

NATIONAL QUALITY FORUM

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

NQF #: 0648 NQF Project: Care Coordination Project
(for Endorsement Maintenance Review) Original Endorsement Date: May 05, 2010 Most Recent Endorsement Date: May 05, 2010
BRIEF MEASURE INFORMATION
De.1 Measure Title: Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)
Co.1.1 Measure Steward: American Medical Association - Physician Consortium for Performance Improvement
De.2 Brief Description of Measure: 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
2a1.1 Numerator Statement: Patients 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
2a1.4 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
2a1.8 Denominator Exclusions: Patients who died Patients who left against medical advice (AMA) or discontinued care
1.1 Measure Type: Process 2a1. 25-26 Data Source: Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Records 2a1.33 Level of Analysis: Facility, Integrated Delivery System
1.2-1.4 Is this measure paired with another measure? No
De.3 If included in a composite, please identify the composite measure (<i>title and NQF number if endorsed</i>):

STAFF NOTES (<i>issues or questions regarding any criteria</i>)
Comments on Conditions for Consideration:
Is the measure untested? Yes <input type="checkbox"/> No <input type="checkbox"/> If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (<i>check De.5</i>): 5. Similar/related endorsed or submitted measures (<i>check 5.1</i>): Other Criteria:
Staff Reviewer Name(s):

1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See [guidance on evidence](#).

Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)

1a. High Impact: H M L I

(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)

De.4 Subject/Topic Areas (Check all the areas that apply):

De.5 Cross Cutting Areas (Check all the areas that apply): Care Coordination, Safety, Safety : Medication Safety

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Patient/societal consequences of poor quality

1a.2 If "Other," please describe:

1a.3 Summary of Evidence of High Impact (Provide epidemiologic or resource use data):

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

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.
- 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.
- The Institute of Medicine estimated that medication errors harm 1.5 million people each year in the United States, at an annual cost of at least \$3.5 billion.

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.
- 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.
- 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.

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.

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

- An estimated 60 percent of medication errors occur during times of transition: upon admission, transfer, or discharge of a patient.
- During care transitions, patients receive medications from different prescribers who rarely have access to patients' comprehensive medication list.
- 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.
- 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.

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

1a.4 Citations for Evidence of High Impact cited in 1a.3: Coleman EA, Min S, Chomiak A, Kramer AM. 2004. Post-hospital care transitions: patterns, complications, and risk identification. *Health Services Research* 39:1449-1465.

Agency for Healthcare Research and Quality (ARHQ). 1999. Outcomes by Patient and Hospital Characteristics for All Discharges. Available at: <http://www.ahrq.gov/HCUPnet.asp>.

Kramer A, Eilertsen T, Lin M, Hutt E. 2000. Effects of nurse staffing on hospital transfer quality measures for new admissions. Pp. 9.1–9.22. Inappropriateness of Minimum Nurse Staffing Ratios for Nursing Homes. Health Care Financing Administration.

Hutt E, Ecord M, Eilertsen TB, et al. Precipitants of emergency room visits and acute hospitalization in short-stay Medicare nursing home residents. *J Am Geriatr Soc* 2001; 50: 223-229.

Jack BW, Chetty VK, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization. *Ann Intern Med* 2009; 150:178-187.

Agency for Healthcare Research and Quality (ARHQ). 2006. Outcomes by Patient and Hospital Characteristics for All Discharges. Available at: <http://www.ahrq.gov/HCUPnet.asp>.

Medicare Payment Advisory Commission. A data book: Healthcare spending and the medicare program. June 2007. Available at: http://www.medpac.gov/documents/Jun07DataBook_Entire_report.pdf.

Harris G. Report finds a heavy toll from medication errors, N.Y. Times (July 21, 2006). Available at: <http://www.nytimes.com/2006/07/21/health/21drugerrors.html?ex=1311134400&en=8f34018d05534d7a&ei=5088&partner=rssnyt&emc=rss>

Sabogal F, Coots-Miyazaki M, Lett JE. Effective care transitions interventions: Improving patient safety and healthcare quality. *CAHQ Journal* 2007 (Quarter 2).

Moore C, Wisnevesky J, Williams S, McGinn T. 2003. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. *Journal of General Internal Medicine* 18:646–651.

Roy CL, Poon EG, Karson AS, et al. Patient safety concerns arising from test results that return after hospital discharge. *Ann Intern Med* 2005;143(2):121-128.

Burt CW, McCaig LF, Simon AE. Emergency department visits by persons recently discharged from US hospitals. *National Health Statistics Reports*, July 24, 2008; Number 6.

Rozich JD & Resar, RK. 2001. Medication safety: One organization's approach to the challenge. *J. Clin. Outcomes Manag.* 8:27-34.

Partnership for Solutions. 2002. *Chronic Conditions: Making the Case for Ongoing Care*. Baltimore MD: The Johns Hopkins University.

Forster AJ, Murff HJ, Peterson JF, et al. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Ann Intern Med* 2003;138(3):161-167.

Coleman EA, Smith JD, Raha D, Min SJ. Posthospital medication discrepancies: prevalence and contributing factors. *Arch Intern Med* 2005;165(16):1842-1847.

Kripalani S, LeFevre F, Phillips CO, et al. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. *JAMA* 2007;297(8):831-841.

van Walraven C, Seth R, Austin PC, Laupacis A. 2002. Effect of discharge summary availability during post-discharge visits on hospital readmission. *Journal of General Internal Medicine* 17:186–192.

van Walraven C, Seth R, Laupacis A. 2002. Dissemination of discharge summaries. Not reaching follow-up physicians. *Canadian Family Physician* 48:737–742.

Benbassat J, Taragin M. Hospital readmissions as a measure of quality of healthcare. *Archives Internal Medicine* 2000; 160:1074-81.

1b. Opportunity for Improvement: H M L I

(There is a demonstrated performance gap - variability or overall less than optimal performance)

1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:

The availability of the patient's discharge information at the first post-discharge physician visit improves the continuity of care and may be associated with a decreased risk of rehospitalization.

By requiring the completion and prompt transmission of a detailed "transition record" for discharged patients, this measure is 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, and the significant effect of these lapses on hospital readmissions and other indicators of the quality of transitional care. 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.

Citations:

van Walraven C, Seth R, Austin PC, Laupacis A. 2002. Effect of discharge summary availability during post-discharge visits on hospital readmission. *Journal of General Internal Medicine* 17:186–192.

Sabogal F, Coots-Miyazaki M, Lett JE. Effective care transitions interventions: Improving patient safety and healthcare quality. *CAHQ Journal* 2007 (Quarter 2).

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Roy CL, Poon EG, Karson AS, et al. Patient safety concerns arising from test results that return after hospital discharge. *Ann Intern Med* 2005;143(2):121-128.

Kripalani S, LeFevre F, Phillips CO, et al. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. *JAMA* 2007;297(8):831-841.

van Walraven C, Seth R, Austin PC, Laupacis A. 2002. Effect of discharge summary availability during post-discharge visits on hospital readmission. *Journal of General Internal Medicine* 17:186–192.

van Walraven C, Seth R, Laupacis A. 2002. Dissemination of discharge summaries. Not reaching follow-up physicians. *Canadian Family Physician* 48:737–742.

Benbassat J, Taragin M. Hospital readmissions as a measure of quality of healthcare. *Archives Internal Medicine* 2000; 160:1074-81.

1b.2 Summary of Data Demonstrating Performance Gap (*Variation or overall less than optimal performance across providers*):
[For Maintenance – *Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.*]

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.

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.
- 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.
- 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.

Medication errors

- An estimated 60 percent of medication errors occur during times of transition: upon admission, transfer, or discharge of a patient.
- During care transitions, patients receive medications from different prescribers who rarely have access to patients' comprehensive medication list.
- 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.
- 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.

Lapses in communication

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

1b.3 Citations for Data on Performance Gap: [*For Maintenance* – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

Kripalani S, LeFevre F, Phillips CO, et al. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. JAMA 2007;297(8):831-841.

Sabogal F, Coots-Miyazaki M, Lett JE. Effective care transitions interventions: Improving patient safety and healthcare quality. CAHQ Journal 2007 (Quarter 2).

Moore C, Wisnevesky J, Williams S, McGinn T. 2003. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. Journal of General Internal Medicine 18:646–651.

Roy CL, Poon EG, Karson AS, et al. Patient safety concerns arising from test results that return after hospital discharge. Ann Intern Med 2005;143(2):121-128.

Rozich JD & Resar, RK. 2001. Medication safety: One organization’s approach to the challenge. J. Clin. Outcomes Manag. 8:27-34.

Partnership for Solutions. 2002. Chronic Conditions: Making the Case for Ongoing Care. Baltimore MD: The Johns Hopkins University.

Forster AJ, Murff HJ, Peterson JF, et al. The incidence and severity of adverse events affecting patients after discharge from the hospital. Ann Intern Med 2003;138(3):161-167.

Coleman EA, Smith JD, Raha D, Min SJ. Posthospital medication discrepancies: prevalence and contributing factors. Arch Intern Med 2005;165(16):1842-1847.

van Walraven C, Seth R, Austin PC, Laupacis A. 2002. Effect of discharge summary availability during post-discharge visits on hospital readmission. Journal of General Internal Medicine 17:186–192.

van Walraven C, Seth R, Laupacis A. 2002. Dissemination of discharge summaries. Not reaching follow-up physicians. Canadian Family Physician 48:737–742.

Benbassat J, Taragin M. Hospital readmissions as a measure of quality of healthcare. Archives Internal Medicine 2000; 160:1074-81.

1b.4 Summary of Data on Disparities by Population Group: [*For Maintenance* –Descriptive statistics for performance results for this measure by population group]

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

1b.5 Citations for Data on Disparities Cited in 1b.4: [*For Maintenance* – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

N/A

1c. Evidence (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.)
Is the measure focus a health outcome? Yes No **If not a health outcome, rate the body of evidence.**

Quantity: H M L I Quality: H M L I Consistency: H M L I

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	Yes <input type="checkbox"/>
L	M-H	M	Yes <input type="checkbox"/> IF additional research unlikely to change conclusion that benefits to patients outweigh

NQF #0648 Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

			harms: otherwise No <input type="checkbox"/>
M-H	L	M-H	Yes <input type="checkbox"/> IF potential benefits to patients clearly outweigh potential harms: otherwise No <input type="checkbox"/>
L-M-H	L-M-H	L	No <input type="checkbox"/>
Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service		Does the measure pass subcriterion1c? Yes <input type="checkbox"/> IF rationale supports relationship	
<p>1c.1 Structure-Process-Outcome Relationship (Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process- health outcome; intermediate clinical outcome-health outcome):</p> <p>The measure focus is the process of providing a timely transition record to the facility, physician or other health care professional designated for patient follow-up care within 24 hours of discharge from an inpatient facility (eg, hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home or any other site of care. This process is directly related to preventing medication errors, adverse events, patient harm, and hospital readmissions. The availability of the patient's discharge information at the first post-discharge physician visit improves the continuity of care and may be associated with a decreased risk of rehospitalization. Additionally, randomized trials have shown that many hospital readmissions can be prevented by patient education, predischarge assessment, and domiciliary aftercare. 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.</p> <p>Citations:</p> <p>van Walraven C, Seth R, Austin PC, Laupacis A. 2002. Effect of discharge summary availability during post-discharge visits on hospital readmission. <i>Journal of General Internal Medicine</i> 17:186–192.</p> <p>Benbassat J, Taragin M. Hospital readmissions as a measure of quality of healthcare. <i>Archives Internal Medicine</i> 2000; 160:1074-81.</p> <p>Jack BW, Chetty VK, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization. <i>Ann Intern Med</i> 2009; 150:178-187.</p> <p>1c.2-3 Type of Evidence (Check all that apply): Clinical Practice Guideline, Systematic review of body of evidence (other than within guideline development)</p> <p>1c.4 Directness of Evidence to the Specified Measure (State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population): The evidence cited for this measure is directly related to timely transmission of transition records for all ages, during transitions of care from inpatient to outpatient settings. There are no differences from the measure focus and measure target population.</p> <p>1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): The quantity of studies reviewed was not stated, but the guideline paper references 21 articles.</p> <p>1c.6 Quality of Body of Evidence (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): The quality of the evidence was not discussed; however, the guideline paper provided the following summary:</p> <p>Summary: This guideline is the result of a consensus conference convened in 2006 by the American College of Physicians (ACP), the Society of General Internal Medicine (SGIM), and the Society of Hospital Medicine (SHM), with representation from the Emergency Medicine community added subsequent to the conference. The participating organizations focused specifically on the development of</p>			

principles and standards for transitions of care between the inpatient and outpatient settings, in preparation for the development of performance measures. The standards development of the Transitions of Care Consensus Conference (TOCCC) built upon the earlier work of the Stepping Up to the Plate (SUTTP) Alliance established by the ABIM Foundation.

Guideline development methodology: The TOCCC developed its principles and standards based on a systematic review of the evidence related to transitions of care between the inpatient and outpatient settings. After initial discussion in breakout groups, the conference participants refined the principles and standards through a group consensus process. Participants then prioritized the standards using a group consensus voting process. The final summary paper was subsequently reviewed and approved by all participating organizations.

Evidence base: The TOCCC developed 8 standards for care transitions, based on cohort, observational, and cross-sectional studies and expert opinion. The standards/ recommendations were developed and prioritized by a group consensus process.

1c.7 Consistency of Results across Studies (*Summarize the consistency of the magnitude and direction of the effect*): Again, the consistency of results across studies was not discussed, but the number of people and organizations involved in the development of the consensus statement suggest great consistency in the evidence base. The TOCCC was held over two days on July 11-12, 2007 at ACP Headquarters in Philadelphia, PA. There were 51 participants representing over thirty organizations. Participating organizations included medical specialty societies from internal medicine as well as family medicine and pediatrics, governmental agencies, such as the AHRQ and CMS, performance measure developers, such as the NCQA and AMA PCPI, nurses associations, such as the VNAA and Home Care and Hospice, pharmacists groups, and patient groups such as the Institute for Family-Centered Care. The TOCCC developed 8 standards for care transitions, based on cohort, observational, and cross-sectional studies and expert opinion. The standards/ recommendations were developed and prioritized by a group consensus process.

In addition, multiple studies have shown that many hospital readmissions can be prevented by patient education, pre-discharge assessment, and domiciliary aftercare; 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. [Benbassat, 2000; Jack, 2009]

1c.8 Net Benefit (*Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms*):

There are no potential harms discussed in this guideline or in the evidence, only the harm caused by not transmitting a detailed transition record in a timely manner. The TOCCC focuses only on the transitions between the inpatient and outpatient settings and does not address the equally important transitions between the many other different care settings such as hospital to nursing home, or rehabilitation facility. The intent of the TOCCC is to provide this document to national measure developers such as the Physician Consortium for

Performance Improvement and others in order to guide measure development and ultimately lead to improvement in quality and safety in care transitions.

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? **No**

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: **N/A**

1c.11 System Used for Grading the Body of Evidence: **Other**

1c.12 If other, identify and describe the grading scale with definitions: **The body of evidence was not graded.**

1c.13 Grade Assigned to the Body of Evidence: **N/A**

1c.14 Summary of Controversy/Contradictory Evidence: **No areas of controversy.**

1c.15 Citations for Evidence other than Guidelines(*Guidelines addressed below*):

1c.16 Quote verbatim, the specific guideline recommendation (Including guideline # and/or page #):

The following evidence statements are quoted verbatim.

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, 2009)

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)

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 12: Patient Care Information

Ensure that care information is transmitted and appropriately documented in a timely manner and in a clearly understandable form to patients and appropriate family and caregivers, and to all of the patient's healthcare providers/ professionals, within and between care settings, who need that information to provide continued care. [Massachusetts Coalition for the Prevention of Medical Errors. Available at <http://www.macoalition.org/index.shtml>. Last accessed October 14, 2009] (NQF Safe Practices for Better Healthcare–2010 Update)

Safe Practice 15: 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 receipt of the discharge information by the independent licensed practitioner who will assume the responsibility for care after discharge. [Jack BW, Chetty VK, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. *Ann Intern Med* 2009 Feb 3;150(3):178-87] (NQF Safe Practices for Better Healthcare–2010 Update)

-Discharge policies and procedures should be established and resourced and should address: [Clancy CM. Reengineering hospital discharge: a protocol to improve patient safety, reduce costs, and boost patient satisfaction. *Am J Med Qual* 2009 Jul-Aug;24(4):344-6. Epub 2009 Jun 5] • explicit delineation of roles and responsibilities in the discharge process; • preparation for discharge

occurring, with documentation, throughout the hospitalization; • reliable information flow from the primary care physician (PCP) or referring caregiver on admission, to the hospital caregivers, and back to the PCP, after discharge, using standardized communication methods; [Sherman FT. Rehospitalizations: packaging discharge and transition services to prevent "bounce backs".

Geriatrics 2009 May;64(5):8-9] • completion of discharge plan and discharge summaries before discharge; [Jack, 2009] • patient or, as appropriate, family perception of coordination of discharge care; and • benchmarking, measurement, and continuous quality improvement of discharge processes.

-A written discharge plan must be provided to each patient at the time of discharge that is understandable to the patient and/or his family or guardian and appropriate to each individual's health literacy and English language proficiency. [Chugh A, Williams MV, Grigsby J, et al. Better transitions: improving comprehension of discharge instructions. Front Health Serv Manage 2009 Spring;25(3):11-32; Were MC, Li X, Kesterson J, et al. Adequacy of hospital discharge summaries in documenting tests with pending results

and outpatient follow-up providers. J Gen Intern Med 2009 Sep;24(9):1002-6. Epub 2009 Jul 3]

At a minimum, the discharge plan must include the following: • reason for hospitalization; • medications to be taken postdischarge, including, as appropriate, resumption of pre-admission medications, how to take them, and how to obtain them; • instructions for the patient on what to do if his or her condition changes; and • coordination and planning for follow-up appointments that the patient can keep and follow-up of tests and studies for which confirmed results are not available at the time of discharge.

-A discharge summary must be provided to the ambulatory clinical provider who accepts the patient's care after hospital discharge. At a minimum, the discharge summary should include the following: • 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, tests, and studies for which confirmed results are unavailable at the time of discharge and require follow-up.

-Original source documents (e.g., laboratory or radiology reports or medication administration records) should be in the transcriber's immediate possession and should be visible when it is necessary to transcribe information from one document to another.

-The organization should ensure and document receipt of discharge information by caregivers who assume responsibility for postdischarge care. This confirmation may occur through telephone, fax, e-mail response, or other electronic response using health information technologies. [Zsenits B, Polashenski WA, Sterns RH, et al. Systematically improving physician assignment during in-hospital transitions of care by enhancing a preexisting hospital electronic health record. J Hosp Med 2009 May;4(5):308-12] (NQF Safe Practices for Better Healthcare–2010 Update)

1c.17 Clinical Practice Guideline Citation: Snow V, Beck D, Budnitz T, Miller DC, Potter J, Wears RL, Weiss KB, Williams MV. Transitions of Care Consensus Policy Statement: American College of Physicians-Society of General Internal Medicine-Society of Hospital Medicine-American Geriatrics Society-American College of Emergency Physicians-Society of Academic Emergency Medicine. J Gen Intern Med 2009 Apr 3.

Joint Commission on Accreditation of Healthcare Organizations. 2009 Hospital Accreditation Standards. Oakbrook Terrace, IL: Joint Commission Resources, Inc.

National Quality Forum (NQF). Safe Practices for Better Healthcare–2010 Update: A Consensus Report. Washington, DC: NQF; 2010.

1c.18 National Guideline Clearinghouse or other URL:

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? **No**

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:

1c.21 System Used for Grading the Strength of Guideline Recommendation: **Other**

1c.22 If other, identify and describe the grading scale with definitions: **The guideline recommendations were not graded.**

1c.23 Grade Assigned to the Recommendation: **N/A**

1c.24 Rationale for Using this Guideline Over Others: **It is the PCPI policy to use guidelines, which are evidence-based, applicable to physicians and other health-care providers, and developed by a national specialty organization or government agency. In addition, the PCPI has now expanded what is acceptable as the evidence base for measures to include documented quality**

improvement (QI) initiatives or implementation projects that have demonstrated improvement in quality of care.

Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?
 1c.25 Quantity: **Moderate** 1c.26 Quality: **Moderate** 1c.27 Consistency: **Moderate**

Was the threshold criterion, *Importance to Measure and Report*, met?
 (1a & 1b must be rated moderate or high and 1c yes) Yes No

Provide rationale based on specific subcriteria:

**For a new measure if the Committee votes NO, then STOP.
 For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.**

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)
 Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See [guidance on measure testing](#).

S.1 **Measure Web Page** (*In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? **Yes**

S.2 If yes, provide web page URL: www.physicianconsortium.org

2a. RELIABILITY. Precise Specifications and Reliability Testing: H M L I

2a1. Precise Measure Specifications. (*The measure specifications precise and unambiguous.*)

2a1.1 **Numerator Statement** (*Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome*):
 Patients 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

2a1.2 **Numerator Time Window** (*The time period in which the target process, condition, event, or outcome is eligible for inclusion*):
 Within 24 hours of each discharge during measurement period

2a1.3 **Numerator Details** (*All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*):
 Numerator 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

For EHR:
 This measure does not lend itself 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 current recommended standards for interoperability as determined by the Meaningful Use (CMS EHR Incentive) requirements. The use of industry 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.

For Claims/Administrative:

Numerator Elements to be identified through medical record abstraction:

See Sample Data Collection Tool attached.

2a1.4 Denominator Statement *(Brief, narrative description of the target population being measured):*

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

2a1.5 Target Population Category *(Check all the populations for which the measure is specified and tested if any):* Adult/Elderly Care

2a1.6 Denominator Time Window *(The time period in which cases are eligible for inclusion):*

Each discharge during 12 consecutive month measurement period

2a1.7 Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):*

For EHR:

Eligible discharges for the denominator should be identified through the Admission, Discharge, Transfer (ADT) system, or from another electronic system where this information is stored.

For Claims/Administrative:

Identify patients discharged from inpatient facility using the following:

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

- 0111 (Hospital, Inpatient, Admit through Discharge Claim)
- 0121 (Hospital, Inpatient - Medicare Part B only, Admit through Discharge Claim)
- 0114 (Hospital, Inpatient, Last Claim)
- 0124 (Hospital, Inpatient - Medicare Part B only, Interim-Last Claim)
- 0211 (Skilled Nursing-Inpatient, Admit through Discharge Claim)
- 0214 (Skilled Nursing-Inpatient, Interim, Last Claim)
- 0221 (Skilled Nursing-Inpatient, Medicare Part B only, Admit through Discharge Claim)
- 0224 (Skilled Nursing- 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 care 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 an intermediate care facility)
- 05 Discharged/transferred to a designated cancer center or children's hospital
- 06 (Discharged/transferred to home under care of organized home health service org. in anticipation of covered skilled care)

- 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))
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)

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 care 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 an intermediate care facility)
- 05 Discharged/transferred to a designated cancer center or children's hospital
- 06 (Discharged/transferred to home under care of organized home health service org. in anticipation of covered skilled care)
- 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))
- 70 (Discharged/transferred to another type of health care institution not defined elsewhere in this code list)

2a1.8 Denominator Exclusions (*Brief narrative description of exclusions from the target population*):

Patients who died

Patients who left against medical advice (AMA) or discontinued care

2a1.9 Denominator Exclusion Details (*All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses*):

For Claims/Administrative Data:

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
- 42 – Expired-place unknown

2a1.10 Stratification Details/Variables (*All information required to stratify the measure results including the stratification variables*,

codes with descriptors, definitions, and/or specific data collection items/responses):

We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.

2a1.11 Risk Adjustment Type (Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13): No risk adjustment or risk stratification **2a1.12 If "Other," please describe:**

2a1.13 Statistical Risk Model and Variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):

No risk adjustment or risk stratification.

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. Type of Score: Rate/proportion

2a1.19 Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score): Better quality = Higher score

2a1.20 Calculation Algorithm/Measure Logic(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):

To calculate performance rates:

- 1) Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address).
- 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. For the purpose of this measure, a patient can qualify for the measure multiple times during the measurement period if they have multiple inpatient discharges.
- 3) From the patients within the denominator, find the patients who qualify for the Numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator
- 4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified [for this measure: Patients who died OR Patients who left against medical advice (AMA) or discontinued care]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation.

--Although the exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the

sample, conducting the survey and guidance on minimum sample size (response rate):
[The measure does not require sampling or a survey.](#)

2a1.25 **Data Source** (Check all the sources for which the measure is specified and tested). If other, please describe:
[Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Records](#)

2a1.26 **Data Source/Data Collection Instrument** (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): [See attached data collection tool.](#)

2a1.27-29 **Data Source/data Collection Instrument Reference Web Page URL or Attachment:**

2a1.30-32 **Data Dictionary/Code Table Web Page URL or Attachment:**

[Attachment](#)

[0648_AMA PCPI_CARETRANS TimelyTransmissionTransitionRecord_DataCollectionTool.pdf](#)

2a1.33 **Level of Analysis** (Check the levels of analysis for which the measure is specified and tested): [Facility, Integrated Delivery System](#)

2a1.34-35 **Care Setting** (Check all the settings for which the measure is specified and tested): [Ambulatory Care : Ambulatory Surgery Center \(ASC\), Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility, Post Acute/Long Term Care Facility : Rehabilitation](#)

2a2. **Reliability Testing.** (Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.)

2a2.1 **Data/Sample** (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

[Refer to the validity section for a description of the data sample for our EHR testing project.](#)

2a2.2 **Analytic Method** (Describe method of reliability testing & rationale):

[Refer to the validity section for a description of the analytic methods for our EHR testing project.](#)

2a2.3 **Testing Results** (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):

[Refer to the validity section for the testing results for our EHR testing project.](#)

2b. **VALIDITY. Validity, Testing, including all Threats to Validity:** H M L I

2b1.1 Describe how the measure specifications (measure focus, target population, and exclusions) are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence:

[The evidence cited for this measure is directly related to timely transmission of transition records for all ages, during transitions of care from inpatient to outpatient settings. There are no differences from the measure focus, target population, or exceptions.](#)

2b2. **Validity Testing.** (Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)

2b2.1 **Data/Sample** (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

[EHR Measure Validity](#)

[AMA-PCPI Testing Project](#)

- [o This project identified a sample of patients taken from one multi-specialty, medium-sized health practice in Southeast Texas.](#)
- [o This health practice has been designated by the NCOA as a Tier III Medical Home, and has made it a priority to create coordinated transitions in care across the continuum of care.](#)
- [o This proactive oversees approximately 7-8,000 hospital discharges per year.](#)
- [o Measure implementation began in July of 2009.](#)

o Manually abstracted sample included 100 patients from the inpatient setting.

Face Validity

The measures were pilot tested via focus group discussion and surveys in six Midwestern healthcare facilities between December 2009 and February 2010. Participants included front line caregivers as well as administrators and leadership. Approximately 65% of the 81 focus group participants also provided written surveys and feedback for analysis.

2b2.2 Analytic Method *(Describe method of validity testing and rationale; if face validity, describe systematic assessment):*

EHR Measure Validity

Data from a performance report for the measure automatically-generated from the EHR (designed to collect the necessary data elements to identify eligible cases and calculate the performance score) were compared to data elements found and scores calculated manually on visual inspection of the medical record by trained abstractors.

Data analysis included:

- Percent agreement at the denominator, numerator, (exception - for those measures with exception) and the measure overall.
- Kappa statistic to ensure that agreement rates are not a phenomenon of chance

Face Validity

The clarity and face validity of measures was assessed using numeric surveys and focused discussion.

The survey asked a panel consisting of 81 individuals including front line caregivers, administrators and leadership.

The aforementioned panel was asked to rate the following aspects of this measure:

Clarity of Numerator Statement

Clarity of Denominator Statement

Clarity of Denominator Exclusions

Overall Understanding of the Information in the Measure Specification Document

The rating scale ranged from 1-5, where 1=Very Poor; 3=Average; 5=Very Good

2b2.3 Testing Results *(Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):*

EHR Measure Validity

Overall Reliability*: N, % Agreement, Kappa (95% Confidence Interval)

100, 95.00%, 0.49 (0.05 - 0.93)

A kappa of 0.49 shows that the measure has a moderate level of agreement.

*Visual inspection of the medical record compared to the automatically generated report of the data elements.

Face Validity

For this measure, 97% of sites submitted a rating of 4 or 5 for the clarity of exceptions with a slightly lower percentage of respondents rating the clarity of denominator statements in the top 2 boxes (92%). 87% selected a 4 or 5 for the clarity of the numerator statement. Overall understanding of information in the measure specifications document received a score of 84% in the top 2 boxes.

POTENTIAL THREATS TO VALIDITY. (*All potential threats to validity were appropriately tested with adequate results.*)

2b3. Measure Exclusions. (*Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.*)

2b3.1 Data/Sample for analysis of exclusions (*Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

AMA-PCPI Testing Project

- o This project identified a sample of patients taken from a multi-specialty, medium-sized health practice in Southeast Texas.
- o This health practice has been designated by the NCQA as a Tier III Medical Home, and has made it a priority to create coordinated transitions in care across the continuum of care.
- o This practice oversees approximately 7-8,000 hospital discharges per year.
- o Measure implementation began in July of 2009.
- o Manually abstracted sample included 100 patients from the inpatient setting.

2b3.2 Analytic Method (*Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference*):

Data from an automatically-generated report from the EHR was compared to manual abstraction from patient records to calculate parallel forms reliability for the measure.

Data analysis included:

- Percent agreement
- Kappa statistic to adjust for chance agreement

2b3.3 Results (*Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses*):
Overall Reliability: N, % Agreement, Kappa (95% Confidence Interval)

100, 95.00%, 0.00 (0.00 - 0.85)*

* This is an example of a limitation of the Kappa statistic, despite the high agreement shown, the "kappa is significantly reduced if one classification category dominates" (<http://www.ajronline.org/cgi/content/full/184/5/1391>).

2b4. Risk Adjustment Strategy. (*For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.*)

2b4.1 Data/Sample (*Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

This measure is not risk adjusted.

2b4.2 Analytic Method (*Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables*):

This measure is not risk adjusted.

2b4.3 Testing Results (*Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata*):

This measure is not risk adjusted.

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: As a process measure, no risk adjustment is necessary.

2b5. Identification of Meaningful Differences in Performance. (*The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.*)

2b5.1 Data/Sample (*Describe the data or sample including number of measured entities; number of patients; dates of data; if a*

sample, characteristics of the entities included):

Highmark Quality Blue Hospital Pay-for-Performance Program

63 participating hospitals implemented Care Coordination measures as part of a "defect-free care transitions bundle"

2b5.2 Analytic Method (Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance):

Highmark Quality Blue Hospital Pay-for-Performance Program

Participant performance was assessed quarterly over the course of Fiscal Year 2011

2b5.3 Results (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

Quality Blue Hospital Pay-for-Performance Program

Participant performance on this measure, by quarter is as follows:

FY 2011, Quarter 1: 30.00%

FY 2011, Quarter 2: 50.00%

FY 2011, Quarter 3: 80.00%

2b6. Comparability of Multiple Data Sources/Methods. (If specified for more than one data source, the various approaches result in comparable scores.)

2b6.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

AMA-PCPI Testing Project

- o This project identified a sample of patients taken from one multi-specialty, medium-sized health practice in Southeast Texas.
- o This health practice has been designated by the NCOA as a Tier III Medical Home, and has made it a priority to create coordinated transitions in care across the continuum of care.
- o This proactive oversees approximately 7-8,000 hospital discharges per year.
- o Measure implementation began in July of 2009.
- o Manually abstracted sample included 100 patients from the inpatient setting.

2b6.2 Analytic Method (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):

Data from a performance report for the measure automatically-generated from the EHR (designed to collect the necessary data elements to identify eligible cases and calculate the performance score) were compared to data elements found and scores calculated manually on visual inspection of the medical record by trained abstractors.

Data analysis included:

- Percent agreement at the denominator, numerator, (exception - for those measures with exception) and the measure overall.
- Kappa statistic to ensure that agreement rates are not a phenomenon of chance

Data analysis included:

- Percent agreement
- Kappa statistic to adjust for chance agreement

2b6.3 Testing Results (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):

Overall Reliability*: N, % Agreement, Kappa (95% Confidence Interval)

100, 95.00%, 0.49 (0.05 - 0.93)

A kappa of 0.49 shows that the measure has a moderate level of agreement.

*Visual inspection of the medical record compared to the automatically generated report of the data elements.

2c. Disparities in Care: H M L I NA (If applicable, the measure specifications allow identification of disparities.)

2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts): We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:

The PCPI advocates that performance measure data should, where possible, be stratified by race, ethnicity, and primary language to assess disparities and initiate subsequent quality improvement activities addressing identified disparities, consistent with recent national efforts to standardize the collection of race and ethnicity data. A 2008 NQF report endorsed 45 practices including stratification by the aforementioned variables. (1) A 2009 IOM report "recommends collection of the existing Office of Management and Budget (OMB) race and Hispanic ethnicity categories as well as more fine-grained categories of ethnicity (referred to as granular ethnicity and based on one's ancestry) and language need (a rating of spoken English language proficiency of less than very well and one's preferred language for health-related encounters)." (2)

References:

(1) National Quality Forum Issue Brief (No.10). Closing the Disparities Gap in Healthcare Quality with Performance Measurement and Public Reporting. Washington, DC: NQF, August 2008.

(2) Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement. March 2010. AHRQ Publication No. 10-0058-EF. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/research/iomraceport>. Accessed May 25, 2010.

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, *Scientific Acceptability of Measure Properties*, met?

(Reliability and Validity must be rated moderate or high) Yes No

Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

C.1 Intended Purpose/ Use (Check all the purposes and/or uses for which the measure is intended): Public Reporting, Quality Improvement (Internal to the specific organization)

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in the following questions): Public Reporting, Quality Improvement (Internal to the specific organization)

3a. Usefulness for Public Reporting: H M L I

(The measure is meaningful, understandable and useful for public reporting.)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large (If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[For Maintenance – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]**

This measure was used in the Highmark Quality Blue Hospital Pay-for-Performance Program 2011, where 63 participating hospitals implemented Care Coordination measures as part of a “defect-free care transitions bundle.” The PCPI believes that the reporting of participation information is a beneficial first step on a trajectory toward the public reporting of performance results, which is appropriate since the measure has been tested and the reliability of the performance data has been validated. Continued NQF endorsement will facilitate our ongoing progress toward this public reporting objective.

3a.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: The PCPI believes that the reporting of participation information is a beneficial first step on a trajectory toward the public reporting of performance results, which is appropriate since the measure has been tested and the reliability of the performance data has been validated. Continued NQF endorsement will facilitate our ongoing progress toward this public reporting objective.

3.2 Use for other Accountability Functions (payment, certification, accreditation). If used in a public accountability program, provide name of program(s), locations, Web page URL(s): This measure may be used in a Maintenance of Certification program. It was also used in the Highmark Quality Blue Hospital Pay-for-Performance Program 2011, where 63 participating hospitals implemented Care Coordination measures as part of a “defect-free care transitions bundle.”

3b. Usefulness for Quality Improvement: H M L I
 (The measure is meaningful, understandable and useful for quality improvement.)

3b.1. Use in QI. If used in quality improvement program, provide name of program(s), locations, Web page URL(s): **[For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].**

All PCPI measures are suitable for use in quality improvement initiatives and are made freely available on the PCPI website and through the implementation efforts of medical specialty societies and other PCPI members. The PCPI strongly encourages the use of its measures in QI initiatives and seeks to provide information on such initiatives to PCPI members.

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results: The PCPI believes that the use of PCPI measures in quality improvement initiatives is a beneficial way to gather scientific data with which to improve physician performance. This is appropriate since the measure has been tested and the reliability of the performance data has been validated. NQF endorsement will facilitate our ongoing progress toward this quality improvement objective.

Overall, to what extent was the criterion, Usability, met? H M L I
 Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. **(evaluation criteria)**

4a. Data Generated as a Byproduct of Care Processes: H M L I

4a.1-2 How are the data elements needed to compute measure scores generated? (Check all that apply).

Data used in the measure are:
 generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition,
 Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims), Abstracted from a record
 by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

4b. Electronic Sources: H <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> I <input type="checkbox"/>
4b.1 Are the data elements needed for the measure as specified available electronically (<i>Elements that are needed to compute measure scores are in defined, computer-readable fields</i>): ALL data elements in electronic health records (EHRs)
4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:
4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> I <input type="checkbox"/>
4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results: We are not aware of any unintended consequences related to this measurement.
4d. Data Collection Strategy/Implementation: H <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> I <input type="checkbox"/>
A.2 Please check if either of the following apply (<i>regarding proprietary measures</i>):
4d.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues (<i>e.g., fees for use of proprietary measures</i>): This measure was found to be reliable and feasible for implementation.
Overall, to what extent was the criterion, <i>Feasibility</i> , met? H <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> I <input type="checkbox"/> Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT
Does the measure meet all the NQF criteria for endorsement? Yes <input type="checkbox"/> No <input type="checkbox"/> Rationale:
If the Committee votes No, STOP. If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES
If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.
5.1 If there are related measures (<i>either same measure focus or target population</i>) or competing measures (<i>both the same measure focus and same target population</i>), list the NQF # and title of all related and/or competing measures: 0136 : Heart Failure (HF): Detailed discharge instructions 0338 : CAC-3: Home Management Plan of Care (HMPC) Document Given to Patient/Caregiver 0558 : HBIPS-7 Post discharge continuing care plan transmitted to next level of care provider upon discharge
5a. Harmonization
5a.1 If this measure has EITHER the same measure focus OR the same target population as NQF-endorsed measure(s) : Are the measure specifications completely harmonized? No
5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden: Our measure has a broader target population since the three measures above are for the psychiatric, heart failure and pediatric asthma populations, respectively.
5b. Competing Measure(s)
5b.1 If this measure has both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):
N/A

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): American Medical Association - Physician Consortium for Performance Improvement, 515 N. State St., Chicago, Illinois, 60654

Co.2 Point of Contact: Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056-

Co.3 Measure Developer if different from Measure Steward: American Medical Association - Physician Consortium for Performance Improvement, 515 N. State St., Chicago, Illinois, 60654

Co.4 Point of Contact: Katherine, Ast, MSW, LCSW, Policy Analyst, Measure Development Operations Performance Improvement, katherine.ast@ama-assn.org, 312-464-4920-

Co.5 Submitter: Katherine, Ast, MSW, LCSW, Policy Analyst, Measure Development Operations Performance Improvement, katherine.ast@ama-assn.org, 312-464-4920-, American Medical Association - Physician Consortium for Performance Improvement

Co.6 Additional organizations that sponsored/participated in measure development:
ABIM Foundation
American College of Physicians
Society of Hospital Medicine

Co.7 Public Contact: Mark S., Antman, DDS, MBA, Director, Measure Development Operations Performance Improvement, mark.antman@ama-assn.org, 312-464-5056-, American Medical Association - Physician Consortium for Performance Improvement

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

PCPI measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study must be equal contributors to the measure development process. In addition, the PCPI strives to include on its work groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

Robert M. Palmer, MD, MPH (Co-Chair) (Geriatrics/Gerontology)

Mark V. Williams, MD, FACP (Co-Chair) (Hospital medicine)

Dennis M. Beck, MD, FACEP (Emergency medicine)

Judith S. Black, MD, MHA (Blue Cross and Blue Shield Association)

Caroline Blaum, MD (Geriatrics)

Clair M. Callan, MD, MBA, CPE (American College of Physician Executives)

Jayne Hart Chambers, MBA (Federation of American Hospitals)

Steven Chen, MD, MBA (Surgical oncology)

Kenneth D. Coburn, MD, MPH (Health Quality Partners)

Mirean Fisher Coleman, MSW, LICSW, CT (National Association of Social Workers)

Sydney Dy, MD, MSc (Hospice and palliative medicine)

NQF #0648 Timely Transmission of Transition Record (Discharges from an Inpatient Facility to Home/Self Care or Any Other Site of Care)

Scott Endsley, MD, MSc (Health Services Advisory Group)
David A. Etzioni, MD, MSHS (Colon and rectal surgery)
Beth Feldpush, MPH (American Hospital Association)
Rita Munley Gallagher, PhD, RN (American Nurses Association)
G. Scott Gazelle, MD, MPH, PhD (Radiology)
Robert W. Gilmore, MD (Clinical surgery)
Eric S. Holmboe, MD, FACP (Internal medicine)
Mary Ann Kliethermes, B.S., Pharm.D. (American Society of Health System Pharmacists)
James E. Lett, II, MD (American Medical Directors Association)
Janet R. Maurer, MD, MBA, FCCP (Pulmonology)
Andie Melendez, RN, MSN, HTPC (Academy of Medical-Surgical Nurses)
Donise Mosebach, RN, MS, CEN (The Joint Commission)
Michael O'Dell, MD, MSHA, FAAFP (Family medicine)
Eric D. Peterson, MD, MPH, FAHA, FACC (American Heart Association/Cardiology)
Mark Redding MD, FAAP (Pediatrics)
Michael Ries, MD, MBA, FCCM (Critical care medicine)
Hilary C. Siebens, MD (Physical medicine and rehabilitation)
Janet (Jesse) Sullivan, MD (National Transitions of Care Coalition)
Randal J. Thomas, MD, MS, FACC, FAHA, FACP, FAACVPR (Cardiology)
Christopher Tompkins, PhD (Brandeis University)
Robert Wears, MD, FACEP (Emergency medicine)

ABIM Foundation
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Kendra Hanley, MS
Karen Kmetik, PhD
Joanne G. Schwartzberg, MD
Patricia Sokol, RN, JD
Chyna Wilcoxson

Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.3 Year the measure was first released: 2009

Ad.4 Month and Year of most recent revision: 12, 2011

Ad.5 What is your frequency for review/update of this measure? See Ad.9.

Ad.6 When is the next scheduled review/update for this measure? 12, 2012

Ad.7 Copyright statement: Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement® (the Consortium), are intended to facilitate quality improvement activities by physicians.

These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its Measures for all potential applications. The Consortium encourages the testing and evaluation of its Measures.

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Ad.8 Disclaimers:

Ad.9 Additional Information/Comments: Coding/Specifications updates occur annually. The PCPI has a formal measurement review process that stipulates regular (usually on a three-year cycle, when feasible) review of the measures. The process can also be activated if there is a major change in scientific evidence, results from testing or other issues are noted that materially affect the integrity of the measure.

Date of Submission (MM/DD/YY): 01/09/2012