Common Procedures Report
October 1, 2022 through September 30, 2023 Data

About the Report

What is the purpose of this report?

The Pennsylvania Health Care Cost Containment Council's (PHC4) *Common Procedures Report (CPR)* displays outcome and volume information for common orthopedic procedures performed in Pennsylvania facilities. The *CPR* can assist consumers and purchasers in making more informed health care decisions. This report can also serve as an aid to providers in highlighting additional opportunities for quality improvement and cost containment.

About this report

- This report includes hospital-specific outcomes (in the Hospital Results section) and inpatient and outpatient volume (in the Inpatient and Outpatient Volume section) for three orthopedic procedure groups, as defined by ICD-10-PCS (International Classification of Diseases, Tenth Revision, Procedure Coding System) codes for inpatient hospital discharges and CPT-4 (Current Procedural Technology, Fourth Edition) codes for outpatient encounters. Technical Notes relevant to this report provide additional detail. They are posted to PHC4's website at www.phc4.org. Procedures included in this report:
    - Spinal Fusion
    - Total Hip Replacement
    - Total Knee Replacement
- This report covers adult (18 years and older) inpatient acute care hospital discharges and hospital outpatient department and ambulatory surgery center (ASC) encounters from October 1, 2022 through September 30, 2023.
- Cases with a COVID-19 diagnosis that was present on admission were not included in this report.
- All Pennsylvania acute care hospitals and ASCs that performed an orthopedic procedure of interest during the reported time period are included. Facilities that closed or merged with other facilities are not reported.
- Facility names have been shortened in many cases for formatting purposes. Facility names may be different today than they were during the period covered in this report.

About the data

The claims data compiled for this report was submitted to PHC4 by Pennsylvania facilities. The data was subject to standard validation processes by PHC4 and verified for accuracy by the facilities at the individual case level. Data accuracy and completeness were ultimately the responsibility of each individual facility.

Medicare fee-for-service payment data was obtained from the Centers for Medicare and Medicaid Services (CMS).

About the Report

Accounting for high-risk patients when calculating hospital outcomes

Included in the data PHC4 receives from Pennsylvania hospitals is information indicating, in simple terms, "how sick the patient was" on admission to the hospital—information that is used to account for high-risk patients. Even though two patients may be admitted to the hospital for the same procedure, there may be differences in the seriousness of their conditions. To account for differences in patient risk, PHC4 uses a complex mathematical formula to risk adjust the complication and extended postoperative length of stay data as reported in the Hospital Results section of the *CPR*. That is, hospitals receive "extra credit" for treating patients who are more seriously ill or at a greater risk than others. Risk adjusting the data is important because sicker patients may be more likely to experience a complication or have a longer postoperative length of stay.

PHC4 uses clinical laboratory data, patient characteristics such as age, gender, race/ethnicity, and socioeconomic status, and billing codes that describe the patient's medical conditions such as chronic lung disease, diabetes, heart failure, etc., to calculate risk for the patients in the Hospital Results section of this report. A comprehensive description of the risk-adjustment techniques used for this report can be found in the Technical Notes on PHC4's website at www.phc4.org.

What hospital outcomes are measured in this report and why are they important?

Displayed in the Hospital Results section of the report:

Outcomes (ratings) are displayed for the risk-adjusted measures below, when appropriate for the procedure. The number of inpatient acute care cases (after exclusions) and the average hospital charge are reported for all procedures.

To determine the risk-adjusted rating, PHC4 compares the number of patients one could reasonably expect to experience an outcome (e.g., complication), after accounting for patient risk, with the actual number that occurred. Please refer to "Understanding the Symbols" box and the Technical Notes (at www.phc4.org) for further details.

Outcome data are not reported for hospitals that have fewer than five cases evaluated for a measure; such low volume cannot be considered meaningful and, as such, the outcome data are not displayed. Not Reported (NR) appears in the table when this occurs.

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- ***Number of Cases.*** The number of inpatient acute care hospitalizations, *after* exclusions, in which the procedure was performed. The number of cases represents separate hospital admissions, not individual patients. A patient admitted more than once for the same procedure would be included in the number of cases each time. Note that because of the excluded cases, the number of cases reported in the Hospital Results section of the *CPR* is typically lower than the "*total* number of cases" displayed in the Inpatient and Outpatient Volume section of the *CPR*.

- ***Risk-Adjusted Complication.*** These measures are reported as statistical ratings that represent the number of patients who:
  - developed a complication or died during the hospital stay in which the procedure was performed, or
  - were readmitted to a Pennsylvania acute care hospital for a complication within 7, 30, or 90 days (depending on the complication) of being discharged from the hospitalization during which the procedure was performed. A complication is only counted when the complication is the principal reason for readmission.

- ***Extended Postoperative Length of Stay.*** This measure is reported as a statistical rating that represents patients whose length of stay following the procedure was significantly longer than expected, after accounting for patient risk.

- ***Case-Mix Adjusted Average Hospital Charge.*** This represents the average hospital charge for each procedure reported. The average hospital charge represents the entire length of the hospital stay. It does not include professional fees (e.g., physician fees) or other additional post-discharge costs, such as rehabilitation treatment, long-term care and/or home health care. The average charge is adjusted for the mix of cases that are specific to each hospital (for more details, see the Technical Notes at www.phc4.org). While charges are what the hospital reports on the billing form, hospitals typically receive actual payments from private insurers and government payers that are considerably less than the listed charge.

Displayed in the Medicare Payments section of the report:

- ***Medicare Payments.*** This section of the report displays the average payments made by Medicare fee-for-service for each procedure performed during an inpatient hospital stay by the Medicare Severity-Diagnosis Related Groups (MS-DRGs) associated with each procedure.

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Understanding the Symbols

The symbols displayed in this report represent a comparison of a hospital's actual outcome rate to what is expected after accounting for patient risk.

Using the risk-adjusted complication measure as an example:

- ◯ **Hospital's rate was significantly lower than expected.** Fewer patients experienced a complication than could be attributed to patient risk and random variation.
- ⦿ **Hospital's rate was not significantly different than expected.** The number of patients who experienced a complication was within the range anticipated based on patient risk and random variation.
- ● **Hospital's rate was significantly higher than expected.** More patients experienced a complication than could be attributed to patient risk and random variation.

What is inpatient and outpatient volume and why is it important?

Displayed in the Inpatient and Outpatient Volume section of the report:

The total number of cases for each procedure is displayed in this section of the report. The total number of cases reported for hospitals in this section is often higher than the number displayed in the Hospital Results section where cases are limited to only those included in the hospital-specific measures. In general, information on the overall total number of cases performed at a facility reflects the degree of experience a facility has in caring for patients who undergo a procedure of interest. Higher volume has been associated with improved patient outcomes. Because total hip replacement and total knee replacement procedures are increasingly performed in hospital outpatient departments and ambulatory surgery centers (collectively referred to as outpatient cases), the total number of cases performed in both inpatient and outpatient locations are displayed separately, to show where variations in treatment patterns may exist across care settings. These differences may reflect patient-surgeon partnership decisions and efforts to save costs.

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- ***Total Number of Cases.*** This represents inpatient hospitalizations and outpatient encounters for adults (18 years and older) who underwent a procedure of interest.
- ***Inpatient Cases.*** This represents the total number and percentage of cases performed in a Pennsylvania inpatient acute care hospital.
- ***Outpatient Cases.*** This represents the total number and percentage of cases performed in a Pennsylvania hospital outpatient department or ambulatory surgery center.

Uses of this report

This report can be used as a tool to examine a facility's performance and experience in specific procedure categories. It is not intended to be a sole source of information for making decisions about health care, nor should it be used to generalize about the overall quality of care provided by a facility. Readers of this report should use it in discussions with their physicians who can answer specific questions and concerns about their care.

- ***Patients/Consumers*** can use this report as an aid in making decisions about where to seek treatment for the procedures detailed in this report. This report should be used in conjunction with a physician or other health care provider when making health care decisions.
- ***Group Benefits Purchasers/Insurers*** can use this report as part of a process in determining where employees, subscribers, members, or participants should go for their health care.
- ***Health Care Providers*** can use this report as an aid in identifying opportunities for quality improvement and cost containment.
- ***Policymakers/Public Officials*** can use this report to enhance their understanding of health care issues, to ask provocative questions, to raise public awareness of important issues, and to help constituents identify health care options.
- ***Everyone*** can use this information to raise important questions about why differences exist in the quality and efficiency of care.

About PHC4

Created by the PA General Assembly in 1986, the PA Health Care Cost Containment Council (PHC4) is an independent council charged with collecting, analyzing and reporting information that can be used to improve the quality and restrain the cost of health care in the state. Today, PHC4 is a recognized national leader in public health care reporting. PHC4 is governed by a council with members representing business, labor, consumers, health care providers, insurers, health economists and state government.

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