, in order to be certified as a Medicare hospice provider. CMS found that 77% of beneficiaries did not receive any GIP care and that 57% of hospices did not bill at least one day of CHC in 2012.⁶ While there are appropriate circumstances in which a hospice may provide no GIP or no CHC, there remains concern that beneficiaries may not have adequate access to the level of care they need. Additionally, there is concern that the level of hospice care a beneficiary receives may not always be driven by patient needs. Therefore, a target area has been established to assess the percentage of episodes in which the beneficiary does not receive any GIP or CHC.

The OIG reviewed hospice GIP stays and identified concerns related to the inappropriate use of GIP care.⁷ GIP is intended to be short-term and may be provided in a hospice inpatient unit, hospital, or SNF for pain control or acute/chronic symptom management that cannot be effectively addressed in other settings, such as the beneficiary's home. When a beneficiary has an extended GIP stay, concerns arise regarding whether GIP is the appropriate level of care and whether the hospice is effectively managing the beneficiary's symptoms. Therefore, a target area has been established to monitor long GIP stays.

In August 2019, the OIG released a report titled *Medicare Part D Is Still Paying Millions for Drugs Already Paid for Under the Part A Hospice Benefit*, which detailed concerns and improper payments related to Medicare spending outside of the hospice benefit.⁸ The OIG estimated that the Medicare Part D incurred \$160.8 million in costs for drugs that should have been covered by hospice organizations. To address these concerns, three target areas have been established, each differentiated by the beneficiary's place of residence. The place of service indicated on the last claim in a hospice episode was used to determine the beneficiary's place of residence. A hospice episode had to be at least three days in length to be included in the assessment. Medicare Part D claims were counted beginning on the day after the first day of the episode. If the beneficiary's discharge status was "expired," Medicare Part D claims were counted through the last day of the hospice episode. If the beneficiary was discharged alive, Medicare Part D claims were counted through the day before the discharge date, which represents the last day of the hospice episode. A hospice with a high average number of Part D claims per episode

⁵ The Centers for Medicare & Medicaid Services. "Medicare Claims Processing Manual." Chapter 11- Processing Hospice Claims. Revision 13190. April 2025. Available at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c11.pdf>

⁶ Department of Health and Human Services/The Centers for Medicare & Medicaid Services. "FY2015 Hospice Final Rule." *Federal Register* 79, no. 165, Aug. 22, 2014. Available at: <https://www.govinfo.gov/content/pkg/FR-2014-08-22/pdf/2014-18506.pdf>

⁷ Department of Health and Human Services/Office of Inspector General. "Hospices Inappropriately Billed Medicare Over \$250 Million for General Inpatient Care." January 2015. Available at: <https://oig.hhs.gov/oei/reports/oei-02-14-00070.pdf>

⁸ Department of Health and Human Services/Office of Inspector General. "Medicare Part D is Still Paying Millions for Drugs Already Paid for Under the Part A Hospice Benefit." August 2019. Available at: <https://oig.hhs.gov/oas/reports/region6/61708004.pdf>

may need to review its policies and practices related to the provision of drugs to hospice patients.

Medicare may pay for the same items or services twice when nonhospice providers bill Medicare for items and services that should be covered by the hospice under the hospice benefit. In February 2022, the OIG published *Medicare Payments of \$6.6 Billion to Nonhospice Providers Over 10 Years for Items and Services Provided to Hospice Beneficiaries Suggest the Need for Increased Oversight*⁹ (A-09-20-03015). In this report, OIG noted that CMS reaffirmed “its long-standing position [that] services unrelated to the terminal illness and related conditions should be exceptional, unusual, and rare given the comprehensive nature of the services covered under the Medicare hospice benefit” (84 Fed. Reg. 38484, 38506 [Aug. 6, 2019]). “All hospice-related services must be provided directly by the hospice or under arrangements with the hospice (42 CFR §§ 418.64 and 418.70).”

1.2 How Hospices Can Use PEPPER Data

For Medicare data, the FY runs from October 1 through September 30. The *Hospice PEPPER* enables hospices to compare their billing statistics with national, jurisdiction, and state percentile values for each target area with reportable data for the three most recent fiscal years included in report. “Reportable data” in PEPPER means that the numerator or denominator count is at least eleven. When either the numerator or denominator is fewer than eleven, statistics are not displayed in PEPPER due to CMS data restrictions.

To calculate percentiles, the target area percents or rates for all hospices with reportable data for each target area and time period are ordered from highest to lowest. The target area percent or rate below which 80% of all hospices’ target area percents or rates fall is identified as the 80th percentile. Hospices with target percents or rates at or above the 80th percentile (i.e., the top 20%) are considered at risk for improper Medicare payments. Percentiles are calculated separately for each of the three comparison groups - nation, jurisdiction, and state. A higher percentile indicates a greater risk for improper payments.

The PEPPER Team has developed suggested interventions that hospices may consider when evaluating their risk for improper Medicare payments. Please note that these are generalized suggestions and may not apply to all situations. The following table can assist hospices in interpreting their percentile values, which serve as indicators of potential risk for improper Medicare payments.

Table 3 provides suggested interventions for outliers by target area.

Table 3: Suggested Interventions for Outliers by Target Area

Target Area(s)	Suggested Interventions for High Outliers (If at or above the 80th Percentile)
Live Discharges No Longer Terminally ill	For all three target areas related to live discharges: This could indicate that beneficiaries are being enrolled in the Medicare hospice benefit who do not meet the hospice eligibility criteria. The hospice should review Medicare hospice eligibility criteria and admissions procedures to ensure that beneficiaries are enrolled in the hospice benefit when

⁹ Office of Inspector General. “Medicare Payments of \$6.6 Billion to Nonhospice Providers Over 10 Years for Items and Services Provided to Hospice Beneficiaries Suggest the Need for Increased Oversight.” February 2022. Available at: <https://oig.hhs.gov/oas/reports/region9/92003015.pdf>

Target Area(s)	Suggested Interventions for High Outliers (If at or above the 80th Percentile)
<p>Live Discharges – Revocations</p> <p>Live Discharges with LOS 61 – 179 Days</p>	<p>they meet eligibility criteria. Medical record documentation should be reviewed for beneficiaries discharged alive to determine whether enrollment in the hospice benefit was appropriate and in accordance with Medicare policy.</p> <p>For revocations: A high percentage of live discharges for beneficiary revocations could indicate improper beneficiary revocations are occurring. The hospice should review instances where occurrence code 42 is applied to ensure that the revocation was initiated by the beneficiary (not by the hospice) and that the revocation was not initiated to avoid costly patient care.</p> <p>For LOS 61 - 179: As of October 1, 2015 (fiscal year 2016), hospice payments for RHC decreased on day 61. Beginning with FY 2016, a high percentage of live discharges with a LOS between 61 and 179 days could indicate that financial incentives are impacting patient care decisions.</p>
<p>Long Length of Stay</p>	<p>This could indicate that beneficiaries are being enrolled in the Medicare hospice benefit who do not meet the hospice eligibility criteria. The hospice should review Medicare hospice eligibility criteria and admissions procedures to ensure that beneficiaries are enrolled in the hospice benefit when they meet eligibility criteria. Medical record documentation should be reviewed for a sample of beneficiaries with long LOSs to determine whether enrollment in the hospice benefit was appropriate and in accordance with Medicare policy.</p>
<p>Routine Home Care Provided in an Assisted Living Facility</p> <p>Routine Home Care Provided in a Nursing Facility</p> <p>Routine Home Care Provided in a Skilled Nursing Facility</p>	<p>For the three target areas related to Routine Home Care in ALF, NF, or SNFs: This could indicate that beneficiaries are being enrolled in the Medicare hospice benefit when they may not meet hospice eligibility criteria. The hospice should review Medicare hospice eligibility criteria and admissions procedures to ensure that beneficiaries are enrolled in the hospice benefit appropriately. Medical record documentation should be reviewed to determine whether enrollment in the hospice benefit and services provided are appropriate and in accordance with Medicare policy.</p>
<p>Claims with Single Diagnosis Coded</p>	<p>This could indicate that the hospice is not coding all coexisting diagnoses related to the terminal illness and related conditions. All of a patient’s coexisting or additional diagnoses related to the terminal illness and related conditions should be reported on the hospice claim. The hospice should review a sample of hospice claims with a single diagnosis coded to ensure that all diagnoses related to the terminal illness and related conditions are reported on the hospice claim. Remember that in order for a diagnosis to be coded as a coexisting condition, it must be substantiated by documentation. A coder should not code based on laboratory or radiological findings without seeking physician determination of the clinical significance of the abnormal finding. Consider whether the use of a physician query would have substantiated a coexisting condition.</p>

Target Area(s)	Suggested Interventions for High Outliers (If at or above the 80th Percentile)
No General Inpatient Care or Continuous Home Care	This could indicate that the hospice is not providing the full spectrum of services as required by the Medicare program. A sample of records for beneficiaries that did not receive GIP or CHC should be reviewed. The hospice should ensure that processes are in place to assess when beneficiaries need GIP and/or CHC and that the hospice is able to provide these services.
Long General Inpatient Care Stays	This could indicate that the hospice is initiating GIP services when not indicated/necessary. A sample of records for beneficiaries that had long GIP stays should be reviewed to determine whether GIP was provided in the appropriate setting and was appropriately used for pain control or acute/chronic symptom management that could not be addressed in other settings.
Average Number of Medicare Part D Claims for Beneficiaries Residing at Home Average Number of Medicare Part D Claims for Beneficiaries Residing in an Assisted Living Facility Average Number of Medicare Part D Claims for Beneficiaries Residing in a Nursing Facility	For all three target areas related to average number of Medicare Part D claims: This could indicate that patients residing at home, in ALFs, or in NFs may be receiving drugs that should have been paid for by the hospice organization. A sample of records for beneficiaries should be reviewed. The hospice should ensure that processes are in place to assess medication regimens and that medications related to the terminal condition are provided as part of the hospice benefit. It is recommended that the hospice compare the rate of claims for beneficiaries residing in different settings, in order to identify the patient population with the highest rate so that it may be prioritized for possible intervention.
Average Number of Medicare Part B Claims for Beneficiaries Residing at Home Average Number of Medicare Part B Claims for Beneficiaries Residing in an Assisted Living Facility, Nursing Facility, or Skilled Nursing Facility	For the two target areas related to average number of Medicare Part B claims: This could indicate that patients may be receiving services that should have been coordinated by the hospice organization. A sample of records for beneficiaries should be reviewed. The hospice should ensure that processes are in place to coordinate with providers that previously provided services to the beneficiary to ensure that they do not bill Medicare for additional services that are related to the beneficiary's terminal illness and related conditions once the beneficiary has enrolled in hospice. It is recommended that the hospice compare the rate of claims for beneficiaries residing in different settings, in order to identify the patient population with the highest rate so that it may be prioritized for possible intervention.

Comparative data for the three consecutive years can be used to identify whether the hospice's target area percents or rates have changed significantly – either increasing or decreasing – from

one year to the next. Such changes may indicate a shift in admitting practices, staff turnover, or changes in medical staff.

2. Using PEPPER

PEPPER is a Microsoft Excel workbook that contains multiple worksheets. Users navigate through PEPPER by selecting the worksheet tabs at the bottom of the screen. Each tab is labeled to identify the contents of each worksheet (e.g., Definitions, Compare, and specific Target Area).

2.1 Compare Targets Report

Hospices can use the Compare Targets Report to help prioritize areas for auditing and monitoring. The report includes all target areas with reportable data for the most recent year included in PEPPER. For each target area, the Compare Targets Report displays the hospice's number of target episodes, target percent, percentile rankings compared with the nation, jurisdiction, and state, and the "Sum of Payments" (when calculated).

The *Hospice PEPPER* identifies providers whose data suggests they may be at risk for improper Medicare payments when compared with all hospices nationwide. The hospice's risk status is indicated by the color of the target area percent or rate on the Compare Targets Report. When the hospice's percent or rate is at or above the national 80th percentile for a target area, it appears in **red bold** text. When the hospice's percent or rate is below the national 80th percentile, it appears in black text.

The Compare Targets Report provides the hospice's percentile values for the nation, jurisdiction, and state for all target areas with reportable data in the most recent year. These percentile values allow a hospice to assess how its target area percent or rate compares with all hospices in each respective comparison group. (See "Percentile" in the Glossary, page 21.)

The hospice's national percentile indicates the percentage of all other hospices in the nation that have a target area percent or rate lower than the hospice's own target area percent or rate.

The hospice's jurisdiction percentile indicates the percentage of all other hospices within the MAC jurisdiction that have a target area percent or rate lower than the hospice's own target area percent or rate. The jurisdiction percentile for a target area will be blank if fewer than 11 hospices in the jurisdiction have reportable data for that target area.

The hospice's state percentile indicates the percentage of all other hospices in the state that have a target area percent or rate lower than the hospice's own target area percent or rate. The state percentile for a target area will be blank if fewer than 11 hospices in the state have reportable data for that target area.

When interpreting the Compare Targets Report, hospices should consider their percentile values for the nation, jurisdiction, and state. Percentile values at or above the 80th percentile indicate that the hospice is at risk for improper Medicare payments. Providers should give the greatest weight to their national percentile, as it reflects how the hospice compares with all hospices across the nation.

Percentile values at or above the jurisdiction's 80th percentile or the state's 80th percentile should also be considered, though they represent a lower priority. Because jurisdiction and state comparison groups are smaller, their percentile values may be less meaningful. Additionally, regional differences in practice patterns may influence jurisdiction and state percentiles.

The *Hospice PEPPER* identifies providers whose data suggest they may be at risk for improper Medicare payments when compared with all hospices nationwide. The hospice's risk status is indicated by the color of the target area percent or rate on the Compare Targets Report. When the hospice's percent or rate is at or above the national 80th percentile for a target area, it appears in **red bold** text. When the hospice's percent or rate is below the national 80th percentile, it appears in black text.

The "Sum of Payments" (calculated for target areas that are based on episodes) and the "Target Count" can also help hospices prioritize areas for review. Target areas in which a provider is at or above the 80th percentile and has a high sum of payments and/or a high number of target episodes may warrant higher priority than areas where the provider is at or above the 80th percentile but has a lower sum of payments or fewer target episodes.

2.2 Target Area Data Tables

PEPPER data tables display a variety of statistics for each target area summarized over three years. These statistics include the proportion of numerator and denominator discharges (percent), the total numerator count of discharges for the target area (target area discharge count), the denominator count of discharges, average length of stay (ALOS), and Medicare payment data.

The "Outlier Status" column identifies when the hospice is a high outlier, meaning the hospice's percentile is at or above the national 80th percentile. In these cases, the percentile value appears in **red bold** text. The "Outlier Status" column will display "Not an outlier" when the hospice is not an outlier for the target area and time period, and it will display "No data" when the hospice does not have reportable data for that target area and time period.

The "Target Sum Medicare Payments" column is determined by adding the claim payment amount of all claims meeting the target area numerator definition. The "Target Average Medicare Payment" column is calculated by dividing the Target Sum Medicare Payments by the Target Area Discharge Count. Interpretive guidance is included on the data tables to help hospices determine whether they should audit a sample of records. Suggested interventions tailored to each target area are also included on each data table.

Below the data tables are graphs that provide a visual representation of the hospice's percentage for each target area over the previous three years. These graphs allow hospices to identify significant changes from one quarter to the next, which may result from shifts in medical staff, coding or billing staff, utilization review processes, documentation improvement, or hospice services. External factors, such as changes in health care providers within the community, may also influence patient population or case mix, which can be reflected in PEPPER target area statistics. Hospices are encouraged to identify the root causes of major changes to help ensure that improper payments are prevented.

The graphs include trend lines representing the percents at the 80th percentile for each of the three comparison groups (nation, jurisdiction, and state), allowing hospices to easily identify when they are outliers relative to any of these groups. A table displaying these percents is included on each target area graph worksheet. State percentiles are shown as zero when fewer than 11 hospices in the state have reportable data for the target area. Jurisdiction percentiles are shown as zero when fewer than 11 hospices in the jurisdiction have reportable data for the target area. If there is no reportable data for a given quarter, the table will display "#N/A" in the corresponding cell.

If there is no reportable data for the hospice for a given time period due to CMS data use restrictions, no data point will appear on the graph for that time period. Likewise, if fewer than 11

hospices in the state or jurisdiction have reportable data for a target area during one or more time periods, the graph will not display a data point or trend line for the state or jurisdiction comparison group.

2.2.1 Hospice and Jurisdiction Top Terminal Diagnoses Reports

The Hospice Top Terminal Diagnoses Report lists the CCSR categories for hospice decedents (beneficiaries who died) for the most recent fiscal year. The terminal CCSR diagnosis categories are as follows:

- **Cancer** (CCSR categories NEO001-NEO073, END015, FAC006, SYM017)
- **Circulatory or heart disease** (CCSR categories C001-019, CIR026-039, DIG014, DIG025, FAC009, GEN003, GEN006, INJ030, INJ033, INJ069, MAL001, MUS024, RSP003, SYM012)
- **Dementia** (CCSR categories MDB009, MBD013, NVS011, SYM010, SYM016)
- **Respiratory disease** (CCSR categories FAC012, FAC025, MAL007, RSP002, RSP004-017, SYM013)
- **Neurodegenerative Disease or Stroke** (CCSR categories CIR020-025, EYE006, NVS004-008, NVS012-013, NVS020, NVS022)

Each episode is assigned a CCSR diagnosis category based on the default inpatient CCSR category associated with the principal diagnosis code on the final claim of the episode.

Additional information on CCSR categories is available at https://www.hcup-us.ahrq.gov/tools_software.jsp.

The report includes the total number of decedents for each of the top terminal condition categories, the proportion of decedents in each category relative to all hospice decedents, and the hospice's ALOS for each category. ALOS is calculated by dividing the total number of days that decedents in each terminal CCSR category received hospice services by the total number of decedents in that CCSR diagnosis category who received services from the hospice. Please note that this report is limited to the top terminal CCSR diagnosis categories for which there are at least 11 decedents during the most recent fiscal year.

The Jurisdiction Top Terminal Diagnoses Report lists the terminal condition categories for decedents (beneficiaries who died) within the jurisdiction for the most recent fiscal year. The terminal CCSR diagnosis categories are as follows:

- **Cancer** (CCSR categories NEO001-NEO073, END015, FAC006, SYM017)
- **Circulatory or heart disease** (CCSR categories CIR001-019, CIR026-039, DIG014, DIG025, FAC009, GEN003, GEN006, INJ030, INJ033, INJ069, MAL001, MUS024, RSP003, SYM012)
- **Dementia** (CCSR categories MDB009, MBD013, NVS011, SYM010, SYM016)
- **Respiratory disease** (CCSR categories FAC012, FAC025, MAL007, RSP002, RSP004-017, SYM013)
- **Neurodegenerative Disease or Stroke** (CCSR categories CIR020-025, EYE006, NVS004-008, NVS012-013, NVS020, NVS022)

2.2.2 Hospice and Jurisdiction Live Discharges by Type Reports

The Hospice Live Discharges by Type Report provides detailed information on episodes in which the beneficiary was discharged alive during the most recent three fiscal years. A live discharge is identified when the patient discharge status code is not equal to 40 (expired at

home), 41 (expired in a medical facility), or 42 (expired- place unknown). Live discharges are categorized as follows:

- No longer terminally ill
- Revocation (occurrence code 42)
- Moved out of service area (condition code 52)
- Beneficiary transfer (discharge status code 50 or 51)
- Discharged for cause (condition code H2)

The report identifies the total number of episodes for each live discharge type, listed in descending order by volume, for the hospice across the most recent three fiscal years. It also displays the proportion of each live discharge type relative to all live discharges, as well as the hospice's ALOS. ALOS is calculated by dividing the total number of days that beneficiaries discharged alive received hospice services by the total number of live discharges. The hospice's overall proportion of all live discharges to total episodes (those ending in death or live discharge) is also included, along with the hospice's ALOS for all live discharges. Please note that this report is limited to the types of live discharges for which there are at least 11 episodes discharged alive at the hospice during the most recent three fiscal years.

The Jurisdiction-Wide Live Discharges by Type Report provides detailed information on episodes in which beneficiaries were discharged alive during the most recent three fiscal years for all hospices within the MAC jurisdiction (see live discharge specifications above). The report identifies the total number of episodes for each live discharge type, listed in descending order by volume, for the jurisdiction across the most recent three fiscal years. It also displays the proportion of each live discharge type relative to all live discharges, as well as the jurisdiction's ALOS. ALOS is calculated by dividing the total number of days that beneficiaries discharged alive received services by the total number of live discharges. The report also includes the overall proportion of all live discharges to total episodes (those ending in death or live discharge) within the jurisdiction, along with the jurisdiction and national ALOS for all live discharges.

2.3 System Requirements, Customer Support, and Technical Assistance

PEPPER is a Microsoft Excel spreadsheet, developed in Excel 2016, that can be opened and saved to a personal computer (PC). It is not intended for use on a network; however, it may be saved to as many PCs as needed.

For help using PEPPER, submit a request for assistance through the [CMS CBR PEPPER website](#) by selecting the "Help/Contact Us" tab. This website also provides a variety of educational resources to support hospices in using PEPPER effectively.

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

Appendix A: Terms and Abbreviations

Table 4 provides a list of terms, abbreviations, and definitions in this document.

Table 4: Terms and Abbreviations

Term	Abbreviation	Definition
Agency for Healthcare Research and Quality	AHRQ	AHRQ is the lead federal agency within the U.S. Department of Health and Human Services (HHS) tasked with producing and supporting research to make healthcare safer, more accessible, equitable, affordable, and of higher quality for all Americans.
Ambulatory Surgery Center	ASC	ASC is a specialized healthcare facility designed to provide same-day surgical, diagnostic, and preventive procedures.
Assisted Living Facility	ALF	An ALF is a residential community designed for individuals who need help with daily care but do not require the intensive, 24/7 medical supervision of a traditional nursing home.
Average Length of Stay	ALOS	The average length of stay (ALOS) is calculated as an arithmetic mean. It is computed by dividing the total number of days beneficiaries received service from the hospice by the total number of episodes of service within the time period.
Centers for Medicare & Medicaid Services	CMS	CMS is a federal agency within the U.S. Department of Health and Human Services that administers the Medicare program and works in partnership with state governments to administer Medicaid, the State Children's Health Insurance Program, and health insurance portability standards.
Clinical Classifications Software Refined	CCSR	CCSR is a healthcare categorization tool developed by the Agency for Healthcare Research and Quality (AHRQ).
Comparative Billing Report	CBR	A CBR provides comparative data on Medicare billing trends, allowing an individual health care provider to compare their billing practices to peers in the same state and across the nation by specialty.
Complication or Comorbidity	CC	A CC is a condition that, while not the primary reason for hospitalization, can increase length of stay, resource utilization, or treatment complexity.
Continuous Home Care	CHC	CHC, often referred to as "crisis care", is a level of hospice care provided to terminally ill patients experiencing brief, acute medical crises at home.
Cost-to-Charge Ratio	CCR	CCR is a healthcare finance metric used to estimate the actual cost of providing medical services based on the amounts billed (charges).
Critical Access Hospital	CAH	CAH is a designation CMS gives to a small, rural hospital that provides limited inpatient care, 24-hour emergency services, and is located far from other hospitals, allowing it to receive cost-based Medicare reimbursements to help maintain services in underserved areas.

Term	Abbreviation	Definition
Current Procedural Terminology	CPT	CPT is a medical code set developed and maintained by the American Medical Association (AMA) that provides a uniform language for reporting medical procedures and services.
Diagnosis-Related Group	DRG	DRG is a system developed for Medicare in 1980, becoming effective in 1983, as a part of the PPS to classify hospital cases expected to have similar hospital resource use.
Fiscal Year	FY	For CMS, the FY is the 12-month period used for calculating annual fiscal spending, running from October 1 of the previous year to September 30 of the calendar year for which the FY is numbered.
Form Locator	FL	A form locator is a numbered field on a standardized, multi-section document that directs you to a specific piece of information.
General Inpatient Care	GIP	GIP is a short-term, intensive level of hospice care for patients experiencing acute pain or severe symptoms that cannot be managed in a home setting. It is provided in a dedicated hospice unit, hospital, or skilled nursing facility until the patient is stabilized and can return home.
GovCon Growth Solutions, LLC	NA	GovCon Growth Solutions is a company that helps government contractors grow their business through services like market research, strategic planning, proposal development, and business development.
Government Accountability Office	GAO	GAO is an independent, nonpartisan agency in the legislative branch that serves as the investigative arm of Congress. Often called the "congressional watchdog," the GAO audits federal spending, evaluates government programs, and investigates how taxpayer dollars are allocated to ensure accountability and efficiency.
Healthcare Common Procedure Coding System	HCPCS	HCPCS is a set of healthcare procedure codes based on the American Medical Association (AMA) current procedural terminology (Commonly pronounced Hick-Picks).
Health Maintenance Organization	HMO	An HMO is a type of Medicare managed care plan where a group of doctors, hospitals, and other healthcare providers agree to give healthcare to Medicare beneficiaries for a set amount of money from Medicare every month.
Home Health Agency	HHA	An HHA is a public agency or private organization, or subdivision of such agency or organization that provides skilled nursing services and at least one other therapeutic service in the residence of the client.
Hospice	NA	Hospice is inpatient or outpatient supportive care given to a terminally ill client and the family. The focus of this care is to enable the client to remain in the familiar surroundings of their home for as long as they can.
Index Analytics	IA	Index provides data integration services, including data architecture, master data management, data quality, security, and data warehousing.

Term	Abbreviation	Definition
Inpatient Prospective Payment System	IPPS	IPPS (or PPS) refers to Section 1886(d) of the Social Security Act that sets forth a system of payment for the operating costs of acute care hospital inpatient stays under Medicare Part A (Hospital Insurance) based on prospectively set rates.
Inpatient Psychiatric Facility	IPF	An IPF is a facility that provides intensive, 24-hour psychiatric care for individuals who cannot be safely or adequately managed at a lower level of care and is certified under Medicare as an inpatient psychiatric hospital.
Inpatient Rehabilitation Facility	IRF	An IRF is a hospital or specialized unit within a hospital that provides intensive, specialized rehabilitation services to patients who require a high level of care and therapy after an illness, surgery, or injury.
International Classification of Diseases, 10th Revision, Clinical Modification	ICD-10-CM	ICD-10-CM is a standardized medical coding system used by healthcare providers to classify and code all diagnoses, symptoms, and procedures in the United States.
Integrity Management Services, Inc.	IntegrityM	IntegrityM is a women-owned small business empowering Federal Government, State agencies, and private sector organizations to make more informed decisions.
Length of Stay	LOS	The length of stay (LOS) is the total number of hospice days for the series of claims submitted for a beneficiary's episode of service. It is computed by first subtracting the admission date (i.e., from date) of the first claim in the episode of service from the discharge date (i.e., through date) of the last claim in the episode of service and then adding one.
Long-Term Acute Care Hospital	LTACH	LTACH is a specialty facility for critically ill patients with complex medical conditions requiring extended hospital stays, typically 25 days or longer.
Medicare	NA	Medicare is the federal system of health insurance for people over 65 years of age and for certain younger people with disabilities.
Medicare Administrative Contractor	MAC	The MAC is the contracting authority replacing the fiscal intermediary and carrier in performing Medicare Fee-for-Service claims processing activities.
Medicare Conditions of Participation	CoPs	CoPs are federal health and safety regulations established by the Centers for Medicare & Medicaid Services (CMS).
Medicare Part A	NA	Medicare Part A is the part of Medicare that covers hospice care, home healthcare, skilled nursing facilities, and inpatient hospital stays.
Medicare Part B	NA	Medicare Part B is the part of Medicare that covers doctor services, outpatient hospital care, and other medical services that Part A does not cover such as physical and occupational therapy, X-rays, medical equipment, or limited ambulance service.

Term	Abbreviation	Definition
Medicare Payment Advisory Commission	MedPAC	MedPAC is an independent, non-partisan legislative branch agency established by Congress. It is responsible for advising the U.S. Congress on issues, policies, and regulations affecting the Medicare program, including payments to healthcare providers and private health plans.
Nursing Facility	NF	NF is a residential institution that provides 24-hour medical, nursing, and rehabilitative care.
Office of Inspector General	OIG	The OIG is an HHS agency that protects the integrity of HHS programs as well as the health and welfare of the beneficiaries of those programs.
Outlier Status	NA	Outlier status refers to percentiles at or above the 80th percentile for any target areas or at or below the 20th percentile for coding-focused target areas.
Partial Hospitalization Program	PHP	PHP refers to an intensive outpatient psychiatric treatment program.
Percentile	NA	<p>In PEPPER, the percentile represents the percent of hospices in the comparison group below which a given hospice's percent/rate 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 hospice's position in the group compared to all other hospices in the comparison group for that target area and time period. For example, suppose a hospice has a target area percent of 2.3 and 80% of the hospices in the comparison group have a percent for that target area that is less than 2.3. Then we can say the hospice is at the 80th percentile.</p> <p>Percentiles in PEPPER are calculated from the hospices' percents/rates so that each hospice percent/rate can be compared to the statewide, jurisdiction-wide, or nationwide distribution of hospice percents/rates.</p>
Personal Computer	PC	A PC is a general-purpose computer designed for individual use, distinguishing it from larger, multi-user systems like mainframes or supercomputers.
Procedure Coding System	PCS	PCS is a standardized set of codes used in healthcare to report medical procedures, services, and supplies for billing and record-keeping purposes.
Program for Evaluating Payment Patterns Electronic Report	PEPPER	PEPPER is an electronic data report in Microsoft Excel format that contains a single hospital's claims data statistics for diagnosis-related groups (DRGs) and discharges at high risk for improper payments due to billing, coding, and/or admission necessity issues.
Prospective Payment System	PPS	PPS (or IPPS) refers to Section 1886(d) of the Social Security Act (the Act) that sets forth a system of payment for the operating costs of acute care hospital inpatient stays under Medicare Part A (Hospital Insurance) based on prospectively set rates.

Term	Abbreviation	Definition
Routine Home Care	RHC	RHC is the foundational level of hospice care. It is provided in a patient's place of residence—whether that is a private home, assisted living facility, or nursing home—focusing on pain management, symptom control, and emotional support for terminally ill individuals who are generally stable.
Short-Term Acute Care Hospital	STACH	STACH is a medical facility designed to treat severe, sudden illnesses, injuries, or surgical recoveries.
Skilled Nursing Facility	SNF	An SNF is a facility that provides inpatient skilled nursing care and related services to patients who require medical, nursing, or rehabilitative services but do not require the level of care provided in a hospital.
UB-04	NA	Institutional healthcare providers, such as hospitals and rehabilitation facilities, use the UB-04 standardized claim form (also known as CMS-1450), to submit billing information to insurance companies, including Medicare and Medicaid.

Appendix B: Clinical Classification Software Refined (CCSR) Categories for Top Terminal Diagnoses

Table 5 provides a list of the Clinical Classification Software Refined (CCSR) categories and their descriptions for each of the Terminal Diagnosis Groups used in the Top Terminal Diagnosis Report in the *Hospice PEPPER*. More information on the CCSR categories listed below is available at: https://hcup-us.ahrq.gov/toolssoftware/ccsr/ccs_refined.jsp.

Table 5: CCSR Category Terminal Diagnosis Groupings

CCSR Category	CCSR Category Description	Terminal Diagnosis Grouping
END015	Other specified and unspecified endocrine disorders	Cancer
FAC006	Encounter for antineoplastic therapies	Cancer
NEO001	Head and neck cancers - eye	Cancer
NEO002	Head and neck cancers - lip and oral cavity	Cancer
NEO003	Head and neck cancers - throat	Cancer
NEO004	Head and neck cancers - salivary gland	Cancer
NEO005	Head and neck cancers - nasopharyngeal	Cancer
NEO006	Head and neck cancers - hypopharyngeal	Cancer
NEO007	Head and neck cancers - pharyngeal	Cancer
NEO008	Head and neck cancers - laryngeal	Cancer
NEO009	Head and neck cancers - tonsils	Cancer
NEO010	Head and neck cancers - all other types	Cancer
NEO011	Cardiac cancers	Cancer
NEO012	Gastrointestinal cancers - esophagus	Cancer
NEO013	Gastrointestinal cancers - stomach	Cancer
NEO014	Gastrointestinal cancers - small intestine	Cancer
NEO015	Gastrointestinal cancers - colorectal	Cancer
NEO016	Gastrointestinal cancers - anus	Cancer
NEO017	Gastrointestinal cancers - liver	Cancer
NEO018	Gastrointestinal cancers - bile duct	Cancer
NEO019	Gastrointestinal cancers - gallbladder	Cancer
NEO020	Gastrointestinal cancers - peritoneum	Cancer
NEO021	Gastrointestinal cancers - all other types	Cancer
NEO022	Respiratory cancers	Cancer
NEO023	Bone cancer	Cancer

CCSR Category	CCSR Category Description	Terminal Diagnosis Grouping
NEO024	Sarcoma	Cancer
NEO025	Skin cancers - melanoma	Cancer
NEO026	Skin cancers - basal cell carcinoma	Cancer
NEO027	Skin cancers - squamous cell carcinoma	Cancer
NEO028	Skin cancers - all other types	Cancer
NEO029	Breast cancer - ductal carcinoma in situ (DCIS)	Cancer
NEO030	Breast cancer - all other types	Cancer
NEO031	Female reproductive system cancers - uterus	Cancer
NEO032	Female reproductive system cancers - cervix	Cancer
NEO033	Female reproductive system cancers - ovary	Cancer
NEO034	Female reproductive system cancers - fallopian tube	Cancer
NEO035	Female reproductive system cancers - endometrium	Cancer
NEO036	Female reproductive system cancers - vulva	Cancer
NEO037	Female reproductive system cancers - vagina	Cancer
NEO038	Female reproductive system cancers - all other types	Cancer
NEO039	Male reproductive system cancers - prostate	Cancer
NEO040	Male reproductive system cancers - testis	Cancer
NEO041	Male reproductive system cancers - penis	Cancer
NEO042	Male reproductive system cancers - all other types	Cancer
NEO043	Urinary system cancers - bladder	Cancer
NEO044	Urinary system cancers - ureter and renal pelvis	Cancer
NEO045	Urinary system cancers - kidney	Cancer
NEO046	Urinary system cancers - urethra	Cancer
NEO047	Urinary system cancers - all other types	Cancer
NEO048	Nervous system cancers - brain	Cancer
NEO049	Nervous system cancers - all other types	Cancer
NEO050	Endocrine system cancers - thyroid	Cancer
NEO051	Endocrine system cancers - pancreas	Cancer
NEO052	Endocrine system cancers - thymus	Cancer
NEO053	Endocrine system cancers - adrenocortical	Cancer
NEO054	Endocrine system cancers - parathyroid	Cancer

CCSR Category	CCSR Category Description	Terminal Diagnosis Grouping
NEO055	Endocrine system cancers - pituitary gland	Cancer
NEO056	Endocrine system cancers - all other types	Cancer
NEO057	Hodgkin lymphoma	Cancer
NEO058	Non-Hodgkin lymphoma	Cancer
NEO059	Leukemia - acute lymphoblastic leukemia (ALL)	Cancer
NEO060	Leukemia - acute myeloid leukemia (AML)	Cancer
NEO061	Leukemia - chronic lymphocytic leukemia (CLL)	Cancer
NEO062	Leukemia - chronic myeloid leukemia (CML)	Cancer
NEO063	Leukemia - hairy cell	Cancer
NEO064	Leukemia - all other types	Cancer
NEO065	Multiple myeloma	Cancer
NEO066	Malignant neuroendocrine tumors	Cancer
NEO067	Mesothelioma	Cancer
NEO068	Myelodysplastic syndrome (MDS)	Cancer
NEO069	Cancer of other sites	Cancer
NEO070	Secondary malignancies	Cancer
NEO071	Malignant neoplasm, unspecified	Cancer
NEO072	Neoplasms of unspecified nature or uncertain behavior	Cancer
NEO073	Benign neoplasms	Cancer
SYM017	Abnormal findings without diagnosis	Cancer
CIR001	Chronic rheumatic heart disease	Circulatory or Heart Disease
CIR002	Acute rheumatic heart disease	Circulatory or Heart Disease
CIR003	Nonrheumatic and unspecified valve disorders	Circulatory or Heart Disease
CIR004	Endocarditis and endocardial disease	Circulatory or Heart Disease
CIR005	Myocarditis and cardiomyopathy	Circulatory or Heart Disease
CIR006	Pericarditis and pericardial disease	Circulatory or Heart Disease
CIR007	Essential hypertension	Circulatory or Heart Disease
CIR008	Hypertension with complications and secondary hypertension	Circulatory or Heart Disease
CIR009	Acute myocardial infarction	Circulatory or Heart Disease
CIR010	Complications of acute myocardial infarction	Circulatory or Heart Disease

CCSR Category	CCSR Category Description	Terminal Diagnosis Grouping
CIR011	Coronary atherosclerosis and other heart disease	Circulatory or Heart Disease
CIR012	Nonspecific chest pain	Circulatory or Heart Disease
CIR013	Acute pulmonary embolism	Circulatory or Heart Disease
CIR014	Pulmonary heart disease	Circulatory or Heart Disease
CIR015	Other and ill-defined heart disease	Circulatory or Heart Disease
CIR016	Conduction disorders	Circulatory or Heart Disease
CIR017	Cardiac dysrhythmias	Circulatory or Heart Disease
CIR018	Cardiac arrest and ventricular fibrillation	Circulatory or Heart Disease
CIR019	Heart failure	Circulatory or Heart Disease
CIR026	Peripheral and visceral vascular disease	Circulatory or Heart Disease
CIR027	Arterial dissections	Circulatory or Heart Disease
CIR028	Gangrene	Circulatory or Heart Disease
CIR029	Aortic; peripheral; and visceral artery aneurysms	Circulatory or Heart Disease
CIR030	Aortic and peripheral arterial embolism or thrombosis	Circulatory or Heart Disease
CIR031	Hypotension	Circulatory or Heart Disease
CIR032	Other specified and unspecified circulatory disease	Circulatory or Heart Disease
CIR033	Acute phlebitis; thrombophlebitis and thromboembolism	Circulatory or Heart Disease
CIR034	Chronic phlebitis; thrombophlebitis and thromboembolism	Circulatory or Heart Disease
CIR035	Varicose veins of lower extremity	Circulatory or Heart Disease
CIR036	Postthrombotic syndrome and venous insufficiency/hypertension	Circulatory or Heart Disease
CIR037	Vasculitis	Circulatory or Heart Disease
CIR038	Postprocedural or postoperative circulatory system complication	Circulatory or Heart Disease
CIR039	Other specified diseases of veins and lymphatics	Circulatory or Heart Disease
DIG014	Hemorrhoids	Circulatory or Heart Disease
DIG025	Other specified and unspecified gastrointestinal disorders	Circulatory or Heart Disease
FAC009	Implant, device or graft related encounter	Circulatory or Heart Disease
GEN003	Chronic kidney disease	Circulatory or Heart Disease
GEN006	Other specified and unspecified diseases of kidney and ureters	Circulatory or Heart Disease

CCSR Category	CCSR Category Description	Terminal Diagnosis Grouping
INJ030	Drug induced or toxic related condition	Circulatory or Heart Disease
INJ033	Complication of cardiovascular device, implant or graft, initial encounter	Circulatory or Heart Disease
INJ069	Complication of cardiovascular device, implant or graft, subsequent encounter	Circulatory or Heart Disease
MAL001	Cardiac and circulatory congenital anomalies	Circulatory or Heart Disease
MUS024	Systemic lupus erythematosus and connective tissue disorders	Circulatory or Heart Disease
RSP003	Influenza	Circulatory or Heart Disease
SYM012	Circulatory signs and symptoms	Circulatory or Heart Disease
MBD009	Personality disorders	Dementia
MBD013	Miscellaneous mental and behavioral disorders/conditions	Dementia
NVS011	Neurocognitive disorders	Dementia
SYM010	Nervous system signs and symptoms	Dementia
SYM016	Other general signs and symptoms	Dementia
CIR020	Cerebral infarction	Neurodegenerative Disease or Stroke
CIR021	Acute hemorrhagic cerebrovascular disease	Neurodegenerative Disease or Stroke
CIR022	Sequela of hemorrhagic cerebrovascular disease	Neurodegenerative Disease or Stroke
CIR023	Occlusion or stenosis of precerebral or cerebral arteries without infarction	Neurodegenerative Disease or Stroke
CIR024	Other and ill-defined cerebrovascular disease	Neurodegenerative Disease or Stroke
CIR025	Sequela of cerebral infarction and other cerebrovascular disease	Neurodegenerative Disease or Stroke
EYE006	Neuro-ophthalmology	Neurodegenerative Disease or Stroke
NVS004	Parkinson`s disease	Neurodegenerative Disease or Stroke
NVS005	Multiple sclerosis	Neurodegenerative Disease or Stroke
NVS006	Other nervous system disorders (often hereditary or degenerative)	Neurodegenerative Disease or Stroke
NVS007	Cerebral palsy	Neurodegenerative Disease or Stroke
NVS008	Paralysis (other than cerebral palsy)	Neurodegenerative Disease or Stroke
NVS012	Transient cerebral ischemia	Neurodegenerative Disease or Stroke
NVS013	Coma; stupor; and brain damage	Neurodegenerative Disease or Stroke
NVS020	Other specified nervous system disorders	Neurodegenerative Disease or Stroke

CCSR Category	CCSR Category Description	Terminal Diagnosis Grouping
NVS022	Sequela of specified nervous system conditions	Neurodegenerative Disease or Stroke
FAC012	Other specified encounters and counseling	Respiratory Disease
FAC025	Other specified status	Respiratory Disease
MAL007	Respiratory congenital malformations	Respiratory Disease
RSP002	Pneumonia (except that caused by tuberculosis)	Respiratory Disease
RSP004	Acute and chronic tonsillitis	Respiratory Disease
RSP005	Acute bronchitis	Respiratory Disease
RSP006	Other specified upper respiratory infections	Respiratory Disease
RSP007	Other specified and unspecified upper respiratory disease	Respiratory Disease
RSP008	Chronic obstructive pulmonary disease and bronchiectasis	Respiratory Disease
RSP009	Asthma	Respiratory Disease
RSP010	Aspiration pneumonitis	Respiratory Disease
RSP011	Pleurisy, pleural effusion and pulmonary collapse	Respiratory Disease
RSP012	Respiratory failure; insufficiency; arrest	Respiratory Disease
RSP013	Lung disease due to external agents	Respiratory Disease
RSP014	Pneumothorax	Respiratory Disease
RSP015	Mediastinal disorders	Respiratory Disease
RSP016	Other specified and unspecified lower respiratory disease	Respiratory Disease
RSP017	Postprocedural or postoperative respiratory system complication	Respiratory Disease
SYM013	Respiratory signs and symptoms	Respiratory Disease