American Medical Association-convened
Physician Consortium for Performance Improvement®
American Board of Internal Medicine Foundation
American College of Physicians
Society of Hospital Medicine

Care Transitions
Performance Measurement Set

Inpatient Discharges & Emergency Department Discharges

PCPI Approved: June 2009
Coding Reviewed and Updated: April 2016

** Introductory content is listed as originally drafted in 2009 and may not be up to date*

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Executive Summary:

The American Board of Internal Medicine (ABIM) Foundation, American College of Physicians, Society of Hospital Medicine, and American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®) jointly formed a Care Transitions Work Group (CTWG) to identify and define quality measures toward improving outcomes for patients undergoing transitions in care (see diagram at end of this section).

National Priority Area

This goal to improve outcomes during transitions in care is a priority identified by several national organizations, including:

- National Quality Forum (NQF) National Priorities Partnership (see NPP *National Priorities & Goals,* www.nationalprioritiespartnership.org)
- PCPI (see *Physician Consortium for Performance Improvement 2008 Report*)
- Centers for Medicare and Medicaid Services (see *CMS Fact Sheet: 9th Statement of Work (SOW)*, www.cms.hhs.gov)
- The Joint Commission (see *National Patient Safety Goals,* www.jointcommission.org) and Joint Commission International

Current Reasons for Prioritizing Improvement in Care Transitions

- Gaps in care – eg, the report finding that the availability of a discharge summary at the first post-discharge visit is only 12-34%, affecting the quality of care in approximately 25% of follow-up visits (*JAMA* 2007)
- High costs – eg, the Institute of Medicine estimate that inpatient and outpatient medication errors harm 1.5 million people each year in the United States, at an annual cost of at least $3.5 billion (*NY Times* 2006), and one study finding that 60% of inpatient medication errors occur at times of transition (*J Clin Outcomes Manag* 2001)

Indicators of Success in Improving Outcomes

The CTWG has identified several indicators of success in improving outcomes for patients undergoing transitions in care, including:

1. Reduction in adverse drug events
2. Reduction in patient harm related to medical errors of omission and commission
3. Reduction in unnecessary healthcare encounters (eg, hospital readmissions)
4. Reduction in redundant tests and procedures
5. Achievement of patient goals and preferences (eg, functional status, comfort care)
6. Improved patient understanding of and adherence to treatment plan

Setting Targets for Success and Tracking Progress with Outcomes Measures

National targets (eg, reducing adverse drug events during care transitions by X% in X years) have not yet been established. Individual provider groups and collaboratives have established their own targets. In order to track progress toward outcomes, outcomes measures should be implemented and tracked.

Several outcomes measures have previously been developed and are NQF-endorsed™, including:

3-Item Care Transition Measure (CTM-3)	Coleman/Univ. of Colorado-Denver
30-Day All-Cause Risk Standardized Readmission Rate Following Heart Failure Hospitalization	CMS
30-Day All-Cause Risk Standardized Readmission Rate Following Acute Myocardial Infarction (AMI) Hospitalization	CMS
30-Day All-Cause Risk Standardized Readmission Rate Following Pneumonia Hospitalization	CMS

All-Cause Readmission Index (total inpatient readmissions within 30 days from discharge to any hospital)	PacifiCare

Process Measures Linked to Successful Outcomes

Evidence suggests several processes that may improve patient outcomes, and that are linked to the identified indicators of success:

1. Timely transfer of information across settings and professionals involved in care transitions
2. Effective coordination of transition across settings and professionals
3. Timely delivery of care
4. Improve patient understanding of and adherence to treatment plan
5. Improve patient awareness of emergency provider contact information
6. Improve patient engagement in care

Care Transitions Work Group Recommendations

Process measures: Several processes of care, demonstrated to improve outcomes during care transitions, should be added to the existing portfolio of measures; a subset of these process measures that address closely related aspects of care transitions (measures 1, 2, and 3) should be bundled:

Measures 1-3 (inpatient discharges to home or any other site of care) – Proposed as bundled set:

1. Reconciled Medication List Received by Discharged Patients
2. Transition Record with Specified Elements Received by Discharged Patients
3. Timely Transmission of Transition Record (to facility or primary physician for follow up care)

4. Transition Record with Specified Elements Received by Discharged Patients -- Emergency Department discharges to home

5. Post-Discharge Appointment for Heart Failure Patients (This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive)

Intermediate step to an identified indicator of success: Through participation in upcoming stakeholder meetings convened by the Agency for Healthcare Research and Quality (AHRQ), the CTWG will work toward the following intermediate objective:

6. To promote improved patient understanding of and adherence to the post-discharge treatment plan through the addition of appropriate questions to the CAHPS® Hospital Survey (HCAHPS). (This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive)

Data Sources

There are several data sources available for collecting performance measures; generally different data sources require different sets of measure specifications, due to the structure of the systems storing the data. The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®), recognizes that Electronic Health Records (EHRs) are the state of the art for clinical encounters and is focusing significant resources and expertise toward specifying and testing measures within EHRs, as they hold the promise of providing the relevant clinical data for measures and for providing feedback to physicians and other health care providers that is timely and actionable.

The type of specifications provided for this measurement set are aligned with the PCPI plans to focus on the development of EHR specifications for new measure development projects, consistent with the information shared at the PCPI membership meeting held in October 2011. While the PCPI values prospective claims reporting programs and the data these programs can provide, the PCPI is looking to leverage the data in EHRs. This new focus will align the PCPI with national initiatives that highlight the benefits and wealth of data that EHRs bring to healthcare. The PCPI intends to maintain prospective claims specifications for measures that are currently reportable in national reporting programs.

Additional detailed information regarding PCPI Specifications Methodology is included in the Technical Specifications section of this document.

Another venue for advancing this work in EHR data measurement is the AMA/NCQA/HIMSS Electronic Health Record Association (EHRA) Collaborative (see www.ama-assn.org/go/collaborative).

Testing of the Measurement Set

The PCPI conducted two distinct testing projects, in accordance with the Measure Testing Protocol for PCPI Measures, at two different points in time to ensure that the Care Transitions performance measures were feasible to implement, valid, and reliable. First, clarity and face validity were tested in a pilot testing project. The second, and separate, testing project examined reliability. Overall, the Care Transitions measures were found to be valid and moderate to highly reliable. Findings from these testing projects have been considered and resulted in modifications to two of the measures, where appropriate.

1) Clarity and Face Validity Pilot Testing

The PCPI, in partnership with the Joint Commission, pilot tested four Care Transitions measures for clarity and face validity from December 2009 to February 2010. Face validity was assessed via focus group discussion and surveys in six Midwestern healthcare facilities consisting of a panel of 81 individuals including front line caregivers, administrators, and leadership.

Clarity and Face Validity Pilot Testing Results

Face validity of the measures was rated on a Likert scale from 1 to 5. A rating of 1 signified "very poor" clarity and face validity, 2 signified "poor," 3 signified "fair," 4 signified "good," and 5 signified "very good." The face validity testing results are as follows:

Measure #1: Rated "very good"
Measure #2: Rated "fair"
Measure #3: Rated "fair"
Measure #4: Rated "fair"

2) Reliability Testing

Reliability testing began in July of 2009 and concluded prior to full NQF endorsement in May 2010. The data samples for reliability testing were gathered from a multi-specialty, medium-sized health practice in the Southern U.S.

Reliability Testing Results

The PCPI measure testing project calculated the kappa statistic* for measure reliability, which ranged from moderate to almost perfect. Agreement percentages from parallel-forms reliability testing ranged from 81.6% to 95%. These results indicate that the measures were found to be moderate to highly reliable.

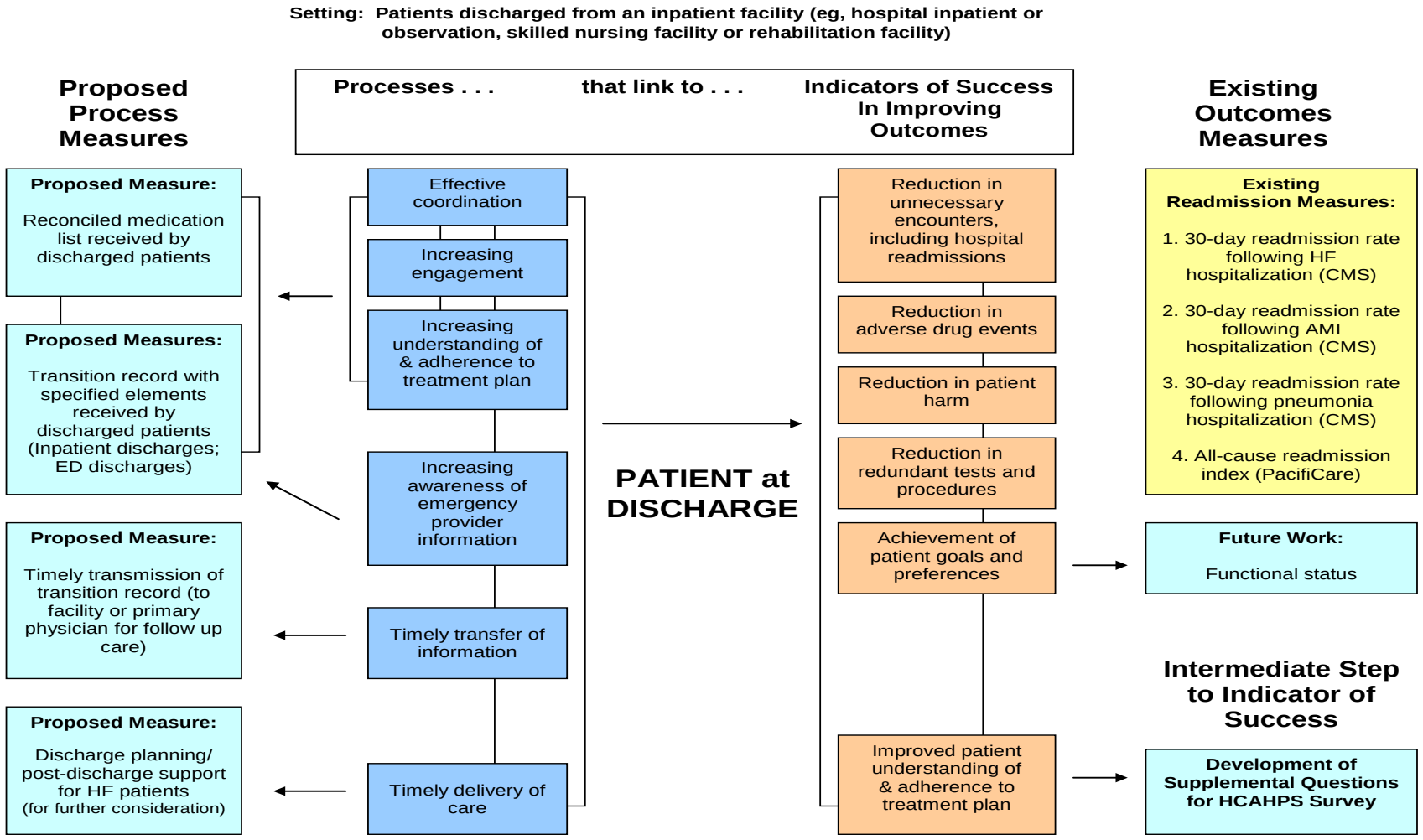
*Landis, JR and GG Koch. The Measurement of Observer Agreement for Categorical Data. Biometrics Vol 33. No1. March 1977. pp.159-174.

Measurement as a Tool for Improvement:

Performance measurement serves as an important component in a quality improvement strategy but performance measurement alone will not achieve the desired goal of improving patient care. Measures can have their greatest effect when they are used judiciously and linked directly to operational steps that clinicians, patients, and health plans can apply in practice to improve care. To that end, the PCPI will work with quality improvement collaboratives and other initiatives to ensure that these measures are implemented with the goal of improved patient care.

Link to Outcomes:

The proposed measures focus on safe and effective transitions between care settings; in particular, they address transitions from the inpatient setting or emergency department to the ambulatory setting (eg, home/self care) or other sites of care. The proposed measures are intended to be complementary to existing outcomes measures.



Purpose of Measurement Set:

In 2008, the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®) convened the Ad Hoc Committee on Priorities. This committee was charged with developing recommendations about the future activities of the PCPI in light of the National Quality Forum (NQF) National Priorities Partnership initiative. To accomplish this, the Ad Hoc Committee assessed the past and current work of the PCPI, gathered information about the priorities of the stakeholders participating in the NQF initiative, and surveyed multiple stakeholders and PCPI members to determine their views of the role of the PCPI. The resulting Ad Hoc Committee recommendations are intended to advance the work of the PCPI and increase the relevance of its work to multiple stakeholders, all of whom share the central goal of making a positive impact on the health of patients and the outcomes of care. Care coordination (care transitions, communication, care planning, and follow up) was identified as one of the priority areas on which the PCPI should focus.

In addition, the NQF National Priorities Partnership convened a group of 28 organizations who are committed to improving the quality of healthcare in the United States. This partnership identified six priority areas where there is compelling evidence that opportunities exist to produce sizable improvements in health and healthcare. Care Coordination was identified as one of these priority areas.

This set of measures developed by the American Board of Internal Medicine (ABIM) Foundation, the American College of Physicians, the Society of Hospital Medicine and the PCPI is the first of a multi-phase project on care coordination. The measures contained within this document focus on safe and effective transitions between care settings and, in particular, from the inpatient setting or emergency department to the ambulatory setting (eg, home/self care) or other sites of care. Future work will be undertaken to address other areas that fall within the umbrella of care coordination. In addition, all PCPI work groups are charged with developing measures related to care coordination.

The Care Transitions Work Group identified several indicators of success in improving outcomes for patients undergoing transitions in care (see "Link to Outcomes" diagram in preceding section). The proposed measures address several processes of care that are linked to the identified indicators of success (measures 1-5). The measure set also describes an intermediate step (measure 6) to promote improved patient understanding of and adherence to the post-discharge treatment plan, which will provide the basis for a future performance measure.

These clinical performance measures are designed for practitioner and/or system level quality improvement to achieve better outcomes for patients undergoing transitions of care. Unless otherwise indicated, the measures are also appropriate for accountability if the appropriate methodological, statistical, and implementation rules are achieved.

The measure titles listed below may be used for quality improvement and accountability:

Measure #1: Reconciled Medication List Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
Measure #2: Transition Record with Specified Elements Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
Measure #3: Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
Measure #4: Transition Record with Specified Elements Received by Discharged Patients (Emergency Department Discharges to Ambulatory Care [Home/Self Care] or Home Health Care)
Measure #5: Post-Discharge Appointment for Heart Failure Patients (Inpatient Setting) (This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive)

An intermediate step is proposed for the following measure title, with no measure proposed at this time:

Measure #6: Patient Understanding of Post-Discharge Care Needed (This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive)

Measures 1, 2, and 3 in the draft Care Transitions measurement set address closely related aspects of the transition in care for patients discharged from an inpatient facility and are therefore intended for use as a "bundled" set. Users will be instructed to always measure performance for all three of these measures, rather than using any of the measures independently. Comments on this "bundled" measurement approach were solicited during the Public Comment period.

The measure titles listed below are included in the "bundled" set:

Measure #1: Reconciled Medication List Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
Measure #2: Transition Record with Specified Elements Received by Discharged Patients (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
Measure #3: Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

Additional information clarifying the design and intent of individual measures is provided (as needed) under "Additional Information" at the end of the documentation for each measure.

Intended Audience, Care Setting, and Patient Population

The PCPI encourages use of these measures by physicians, other health professionals, and healthcare systems, where appropriate, to manage the transition of care for all patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, rehabilitation facility) or emergency department to care in a post-acute inpatient facility (eg, skilled nursing facility, rehabilitation facility, home health care) or ambulatory care setting.

These measures are meant to be used to calculate performance and/or reporting at the practitioner or system level. Performance measurement serves as an important component in a quality improvement strategy but performance measurement alone will not achieve the desired goal of improving patient care. Measures can have their greatest effect when they are used judiciously and linked directly to operational steps that clinicians, patients, and health plans can apply in practice to improve care.

Importance of Topic

Incidence and Prevalence

- A study by Coleman and colleagues tracked post-hospital transitions for 30 days in a large, nationally representative sample of Medicare beneficiaries. Transitions in this study were defined as transfers to or from an acute hospital, skilled nursing or rehabilitation facility, or home with or without home health care. Between 12 and 25 percent of all care patterns were categorized as complicated, requiring return to higher intensity care settings. Overall, 46 unique care patterns were identified during the 30-day time period. Sixty-one percent of care episodes resulted in one transition, 18 percent in 2 transitions, 9 percent in 3 transitions, 4 percent in 4 or more transitions, and 8 percent resulted in death.[1]

- Twenty-three percent of hospitalized patients over the age of 65 are discharged to another institution, and 11.6 percent are discharged with home health care.[2]

- An estimated 19 percent of patients discharged from a hospital to a skilled nursing facility (SNF) are readmitted to the hospital within 30 days.[3]

- Transfers from nursing homes to acute-care hospitals comprise 8.5 percent of all Medicare admissions to acute-care hospitals; about 40 percent of these hospitalizations occur within 90 days of nursing home admission. Eighty-four percent of these patients are discharged from the hospital back to their nursing home of origin.[4]

- Jack and colleagues conducted a randomized trial of 749 discharged patients. A nurse discharge advocate worked with 368 patients to arranged follow up appointments, confirm medication reconciliation, and conduct patient

education via a take home booklet. The patients also received a call from a clinical pharmacist 2 to 4 days after discharge to reinforce the discharge plan and review medications. This patient population had a 30 percent decrease in hospital utilization 30 days after discharge, reported a higher degree of preparedness for discharge and had higher rates of PCP follow up within 30 days of discharge.[5]

Cost

- In 2006, there were over 39 million hospital discharges; of those, 13 percent of these patients are repeatedly hospitalized and use 60 percent of the healthcare resources.[6]

- A 2007 report by the Medicare Payment Advisory Commission estimated approximately 18 percent of admissions result in readmissions within 30 days, costing CMS $15 billion.[7]

- The Institute of Medicine estimated that medication errors in inpatient and outpatient settings harm 1.5 million people each year in the United States, at an annual cost of at least $3.5 billion.[8]

Gaps in Care:

- Sabogal and colleagues found that uncoordinated transitions between sites of care, even within the same institution, and between caregivers increase hospital readmissions, medical errors, duplication of services, and waste of resources.[9]

- Moore and colleagues examined three types of discontinuity of care among older patients transferred from the hospital: medication, test result follow-up, and initiation of a recommended work-up. They found that nearly 50 percent of hospitalized patients experienced at least one discontinuity and that patients who did not have a recommended work-up initiated were six times more likely to be re-hospitalized.[10]

- A prospective, cross-sectional study by Roy and colleagues found that approximately 40 percent of patients have pending test results at the time of discharge and that 10 percent of these require some action; yet, outpatient physicians and patients are unaware of these results.[11]

Emergency Department Visits

- The 2008 National Health Statistics Report determined that 2.3 million (2 percent) emergency department visits are from patients who were discharged from the hospital within the previous 7 days.[12]

  The report also cited the following:

  - ten percent of the 2.3 million emergency department visits were for complications related to their recent hospitalization and
  - The uninsured are 3 times more likely to visit the emergency department.

Medication errors

- One study found that an estimated 60 percent of inpatient medication errors occur during times of transition: upon admission, transfer, or discharge of a patient.[13]

- During care transitions, patients receive medications from different prescribers who rarely have access to patients' comprehensive medication list.[14]

- Forster and colleagues found that 19 percent of discharged patients experienced an associated adverse event within three weeks of leaving the hospital; 66 percent of these were adverse drug events.[15]

- An observational study by Coleman and colleagues showed that 14 percent of elderly patients had one or more medication discrepancies and that, within that group of patients, 14 percent were re-hospitalized at 30 days compared to 6 percent of the patients who did not experience a medication discrepancy.[16]

Lapses in communication

- A literature summary published in *JAMA* in 2007 found that direct communication between hospital physicians and primary care physicians occurs infrequently (in 3%-20% of cases studied) and that the availability of a discharge summary at the first post-discharge visit is low (12%-34%) and did not improve greatly even after 4 weeks (51%-77%), affecting the quality of care in approximately 25% of follow-up visits.[17]

- Studies by van Walraven and colleagues documented failures in information transfer after discharge as well as the frequent incompleteness and inaccuracy of the information transferred.[18,19]

- 9% to 48% of readmissions judged preventable; 12% to 75% of all readmissions can be prevented by patient education, pre-discharge assessment and domiciliary aftercare.[20]

Disparities

We are not aware of any publications or evidence outlining disparities in this area.

Measure Harmonization

The PCPI attempts to harmonize measures with other existing measures to the extent feasible. Measure #5 in the Care Transitions measurement set, which has been adapted and is now a part of the PCPI's Heart Failure measurement set (Post-Discharge Appointment for Heart Failure Patients) is partially harmonized with the Joint Commission's Heart Failure – Discharge Instructions measure. No harmonization was necessary for other measures in this measurement set.

Measure Exclusions and Exceptions

Measure Exclusions
The PCPI distinguishes between measure exceptions and measure exclusions. Exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (ie, the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision.

Measure Exceptions
Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences.

For ***process measures***, the PCPI provides two categories of reasons for which a patient may be excluded from the denominator of an individual measure:

- **Medical reasons**
  Include:
  - Contraindicated in patient (potential allergy due to previous reported allergic history, potential adverse drug interaction, other)
  - Already received/performed
  - Intolerant (therapy was tried and the patient was intolerant)
  - Other medical reason(s)

- **Patient or Non-medical reason(s)**
  Include:
    - Patient refused/declined
    - Access issues or insurance coverage/payor-related limitations (patient not covered for treatment)
    - Patient preference: Social reason(s) (eg, family or support system not supportive of intervention/treatment); Religious reason(s) (eg, religious beliefs regarding blood transfusion)
    - Other patient or non-medical reason(s)

These measure exception categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exception for a medical or patient/non-medical reason. For some measures, examples have been provided in the measure exception language of instances that would constitute an exception. Examples are intended to guide clinicians and are not all-inclusive lists of all possible reasons why a patient could be excluded from a measure. There are different approaches for reporting measure exceptions, depending on whether the measure is being reported from an electronic clinical data source or an administrative data source.

Electronic Clinical Data Sources:
Value sets are included in the electronic clinical data source specifications for Medical Reason and Patient Reason. These have been specified in SNOMED-CT and include a broad list of reasons that pertain to each type of exception and cover various situations. The contents of these value sets are broad, and facilitate re-use of the Medical and Patient Reason value sets across measurement sets.

Administrative Data Sources
Exceptions reported from administrative data sources can be reported using a Quality Data Code (QDC), which may be a CPT Category II code or a G-code.

Where CPT Category II codes are used, the exception of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons**: modifier 1P
- **Patient reasons**: modifier 2P

Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the *specific* reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception.

Please refer to documentation for each individual measure for information on the acceptable exception categories and the codes and modifiers to be used for reporting.

Testing of the Measurement Set

The PCPI conducted two distinct testing projects, in accordance with the Measure Testing Protocol for PCPI Measures, at two different points in time to ensure that the Care Transitions performance measures were feasible to implement, valid, and reliable. First, clarity and face validity was tested in a pilot testing project. The second, and separate, testing project examined reliability. Overall, the Care Transitions measures were found to be valid and moderate to highly reliable. Findings from these testing projects have been considered and resulted in modifications to two of the measures, where appropriate.

1) Clarity and Face Validity Pilot Testing
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Midwestern healthcare facilities consisting of a panel of 81 individuals including front line caregivers, administrators, and leadership.

Clarity and Face Validity Pilot Testing Results
Face validity of the measures was rated on a Likert scale from 1 to 5. A rating of 1 signified “very poor” clarity and face validity, 2 signified “poor,” 3 signified “fair,” 4 signified “good,” and 5 signified “very good.” The face validity testing results are as follows:
Measure #1: Rated “very good”
Measure #2: Rated “fair”
Measure #3: Rated “fair”
Measure #4: Rated “fair”

2) Reliability Testing
Reliability testing began in July of 2009 and concluded prior to full NQF endorsement in May 2010. The data samples for reliability testing were gathered from a multi-specialty, medium-sized health practice in the Southern U.S.

Reliability Testing Results
The PCPI measure testing project calculated the kappa statistic* for measure reliability, which ranged from moderate to almost perfect. Agreement percentages from parallel-forms reliability testing ranged from 81.6% to 95%. These results indicate that the measures were found to be moderate to highly reliable.

*Landis, JR and GG Koch. The Measurement of Observer Agreement for Categorical Data. Biometrics Vol 33. No1. March 1977. pp.159-174.

Measure #1: Reconciled Medication List Received by Discharged Patients

(Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

(facility-level measure; included in bundled measure set: Measures 1, 2, & 3)

Care Transitions

Measure Description

Percentage of patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home or any other site of care, or their caregiver(s), who received a reconciled medication list at the time of discharge including, at a minimum, medications in the specified categories

Measure Components

Numerator Statement ➢ **See "Additional Information" for clarification on the bundling of measures 1, 2, & 3**	Patients or their caregiver(s) who received a reconciled medication list at the time of discharge including, at a minimum, medications in the following categories: Medications ***to be Taken*** by Patient ➢ ***Continued**** Medications prescribed *before* inpatient stay that patient should continue to take after discharge, including any change in dosage or directions, AND ➢ ***New**** Medications started *during* inpatient stay that are to be continued after discharge and newly prescribed medications that patient should begin taking after discharge * Prescribed dosage, instructions, and intended duration must be included for each *continued* and *new* medication listed Medications ***NOT*** to be Taken by Patient ➢ ***Discontinued*** Medications taken by patient *before* the inpatient stay that should be discontinued or held after discharge, AND ➢ ***Allergies and Adverse Reactions*** Medications administered *during* the inpatient stay that caused an allergic reaction or adverse event and were therefore discontinued Numerator Instructions: • For the purposes of this measure, "medications" includes prescription, over-the-counter, and herbal products. Generic and proprietary names should be provided for each medication, when available. • Given the complexity of the medication reconciliation process and variability across inpatient facilities in documentation of that process, this measure does not require that the medication list be organized under the "taken/NOT taken" headings OR the specified sub-categories, provided that the status of each medication (continued, new, or discontinued) is specified within the list AND any allergic reactions are identified.
Denominator Statement	All patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home/self care or any other site of care
Denominator Exclusions	Patients who died Patients who left against medical advice (AMA) or discontinued care

Supporting Guideline & Other References	The following evidence statements are quoted verbatim from the referenced clinical guidelines. ***Transition record*** All transitions must include a transition record. There is a minimal set of data elements that should always be part of the transition record: – Principal diagnosis and problem list – Medication list (reconciliation) including OTC/ herbals, allergies and drug interactions – Clearly identifies the medical home/transferring coordinating physician/institution and their contact information – Patient's cognitive status – Test results/pending results (TOCCC, 2008) [21] ***Medication reconciliation*** Reconcile discharge orders with the nursing medication administration record: After discharge from the hospital, a patient may continue taking some medications at home, but not perhaps all of them. Therefore, it is extremely important to compare the discharge medication orders with the nursing medication administration record (MAR) to check for any discrepancies. If a medication the patient has been receiving in the hospital is not in the discharge orders, and there is no adequate documentation indicating why that medication has been omitted, then a nurse or pharmacist should contact the patient's physician to verify whether or not the patient should discontinue use of the medication. • Create a standardized form that lists all the medications the patient has been receiving in the hospital, and include space on the form for physicians to document the reasons for omitting certain medications upon discharge from the hospital. Physicians can also use this form for ordering medications. • Attach the pre-admission medication list to the discharge orders form — the patient may need to discontinue some medications that were being taken at home. • Provide the patient with a comprehensive list of all medications — those being taken before admission plus the new medications from the discharge orders. Clearly indicate the name of each drug, its purpose, and the instructions for taking the medication, as well as any instructions for discontinuing use. (IHI)[22] **NPSG.08.01.01** A process exists for comparing the [patient]'s current medications with those ordered for the [patient] while under the care of the [organization]. 1. At the time the patient enters the hospital or is admitted, a complete list of the medications the patient is taking at home (including dose, route, and frequency) is created and documented. The patient and, as needed, the family are involved in creating this list. 2. The medications ordered for the patient while under the care of the hospital are compared to those on the list created at the time of entry to the hospital or admission. 3. Any discrepancies (that is, omissions, duplications, adjustments, deletions, additions) are reconciled and documented while the patient is under the care of the hospital. 4. When the patient's care is transferred within the hospital (for example, from the ICU to a floor), the current provider(s) informs the receiving provider(s) about the up-to-date reconciled medication list and documents the communication. (See also NPSG.02.05.01, EP 2) Note: Updating the status of a patient's medications is also an important component of all patient care hand-offs. (Joint Commission National Patient Safety Goals, 2009)[23]

	NPSG.08.02.01 When a [patient] is referred to or transferred from one [organization] to another, the complete and reconciled list of medications is communicated to the next provider of service, and the communication is documented. Alternatively, when a [patient] leaves the [organization]'s care to go directly to his or her home, the complete and reconciled list of medications is provided to the [patient]'s known primary care provider, the original referring provider, or a known next provider of service. Note: When the next provider of service is unknown or when no known formal relationship is planned with a next provider, giving the [patient] and, as needed, the family the list of reconciled medications is sufficient. 1. The patient's most current reconciled medication list is communicated to the next provider of service, either within or outside the hospital. The communication between providers is documented. 2. At the time of transfer, the transferring hospital informs the next provider of service how to obtain clarification on the list of reconciled medications. (Joint Commission National Patient Safety Goals, 2009)[23] **NPSG.08.03.01** When a [patient] leaves the [organization]'s care, a complete and reconciled list of the [patient]'s medications is provided directly to the [patient] and, as needed, the family, and the list is explained to the [patient] and/or family. 1. When the patient leaves the hospital's care, the current list of reconciled medications is provided and explained to the patient and, as needed, the family. This interaction is documented. Note: Patients and families are reminded to discard old lists and to update any records with all medication providers or retail pharmacies. (Joint Commission National Patient Safety Goals, 2009) [23]

Measure Importance

Relationship to desired outcome	The Institute of Medicine (IOM) estimated that medication errors in inpatient and outpatient settings harm 1.5 million people each year in the United States, at an annual cost of at least $3.5 billion.[8] Many medication errors (approximately 60% in one inpatient study[13]) occur during times of transition, when patients receive medications from different prescribers who lack access to patients' comprehensive medication list.[14] Providing patients with a comprehensive, reconciled medication list at each care transition (eg, inpatient discharge) may improve patients' ability to manage their medication regimen properly and reduce the number of medication errors. A recent study in Sweden found that providing elderly patients with a structured, comprehensive summary of their medications at discharge significantly reduced the risk of adverse clinical consequences due to medication errors.[24]
Opportunity for Improvement	One observational study showed that 14% of elderly patients had one or more medication discrepancies and that, within that group of patients, 14% were re-hospitalized at 30 days compared to 6% of the patients who did not experience a medication discrepancy.[16] Another study found that 19% of discharged patients experienced an associated adverse event within three weeks of leaving the hospital; 66% of these were adverse drug events.[15]
IOM Domains of Health Care Quality Addressed[25]	• Safe • Patient-centered • Efficient • Equitable
Exclusion	Exclusions arise when patients who are included in the initial patient or eligible population for a

Justification	measure do not meet the denominator criteria specific to the intervention required by the numerator. Exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. Patients who expired and patients who left against medical advice (AMA) are categorized by inpatient facilities as having been "discharged" (with specific discharge status codes) and must therefore be excluded from the denominators for these measures. The Care Transitions Work Group acknowledges that it may be feasible to provide patients who leave AMA with a medication list and transition record (and to transmit this information to the facility/physician providing follow-up care), but not necessarily with the level of detail specified in these measures.
Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.

Measure Designation

Measure purpose	• Quality Improvement • Accountability
Type of measure	• Process
Level of Measurement	• Facility
Care setting	• Discharge from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility)
Data source	• Administrative data • Medical record • Electronic health record system • Retrospective data collection flowsheet

Technical Specifications: Administrative Data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using medical record abstraction (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.
The specifications listed below are those needed for performance calculation.
Note: Facilities are responsible for determining the appropriate use of codes.

	Facility-Level Specifications
Denominator (Eligible Population)	Identify patients discharged from inpatient facility using the following: UB-04 (Form Locator 04 - Type of Bill): • 0111 (Hospital Inpatient (Including Medicare Part A), Admit through Discharge Claim) • 0114 (Hospital Inpatient (Including Medicare Part A), Interim - Last Claim) • 0121 (Hospital Inpatient (Medicare Part B only), Admit through Discharge Claim) • 0124 (Hospital Inpatient (Medicare Part B only), Interim - Last Claim) • 0181 (Hospital - Swing Beds, Admit through Discharge Claim) • 0184 (Hospital - Swing Beds, Interim - Last Claim) • 0211 (Skilled Nursing - Inpatient (Including Medicare Part A), Admit through Discharge Claim) • 0214 (Skilled Nursing - Inpatient (Including Medicare Part A), Interim - Last Claim) • 0221 (Skilled Nursing - Inpatient (Medicare Part B only), Admit through Discharge Claim) • 0224 (Skilled Nursing - Inpatient (Medicare Part B only), Interim - Last Claim) • 0281 (Skilled Nursing-Swing Beds, Admit through Discharge Claim) • 0284 (Skilled Nursing-Swing Beds, Interim, Last Claim) AND

Discharge Status (Form Locator 17)

- 01 (Discharged to home or self care (routine discharge)
- 02 (Discharged/transferred to a short term general hospital for inpatient care)
- 03 (Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of skilled care)
- 04 (Discharged/transferred to a facility that provides custodial or supportive care)
- 05 (Discharged/transferred to a designated cancer center or children's hospital)
- 06 (Discharged/transferred to home under care of an organized home health service organization in anticipation of covered skilled care)
- 21 (Discharged/transferred to court/law enforcement)
- 43 (Discharged/transferred to a federal health care facility)
- 50 (Hospice – home)
- 51 (Hospice - medical facility (certified) providing hospice level of care)
- 61 (Discharged/transferred to hospital-based Medicare approved swing bed)
- 62 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital)
- 63 (Discharged/transferred to a Medicare certified long term care hospital (LTCH))
- 64 (Discharged/transferred to a nursing facility certified under Medicaid but not certified under Medicare)
- 65 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital)
- 66 (Discharged/transferred to a Critical Access Hospital (CAH))
- 69 (Discharged/transferred to a designated disaster alternative care site)
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)
- 81 (Discharged to home or self care with a planned acute care hospital inpatient readmission)
- 82 (Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission)
- 83 (Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission)
- 84 (Discharged/transferred to a facility that provides custodial or supportive care with a planned acute care hospital inpatient readmission)
- 85 (Discharged/transferred to a designated cancer center or children's hospital with a planned acute care hospital inpatient readmission)
- 86 (Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission)
- 87 (Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission)
- 88 (Discharged/transferred to a federal health care facility with a planned acute care hospital inpatient readmission
- 89 (Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission)
- 90 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital with a planned acute care hospital inpatient readmission)
- 91 (Discharged/transferred to a Medicare certified long term care hospital (LTCH) with a planned acute care hospital inpatient readmission)
- 92 (Discharged/transferred to nursing facility certified under Medicaid but not certified under Medicare with a planned acute care hospital inpatient readmission)
- 93 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission)

- 94 (Discharged/transferred to a critical access hospital (CAH) with a planned acute care hospital inpatient readmission)
- 95 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list with a planned acute care hospital inpatient readmission

OR

UB-04 (Form Locator 04 - Type of Bill):
- 0131 (Hospital Outpatient, Admit through Discharge Claim)
- 0134 (Hospital Outpatient, Interim - Last Claim)

AND
UB-04 (Form Locator 42 - Revenue Code):
- 0762 (Hospital Observation)
- 0490 (Ambulatory Surgery)
- 0499 (Other Ambulatory Surgery)

AND
Discharge Status (Form Locator 17)
- 01 (Discharged to home or self care (routine discharge)
- 02 (Discharged/transferred to a short term general hospital for inpatient care)
- 03 (Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of skilled care)
- 04 (Discharged/transferred a facility that provides custodial or supportive care)
- 05 (Discharged/transferred to a designated cancer center or children's hospital)
- 06 (Discharged/transferred to home under care of an organized home health service organization in anticipation of covered skilled care)
- 21 (Discharged/transferred to court/law enforcement)
- 43 (Discharged/transferred to a federal health care facility)
- 50 (Hospice – home)
- 51 (Hospice - medical facility (certified) providing hospice level of care)
- 61 (Discharged/transferred to hospital-based Medicare approved swing bed)
- 62 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital)
- 63 (Discharged/transferred to a Medicare certified long term care hospital (LTCH))
- 64 (Discharged/transferred to a nursing facility certified under Medicaid but not certified under Medicare)
- 65 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital)
- 66 (Discharged/transferred to a Critical Access Hospital (CAH))
- 69 (Discharged/transferred to a designated disaster alternative care site)
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)
- 81 (Discharged to home or self care with a planned acute care hospital inpatient readmission)
- 82 (Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission)
- 83 (Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission)
- 84 (Discharged/transferred to a facility that provides custodial or supportive care with a planned acute care hospital inpatient readmission)
- 85 (Discharged/transferred to a designated cancer center or children's hospital

	with a planned acute care hospital inpatient readmission) • 86 (Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission) • 87 (Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission) • 88 (Discharged/transferred to a federal health care facility with a planned acute care hospital inpatient readmission • 89 (Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission) • 90 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital with a planned acute care hospital inpatient readmission) • 91 (Discharged/transferred to a Medicare certified long term care hospital (LTCH) with a planned acute care hospital inpatient readmission) • 92 (Discharged/transferred to nursing facility certified under Medicaid but not certified under Medicare with a planned acute care hospital inpatient readmission) • 93 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission) • 94 (Discharged/transferred to a critical access hospital (CAH) with a planned acute care hospital inpatient readmission) • 95 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list with a planned acute care hospital inpatient readmission)
Numerator	**Numerator Elements to be identified through medical record abstraction:** See Sample Data Collection Tool below.
Denominator Exclusions	UB-04 (Form Locator 17 - Discharge Status): • 07 (Left against medical advice or discontinued care) • 20 (Expired) • 40 (Expired at home) • 41 (Expired in a medical facility (e.g. hospital, SNF, ICF, or free standing hospice)) • 42 (Expired-place unknown)

Technical Specifications: Electronic Health Record System

The PCPI seeks to facilitate the integration of its measures into electronic health record (EHR) systems, registries, and applications used by physicians and other health care professionals that improve health care quality and prevent medical errors. In particular, it is valuable to have data for measurement and improvement available at the point of care and for practice-wide or facility-wide analysis as well as for external reporting.

The Care Transitions measures do not lend themselves to a "traditional specification" for EHR reporting, where data elements, logic and clinical coding are identified to calculate the measure, due to the fact that every facility may have a different template for medication reconciliation and the information required for this measure is based on individualized patient information unique to one episode of care (ie, inpatient stay). We have provided guidance on how a facility should query the electronic health record for the information required for this measure.

Producing the Reconciled Medication List

Facilities that have implemented an EHR system should utilize their system to produce a standardized template for the Reconciled Medication List. A standardized template will ensure that all required data elements specified in the measure are included whenever a Reconciled Medication List is generated from the EHR. Each facility has the autonomy to

customize the format of the Reconciled Medication List, based on clinical workflow, policies and procedures, and the patient population treated at the individual institution.

Systematic External Reporting that the Reconciled Medication List was provided to patient
In order to report, at the facility level, which of the discharged patients have received a Reconciled Medication List, a discrete data field and code indicating the patient received a reconciled medication list at discharge may be needed in the EHR. Each facility should determine the most effective way to identify whether or not the patient received the reconciled medication list.

Transmitting the Reconciled Medication List
This performance measure does not require that the Reconciled Medication List be transmitted to the next provider(s) of care. However, if it is transmitted to the next provider(s) of care, it should be done so in accordance with established approved standards for interoperability. The ONC Health IT Standards Committee (HITSC) has recommended that certain vocabulary standards are used for quality measure reporting, in accordance with the Quality Data Model (https://ecqi.healthit.gov/qdm). RxNorm has been named as the recommended vocabulary for medications and can be used to identify the medications to which the allergies exist. Allergies (non-substance) and Adverse Events to medications should be expressed using SNOMED-CT. The use of recognized industry interoperability standards for the transmission of the Reconciled Medication List information will ensure that the information can be received into the destination EHR.

Technical Specifications: Retrospective Data Collection Flowsheet

This form is intended to be used for patients who were discharged from the inpatient setting (eg, hospital inpatient or observation, skilled nursing facility or rehabilitation facility), does not include patients that left against medical advice (AMA) or patients that expired during their inpatient visit.

Reconciled Medication List Received by Discharged Patients

Patient Name:

Medical Record Number or other patient identifier:

Date of Discharge:

Numerator:

		Elements in Reconciled Medication List	Yes	No	Instructions
Reconciled Medication List with all of the specified elements		**Did patient receive a reconciled medication list at discharge?** *(Underlined terms are defined below)*			If yes, answer questions (1-8) to determine that all appropriate elements were included. If NO, patient does not meet measure. STOP
Continued	1.	Are there medication (s) that were prescribed that the patient should continue to take after discharge?			If YES, answer #2. If NO, SKIP to question #3.
	2.	Are the continued medication(s) included in the reconciled medication list (including prescribed dosage, instructions and intended duration)?			
New	3.	Are there new medication(s) that have been prescribed for the patient?			If YES, answer #4 If NO, SKIP to question #5.
	4.	Are the new medication(s) included in the reconciled medication list (including prescribed dosage, instructions and			

		intended duration)?			
Discontinued	5.	Are there medication(s) the patient was taking prior to the inpatient stay that should be discontinued or held after discharge?			If YES, answer #6 If NO, SKIP to question #7.
	6.	Are the discontinued medication(s) included in the reconciled medication list?			
Allergies and Adverse Reactions	7.	Did any medication(s) administered during the inpatient stay cause the patient to have an allergic reaction or adverse event?			If YES, answer #8 If NO, proceed to Reconciled Medication List with all of the specified elements section
	8.	Is the medication(s) that caused an allergic reaction or adverse event included as a discontinued medication in the reconciled medication list?			
Reconciled Medication List with all of the specified elements		**Did patient receive a reconciled medication list at discharge, with all appropriate elements?**			Review required elements above to determine if all applicable elements were included in reconciled medication list.

Definition of Terms:

Medications	Includes prescription, over-the-counter, and herbal products. Generic and proprietary names should be provided for each medication, when available.
Continued	Medications prescribed *before* inpatient stay that patient should continue to take after discharge, including any change in dosage or directions that differs from what the patient was taking prior to the inpatient stay
New	Medications started *during* inpatient stay that are to be continued after discharge or newly prescribed medications that patient should begin taking after discharge

Additional Information

Measures 1, 2, & 3 address closely related, interdependent aspects of the transition in care for patients discharged from an inpatient facility and are therefore proposed as a bundled set of measures. The intent of this proposal is that the measures always be used together when assessing performance; no one of these measures should be selected for use independently. The bundling of the measures is *not* intended to suggest the use of any particular scoring methodology (ie, a composite score), nor does it imply either equality or difference in the relative "weights" of the three measures. A performance score for each of the three measures should be reported individually.

This rationale and methodology for a measure bundle are consistent with the definitions for "bundle" and "composite" provided by the Institute for Healthcare Improvement (IHI):

> Bundle – a series of interventions related to a specific condition that, when implemented together, will achieve significantly better outcomes than when implemented individually.
>
> Composite measure – a combination of two or more individual measures into a single measure that results in a single score. (www.ihi.org)

Measure #2: Transition Record with Specified Elements Received by Discharged Patients

(Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

(facility-level measure; included in bundled measure set: Measures 1, 2, & 3)

Care Transitions

Measure Description

Percentage of patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home or any other site of care, or their caregiver(s), who received a transition record (and with whom a review of all included information was documented) at the time of discharge including, at a minimum, *all* of the specified elements

Measure Components

Numerator Statement

- **See "Additional Information" for clarification of numerator elements and the bundling of measures 1, 2, & 3**

Patients or their caregiver(s) who received a transition record[a] (and with whom a review of all included information was documented) at the time of discharge including, at a minimum, *all* of the following elements:

Inpatient Care

- Reason for inpatient admission, AND
- Major procedures and tests performed during inpatient stay and summary of results, AND
- Principal diagnosis at discharge

Post-Discharge/ Patient Self-Management

- Current medication list,[b] AND
- Studies pending at discharge (eg, laboratory, radiological) , AND
- Patient instructions

Advance Care Plan

- Advance directives[c] or surrogate decision maker documented **OR** Documented reason for not providing advance care plan[d]

Contact Information/ Plan for Follow-up Care[e]

- 24-hour/7-day contact information including physician for emergencies related to inpatient stay, AND
- Contact information for obtaining results of studies pending at discharge, AND
- Plan for follow-up care,[f] AND
- Primary physician, other health care professional, or site designated for follow-up care[g]

Numerator Element Definitions*:*

a. Transition record: a core, standardized set of data elements related to patient's diagnosis, treatment, and care plan that is discussed with and provided to patient in printed or electronic format at each transition of care, and transmitted to the facility/physician/other health care professional providing follow-up care. Electronic format may be provided only if acceptable to patient.
b. Current medication list: all medications to be taken by patient after discharge, including all continued and new medications
c. Advance directives: eg, written statement of patient wishes regarding future use of life-

	sustaining medical treatment d. Documented reason for not providing advance care plan: documentation that advance care plan was discussed but patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan, OR documentation as appropriate that the patient's cultural and/or spiritual beliefs preclude a discussion of advance care planning as it would be viewed as harmful to the patient's beliefs and thus harmful to the physician-patient relationship e. Contact information/ plan for follow-up care: For patients discharged to an inpatient facility, the transition record may indicate that these four elements are to be discussed between the discharging and the "receiving" facilities. f. Plan for follow-up care: may include any post-discharge therapy needed (eg, oxygen therapy, physical therapy, occupational therapy), any durable medical equipment needed, family/psychosocial resources available for patient support, etc. g. Primary physician or other health care professional designated for follow-up care: may be designated primary care physician (PCP), medical specialist, or other physician or health care professional
Denominator Statement	All patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home/self care or any other site of care
Denominator Exclusions	Patients who died Patients who left against medical advice (AMA) or discontinued care
Supporting Guideline & Other References	The following evidence statements are quoted verbatim from the referenced clinical guidelines. ***Transition record*** All transitions must include a transition record. There is a minimal set of data elements that should always be part of the transition record: – Principal diagnosis and problem list – Medication list (reconciliation) including OTC/ herbals, allergies and drug interactions – Clearly identifies the medical home/transferring coordinating physician/institution and their contact information – Patient's cognitive status – Test results/pending results (TOCCC, 2008) [21] Patients and/or their family/caregivers must receive, understand and be encouraged to participate in the development of their transition record which should take into consideration the patient's health literacy, insurance status and be culturally sensitive. (TOCCC, 2008) **Standard PC.04.02.01** When a [patient] is discharged or transferred, the [organization] gives information about the care, treatment, and services provided to the [patient] to other service providers who will provide the [patient] with care, treatment, or services. • At the time of the patient's discharge or transfer, the hospital informs other service providers who will provide care, treatment, or services to the patient about the following: - The reason for the patient's discharge or transfer - The patient's physical and psychosocial status - A summary of care, treatment, and services it provided to the patient - The patient's progress toward goals - A list of community resources or referrals made or provided to the patient (See also PC.02.02.01, EP 1) (Joint Commission, 2009)[23]

	Standard PC.04.01.05 Before the [organization] discharges or transfers a [patient], it informs and educates the [patient] about his or her follow-up care, treatment, and services. 1. When the hospital determines the patient's discharge or transfer needs, it promptly shares this information with the patient. 2. Before the patient is discharged, the hospital informs the patient of the kinds of continuing care, treatment, and services he or she will need. 3. When the patient is discharged or transferred, the hospital provides the patient with information about why he or she is being discharged or transferred. 5. Before the patient is transferred, the hospital provides the patient with information about any alternatives to the transfer. 7. The hospital educates the patient about how to obtain any continuing care, treatment, and services that he or she will need. 8. The hospital provides written discharge instructions in a manner that the patient and/or the patient's family or caregiver can understand. (See also RI.01.01.03, EP 1) (Joint Commission, 2009) [23]

Measure Importance

Relationship to desired outcome	Providing detailed discharge information enhances patients' preparation to self-manage post-discharge care and comply with treatment plans. Additionally, randomized trials have shown that many hospital readmissions can be prevented by patient education, predischarge assessment, and domiciliary aftercare.[20] One recent study found that patients participating in a hospital program providing detailed, personalized instructions at discharge, including a review of medication routines and assistance with arranging follow-up appointments, had 30% fewer subsequent emergency visits and hospital readmissions than patients who received usual care at discharge.[5]
Opportunity for Improvement	A prospective, cross-sectional study of discharged patients found that approximately 40% have pending test results at the time of discharge and that 10% of these require some action; yet outpatient physicians and patients are unaware of these results.[11] A more recent literature summary found that discharge summaries often lacked information important for follow-up care, including diagnostic test results (missing in 33-63% of summaries), treatment or hospital course (7-22%), discharge medications (2-40%), test results pending at discharge (65%), and follow-up plans (2-43%).[17]
IOM Domains of Health Care Quality Addressed [25]	• Safe • Patient-centered • Efficient • Equitable
Exclusion Justification	Exclusions arise when patients who are included in the initial patient or eligible population for a measure do not meet the denominator criteria specific to the intervention required by the numerator. Exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. Patients who expired and patients who left against medical advice (AMA) are categorized by inpatient facilities as having been "discharged" (with specific discharge status codes) and must therefore be excluded from the denominators for these measures. The Care Transitions Work Group acknowledges that it may be feasible to provide patients who leave AMA with a medication list and transition record (and to transmit this information to the facility/physician providing follow-up care), but not necessarily with the level of detail specified in

	these measures.
Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.

Measure Designation

Measure purpose	• Quality Improvement • Accountability
Type of measure	• Process
Level of Measurement	• Facility
Care setting	• Discharge from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility)
Data source	• Administrative data • Medical record • Electronic health record system • Retrospective data collection flowsheet

Technical Specifications: Administrative Data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using medical record abstraction (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.
The specifications listed below are those needed for performance calculation.
Note: Facilities are responsible for determining the appropriate use of codes.

	Facility-Level Specifications
Denominator (Eligible Population)	Identify patients discharged from inpatient facility using the following: UB-04 (Form Locator 04 - Type of Bill): • 0111 (Hospital Inpatient (Including Medicare Part A), Admit through Discharge Claim) • 0114 (Hospital Inpatient (Including Medicare Part A), Interim - Last Claim) • 0121 (Hospital Inpatient (Medicare Part B only), Admit through Discharge Claim) • 0124 (Hospital Inpatient (Medicare Part B only), Interim - Last Claim) • 0181 (Hospital - Swing Beds, Admit through Discharge Claim) • 0184 (Hospital - Swing Beds, Interim - Last Claim) • 0211 (Skilled Nursing-Inpatient (Including Medicare Part A), Admit through Discharge Claim) • 0214 (Skilled Nursing-Inpatient (Including Medicare Part A), Interim - Last Claim) • 0221 (Skilled Nursing-Inpatient (Medicare Part B only), Admit through Discharge Claim) • 0224 (Skilled Nursing- Inpatient (Medicare Part B only), Interim - Last Claim) • 0281 (Skilled Nursing-Swing Beds, Admit through Discharge Claim) • 0284 (Skilled Nursing-Swing Beds, Interim - Last Claim) AND Discharge Status (Form Locator 17) • 01 (Discharged to home or self care (routine discharge) • 02 (Discharged/transferred to a short term general hospital for inpatient care) • 03 (Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of skilled care) • 04 (Discharged/transferred to a facility that provides custodial or supportive care) • 05 (Discharged/transferred to a designated cancer center or children's hospital) • 06 (Discharged/transferred to home under care of an organized home health

service organization in anticipation of covered skilled care)
- 21 (Discharged/transferred to court/law enforcement)
- 43 (Discharged/transferred to a federal health care facility)
- 50 (Hospice – home)
- 51 (Hospice - medical facility (certified) providing hospice level of care)
- 61 (Discharged/transferred to hospital-based Medicare approved swing bed)
- 62 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital)
- 63 (Discharged/transferred to a Medicare certified long term care hospital (LTCH))
- 64 (Discharged/transferred to a nursing facility certified under Medicaid but not certified under Medicare)
- 65 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital)
- 66 (Discharged/transferred to a Critical Access Hospital (CAH))
- 69 (Discharged/transferred to a designated disaster alternative care site)
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)
- 81 (Discharged to home or self care with a planned acute care hospital inpatient readmission)
- 82 (Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission)
- 83 (Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission)
- 84 (Discharged/transferred to a facility that provides custodial or supportive care with a planned acute care hospital inpatient readmission)
- 85 (Discharged/transferred to a designated cancer center or children's hospital with a planned acute care hospital inpatient readmission)
- 86 (Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission)
- 87 (Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission)
- 88 (Discharged/transferred to a federal health care facility with a planned acute care hospital inpatient readmission
- 89 (Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission)
- 90 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital with a planned acute care hospital inpatient readmission)
- 91 (Discharged/transferred to a Medicare certified long term care hospital (LTCH) with a planned acute care hospital inpatient readmission)
- 92 (Discharged/transferred to nursing facility certified under Medicaid but not certified under Medicare with a planned acute care hospital inpatient readmission)
- 93 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission)
- 94 (Discharged/transferred to a critical access hospital (CAH) with a planned acute care hospital inpatient readmission)
- 95 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list with a planned acute care hospital inpatient readmission)

OR

UB-04 (Form Locator 04 - Type of Bill):

- 0131 (Hospital Outpatient, Admit through Discharge Claim)
- 0134 (Hospital Outpatient, Interim - Last Claim)

AND
UB-04 (Form Locator 42 - Revenue Code):

- 0762 (Hospital Observation)
- 0490 (Ambulatory Surgery)
- 0499 (Other Ambulatory Surgery)

AND
Discharge Status (Form Locator 17)

- 01 (Discharged to home or self care (routine discharge)
- 02 (Discharged/transferred to a short term general hospital for inpatient care)
- 03 (Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of skilled care)
- 04 (Discharged/transferred to a facility that provides custodial or supportive care)
- 05 (Discharged/transferred to a designated cancer center or children's hospital
- 06 (Discharged/transferred to home under care of an organized home health service organization in anticipation of covered skilled care)
- 21 (Discharged/transferred to court/law enforcement)
- 43 (Discharged/transferred to a federal health care facility)
- 50 (Hospice – home)
- 51 (Hospice - medical facility (certified) providing hospice level of care)
- 61 (Discharged/transferred to hospital-based Medicare approved swing bed)
- 62 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital)
- 63 (Discharged/transferred to a Medicare certified long term care hospital (LTCH))
- 64 (Discharged/transferred to a nursing facility certified under Medicaid but not certified under Medicare)
- 65 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital)
- 66 (Discharged/transferred to a Critical Access Hospital (CAH))
- 69 (Discharged/transferred to a designated disaster alternative care site)
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)
- 81 (Discharged to home or self-care with a planned acute care hospital inpatient readmission)
- 82 (Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission)
- 83 (Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission)
- 84 (Discharged/transferred to a facility that provides custodial or supportive care with a planned acute care hospital inpatient readmission)
- 85 (Discharged/transferred to a designated cancer center or children's hospital with a planned acute care hospital inpatient readmission)
- 86 (Discharged/transferred to home under care of organized home health service organization with a planned acute care hospital inpatient readmission)
- 87 (Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission)
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Numerator	**Numerator Elements to be identified through medical record abstraction:** See Sample Data Collection Tool below.
Denominator Exclusions	UB-04 (Form Locator 17 - Discharge Status): • 07 (Left against medical advice or discontinued care) • 20 (Expired) • 40 (Expired at home) • 41 (Expired in a medical facility (e.g. hospital, SNF, ICF, or free standing hospice)) • 42 (Expired-place unknown)

Technical Specifications: Electronic Health Record System

The PCPI seeks to facilitate the integration of its measures into electronic health record (EHR) systems, registries, and applications used by physicians and other health care professionals that improve health care quality and prevent medical errors. In particular, it is valuable to have data for measurement and improvement available at the point of care and for practice-wide or facility-wide analysis as well as for external reporting.

The Care Transitions measures do not lend themselves to a "traditional specification" for EHR reporting, where data elements, logic and clinical coding are identified to calculate the measure, due to the fact the fact that every facility may have a different template for a transition record and the information required for this measure is based on individualized patient information unique to one episode of care (ie, inpatient stay). We have provided guidance on how a facility should query the electronic health record for the information required for this measure.

As the quality measures arena moves forward with EHR reporting, the Care Transitions measures will be aligned with the ONC Health IT Standards Committee (HITSC) recommendations that certain vocabulary standards be used for quality measure reporting, in accordance with the Quality Data Model (https://ecqi.healthit.gov/qdm).

Producing the Transition Record with Specified Elements

Facilities that have implemented an EHR should utilize their system to produce a standardized template that providers will complete to generate the Transition Record. A standardized template will ensure that all data elements specified in the performance measure are included each time a Transition Record is prepared. Each facility has the autonomy to customize the format of the Transition Record, based on clinical workflow, policies and procedures, and the patient population treated at the individual institution

Transmitting the Transition Record with Specified Elements

This performance measure does not require that the Transition Record be transmitted to the next provider(s) of care. However, if the Transition Record is transmitted to the next provider(s) of care, it should be done so in accordance with established approved standards for interoperability. The ONC Health IT Standards Committee (HITSC) has recommended that certain vocabulary standards are used for quality measure reporting, in accordance with the Quality Data Model. In addition, the use of recognized interoperability standards for the transmission of the Transition Record information will ensure that the information can be received into the destination EHR.

Systematic External Reporting of the Transition Record

In order to report, at the facility level, which of the discharged patients have received a Transition Record, a discrete data field and code indicating the patient received a Transition Record at discharge may be needed in the EHR.

Technical Specifications: Retrospective Data Collection Flowsheet

This form is intended to be used for patients who were discharged from the inpatient setting, does not include patients that left against medical advice (AMA) or patients that expired during their inpatient visit.

Transition Record with Specified Elements Received by Discharged Patients
and
Timely Transmission of Transition Record
(Inpatient Discharges to Home/Self Care or Any Other Site of Care)

Patient Name:

Medical Record Number or other patient identifier:

Date of Discharge:

Numerator:

		Yes	No	Instructions
Transition Record with all of the specified elements	**Did patient receive a Transition Record at discharge?** *(Underlined terms are defined below)*			If yes, answer questions below to determine that all appropriate elements were included in the Transition Record.
	Are the following elements included in Transition Record?	**Yes**	**No**	If a given element does not apply to patient, transition record should state the same (eg, no pending studies at discharge)
Inpatient Care	Reason for inpatient admission			
	Major procedures and tests, including summary of results			
	Principal diagnosis at discharge			
Post-Discharge/ Patient Self-Management	Current Medication List			
	Studies Pending at Discharge (or documentation that no studies are pending)			
	Patient Instructions			
Advance Care Plan	Advance directives or surrogate decision maker documented OR Documented reason for not providing advance care plan			
Contact Information/ Plan for Follow-Up Care	24-hour/7-day contact information including physician for emergencies related to inpatient stay			
	Contact information for obtaining results of studies pending at discharge			
	Plan for follow-up care			
	Primary physician, other health care professional, or site designated for follow-up care			

Transition Record with all of the specified elements	**Are ALL specified elements included in the transition record?**			*Review responses above to determine if all elements were included in transition record*

Discharge Information	Date and time patient was discharged from facility		
	Date and time Transition Record was transmitted to receiving facility, or physician, or other health care professional		
	Was Transition Record transmitted within 24 hours of discharge?	**Yes**	**No**

Definition of Terms:

Transition record	A core, standardized set of data elements related to patient's diagnosis, treatment, and care plan that is discussed with and provided to patient in a printed or electronic format at each transition of care, and transmitted to the facility/physician/other health care professional providing follow-up care. The Transition record may be provided only in electronic format if acceptable to patient.
Current medication list	All medications to be taken by patient after discharge, including all continued and new medications
Advance directives	eg, written statement of patient wishes regarding future use of life-sustaining medical treatment
Documented reason for not providing advance care plan	Documentation that advance care plan was discussed but patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan, OR documentation as appropriate that the patient's cultural and/or spiritual beliefs preclude a discussion of advance care planning as it would be viewed as harmful to the patient's beliefs and thus harmful to the physician-patient relationship
Contact information/ plan for follow-up care	For patients discharged to an inpatient facility, the transition record may indicate that these four elements are to be discussed between the discharging and the "receiving" facilities.
Plan for follow-up care	May include any post-discharge therapy needed (eg, oxygen therapy, physical therapy, occupational therapy), any durable medical equipment needed, family/psychosocial resources available for patient support, etc.
Primary physician or other health care professional designated for follow-up care	May be designated primary care physician (PCP), medical specialist, or other physician or health care professional
Transmitted	Transition record may be transmitted to the facility or physician or other health care professional designated for follow-up care via fax, secure e-mail, or mutual access to an electronic health record (EHR).

Additional Information

By requiring the completion and prompt transmission of a detailed "transition record" for discharged patients, these measures are promoting a significant enhancement to the customary use of the "discharge summary," the traditional means of information transfer for which existing standards require completion within 30 days. Numerous studies have documented the prevalence of communication gaps and discontinuities in care for patients after discharge,[9-11] and the significant effect of these lapses on hospital readmissions and other indicators of the quality of transitional care.[17-20] Current information and communication technology can facilitate the routine completion and transmission of a transition record within 24 hours of discharge, which could greatly reduce communication gaps and may have a positive downstream effect on patient outcomes.

Consistent with the cited Joint Commission standards, the information in the transition record should be provided in a manner that can be understood by patients or their caregivers. Patient/caregiver understanding of this information may be assessed by various methods, including "teach-back."

Measures 1, 2, & 3 address closely related, interdependent aspects of the transition in care for patients discharged from an inpatient facility and are therefore proposed as a bundled set of measures. The intent of this proposal is that the measures always be used together when assessing performance; no one of these measures should be selected for use independently. The bundling of the measures is *not* intended to suggest the use of any particular scoring methodology (ie, a composite score), nor does it imply either equality or difference in the relative "weights" of the three measures. A performance score for each of the three measures should be reported individually.

This rationale and methodology for a measure bundle are consistent with the definitions for "bundle" and "composite" provided by the Institute for Healthcare Improvement (IHI):

> Bundle – a series of interventions related to a specific condition that, when implemented together, will achieve significantly better outcomes than when implemented individually.
>
> Composite measure – a combination of two or more individual measures into a single measure that results in a single score. (www.ihi.org)

Measure #3: Timely Transmission of Transition Record

(Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

(facility-level measure; included in bundled measure set: Measures 1, 2, & 3)

Care Transitions

Measure Description

Percentage of patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home or any other site of care for whom a transition record was transmitted to the facility or primary physician or other health care professional designated for follow-up care within 24 hours of discharge

Measure Components

Numerator Statement ➢ **See "Additional Information" for clarification on the bundling of measures 1, 2, & 3**	Patients for whom a transition record[a] was transmitted[b] to the facility or primary physician or other health care professional designated for follow-up care[c] within 24 hours of discharge Numerator Element Definitions: a. Transition record: a core, standardized set of data elements related to patient's diagnosis, treatment, and care plan that is discussed with and provided to patient in printed or electronic format at each transition of care, and transmitted to the facility/physician/other health care professional providing follow-up care. Electronic format may be provided only if acceptable to patient. b. Transmitted: transition record may be transmitted to the facility or physician or other health care professional designated for follow-up care via fax, secure e-mail, or mutual access to an electronic health record (EHR) *c.* Primary physician or other health care professional designated for follow-up care: may be designated primary care physician (PCP), medical specialist, or other physician or health care professional
Denominator Statement	All patients, regardless of age, discharged from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home/self care or any other site of care
Denominator Exclusions	Patients who died Patients who left against medical advice (AMA) or discontinued care
Supporting Guideline & Other References	The following evidence statements are quoted verbatim from the referenced clinical guidelines. **Coordinating Clinicians** Communication and information exchange between the Medical Home and the receiving provider should occur in an amount of time that will allow the receiving provider to effectively treat the patient. This communication should ideally occur whenever patients are at a transition of care; eg, at discharge from the inpatient setting. The timeliness of this communication should be consistent with the patient's clinical presentation and, in the case of a patient being discharged, the urgency of the follow-up required. Communication and information exchange between the MH and the physician may be in the form of a call, voicemail, fax, or other secure, private, and accessible means, including mutual access to an EHR. (TOCCC, 2008)[21] **Standard PC.02.02.01** The [organization] coordinates the [patient]'s care, treatment, and services based on the [patient]'s needs.

1. The hospital has a process to receive or share patient information when the patient is referred to other internal or external providers of care, treatment, and services. (See also PC.04.02.01, EP 1) (The Joint Commission, 2009)[23]

Standard PC.04.02.01
When a [patient] is discharged or transferred, the [organization] gives information about the care, treatment, and services provided to the [patient] to other service providers who will provide the [patient] with care, treatment, or services.

1. At the time of the patient's discharge or transfer, the hospital informs other service providers who will provide care, treatment, or services to the patient about the following:
   - The reason for the patient's discharge or transfer
   - The patient's physical and psychosocial status
   - A summary of care, treatment, and services it provided to the patient
   - The patient's progress toward goals
   - A list of community resources or referrals made or provided to the patient
   (See also PC.02.02.01, EP 1) (Joint Commission, 2009)

Safe Practice #8: Communication of Critical Information
Ensure that care information is transmitted and appropriately documented in a timely manner and in a clearly understandable form to patients and to all of the patient's healthcare providers/professionals, within and between care settings, who need that information to provide continued care. (National Quality Forum Safe Practices, 2006)[26]

Safe Practice #11: Discharge Systems
A "discharge plan" must be prepared for each patient at the time of hospital discharge, and a concise discharge summary must be prepared for and relayed to the clinical caregiver accepting responsibility for postdischarge care in a timely manner.

Organizations must ensure that there is confirmation of the receipt of the discharge information by the independent licensed practitioner who will assume the responsibility for care after discharge.

- A discharge summary must be provided to the clinical provider who accepts the patient's care after hospital discharge. At a minimum, the discharge summary should include the following:
  - the reason for hospitalization;
  - significant findings;
  - procedures performed and care, treatment, and services provided to the patient
  - the patient's condition at discharge
  - information provided to the patient and family
  - a comprehensive and reconciled medication list; and
  - a list of acute medical issues and tests and studies for which confirmed results were unavailable at the time of discharge that require follow-up

The organization should ensure and document the receipt of the discharge information by caregivers who assume responsibility for postdischarge care. This confirmation may occur via telephone, fax, e-mail response, or other electronic response using health information technologies. (National Quality Forum Safe Practices, 2006)[26]

Measure Importance

Relationship to	The availability of the patient's discharge information at the first post-discharge physician visit

desired outcome	improves the continuity of care and may be associated with a decreased risk of rehospitalization.[18]
Opportunity for Improvement	A recent literature summary found that direct communication between hospital physicians and primary care physicians occurred infrequently (in 3-20% of cases studied) and that the availability of a discharge summary at the first post-discharge visit was low (12-34%) and did not improve greatly even after 4 weeks (51-77%), affecting the quality of care in approximately 25% of follow-up visits.[17]
IOM Domains of Health Care Quality Addressed[25]	• Safe • Patient-centered • Timely • Efficient • Equitable
Exclusion Justification	Exclusions arise when patients who are included in the initial patient or eligible population for a measure do not meet the denominator criteria specific to the intervention required by the numerator. Exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. Patients who expired and patients who left against medical advice (AMA) are categorized by inpatient facilities as having been "discharged" (with specific discharge status codes) and must therefore be excluded from the denominators for these measures. The Care Transitions Work Group acknowledges that it may be feasible to provide patients who leave AMA with a medication list and transition record (and to transmit this information to the facility/physician providing follow-up care), but not necessarily with the level of detail specified in these measures.
Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.

Measure Designation

Measure purpose	• Quality Improvement • Accountability
Type of measure	• Process
Level of Measurement	• Facility
Care setting	• Discharge from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility)
Data source	• Administrative data • Medical record • Electronic health record system • Retrospective data collection flowsheet

Technical Specifications: Administrative Data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using medical record abstraction (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.
The specifications listed below are those needed for performance calculation.
Note: Facilities are responsible for determining the appropriate use of codes.

	Facility Level Specifications
Denominator (Eligible Population)	Identify patients discharged from inpatient facility using the following: UB-04 (Form Locator 04 - Type of Bill): • 0111 (Hospital Inpatient (Including Medicare Part A), Admit through Discharge Claim) • 0114 (Hospital Inpatient (Including Medicare Part A), Interim - Last Claim) • 0121 (Hospital, Inpatient (Medicare Part B only), Admit through Discharge Claim)

- 0124 (Hospital, Inpatient (Medicare Part B only), Interim - Last Claim)
- 0181 (Hospital - Swing Beds, Admit through Discharge Claim)
- 0184 (Hospital - Swing Beds, Interim - Last Claim)
- 0211 (Skilled Nursing-Inpatient (Including Medicare Part A), Admit through Discharge Claim)
- 0214 (Skilled Nursing-Inpatient (Including Medicare Part A), Interim - Last Claim)
- 0221 (Skilled Nursing-Inpatient (Medicare Part B only), Admit through Discharge Claim)
- 0224 (Skilled Nursing- Inpatient (Medicare Part B only), Interim - Last Claim)
- 0281 (Skilled Nursing-Swing Beds, Admit through Discharge Claim)
- 0284 (Skilled Nursing-Swing Beds, Interim - Last Claim)

AND

Discharge Status (Form Locator 17)

- 01 (Discharged to home or self care (routine discharge)
- 02 (Discharged/transferred to a short term general hospital for inpatient care)
- 03 (Discharged/transferred to skilled nursing facility (SNF) with Medicare certification in anticipation of skilled care)
- 04 (Discharged/transferred to a facility that provides custodial or supportive care)
- 05 (Discharged/transferred to a designated cancer center or children's hospital)
- 06 (Discharged/transferred to home under care of an organized home health service organization in anticipation of covered skilled care)
- 21 (Discharged/transferred to court/law enforcement)
- 43 (Discharged/transferred to a federal health care facility)
- 50 (Hospice – home)
- 51 (Hospice - medical facility (certified) providing hospice level of care)
- 61 (Discharged/transferred to hospital-based Medicare approved swing bed)
- 62 (Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital)
- 63 (Discharged/transferred to a Medicare certified long term care hospital (LTCH))
- 64 (Discharged/transferred to a nursing facility certified under Medicaid but not certified under Medicare)
- 65 (Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital)
- 66 (Discharged/transferred to a Critical Access Hospital (CAH))
- 69 (Discharged/transferred to a designated disaster alternative care site)
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)
- 81 (Discharged to home or self care with a planned acute care hospital inpatient readmission)
- 82 (Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission)
- 83 (Discharged/transferred to a skilled nursing facility (SNF) with Medicare certification with a planned acute care hospital inpatient readmission)
- 84 (Discharged/transferred to a facility that provides custodial or supportive care with a planned acute care hospital inpatient readmission)
- 85 (Discharged/transferred to a designated cancer center or children's hospital with a planned acute care hospital inpatient readmission)
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- 87 (Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission)
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- 89 (Discharged/transferred to a hospital-based Medicare approved swing bed with a planned acute care hospital inpatient readmission)
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OR

UB-04 (Form Locator 04 - Type of Bill):
- 0131 (Hospital Outpatient, Admit through Discharge Claim)
- 0134 (Hospital Outpatient, Interim - Last Claim)

AND

UB-04 (Form Locator 42 - Revenue Code):
- 0762 (Hospital Observation)
- 0490 (Ambulatory Surgery)
- 0499 (Other Ambulatory Surgery)

AND

Discharge Status (Form Locator 17)
- 01 (Discharged to home or self care (routine discharge)
- 02 (Discharged/transferred to a short term general hospital for inpatient care)
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Numerator	**Numerator Elements to be identified through medical record abstraction:** See Sample Data Collection Tool (included in tool for Measure #2 above).
Denominator Exclusions	UB-04 (Form Locator 17 - Discharge Status): • 07 (Left against medical advice or discontinued care) • 20 (Expired) • 40 (Expired at home) • 41 (Expired in a medical facility (e.g. hospital, SNF, ICF, or free standing hospice)) • 42 (Expired-place unknown)

Technical Specifications: Electronic Health Record System

The PCPI seeks to facilitate the integration of its measures into electronic health record (EHR) systems, registries, and applications used by physicians and other health care professionals that improve health care quality and prevent medical

errors. In particular, it is valuable to have data for measurement and improvement available at the point of care and for practice-wide or facility-wide analysis as well as for external reporting.

The Care Transitions measures do not lend themselves to a "traditional specification" for EHR reporting, where data elements, logic and clinical coding are identified to calculate the measure, due to the fact that every facility may have a different template for a transition record and the information required for this measure is based on individualized patient information unique to one episode of care (ie, inpatient stay). We have provided guidance on how a facility should query the electronic health record for the information required for this measure.

Transmitting the Transition Record with Specified Elements
The Transition Record should be transmitted to the next provider(s) of care in accordance with established approved standards for interoperability. The ONC Health IT Standards Committee (HITSC) has recommended that certain vocabulary standards are used for quality measure reporting, in accordance with the Quality Data Model (https://ecqi.healthit.gov/qdm). The use of recognized interoperability standards for the transmission of the Transition Record information will ensure that the information can be received into the destination EHR.

Systematic External Reporting that the Transition Record was transmitted within 24 hours of discharge
To systematically identify the transition records that were transmitted within 24 hours of discharge, a discrete data field and code may be needed in the EHR. This discrete data field will facilitate external reporting of the information.

Technical Specifications: Retrospective Data Collection Flowsheet

See Measure #2: Transition Record with Specified Elements Received by Discharged Patients (above)

Additional Information

By requiring the completion and prompt transmission of a detailed "transition record" for discharged patients, these measures are promoting a significant enhancement to the customary use of the "discharge summary," the traditional means of information transfer for which existing standards require completion within 30 days. Numerous studies have documented the prevalence of communication gaps and discontinuities in care for patients after discharge,[9-11] and the significant effect of these lapses on hospital readmissions and other indicators of the quality of transitional care.[17-20] Current information and communication technology can facilitate the routine completion and transmission of a transition record within 24 hours of discharge, which could greatly reduce communication gaps and may have a positive downstream effect on patient outcomes.

Measures 1, 2, & 3 address closely related, interdependent aspects of the transition in care for patients discharged from an inpatient facility and are therefore proposed as a bundled set of measures. The intent of this proposal is that the measures always be used together when assessing performance; no one of these measures should be selected for use independently. The bundling of the measures is *not* intended to suggest the use of any particular scoring methodology (ie, a composite score), nor does it imply either equality or difference in the relative "weights" of the three measures. A performance score for each of the three measures should be reported individually.

This rationale and methodology for a measure bundle are consistent with the definitions for "bundle" and "composite" provided by the Institute for Healthcare Improvement (IHI):

> Bundle – a series of interventions related to a specific condition that, when implemented together, will achieve significantly better outcomes than when implemented individually.
>
> Composite measure – a combination of two or more individual measures into a single measure that results in a single score. (www.ihi.org)

Measure #4: Transition Record with Specified Elements Received by Discharged Patients

(Emergency Department Discharges to Ambulatory Care [Home/Self Care] or Home Health Care)

(facility-level measure)

Care Transitions

Measure Description

Percentage of patients, regardless of age, discharged from an emergency department (ED) to ambulatory care or home health care, or their caregiver(s), who received a transition record at the time of ED discharge including, at a minimum, *all* of the specified elements

Measure Components

Numerator Statement	Patients or their caregiver(s) who received a transition record[a] at the time of emergency department (ED) discharge including, at a minimum, *all* of the following elements: • Summary of major procedures and tests performed during ED visit, AND • Principal clinical diagnosis at discharge which may include the presenting chief complaint, AND • Patient instructions, AND • Plan for follow-up care (OR statement that none required), including primary physician, other health care professional, or site designated for follow-up care,[b] AND • List of new medications and changes to continued medications that patient should take after ED discharge, with quantity prescribed and/or dispensed (OR intended duration) and instructions for each Numerator Element Definitions: a. Transition record (for ED discharges): a core, standardized set of data elements related to patient's diagnosis, treatment, and care plan that is discussed with, provided to and accepted by the patient in written, printed, or electronic format. Electronic format may be provided only if acceptable to patient. b. Summary of any major tests and procedures performed during the emergency department encounter must be included in the transition record, but it is not the intention of the measure that a complete order set is provided to all patients. The types of procedures and tests included should be defined by each emergency department prior to measure implementation and may include fracture management, wound repair, incision and drainage (I & D), foreign body removal, joint reduction, joint aspiration, chest tube placement, emergency endotracheal intubation, central line placement, or lumbar punctures. Tests may include lab tests, scans, or x-rays that were performed. Major tests that have results pending should be included, since they were performed during the encounter and will require follow up after the patient leaves the ED. c. Primary physician or other health care professional designated for follow-up care: may be primary care physician (PCP), medical specialist, or other physician or health care professional. If no physician, other health care professional, or site designated or available, patient may be provided with information on alternatives for obtaining follow-up care needed, which may include a list of community health services/other resources.
Denominator Statement	All patients, regardless of age, discharged from an emergency department (ED) to ambulatory care (home/self care) or home health care
Denominator	Patients who died

Exclusions	Patients who left against medical advice (AMA) or discontinued care
Denominator Exceptions	Documentation of patient or non-medical reason(s) for patients or their caregiver(s) not receiving a transition record at the time of emergency department (ED) discharge (eg, Patients who declined receipt of transition record, Patients for whom providing the information contained in the transition record would be prohibited by state or federal law)
Supporting Guideline & Other References	The following evidence statements are quoted verbatim from the referenced clinical guidelines. The Emergency Department (ED) represents a unique subset of potential transitions of care. The transition potential can generally be described as outpatient to outpatient or outpatient to inpatient depending on whether or not the patient is admitted to the hospital. The outpatient to outpatient transition is represented by a number of potential variables. Patients with a medical home may be referred in to the ED by the medical home or they may self refer. A significant number of patients do not have a physician and self refer to the ED. The disposition from the ED, either outpatient to outpatient or outpatient to inpatient is similarly represented by a number of variables. Discharged patients may or may not have a medical home, may or may not need a specialist and may or may not require urgent (<24 hours) follow-up. Admitted patients may or may not have a medical home and may or may not require specialty care. This variety of variables precludes a single approach to ED transitions of care coordination. The determination as to which scenarios will be appropriate for standards development (Coordinating Clinicians and Transitions Responsibility) will require further contributions from ACEP and SAEM and review by the Steering Committee. (TOCCC, 2008) [21] **Standard PC.04.02.01** When a [patient] is discharged or transferred, the [organization] gives information about the care, treatment, and services provided to the [patient] to other service providers who will provide the [patient] with care, treatment, or services. • At the time of the patient's discharge or transfer, the hospital informs other service providers who will provide care, treatment, or services to the patient about the following: - The reason for the patient's discharge or transfer - The patient's physical and psychosocial status - A summary of care, treatment, and services it provided to the patient - The patient's progress toward goals - A list of community resources or referrals made or provided to the patient (See also PC.02.02.01, EP 1) (Joint Commission, 2009)[23] **Standard PC.04.01.05** Before the [organization] discharges or transfers a [patient], it informs and educates the [patient] about his or her follow-up care, treatment, and services. 1. When the hospital determines the patient's discharge or transfer needs, it promptly shares this information with the patient. 2. Before the patient is discharged, the hospital informs the patient of the kinds of continuing care, treatment, and services he or she will need. 3. When the patient is discharged or transferred, the hospital provides the patient with information about why he or she is being discharged or transferred. 5. Before the patient is transferred, the hospital provides the patient with information about any alternatives to the transfer. 7. The hospital educates the patient about how to obtain any continuing care, treatment, and

	services that he or she will need. 8. The hospital provides written discharge instructions in a manner that the patient and/or the patient's family or caregiver can understand. (See also RI.01.01.03, EP 1) (Joint Commission, 2009) [23]

Measure Importance

Relationship to desired outcome	Providing a detailed transition record at the time of ED discharge enhances the patient's preparation to self-manage post-discharge care and comply with the post-discharge treatment plan.
Opportunity for Improvement	Several studies have documented gaps in the provision or explanation of emergency department discharge instructions, compromising patient understanding of their post-discharge treatment instructions.[27,28]
IOM Domains of Health Care Quality Addressed [25]	• Safe • Patient-centered • Efficient • Equitable
Exclusion Justification	Exclusions arise when patients who are included in the initial patient or eligible population for a measure do not meet the denominator criteria specific to the intervention required by the numerator. Exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. Patients who expired and patients who left against medical advice (AMA) are categorized by inpatient facilities as having been "discharged" (with specific discharge status codes) and must therefore be excluded from the denominators for these measures. The Care Transitions Work Group acknowledges that it may be feasible to provide patients who leave AMA with a medication list and transition record (and to transmit this information to the facility/physician providing follow-up care), but not necessarily with the level of detail specified in these measures.
Exception Justification	Exceptions are used to remove patients from the denominator of a performance measure when a patient does not receive a therapy or service AND that therapy or service would not be appropriate due to specific reasons for which the patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment and individual patient characteristics. As a result of feedback received from CMS during initial implementation of these measures, an exception has been added for patients for whom providing the information contained in the transition record would be prohibited by state or federal law. This exception is intended to address situations in which there is concern over potential HIPAA violations (for example, a neighbor or other non legal guardian/caregiver brings in a patient with dementia) or violations of state laws surrounding sharing information regarding HIV, STD or HCG (pregnancy) tests (it is against state law in many states to share this information with a parent or guardian), or sensitive diagnoses (other states have laws about revealing HIV status, mental health diagnoses and other sensitive diagnoses to others).
Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.

Measure Designation

Measure purpose	• Quality Improvement • Accountability
Type of measure	• Process
Level of Measurement	• Facility
Care setting	• Discharge from emergency department to home or self care
Data source	• Administrative data • Medical record

- Electronic health record system
- Retrospective data collection flowsheet

Technical Specifications: Administrative Data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using medical record abstraction (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.
The specifications listed below are those needed for performance calculation.

	Facility Level Specifications
Denominator (Eligible Population)	Identify patients discharged from emergency department to home or self care using the following: UB-04 (Form Locator 42 - Revenue Code): • 0450 (Emergency Room) AND UB-04 (Form Locator 17 - Discharge Status): • 01 (Discharged to home care or self care (routine discharge)) • 06 (Discharged/transferred to home under care of organized home health service org. in anticipation of covered skilled care) • 21 (Discharged/transferred to court/law enforcement) (Note: Only the above codes from UB-04 Form Locator 17 - Discharge Status should be included in the eligible population.
Numerator	**Numerator Elements to be identified through medical record abstraction:** See Sample Data Collection Tool below.
Denominator Exclusions	UB-04 (Form Locator 17 - Discharge Status): • 07 (Left against medical advice or discontinued care)* • 20 (Expired) • 40 (Expired at home) • 41 (Expired in a medical facility (e.g. hospital, SNF, ICF, or free standing hospice)) • 42 (Expired-place unknown)
Denominator Exceptions	Documentation is required for the following patients who are excepted from the measure: • Patients who declined receipt of transition record. • Patients for whom providing the information contained in the transition record would be prohibited by state or federal law.

Technical Specifications: Electronic Health Record System

The PCPI seeks to facilitate the integration of its measures into electronic health record (EHR) systems, registries, and applications used by physicians and other health care professionals that improve health care quality and prevent medical errors. In particular, it is valuable to have data for measurement and improvement available at the point of care and for practice-wide or facility-wide analysis as well as for external reporting.

The Care Transitions measures do not lend themselves to a "traditional specification" for EHR reporting, where data elements, logic and clinical coding are identified to calculate the measure. Given the fact that every facility may use a

different template for a transition record and the information required for this measure is based on individualized patient information unique to one episode of care (ie, emergency department episode). We have provided guidance on how a facility should query the electronic health record for the information required for this measure.

Producing the Transition Record with Specified Elements
Emergency departments that have implemented an EHR should establish a standardized template within their system that providers will use to generate the Transition Record. A standardized template will ensure that all data elements specified in the performance measure are included each time a Transition Record is prepared. Sample Transition Records were developed and are included in the Care Transitions Specifications. Each facility has the autonomy to customize the format of the Transition Record, based on clinical workflow, policies and procedures, and the patient population treated at the individual institution.

Systematic External Reporting of the Transition Record
In order to report, at the facility level, which of the patients discharged from the emergency department have received a Transition Record, a discrete data field and code indicating the patient received a Transition Record at discharge may be needed in the EHR.

Transmitting the Transition Record with Specified Elements
This performance measure does not require that the Transition Record be transmitted to the next provider(s) of care. However, if the Transition Record is transmitted to the next provider(s) of care, it should be done so in accordance with established approved standards for interoperability. The ONC Health IT Standards Committee (HITSC) has recommended that certain vocabulary standards are used for quality measure reporting, in accordance with the Quality Data Model (https://ecqi.healthit.gov/qdm. In addition, the use of recognized interoperability standards for the transmission of the Transition Record information will ensure that the information can be received into the destination EHR.

Technical Specifications: Retrospective Data Collection Flowsheet

This form is intended to be used for patients who were discharged from the emergency department (ED) to ambulatory care (home/self care) or home health care, does not include patients that left against medical advice (AMA) or patients that expired during their ED visit.

Transition Record with Specified Elements Received by Discharged Patients
(Emergency Department Discharges to Ambulatory Care [Home/Self Care] or Home Health Care)

Patient Name:

Medical Record Number or other patient identifier:

Date of Discharge:

Numerator:

			Yes	No	Instructions
Transition Record with all of the specified elements		**Did patient or their caregiver(s) receive a Transition Record at discharge?** *(Underlined terms are defined below)*			If yes, answer questions (1-5) to determine that all appropriate elements were included in the Transition Record.
		Are the following elements included in Transition Record?	**Yes**	**No**	
	1.	Summary of major procedures and tests performed during ED visit			
	2.	Principal clinical diagnosis at discharge which may include the presenting chief complaint			
	3.	Patient Instructions			

	4.	Plan for Follow-Up Care (or statement that none required), including primary physician, other health care professional, or site designated for follow-up care			
	5.	List of new medications and changes to continued medications that patient should take after ED discharge, with quantity prescribed and/or dispensed (OR intended duration) and instructions for each			
Transition Record with all of the specified elements		**Were ALL of the specified elements included in the transition record?**			*Review responses above to determine if all were elements were included in Transition Record*

Definition of Terms

Transition record (for ED discharges):	A core, standardized set of data elements related to patient's diagnosis, treatment, and care plan that is discussed with and provided to patient in written, printed, or electronic format. Electronic format may be provided only if acceptable to patient.
Primary physician or other health care professional designated for follow-up care	May be primary care physician (PCP), medical specialist, or other physician or health care professional. If no physician, other health care professional, or site designated or available, patient may be provided with information on alternatives for obtaining follow-up care needed, which may include a list of community health services/other resources.

Technical Specifications: Sample Transition Records

Sample Transition Record #1

Principal Diagnosis: Patient presented to hospital emergency department (ED) complaining of ankle and foot pain likely due to sprain from injury. At the time of discharge, the patient's principal diagnosis was ankle sprain.

The following **major tests and procedures** were conducted in the ED prior to discharge:

- Seen by a physician in the ED and given a complete physical and examination
- Complete Radiologic examination ("X-Ray") of Ankle
- Ankle control orthosis for support, with fitting and adjustment
- Crutches underarm
- Injection of XXXX (medication) for pain and swelling

Patient instructions, Plan for follow up care and New or changed medications: Patient and/or caregiver was given instructions for self care at home and advised to follow up with primary care physician on next business day. Patient was given dosage and administration instructions for any new medications that were prescribed and informed of any changes to current medications.

Sample Transition Record #2

Principal Diagnosis: Patient presented to hospital emergency department (ED) complaining of abdominal pain. At the time of ED discharge, the patient's principal diagnosis was chlamydial infection in the lower genital tract and pelvic inflammatory disease.

The following **major tests and procedures** were conducted during the patient's ED visit:

- ED physician completed a problem-based physical and examination
- Blood test: Complete Blood Count and Metabolic Panel
- Computed Tomography ("CT Scan") of Pelvis
- Urine sample obtained for urinalysis and bacterial culture
- Urine pregnancy test
- Culture testing for *C. trachomatis* (Chlyamydia) and *N. gonorrhoeae* (Gonorrhea)

Patient instructions, Plan for follow up care and New or changed medications: Patient and/or caregiver was given instructions for self care at home and advised to follow up with primary care physician on next business day. Patient was given dosage and administration instructions for any new medications that were prescribed and informed of any changes to current medications.

New Medications: Ofloxacin (Floxin) 400 mg orally twice daily for 14 days or levofloxacin (Levaquin) 500 mg orally once daily for 14 days; with or without metronidazole (Flagyl) 500 mg orally twice daily for 14 days.

Measure #5: Post-Discharge Appointment for Heart Failure Patients - REFERENCING Heart Failure measure (Inpatient Setting)

Care Transitions

Given that heart failure is one of the most common reasons people are admitted to a hospital—and the most common reason for readmission, the Care Transitions Work Group set out to develop a measure that could address post-discharge support for heart failure patients. This draft measure was later referred to the American College of Cardiology Foundation/American Heart Association/PCPI Heart Failure Work Group for consideration. Effective January 2011, the draft Care Transitions: Discharge Planning/Post-Discharge Support for Heart Failure Patients measure is now replaced by the finalized Heart Failure: Post-Discharge Appointment for Heart Failure Patients measure. The ACC/AHA/PCPI Heart Failure measurement set may be accessed on the PCPI web site at: www.physicianconsortium.org.

This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive.

DRAFT Measure #6: Patient Understanding of Post-Discharge Care Needed

(Inpatient Discharges to Home/Self Care or Any Other Site of Care)

(facility-level measure)

Care Transitions

This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive.

Measure Description

(See below)

Measure Components

In lieu of a performance measure at this time, the Care Transitions Work Group (CTWG) has agreed upon the following intermediate objective:

To promote improved patient understanding of and adherence to the post-discharge treatment plan through the addition of appropriate questions to the CAHPS® Hospital Survey (HCAHPS).

Available evidence indicates that many patients lack an understanding of their medication regimen and other instructions provided at discharge, affecting their ability to comply with post-discharge treatment plans. The CTWG agrees that this is an important topic for performance measurement and improvement. However, the CTWG also acknowledges that assessing patient understanding will require the use of a patient survey instrument at the time of discharge (or within a short post-discharge period) and that, given the current and widespread use of HCAHPS, the introduction of an additional survey instrument is not desirable.

Agency for Healthcare Research and Quality (AHRQ) staff have indicated that a Health Literacy (HL) supplement to HCAHPS is under development and have invited AMA professional staff to the PCPI to participate in upcoming stakeholder meetings to provide guidance on the development of the supplemental item set for HCAHPS. Preliminary discussion with AHRQ staff has also indicated that several questions pertaining to patient receipt and understanding of discharge instructions (including discharge medications and plans for follow-up care) are under consideration for inclusion in the HL supplement. Development of a performance measure for this topic is therefore deferred until development of the HCAHPS HL supplement and plans for its implementation have been completed.

Numerator Statement **Denominator Statement** **Denominator Exclusions**	*Numerator and denominator statements and exclusions (if appropriate) will be developed by the Care Transitions Work Group after completion and implementation of the HCAHPS Health Literacy Supplement, as described above.*
Supporting Guideline & Other References	The following evidence statements are quoted verbatim from the referenced clinical guidelines. Patients and/or their family/caregivers must receive, understand and be encouraged to participate in the development of their transition record which should take into consideration the patient's health literacy, insurance status and be culturally sensitive. (TOCCC, 2008)[21] **Standard PC.04.01.05** Before the [organization] discharges or transfers a [patient], it informs and educates the [patient]

	about his or her follow-up care, treatment, and services. 8. The hospital provides written discharge instructions in a manner that the patient and/or the patient's family or caregiver can understand. (See also RI.01.01.03, EP 1) (Joint Commission, 2009)[23] **Standard RI.01.01.03** The hospital respects the patient's right to receive information in a manner he or she understands. 1. The hospital provides information in a manner tailored to the patient's age, language, and ability to understand. 2. The hospital provides interpreting and translation services, as necessary. 3. The hospital communicates with the patient who has vision, speech, hearing, or cognitive impairments in a manner that meets the patient's needs. (Joint Commission, 2009) Providers will continually strive to improve care and achieve quality by facilitating and carefully considering feedback from all patients regarding coordination of their care. To get there, all providers and clinicians will gather input using a valid and reliable tool (e.g., the Care Transition Measure (CTM3))* for all discharged patients. (National Priorities Partnership (NPP), Proposed Goals, 2008)[Error! Bookmark not defined.] * NQF-endorsed™ Care Transitions Measure (CTM-3): [29] • The hospital staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left the hospital. • When I left the hospital, I had a good understanding of the things I was responsible for in managing my health. • When I left the hospital, I clearly understood the purpose for taking each of my medications.

Measure Importance

Relationship to desired outcome	Patients' ability to comply with post-discharge treatment plans is compromised if they lack an understanding of instructions provided to them at discharge regarding their follow-up care and medications.
Opportunity for Improvement	One study of discharged patients found that 41% were able to state their diagnoses, 37% were able to state the purpose of their medications, and 14% knew the common side effects of all their medications.[30] A more recent study of patients discharged from an internal medicine residency service found that fewer than two-thirds could identify the name, dosage, or purpose of their new medications; only 11% could recall being told of any adverse side effects.[31]
Exclusion Justification	(To be provided upon further development of this measure.)
Harmonization with Existing Measures	This measure will be harmonized to the extent feasible with questions in the Health Literacy supplement to the HCAHPS survey (under development) and the existing Care Transitions Measure (CTM-3), as described above.

Measure Designation

Measure purpose	• (No measure proposed at this time)
Type of measure	• (No measure proposed at this time)
Level of Measurement	• Facility
Care setting	• Discharge from inpatient facility

Data source	• Administrative data • Medical record • Electronic health record system • Prospective data collection flowsheet

Integrating Care Transitions Measures Into Practice to Improve Overall Patient Care: Best Practices and Lessons Learned from Approaches Used in Local, Regional, and National Quality Improvement Initiatives

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®) is committed to a sustainable patient-centered culture. Recognizing that performance measurement is an important but not the only component required to build such a culture, the PCPI is evolving its work to demonstrate the utility of performance measures in achieving positive health outcomes and supporting overall quality improvement[32].

Widely-accepted approaches to improve quality, coordination, and delivery of patient care include the Institute for Healthcare Improvement's Model for Improvement[33], the Chronic Care Model[34], and the Patient-Centered Medical Home model[35]. There are, however, a myriad of unique and innovative strategies being used in quality improvement collaboratives to engage all aspects of health and health care and to establish effective, coordinated systems of delivering care. Though some of the initiatives are in their infancy, over the short term many of these initiatives are demonstrating increased efficiencies, improved clinical outcomes, provider support and engagement, and overall enhanced communications and teamwork. Providers and institutions have found that the following best practices led to improvements in the quality of care received by patients transitioning across multiple settings and providers of care.

Best Practice #1: Standardize discharge processes and order sets.
Process Improvement: Ensures the accuracy and completeness of the patient's medical record before discharge.

Example:

At Baylor Health Care System, a non-profit integrated delivery system based in Dallas/Fort Worth, Texas, readmission rates were reduced by establishing standard discharge processes and order sets and by improving its medication reconciliation process for its heart failure patients. The redesigned processes, developed by Baylor's multidisciplinary team of physicians, nurses, pharmacists and ancillary care providers ("Physician Design Team"), have enabled its providers to place more focus on patient education and increasing follow-up visits. Physicians who participate in the Physician Design Team receive training on rapid-cycle process improvement modeled after W. Edwards Deming's Plan-Do-Check-Act cycle through a six-day seminar. Participating physicians also dedicate 4-16 hours per week to activities that include engaging their colleagues in and defining "measurable clinical, financial, and patient satisfaction outcomes" for the health care system's quality improvement initiatives.[36]

Best Practice #2: Recruit a trained individual, such as a nurse or health educator, to work directly with the patients and families/caregivers to design and implement a discharge plan.

Process improvement: The discharge plan is tailored to meet the specific needs of patients and their families/caregivers.

Example:

Improvement interventions assigning transitional care providers to chronically medically ill elderly patients immediately after medical hospital discharge have shown decreased rates of rehospitalization and emergency services utilization, and appear to be cost-effective.[37]

Advanced practice nurses at the University of Pennsylvania Health System helped to reduce readmission rates by working with high-risk, elderly adults with chronic conditions, their families and other health team members to design and implement a transition of care plan from the hospital to the home or other care setting. The care plans were designed to take into consideration all of the patient's illnesses and personal issues, including barriers such as the lack of a telephone. Nurses are provided a Web-based training program and clinical information system to assist them with collecting, recording, and organizing patient information, and accessing evidence-based medicine protocols.[38]

In a study conducted in a large integrated delivery system in Colorado, elderly discharged patients with chronic conditions received the assistance of an advanced practice nurse (or "Transition Coach™") to facilitate their transition of care to a home or a skilled nursing facility. The patients receiving the nurse assistance were found to be more invested in the management of their care compared to those who did not receive this assistance. At 30 and 90 days, the rehospitalization rates for this patient population were reduced as well. Using the Care Transitions Intervention Model[39] developed by Eric A. Coleman, MD, MPH, the nurses provided assistance with reconciling all of the patient's medication, assessing the patient's understanding of the medication, teaching skills for communication with his/her health care provider, and supporting reinforcement of those skills while monitoring self-management progress.[40]

Best Practice #3: Use strategies such as "Teach Back" and "Ask Me 3" to increase patient and family/caregiver understanding of the care plan.

Process improvement: Patients and their families/caregivers are encouraged to actively manage the patient's own care.

Example:

The use of both verbal and written health information when communicating about care issues with patients and/or significant others on discharge from hospital to home has been shown to provide standard care information, which appears to improve patient knowledge and satisfaction.[41]

Strategies used to increase understanding and involvement of patients and their caregivers in care management include "Teach Back" and "Ask Me 3". "Teach Back" is a technique that helps to confirm understanding by asking the patient/caregiver to use their own words to describe the information the physician provides, for example. "Ask Me 3" are questions that can be used as a way to prepare and present medical and health information to a patient. The questions are 1) What is my main concern, 2) What do I need to do, and 3) Why is it important for me to do this?

During a study when "Teach Back" was used by certified diabetes educators along with other communication techniques to help assess diabetes patients' comprehension of the disease, patients with low literacy managed their care more successfully and had better outcomes.[42]

Best Practice #4: Strengthen relationships among key stakeholders in the community that could potentially be involved with care transitions.

Process improvement: A coordinated approach and enhanced communications to improve patient care transitions can be established between all providers.

Example:

Summa Health System, an integrated delivery system in Summit County, Ohio, organized a Care Coordination Network with its local skilled nursing facilities, EMS/ambulance services, and the local Area Agency on Aging. The members of this Network signed a memorandum of understanding to affirm their mutual commitment to improve the overall process of transitioning care to these facilities following discharge and to improve patient outcomes. Through this formal collaboration, communication between the providers improved which led to improved working relationships and processes. Specifically, the members of the Network developed a standard post-acute care transfer form and implemented an electronic referral system that enables facilities to identify available beds, patient needs, and other relevant issues. To support improvement efforts, educational programs are held for hospital discharge planners, social workers, hospital and nursing facility staff. Performance measure data for all patients transitioned to post-acute care facilities enables the Network to continuously identify areas for improvement and to recognize outstanding performance. Over a three-year period, Summa reduced its 31-day readmission rate for post-acute patients and reduced the average length of stay for patients awaiting discharge. Other groups are modeling this approach between hospitals and skilled nursing facilities in other communities across Ohio.[43]

Conclusion

The PCPI will continue to monitor and identify best practices used in quality improvement collaboratives that report positive outcomes in improving patient care transitions and in other areas. This information is intended to support overall efforts to facilitate use of measures across multiple settings and providers of care and as part of an overall quality improvement strategy that supports a patient-centered culture.

EVIDENCE CLASSIFICATION/RATING SCHEMES

ACCF/AHA Classification of Recommendations and Level of Evidence[44]

		Size of Treatment Effect			
		Class I *Benefit >>>Risk* Procedure/treatment SHOULD be performed/administered	**Class IIa** *Benefit >>Risk* *Additional studies with focused objectives needed* IT IS REASONABLE to perform procedure/administer treatment	**Class IIb** *Benefit ≥ Risk* *Additional studies with broad objectives needed; additional registry data would be helpful* Procedure/treatment MAY BE CONSIDERED	**Class III** *Risk ≥ Benefit* *No additional studies needed* Procedure/treatment should NOT be performed/administered SINCE IT IS NOT HELPFUL AND MAY BE HARMFUL
Estimate of Certainty (Precision) of Treatment Effect	**Level A** *Multiple (3 to 5) population risk strata evaluated** *General consistency of direction and magnitude of effect*	Recommendation that procedure or treatment is useful/effective Sufficient evidence from multiple randomized trials or meta-analyses	Recommendation in favor of treatment or procedure being useful/effective Some conflicting evidence from multiple randomized trials or meta-analyses	Recommendation's usefulness/efficacy less well Established Greater conflicting evidence from multiple randomized trials or meta-analyses	Recommendation that procedure or treatment is not useful/effective and may be harmful Sufficient evidence from multiple randomized trials or meta-analyses
	Level B *Limited (2 to 3) population risk strata evaluated**	Recommendation that procedure or treatment is useful/effective Limited evidence from single randomized trial or nonrandomized studies	Recommendation in favor of treatment or procedure being useful/effective Some conflicting evidence from single randomized trial or nonrandomized studies	Recommendation's usefulness/efficacy less well Established Greater conflicting evidence from single randomized trial or nonrandomized studies	Recommendation that procedure or treatment is not useful/effective and may be harmful Limited evidence from single randomized trial or nonrandomized studies
	Level C *Very limited (1 to 2) population risk strata evaluated**	Recommendation that procedure or treatment is useful/effective Only expert opinion, case studies, or standard-of-care	Recommendation in favor of treatment or procedure being useful/effective Only diverging expert opinion, case studies, or standard-of-care	Recommendation's usefulness/efficacy less well Established Only diverging expert opinion, case studies, or standard-of-care	Recommendation that procedure or treatment is not useful/effective and may be harmful Only expert opinion, case studies, or standard-of-care

Suggested phrases for writing recommendations †	should is recommended is indicated is useful/effective/beneficial	is reasonable can be useful/effective/ beneficial is probably recommended or indicated	may/might be considered may/might be reasonable usefulness/effectiveness is unknown /unclear/uncertain or not well established	is not recommended is not indicated should not is not useful/effective/beneficial may be harmful

*Data available from clinical trials or registries about the usefulness/efficacy in different subpopulations, such as gender, age, history of diabetes, history of prior myocardial infarction, history of heart failure, and prior aspirin use. A recommendation with Level of Evidence B or C does not imply that the recommendation is weak. Many important clinical questions addressed in the guidelines do not lend themselves to clinical trials. Even though randomized trials are not available, there may be a very clear clinical consensus that a particular test or therapy is useful or effective.

†In 2003, the ACC/AHA Task Force on Practice Guidelines developed a list of suggested phrases to use when writing recommendations. All guideline recommendations have been written in full sentences that express a complete thought, such that a recommendation, even if separated and presented apart from the rest of the document (including headings above sets of recommendations), would still convey the full intent of the recommendation. It is hoped that this will increase readers' comprehension of the guidelines and will allow queries at the individual recommendation level.

Heart Failure Society of America

Relative weight of evidence used to develop HFSA practice guideline[45]

Strength of Evidence

Level A: Randomized, Controlled, Clinical Trials
May be assigned based on results of a single trial

Level B: Cohort and Case-Control Studies
Post hoc, subgroup analysis, and meta-analysis
Prospective observational studies or registries

Level C: Expert Opinion
Observational studies – epidemiologic findings
Safety reporting from large-scale use in practice

Strength of Recommendations

"Is recommended": Part of routine care
Exceptions to therapy should be minimized.

"Should be considered": Majority of patients should receive the intervention.
Some discretion in application to individual patients should be allowed.

"May be considered": Individualization of therapy is indicated

"Is not recommended": Therapeutic intervention should not be used

Transitions of Care Consensus Conference (TOCCC) Policy Statement (ACP-SGIM-SHM-AGS-ACEP-SAEM)[21]

Methodology (evidence collection, development of recommendations)

- Structured review of studies related to transitions of care between inpatient and outpatient settings, and systematic review of the evidence
- Initial discussion of principles and standards (recommendations) in breakout groups; conference participants then further refined principles and standards and prioritized the standards through a group consensus ranking/voting process

Summary of evidence base

- Cohort, observational, and cross-sectional studies and expert opinion

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