Memo

June 20, 2019

To: Prevention and Population Health Committee

From: NQF Staff

Re: June 27 Spring 2019 Prevention and Population Health Standing Committee Web Meeting

Purpose: This memo provides the Committee with the relevant background information for the upcoming web meeting to discuss the feasibility of a universal influenza measure by 2020

Background

Strengthening measurement of prevention and population health requires joint efforts from communities, public health entities, healthcare providers, and other nonhealthcare stakeholders that influence health outcomes. The United States can reduce the incidence of morbidity and premature mortality by identifying the right measures and implementing evidence-based interventions. Measures held in common across care settings have the potential to foster better care coordination while keeping the patient at the center of care. To reduce burden and optimize efforts to improve performance on key healthcare measures, it is critical to seek alignment and harmonization for these types of measures.

Given the number of influenza measures, a 2008 NQF Steering Committee recommended the creation of a universal influenza measure to reconcile and harmonize a large number of setting-specific influenza measures.[1] The Prevention and Population Health Standing Committee reiterated this.[2] While most of the measures are harmonized to NQF's standard specifications, the Committee strongly recommends the need for a single, standardized measure reconciled in collaboration with the multiple measure developers involved.

Portfolio Influenza Measures Overview

The goal of this memo is to inform the upcoming strategic meeting on June 27 to discuss a path forward for alignment of three influenza measures (NQF 0680, 0681, 1659) as well as appropriate maintenance of endorsement.

Measure 1659 Influenza Immunization (Facility level) is aligned with the standard specifications in the *National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations.*[3] The measure is not harmonized with related/competing measures listed in this document as well as others. The developer justifies this based on the measure's focus on different patient populations (i.e., inpatient), age, health conditions, or location (e.g., home health, physician office, short-term skilled, long-term stay, acute care hospital, etc.). However, this contradicts the Committee's recommendation for a general measure that can be stratified by age groups, settings, and conditions. The developer also states that the measure is important because the acute care setting

is unique and conducts procedures that would not be performed in a skilled setting or physician office setting.

Measure 0680 **Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)** **(Facility level)** is mostly aligned (i.e., as much as possible according to the developer) with the *National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations.* For nursing home residents, the definition of a short stay is a resident whose length of stay is less than or equal to 100 days. The measure is intended for nursing homes, IRFs, and LTCHs. The developer stated that it did not attempt to harmonize this measure with measure 1659 because it did not include patients assessed but not given a vaccine. However, measure 1659 seems to have been re-specified to include this group in its numerator statement. This measure could be a part of a standard facility-level measure that can be stratified by care setting with different data sources.

Measure 0681 **Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)** **(Facility)** is mostly aligned (i.e., as much as possible according to the developer) with the *National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations*. The measure is similar to measure 0680 except it captures long-stay residents. Long-stay residents are identified as those who have had 101 or more cumulative days of nursing facility care. The developer provided an explanation for lack of harmonization similar to that for measure 0680. This measure could be a part of a standard facility-level measure that can be stratified by care setting.

Purpose of Strategic Meeting and Memo

The Committee has previously discussed the need for a universal influenza immunization measure.

The upcoming measure maintenance review date for all three of these measures is 2020. The Committee would like to review a consolidated general measure that can be stratified by various age groups, settings, and conditions for the upcoming maintenance review. Consolidation of these three measures will lower data collection and reporting burden. This will further the alignment and/or increase harmonization of the measures. Additionally, in combining these measures, the Committee acknowledges that not all aspects or nuances of a clinical practice guideline can be captured in a measure, and that the consolidated specifications are intended to capture the most important aspects of the guideline that can be measured.

Future Considerations/Discussion

- What is the feasibility of creating a universal influenza by the next maintenance cycle?

[1] National Quality Forum (NQF). *National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations.* Washington, DC: NQF; 2008. http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=17794. Last accessed June 2019

[2] National Quality Forum (NQF). *Population Health (Phase 1) – Prevention Endorsement Maintenance: Technical Report.* Washington, DC: NQF; 2012. http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=71409. Last accessed June 2019.

[3] National Quality Forum (NQF). *National Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations.* Washington, DC: NQF; 2008. http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=17794. Last accessed June 2019

Appendix A1: Measure Specifications of Related Measures (tabular format)

Comparison of NQF 0680, NQF 0681, and NQF 1659

	0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)	0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)	1659 Influenza Immunization
Steward	Centers for Medicare & Medicaid Services	Centers for Medicare & Medicaid Services	Centers for Medicare and Medicaid Services
Description	The measure reports the percentage of short-stay residents or patients who are assessed and appropriately given the seasonal influenza vaccine during the most recently-completed influenza season. The influenza vaccination season (IVS) is defined as beginning on October 1, or when the vaccine first becomes available*, and ends on March 31 of the following year. This measure is based on the NQF´s National Voluntary Standards for Influenza and Pneumococcal Immunizations. The measure is the aggregate of three separately calculated submeasures to reflect the process by which a resident or patient is assessed and appropriately given the influenza vaccination during the current or most recent influenza season. The three submeasures are as follows: • residents or patients who received the influenza vaccine during the most recently completed influenza season, either in the facility/hospital or outside the facility/hospital (NQF #0680a); • residents or patients who were offered and declined the seasonal influenza vaccine (NQF #0680b); • residents or patients who were ineligible to receive the seasonal influenza vaccine due to contraindication(s) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine, see http://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm) (NQF #0680c). *Note: While the IVS officially begins when the vaccine becomes available, which may be before October 1, the denominator time window for the quality measure and references to the IVS for the denominator specification is from October 1 to March 31 of the following year. The numerator time window and references to the IVS in the numerator specifications may include patients and residents who are assessed and offered the vaccine before October 1. This is based on how the influenza items were coded by the facility. The denominator consists of patients or short-stay residents 180 days of age or older on the target date of assessment who were in the facility/hospital for at least one day during the most recently-completed influenza vaccination season (IVS). The measure is based on data from the Minimum Data Set (MDS) assessments of nursing home residents, Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) assessments for Inpatient Rehabilitation Facility (IRF) patients, and the Long-Term Care Hospital (LTCH) Continuity Assessment Record & Evaluation (CARE) Data Set Version assessments of LTCH patients. Data are collected in each of these three settings using standardized items across the three assessment instruments. For the nursing homes, the measure is limited to short-stay residents, identified as residents who have had 100 or fewer days of nursing home care. For the LTCHs, this measure will include all patients, irrespective of a patient's length of stay. For IRFs, this measure includes all Medicare Part A and Part C patients, irrespective of a patient's length of stay.	This measure reports the percentage of long-stay residents, 180 days of age and older, who were in a nursing facility for at least one day during the most recently completed influenza vaccination season (IVS), and who were assessed and appropriately given the seasonal influenza vaccine . The IVS is defined as beginning on October 1 and ends on March 31 of the following year. The measure is the aggregate of three separately calculated submeasures to reflect the process by which a resident is assessed and appropriately given the influenza vaccination during the current or most recent influenza season. The three submeasures are as follows: • resident received the influenza vaccine during the current or most recent influenza season, either in the facility or outside the facility (NQF #0681a); • resident was offered and declined the seasonal influenza vaccine (NQF #0681b); and • resident was ineligible to receive the seasonal influenza vaccine due to contraindication(s) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine, see http://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm) (NQF #0681c). The denominator consists of long-stay residents 180 days of age or older on the target date of assessment who were in the facility for at least one day during the most recently-completed influenza vaccination season (IVS). This measure is based on data from the Minimum Data Set (MDS 3.0) OBRA, PPS, and/or discharge assessments during the selected influenza season. Long-stay residents are identified as those who have had 101 or more cumulative days of nursing facility care. A separate measure (NQF #0680, Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)) is to be used for residents who have had 100 or fewer cumulative days of nursing facility care.	Inpatients age 6 months and older discharged during October, November, December, January, February or March who are screened for influenza vaccine status and vaccinated prior to discharge if indicated.
Type	Process	Process	Process
Data Source	Electronic Clinical Data Nursing Home Minimum Data Set 3.0, Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), LTCH Continuity Assessment Record & Evaluation (Care) Data Set Available at measure-specific web page URL identified in S.1 No data dictionary	Electronic Clinical Data Nursing Home Minimum Data Set 3.0 Available at measure-specific web page URL identified in S.1 No data dictionary	Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual

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			abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org. Available at measure-specific web page URL identified in S.1 Attachment Appendix_A.Table_12.10_Organ_Transplant_ICD-10__ICD-9_codes.xls
Level	Facility	Facility	Facility
Setting	Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Hospital/Acute Care Facility
Numerator Statement	The numerator for the overall measure (NQF #0680) is the number of residents or patients in the denominator sample who, during the numerator time window, meet any one of the following criteria: (1) those who received the seasonal influenza vaccine during the most recently-completed influenza season, either in the facility/hospital or outside the facility/hospital (NQF #0681a); (2) those who were offered and declined the seasonal influenza vaccine (NQF #0681b); or (3) those who were ineligible due to contraindication(s) (NQF #0681c). The numerator time window coincides with the most recently-completed seasonal IVS which begins on October 1 and ends on March 31 of the following year. Each of the three submeasures numerators described above will be computed and reportedly separately, alongside the overall numerator calculated as the aggregate of the three submeasure numerators.	The numerator is the number of long-stay residents with a target assessment (OBRA admission, quarterly, annual or significant change/correction assessments; PPS 5-,14-, 30-, 60-, 90-day, or readmission/return assessments; or discharge assessment with or without return anticipated) who were in the denominator sample, AND who meet any of the following criteria for the selected influenza season: (1) they received the influenza vaccine during the most recent influenza season, either in the facility or outside the facility (NQF #0681a), (2) they were offered and declined the influenza vaccine (NQF #0681b), or (3) they were ineligible due to medical contraindication(s) (NQF #0681c) . The influenza season is defined as July 1 of the current year to June 30 of the following year. The IVS begins on October 1 and ends on March 31 of the following year. Each of the three submeasure numerators described above will be computed and reported separately, alongside the overall numerator calculated as the aggregate of the three submeasure numerators.	Inpatient discharges who were screened for influenza vaccine status and were vaccinated prior to discharge if indicated.
Numerator Details	The numerator for the overall measure (NQF #0680) includes all patients or short-stay residents in the denominator sample who, during the numerator time window, meet one of three criteria: (1) received the seasonal influenza vaccine during the most recent influenza season, either inside or outside the facility/hospital, (2) were offered and declined the vaccine, or (3) were ineligible due to medical contraindications. For each setting (i.e., nursing homes, inpatient rehabilitation facilities, and long-term care hospitals), the numerator components are also computed and reportedly separately as a submeasure. Specifications for the three provider type assessment tools are listed below: MDS: Residents are counted if they are short-stay residents, defined as residents whose length of stay is less than or equal to 100 days. Short-stay residents are included in the numerator for the overall measure (NQF #0680) if they meet any of the following criteria during the numerator time window: (1) received the influenza vaccine during the most recent influenza vaccine season, either in the facility (O0250A=1) or outside the facility (O0250C=2) (also computed and reportedly separately as a submeasure); or (2) offered and declined the influenza vaccine (O0250C=4) (also computed and reportedly separately as a submeasure); or (3) ineligible due to medical contraindication(s) (O0250C=3) (also computed and reportedly separately as a submeasure). Included in the numerator are short-stay residents who meet the criteria on the selected MDS assessment. The record selected will be the record with the latest target date that meets all of the following conditions: (1) it has a qualifying reason for assessment (OBRA A0310A=01,02,03,04,05,06), PPS (A0310B=01,02,03,04,05,06) or discharge assessment (A0310F=10, 11), (2) the target date is on or after October 1st of the most recently completed influenza season, and (3) the entry date is on or before March 31st of the most recently completed influenza season. IRF-PAI: Patients are included in the numerator for the overall measure (NQF #0680) for stays that meet any of the following criteria during the numerator time window: (1) received the influenza vaccine during the most recently-completed influenza season, either in the facility	Residents are counted if they are long-stay residents, defined as residents who have had 101 or more cumulative days of nursing facility care, are 180 days of age and older and who were in a nursing facility for at least one day during the most recently completed IVS. Residents who return to the nursing home following a hospital discharge will not have their stay reset to zero. The numerator is the number of long-stay residents in the denominator sample with a selected target assessment (OBRA admission, quarterly, annual or significant change/correction assessments; PPS 5-, 14-, 30-, 60-, 90-day, or readmission/return assessments; or discharge assessment with or without return anticipated) during the most recently selected influenza season who meet any of the following criteria: (1) Resident received the influenza vaccine during the most recent influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]) (NQF #0681a, computed separately); or (2) Resident was offered and declined the influenza vaccine (O0250C = [4]) (NQF #0681b, computed separately); or (3) Resident was ineligible due to contraindication(s) (O0250C = [3]) (NQF #0681c, computed separately) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine).	The following are included in the numerator: • Patients who received the influenza vaccine during this inpatient hospitalization • Patients who received the influenza vaccine during the current year's flu season but prior to the current hospitalization • Patients who were offered and declined the influenza vaccine • Patients who have an allergy/sensitivity to the influenza vaccine, anaphylactic latex allergy or anaphylactic allergy to eggs, or for whom the vaccine is not likely to be effective because of bone marrow transplant within the past 6 months, or history of Guillian-Barre Syndrome within 6 weeks after a previous influenza vaccination Data Elements required for the numerator: • ICD-10-CM Other Diagnosis Codes • ICD-10-PCS Other Procedure Codes • ICD-10-CM Principal Diagnosis Code • ICD-10-PCS Principal Procedure Code • Influenza Vaccination Status

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	(O0250A = 1) or outside the facility (O0250C = 2) ; or (2) offered and declined the influenza vaccine (O0250C = 4; or (3) ineligible due to medical contraindication(s) (O0250C = 3). All three of these also computed and reportedly separately as submeasures. Included in the numerator are patients who meet the criteria based on data reported on the IRF-PAI assessments during the denominator time window. Note: IRF-PAI assessments are submitted to CMS for Medicare Part A and Part C patients. LTCH CARE Data Set (LCDS): Patients are included in the numerator for the overall measure (NQF #0680) for patient stays that meet any of the following criteria during the numerator time window: (1) received the influenza vaccine during the most recent influenza season, either in the facility (O250A=1) or outside the facility (O0250C=2) ; or (2) offered and declined the influenza vaccine (O0250C=4); or (3) ineligible due to medical contraindication(s) (O0250C=3).All three of these also computed and reportedly separately as submeasures. Included in the numerator are patients who meet the criteria on the LTCH CARE Data Set admission assessment (A0250=01), discharge or expired patient assessment (A0250=10, 11, 12) during the denominator time window. Note: LCDS expired assessments (A0250=12) completed before April 1, 2016 are not included in the numerator because prior to this date the influenza items were not included on expired assessments.		
Denominator Statement	The denominator consists of patients or short-stay residents 180 days of age and older on the target date of the assessment who were in the facility/hospital for at least one day during the denominator time window. The denominator time window is defined as the most recently-completed IVS, from October 1 to March 31 of the following year. For IRF and LTCH, the QM is based on completed patient stays (have discharge assessments). An IRF or LTCH patient with multiple stays during the denominator time window (IVS) will be included more than once in the QM. If a nursing home resident has more than one episode during the denominator time window only the more recent episode is included in this QM.	The denominator is the total number of long-stay residents 180 days of age or older on the target date of the assessment who were in the nursing facility who were in a nursing facility for at least one day during the most recently completed IVS that have an OBRA, PPS, or discharge assessment and who did not meet the exclusion criteria.	Acute care hospitalized inpatients age 6 months and older discharged during the months of October, November, December, January, February or March.
Denominator Details	The denominator time window is defined as the most recently-completed IVS, from October 1 to March 31 of the following year. Measure specifications for the three assessment tools are listed below. For IRF and LTCH, the QM is based on stays with admission and discharge assessments. An IRF or LTCH patient with multiple stays during the denominator time window (IVS) will be included more than once in the QM. If a nursing home resident has more than one episode during the denominator time window only the more recent episode is included in this QM. MDS (in use in Nursing Homes/Skilled Nursing Facilities): Residents are counted if they are short-stay residents, defined as residents whose length of stay is less than or equal to 100 days. The sample includes residents, aged 180 days or older, meeting the following conditions: the resident has an OBRA assessment (A0310A=01,02,03,04,05,06) or PPS assessment (A0310B=01,02,03,04,05,06) or discharge assessment (A0310F=10, 11) with an assessment reference date on or after the start of the denominator time window and an entry date (A1600) on or before the end of the denominator time window. IRF-PAI (in use in Inpatient Rehabilitation Facilities): Patient stays are included in the sample if patients are 180 days or older and have a stay that includes 1 or more days in the IRF during the denominator time window (the IVS). Patient stays must meet any of the following conditions: (1) the patient has an admission assessment with an entry date (item 12) during the denominator time window; (2) the patient has a discharge assessment with a discharge date (Item 40) during the denominator time window; or (3) the patient has an admission with an entry date (item 12) before the denominator time window and a discharge date (item 40) after the denominator time window. LTCH CARE Data Set (in use in Long-Term Care Hospitals): Patient stays are included in the sample if patients are 180 days of age or older at discharge and have a stay that includes 1 or	Residents are counted if they are long-stay residents, defined as residents who have had 101 or more cumulative days of nursing facility care. Residents who return to the nursing home following a hospital discharge will not have their length of stay reset to zero. The target population includes all long-stay residents with a target assessment (assessments may be OBRA admission, quarterly, annual or significant change/correction assessments (A0310A = 01, 02, 03, 04, 05, 06) or PPS 5-, 14-, 30-, 60-, 90-day, or readmission/return assessments (A0310B = 01, 02, 03, 04, 05, 06) or discharge assessment with or without return anticipated (A0310F = 10, 11) who were in a nursing facility for at least one day during the most recently completed IVS, except for those who meet the exclusion criteria (specified in S.10 and S.11).	Data Elements required for the denominator: • Admission Date • Birthdate • Discharge Date • Discharge Disposition • ICD-10-PCS Other Procedure Codes • ICD-10-PCS Principal Procedure Code

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	more days in the LTCH during the denominator time window. Stays must meet either of the following conditions: (1) a stay with an admission date (A0220) or a planned or unplanned (A0250 = 10, 11) discharge date (A0270) or an expired patient assessment (A0250 = 12) within the denominator time window; or (2) a stay with the admission date (A0220) before the denominator time window and a planned or unplanned discharge (A0250 = 10, 11) with discharge or date (A0270) or a patient expired assessment (A0250 = 12) with date of death (A0270) after the denominator time window.		
Exclusions	Residents or patients whose age is 179 days of less of age on target date of the selected influenza vaccination assessment are excluded. LTCH patients whose expired assessments are completed before April 1, 2016 are excluded. After April 1, 2016 expired patients are no longer excluded from the QM, because the influenza items were added to the LCDS expired assessments. Nursing homes with denominator counts of less than 20 residents and IRFs and LTCHs with less than 20 stays in the sample are excluded from public reporting due to small sample size.	Residents whose age is 179 days or less on target date of selected influenza vaccination assessment are excluded. If the facility sample includes fewer than 30 residents after all other resident-level exclusions are applied, then the facility is excluded from public reporting.	The following patients are excluded from the denominator: • Patients less than 6 months of age • Patients who expire prior to hospital discharge • Patients with an organ transplant during the current hospitalization (Appendix_A.Table 12.10 Organ Transplant codes.xls) • Patients for whom vaccination was indicated, but supply had not been received by the hospital due to problems with vaccine production or distribution • Patients who have a Length of Stay greater than 120 days • Patients who are transferred or discharged to another acute care hospital • Patients who leave Against Medical Advice (AMA)
Exclusion Details	Residents or patients with age 179 days or less are excluded, with age calculation based on the resident and patient birthdate and the target date of the selected influenza vaccination assessment.	Residents whose age is 179 days or less are excluded, with age calculation based on the resident birthdate and the target date of the selected influenza vaccination assessment.	To determine the length of stay, the admission date and discharge date are entered. If the result of the calculation subtracting the admission date from the discharge date is greater than 120 days the patient is excluded from the measure. The patient's date of birth is entered. If the calculation result of the admission date minus the birth date is less than 6 months the patient is excluded from the measure. Patients who had an organ transplant during the current hospitalization are excluded based on having an ICD-10 PCS Principal or Other Procedure Code assigned as having occurred during the current hospitalization. If the patient has at least one code from the list on Appendix_A.Table 12.10 Organ Transplant codes.xls assigned for the current hospitalization they are excluded. Discharge Disposition is a manually abstracted data element. If documentation in the patient's medical record is consistent with the criteria specified in the Discharge Disposition data element for discharge to an acute care facility, patient expired prior to hospital discharge, or the patient left against medical advice the patient is excluded from the measure. The Influenza Vaccination Status is a manually abstracted data element for the measure. Allowable Value 6 may be selected if there is documentation in the medical record reflecting the hospital has ordered the influenza vaccine but has not yet received it based on problems with vaccine production or distribution. If this value is selected the measure algorithm will exclude the patient from the measure.
Risk Adjustment	No risk adjustment or risk stratification This section is not applicable. Provided in response box S.15a	No risk adjustment or risk stratification This is not applicable. Provided in response box S.15a	No risk adjustment or risk stratification N/A
Stratification	This section is not applicable.	This is not applicable.	Measure is not stratified.
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score
Algorithm	For each setting the calculation algorithm for the overall measure and submeasures a-c are: Step 1: Identify the total number of residents or patients meeting the denominator criteria. Step 2: For the first submeasure (NQF #0680a: Percent of Residents or Patients Who Received the Seasonal Influenza Vaccine (short stay)):	The calculation algorithm for the overall measure and submeasures a-c are: Step 1: Identify the total number of residents meeting the denominator criteria. For the first submeasure (NQF #0681a: Percent of Residents Who Received the Seasonal Influenza Vaccine (long stay)):	Numerator: Inpatient discharges who were screened for Influenza vaccine status and were vaccinated prior to discharge if indicated. Denominator: Acute care hospitalized inpatients age 6 months and older discharged during October, November, December, January, February or March.

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)	0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)	1659 Influenza Immunization

Step 2a: Identify the total number of patients or short-stay residents who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]).
 	
Step 2b: Divide the results of Step 2a by the result of Step 1.
 	
Step 3: For the second submeasure (NQF #0680b: Percent of Residents or Patients Who Offered and Declined the Seasonal Influenza Vaccine (short stay)):
 	
Step 3a: Identify the total number of patients or short-stay residents who were offered and declined the seasonal influenza vaccine (O0250C = [4]).
 	
Step 3b: Divide the results of Step 3a by the result of Step 1.
 	
Step 4: For the third submeasure (NQF #0680c: Percent of Residents or Patients Who Did Not Receive, Due to Medical Contraindication, the Seasonal Influenza Vaccine (short stay)):
 	
Step 4a: Identify the total number of patients or short-stay residents who were ineligible due to medical contraindication(s) (O0250C = [3]).
 	
Step 4b: Divide the results of Step 4a by the result of Step 1.
 	
Step 5: For the overall measure (NQF #0680: Percent of Residents or Patients Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)):
 	
Step 5a: Aggregate Step 2a, 3a, and 4a [Sum the total number of short-stay residents or patients who met any one of the following criteria: who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]); OR who were offered and declined seasonal influenza vaccine (O0250C = [4]); OR who were ineligible due to medical contraindication(s) (O0250C = [3]).]
 	
Step 5b: Divide the results of Step 5a by the result of Step 1. Available at measure-specific web page URL identified in S.1
	Step 2a: Identify the total number of long-stay residents who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]).
	
	Step 3a: Divide the results of Step 2a by the result of Step 1.
	
	For the second submeasure (NQF #0681b: Percent of Residents Who Offered and Declined the Seasonal Influenza Vaccine (long stay)):
	
	Step 2b: Identify the total number of long-stay residents who were offered and declined the seasonal influenza vaccine (O0250C = [4]).
	
	Step 3b: Divide the results of Step 2b by the result of Step 1.
	
	For the third submeasure (NQF #0681c: Percent of Residents Who Did Not Receive, Due to Medical Contraindication, the Seasonal Influenza Vaccine (long stay)):
	
	Step 2c: Identify the total number of long-stay residents who were ineligible due to medical contraindication(s) (O0250C = [3]).
	
	Step 3c: Divide the results of Step 2c by the result of Step 1.
	
	For the overall measure (NQF #0681: Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)):
	
	Step 2d: Aggregate Step 2a, 2b, and 2c [Sum the total number of long-stay residents who met any of the following criteria: who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]); OR who were offered and declined the seasonal influenza vaccine (O0250C = [4]); OR who were ineligible due to medical contraindication(s) (O0250C = [3]).]
	
	Step 3d: Divide the results of Step 2d by the result of Step 1. Available at measure-specific web page URL identified in S.1
		Variable Key: Patient Age
		
		1. Start processing. Run cases that are included in the Global Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.
		
		2. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the critical feedback messages into the measure specific algorithms.
		
		3. Check Patient Age
		  a. If the Patient Age is less than 6 months old, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
		  b. If the Patient Age is greater than or equal to 6 months, continue processing and proceed to ICD-10-PCS Principal or Other Procedure Codes.
		
		4. Check ICD-10-PCS Principal or Other Procedure Codes
		  a. If at least one of ICD-10-PCS Principal or Other Procedure Codes is on Appendix_A.Table 12.10 Organ Transplant codes.xls the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
		  b. If all of ICD-10-PCS Principal or Other Procedure Codes are missing or none of ICD-10-PCS Principal or Other Procedure Codes is on Appendix_A.Table 12.10 Organ Transplant codes.xls, continue processing and check Discharge Disposition.
		
		5. Check Discharge Disposition
		  a. If Discharge Disposition equals 4, 6, or 7 the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
		  b. If Discharge Disposition equals 1, 2, 3, 5, or 8 continue processing and proceed to Discharge Date.
		  c. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
		
		6. Check Discharge Date. Note: 'yyyy' refers to the specific year of discharge.
		  a. If the Discharge Date is 04-01-yyyy through 09-30-yyyy, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
		  b. If the Discharge Date is 10-01-yyyy through 03-31-yyyy, continue processing and proceed to Influenza Vaccination Status.
		
		7. Check Influenza Vaccination Status
		  a. If Influenza Vaccination Status is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
		  b. If Influenza Vaccination Status equals 6, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
		  c. If Influenza Vaccination Status equals 1, 2, 3, 4, or 5, continue processing and recheck Influenza Vaccination Status.
		
		8. Recheck Influenza Vaccination Status
		  a. If Influenza Vaccination Status equals 5, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
		  b. If Influenza Vaccination Status equals 1, 2, 3, or 4 the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing. Available at measure-specific web page URL identified in S.1

	0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)	0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)	1659 Influenza Immunization
Submission items	5.1 Identified measures: 0681 : Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay) 1659 : Influenza Immunization 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: The current measure for Nursing Homes is expanded to both additional post-acute care settings (LTCHs and IRFs), as well as to additional data sources (MDS 3.0 remained the data source of nursing homes, IRF-PAI is the data source for IRFs, and the LTCH CARE Data Set is the data source for LTCHs).The proposed measure is harmonized to the NQF Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations. A possible competing measure is the National Committee for Quality Assurance (NCQA) measure titled: Flu vaccinations for adults ages 65 and older: percentage of Medicare members 65 years of age and older who received an influenza vaccination between July 1 of the measurement year and the date when Medicare CAHPS survey was completed. This NCQA measure is based on the CAHPS Health Plan Survey and targets a different and non-institutionalized population, so while this is a related measure, it does not complete with NQF #0680, which provides distinctive value. Another possible competing measure for IRFs and LTCHs is NQF #1659 titled: Influenza Immunization for Hospital/Acute Care Facility AND Institute for Clinical Systems (ICS). The measure suggests immunizations of adult patients 18 years and older to be up to date with all immunization vaccines with follow up time periods. NQF #1659 targets a different population in multiple settings and does not include those assessed but not given the vaccine. ICS is not NQF endorsed and has a different target population with a broader numerator (multiple other vaccines). NQF #0680 targets a different population in multiple settings, so while it is a related measure, it does not compete with NQF# 0680.	5.1 Identified measures: 0680 : Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay) 1659 : Influenza Immunization 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: 5b.1 If competing, why superior or rationale for additive value: NQF #0680 Percent of Residents or Patients Assessed and Appropriately Given the Seasonal Influenza Vaccine (SS) applies to short-stay nursing home residents as well as additional post-acute care settings (LTCHs and IRFs), and is based on different data sources for each setting (MDS 3.0 for nursing homes, IRF-PAI is the data source for IRFs, and the LTCH CARE Data Set is the data source for LTCHs). Both NQF #0680 and the current measure #0681 for long stay nursing home residents were developed together and harmonized to the NQF Voluntary Consensus Standards for Influenza Immunizations and each other as much as possible. A possible competing measure is NQF #1659: Influenza Immunization for Hospital/Acute Care Facility AND Institute for Clinical Systems (ICS) suggest immunizations of adult patients 18 years and older, to be up to date with all immunization vaccines with follow up time periods. NQF #1659 targets a different population in a different setting and does not include those assessed but not given the vaccine. ICS is not NQF endorsed and has a different target population with a broader numerator (multiple other vaccines). NQF #0680 targets a different population in multiple settings. Another possible competing measure is the National Committee for Quality Assurance (NCQA) measure titled: Flu vaccinations for adults ages 65 and older: percentage of Medicare members 65 years of age and older who received an influenza vaccination between July 1 of the measurement year and the date when Medicare CAHPS survey was completed. This NCQA measure is based on the CAHPS Health Plan Survey and targets a different and non-institutionalized population, so NQF #0681 offers distinctive value.	5.1 Identified measures: 0680 : Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay) 0681 : Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay) 0226 : Influenza Immunization in the ESRD Population (Facility Level) 0038 : Childhood Immunization Status (CIS) 0039 : Flu Vaccinations for Adults Ages 18 and Older 0041 : Preventive Care and Screening: Influenza Immunization 0431 : Influenza Vaccination Coverage Among Healthcare Personnel 0522 : Influenza Immunization Received for Current Flu Season (Home Health) 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: Measures focus on different patient populations based on age, health conditions or location (e.g., home health, physician office, short term skilled, long term stay, acute care hospital, etc.). There are some differences in Exclusions and Inclusions specific to the population. These differences are in part based upon procedures that may be performed in an acute care hospital that would not be performed in a skilled setting or physician office setting. Additionally IMM-2 excludes cases in which the vaccine has been ordered but it has not yet been received. We´ve found in the past that there have been some seasons in which the vaccine became available much later than expected and seasons in which there were shortages. We prefer to exclude these cases if there is documentation in the chart to support either of these scenarios 5b.1 If competing, why superior or rationale for additive value: Multiple measures are justified because they each focus on a different patient population. A single measure could not capture the variability inherent in these different populations. IMM-2 is the only measure that focuses on patients in the acute care hospital setting.

Appendix A2: Measure Specifications of Related Measures (narrative format)

Comparison of NQF 0680, NQF 0681, and NQF 1659

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)
0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)
1659 Influenza Immunization

Steward

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Centers for Medicare & Medicaid Services

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Centers for Medicare & Medicaid Services

1659 Influenza Immunization

Centers for Medicare and Medicaid Services

Description

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

The measure reports the percentage of short-stay residents or patients who are assessed and appropriately given the seasonal influenza vaccine during the most recently-completed influenza season. The influenza vaccination season (IVS) is defined as beginning on October 1, or when the vaccine first becomes available*, and ends on March 31 of the following year. This measure is based on the NQF´s National Voluntary Standards for Influenza and Pneumococcal Immunizations.

The measure is the aggregate of three separately calculated submeasures to reflect the process by which a resident or patient is assessed and appropriately given the influenza vaccination during the current or most recent influenza season.

The three submeasures are as follows:

- residents or patients who received the influenza vaccine during the most recently completed influenza season, either in the facility/hospital or outside the facility/hospital (NQF #0680a);
- residents or patients who were offered and declined the seasonal influenza vaccine (NQF #0680b);
- residents or patients who were ineligible to receive the seasonal influenza vaccine due to contraindication(s) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine, see http://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm) (NQF #0680c).

*Note: While the IVS officially begins when the vaccine becomes available, which may be before October 1, the denominator time window for the quality measure and

references to the IVS for the denominator specification is from October 1 to March 31 of the following year. The numerator time window and references to the IVS in the numerator specifications may include patients and residents who are assessed and offered the vaccine before October 1. This is based on how the influenza items were coded by the facility.

The denominator consists of patients or short-stay residents 180 days of age or older on the target date of assessment who were in the facility/hospital for at least one day during the most recently-completed influenza vaccination season (IVS). The measure is based on data from the Minimum Data Set (MDS) assessments of nursing home residents, Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) assessments for Inpatient Rehabilitation Facility (IRF) patients, and the Long-Term Care Hospital (LTCH) Continuity Assessment Record & Evaluation (CARE) Data Set Version assessments of LTCH patients.

Data are collected in each of these three settings using standardized items across the three assessment instruments. For the nursing homes, the measure is limited to short-stay residents, identified as residents who have had 100 or fewer days of nursing home care. For the LTCHs, this measure will include all patients, irrespective of a patient's length of stay. For IRFs, this measure includes all Medicare Part A and Part C patients, irrespective of a patient's length of stay.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

This measure reports the percentage of long-stay residents, 180 days of age and older, who were in a nursing facility for at least one day during the most recently completed influenza vaccination season (IVS), and who were assessed and appropriately given the seasonal influenza vaccine . The IVS is defined as beginning on October 1 and ends on March 31 of the following year. The measure is the aggregate of three separately calculated submeasures to reflect the process by which a resident is assessed and appropriately given the influenza vaccination during the current or most recent influenza season.

The three submeasures are as follows:

- resident received the influenza vaccine during the current or most recent influenza season, either in the facility or outside the facility (NQF #0681a);
- resident was offered and declined the seasonal influenza vaccine (NQF #0681b); and
- resident was ineligible to receive the seasonal influenza vaccine due to contraindication(s) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine, see http://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm) (NQF #0681c).

The denominator consists of long-stay residents 180 days of age or older on the target date of assessment who were in the facility for at least one day during the most recently-completed influenza vaccination season (IVS). This measure is based on data from the Minimum Data Set (MDS 3.0) OBRA, PPS, and/or discharge assessments during the selected influenza season. Long-stay residents are identified as those who have had 101 or more cumulative days of nursing facility care.

A separate measure (NQF #0680, Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)) is to be used for residents who have had 100 or fewer cumulative days of nursing facility care.

1659 Influenza Immunization

Inpatients age 6 months and older discharged during October, November, December, January, February or March who are screened for influenza vaccine status and vaccinated prior to discharge if indicated.

Type

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Process

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Process

1659 Influenza Immunization

Process

Data Source

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Electronic Clinical Data Nursing Home Minimum Data Set 3.0, Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI), LTCH Continuity Assessment Record & Evaluation (Care) Data Set

Available at measure-specific web page URL identified in S.1 No data dictionary

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Electronic Clinical Data Nursing Home Minimum Data Set 3.0

Available at measure-specific web page URL identified in S.1 No data dictionary

1659 Influenza Immunization

Administrative claims, Electronic Clinical Data : Electronic Health Record, Paper Medical Records An electronic data collection tool is made available from vendors or facilities can download the free CMS Abstraction & Reporting Tool (CART). Paper tools for manual abstraction, which are posted on www.QualityNet.org, are also available for the CART tool. These tools are posted on www.QualityNet.org.

Available at measure-specific web page URL identified in S.1 Attachment Appendix_A.Table_12.10_Organ_Transplant_ICD-10__ICD-9_codes.xls

Level

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Facility

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Facility

1659 Influenza Immunization

Facility

Setting

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

1659 Influenza Immunization

Hospital/Acute Care Facility

Numerator Statement

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

The numerator for the overall measure (NQF #0680) is the number of residents or patients in the denominator sample who, during the numerator time window, meet any one of the following criteria: (1) those who received the seasonal influenza vaccine during the most recently-completed influenza season, either in the facility/hospital or outside the facility/hospital (NQF #0681a); (2) those who were offered and declined the seasonal influenza vaccine (NQF #0681b); or (3) those who were ineligible due to contraindication(s) (NQF #0681c). The numerator time window coincides with the most recently-completed seasonal IVS which begins on October 1 and ends on March 31 of the following year.

Each of the three submeasures numerators described above will be computed and reportedly separately, alongside the overall numerator calculated as the aggregate of the three submeasure numerators.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

The numerator is the number of long-stay residents with a target assessment (OBRA admission, quarterly, annual or significant change/correction assessments; PPS 5-,14-, 30-, 60-, 90-day, or readmission/return assessments; or discharge assessment with or without return anticipated) who were in the denominator sample, AND who meet any of the following criteria for the selected influenza season: (1) they received the influenza vaccine during the most recent influenza season, either in the facility or outside the facility (NQF #0681a), (2) they were offered and declined the influenza vaccine (NQF #0681b), or (3) they were ineligible due to medical contraindication(s)

(NQF #0681c) . The influenza season is defined as July 1 of the current year to June 30 of the following year. The IVS begins on October 1 and ends on March 31 of the following year.

Each of the three submeasure numerators described above will be computed and reported separately, alongside the overall numerator calculated as the aggregate of the three submeasure numerators.

1659 Influenza Immunization

Inpatient discharges who were screened for influenza vaccine status and were vaccinated prior to discharge if indicated.

Numerator Details

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

The numerator for the overall measure (NQF #0680) includes all patients or short-stay residents in the denominator sample who, during the numerator time window, meet one of three criteria: (1) received the seasonal influenza vaccine during the most recent influenza season, either inside or outside the facility/hospital, (2) were offered and declined the vaccine, or (3) were ineligible due to medical contraindications.

For each setting (i.e., nursing homes, inpatient rehabilitation facilities, and long-term care hospitals), the numerator components are also computed and reportedly separately as a submeasure.

Specifications for the three provider type assessment tools are listed below:

MDS: Residents are counted if they are short-stay residents, defined as residents whose length of stay is less than or equal to 100 days. Short-stay residents are included in the numerator for the overall measure (NQF #0680) if they meet any of the following criteria during the numerator time window: (1) received the influenza vaccine during the most recent influenza vaccine season, either in the facility (O0250A=1) or outside the facility (O0250C=2) (also computed and reportedly separately as a submeasure); or (2) offered and declined the influenza vaccine (O0250C=4) (also computed and reportedly separately as a submeasure); or (3) ineligible due to medical contraindication(s) (O0250C=3) (also computed and reportedly separately as a submeasure). Included in the numerator are short-stay residents who meet the criteria on the selected MDS assessment. The record selected will be the record with the latest target date that meets all of the following conditions: (1) it has a qualifying reason for assessment (OBRA (A0310A=01,02,03,04,05,06), PPS (A0310B=01,02,03,04,05,06) or discharge assessment (A0310F=10, 11), (2) the target date is on or after October 1st of the most recently completed influenza season, and (3) the entry date is on or before March 31st of the most recently completed influenza season.

IRF-PAI: Patients are included in the numerator for the overall measure (NQF #0680) for stays that meet any of the following criteria during the numerator time window: (1) received the influenza vaccine during the most recently-completed influenza season, either in the facility (O0250A = 1) or outside the facility (O0250C = 2) ; or (2) offered and declined the influenza vaccine (O0250C = 4; or (3) ineligible due to medical

contraindication(s) (O0250C = 3). All three of these also computed and reportedly separately as submeasures. Included in the numerator are patients who meet the criteria based on data reported on the IRF-PAI assessments during the denominator time window. Note: IRF-PAI assessments are submitted to CMS for Medicare Part A and Part C patients.

LTCH CARE Data Set (LCDS): Patients are included in the numerator for the overall measure (NQF #0680) for patient stays that meet any of the following criteria during the numerator time window: (1) received the influenza vaccine during the most recent influenza season, either in the facility (O250A=1) or outside the facility (O0250C=2) ; or (2) offered and declined the influenza vaccine (O0250C=4); or (3) ineligible due to medical contraindication(s) (O0250C=3).All three of these also computed and reportedly separately as submeasures. Included in the numerator are patients who meet the criteria on the LTCH CARE Data Set admission assessment (A0250=01), discharge or expired patient assessment (A0250=10, 11, 12) during the denominator time window. Note: LCDS expired assessments (A0250=12) completed before April 1, 2016 are not included in the numerator because prior to this date the influenza items were not included on expired assessments.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Residents are counted if they are long-stay residents, defined as residents who have had 101 or more cumulative days of nursing facility care, are 180 days of age and older and who were in a nursing facility for at least one day during the most recently completed IVS. Residents who return to the nursing home following a hospital discharge will not have their stay reset to zero. The numerator is the number of long-stay residents in the denominator sample with a selected target assessment (OBRA admission, quarterly, annual or significant change/correction assessments; PPS 5-, 14-, 30-, 60-, 90-day, or readmission/return assessments; or discharge assessment with or without return anticipated) during the most recently selected influenza season who meet any of the following criteria:

(1) Resident received the influenza vaccine during the most recent influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]) (NQF #0681a, computed separately); or

(2) Resident was offered and declined the influenza vaccine (O0250C = [4]) (NQF #0681b, computed separately); or

(3) Resident was ineligible due to contraindication(s) (O0250C = [3]) (NQF #0681c, computed separately) (e.g., anaphylactic hypersensitivity to eggs or other components of the vaccine).

1659 Influenza Immunization

The following are included in the numerator:

- Patients who received the influenza vaccine during this inpatient hospitalization
- Patients who received the influenza vaccine during the current year's flu season but prior to the current hospitalization
- Patients who were offered and declined the influenza vaccine

- Patients who have an allergy/sensitivity to the influenza vaccine, anaphylactic latex allergy or anaphylactic allergy to eggs, or for whom the vaccine is not likely to be effective because of bone marrow transplant within the past 6 months, or history of Guillian-Barre Syndrome within 6 weeks after a previous influenza vaccination

Data Elements required for the numerator:

- ICD-10-CM Other Diagnosis Codes
- ICD-10-PCS Other Procedure Codes
- ICD-10-CM Principal Diagnosis Code
- ICD-10-PCS Principal Procedure Code
- Influenza Vaccination Status

Denominator Statement

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

The denominator consists of patients or short-stay residents 180 days of age and older on the target date of the assessment who were in the facility/hospital for at least one day during the denominator time window. The denominator time window is defined as the most recently-completed IVS, from October 1 to March 31 of the following year. For IRF and LTCH, the QM is based on completed patient stays (have discharge assessments). An IRF or LTCH patient with multiple stays during the denominator time window (IVS) will be included more than once in the QM. If a nursing home resident has more than one episode during the denominator time window only the more recent episode is included in this QM.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

The denominator is the total number of long-stay residents 180 days of age or older on the target date of the assessment who were in the nursing facility who were in a nursing facility for at least one day during the most recently completed IVS that have an OBRA, PPS, or discharge assessment and who did not meet the exclusion criteria.

1659 Influenza Immunization

Acute care hospitalized inpatients age 6 months and older discharged during the months of October, November, December, January, February or March.

Denominator Details

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

The denominator time window is defined as the most recently-completed IVS, from October 1 to March 31 of the following year. Measure specifications for the three assessment tools are listed below. For IRF and LTCH, the QM is based on stays with admission and discharge assessments. An IRF or LTCH patient with multiple stays during the denominator time window (IVS) will be included more than once in the QM. If a nursing home resident has more than one episode during the denominator time window only the more recent episode is included in this QM.

MDS (in use in Nursing Homes/Skilled Nursing Facilities): Residents are counted if they are short-stay residents, defined as residents whose length of stay is less than or equal to 100 days. The sample includes residents, aged 180 days or older, meeting the following conditions: the resident has an OBRA assessment (A0310A=01,02,03,04,05,06) or PPS assessment (A0310B=01,02,03,04,05,06) or discharge assessment (A0310F=10, 11) with an assessment reference date on or after the start of the denominator time window and an entry date (A1600) on or before the end of the denominator time window.

IRF-PAI (in use in Inpatient Rehabilitation Facilities): Patient stays are included in the sample if patients are 180 days or older and have a stay that includes 1 or more days in the IRF during the denominator time window (the IVS). Patient stays must meet any of the following conditions: (1) the patient has an admission assessment with an entry date (item 12) during the denominator time window; (2) the patient has a discharge assessment with a discharge date (Item 40) during the denominator time window; or (3) the patient has an admission with an entry date (item 12) before the denominator time window and a discharge date (item 40) after the denominator time window.

LTCH CARE Data Set (in use in Long-Term Care Hospitals): Patient stays are included in the sample if patients are 180 days of age or older at discharge and have a stay that includes 1 or more days in the LTCH during the denominator time window. Stays must meet either of the following conditions: (1) a stay with an admission date (A0220) or a planned or unplanned (A0250 = 10, 11) discharge date (A0270) or an expired patient assessment (A0250 = 12) within the denominator time window; or (2) a stay with the admission date (A0220) before the denominator time window and a planned or unplanned discharge (A0250 = 10, 11) with discharge or date (A0270) or a patient expired assessment (A0250 = 12) with date of death (A0270) after the denominator time window.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Residents are counted if they are long-stay residents, defined as residents who have had 101 or more cumulative days of nursing facility care. Residents who return to the nursing home following a hospital discharge will not have their length of stay reset to zero. The target population includes all long-stay residents with a target assessment (assessments may be OBRA admission, quarterly, annual or significant change/correction assessments (A0310A = 01, 02, 03, 04, 05, 06) or PPS 5-, 14-, 30-, 60-, 90-day, or readmission/return assessments (A0310B = 01, 02, 03, 04, 05, 06) or discharge assessment with or without return anticipated (A0310F = 10, 11) who were in a nursing facility for at least one day during the most recently completed IVS, except for those who meet the exclusion criteria (specified in S.10 and S.11).

1659 Influenza Immunization

Data Elements required for the denominator:

- Admission Date
- Birthdate
- Discharge Date

- Discharge Disposition
- ICD-10-PCS Other Procedure Codes
- ICD-10-PCS Principal Procedure Code

Exclusions

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Residents or patients whose age is 179 days of less of age on target date of the selected influenza vaccination assessment are excluded. LTCH patients whose expired assessments are completed before April 1, 2016 are excluded. After April 1, 2016 expired patients are no longer excluded from the QM, because the influenza items were added to the LCDS expired assessments. Nursing homes with denominator counts of less than 20 residents and IRFs and LTCHs with less than 20 stays in the sample are excluded from public reporting due to small sample size.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Residents whose age is 179 days or less on target date of selected influenza vaccination assessment are excluded.

If the facility sample includes fewer than 30 residents after all other resident-level exclusions are applied, then the facility is excluded from public reporting.

1659 Influenza Immunization

The following patients are excluded from the denominator:

- Patients less than 6 months of age
- Patients who expire prior to hospital discharge
- Patients with an organ transplant during the current hospitalization (Appendix_A.Table 12.10 Organ Transplant codes.xls)
- Patients for whom vaccination was indicated, but supply had not been received by the hospital due to problems with vaccine production or distribution
- Patients who have a Length of Stay greater than 120 days
- Patients who are transferred or discharged to another acute care hospital
- Patients who leave Against Medical Advice (AMA)

Exclusion Details

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Residents or patients with age 179 days or less are excluded, with age calculation based on the resident and patient birthdate and the target date of the selected influenza vaccination assessment.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Residents whose age is 179 days or less are excluded, with age calculation based on the resident birthdate and the target date of the selected influenza vaccination assessment.

1659 Influenza Immunization

To determine the length of stay, the admission date and discharge date are entered. If the result of the calculation subtracting the admission date from the discharge date is greater than 120 days the patient is excluded from the measure.

The patient's date of birth is entered. If the calculation result of the admission date minus the birth date is less than 6 months the patient is excluded from the measure.

Patients who had an organ transplant during the current hospitalization are excluded based on having an ICD-10 PCS Principal or Other Procedure Code assigned as having occurred during the current hospitalization. If the patient has at least one code from the list on Appendix_A.Table 12.10 Organ Transplant codes.xls assigned for the current hospitalization they are excluded.

Discharge Disposition is a manually abstracted data element. If documentation in the patient's medical record is consistent with the criteria specified in the Discharge Disposition data element for discharge to an acute care facility, patient expired prior to hospital discharge, or the patient left against medical advice the patient is excluded from the measure.

The Influenza Vaccination Status is a manually abstracted data element for the measure. Allowable Value 6 may be selected if there is documentation in the medical record reflecting the hospital has ordered the influenza vaccine but has not yet received it based on problems with vaccine production or distribution. If this value is selected the measure algorithm will exclude the patient from the measure.

Risk Adjustment

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

No risk adjustment or risk stratification

This section is not applicable.

Provided in response box S.15a

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

No risk adjustment or risk stratification

This is not applicable.

Provided in response box S.15a

1659 Influenza Immunization

No risk adjustment or risk stratification

N/A

Stratification

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

This section is not applicable.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

This is not applicable.

1659 Influenza Immunization

Measure is not stratified.

Type Score

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

Rate/proportion better quality = higher score

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

Rate/proportion better quality = higher score

1659 Influenza Immunization

Rate/proportion better quality = higher score

Algorithm

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

For each setting the calculation algorithm for the overall measure and submeasures a-c are:

Step 1: Identify the total number of residents or patients meeting the denominator criteria.

Step 2: For the first submeasure (NQF #0680a: Percent of Residents or Patients Who Received the Seasonal Influenza Vaccine (short stay)):

Step 2a: Identify the total number of patients or short-stay residents who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]).

Step 2b: Divide the results of Step 2a by the result of Step 1.

Step 3: For the second submeasure (NQF #0680b: Percent of Residents or Patients Who Offered and Declined the Seasonal Influenza Vaccine (short stay)):

Step 3a: Identify the total number of patients or short-stay residents who were offered and declined the seasonal influenza vaccine (O0250C = [4]).

Step 3b: Divide the results of Step 3a by the result of Step 1.

Step 4: For the third submeasure (NQF #0680c: Percent of Residents or Patients Who Did Not Receive, Due to Medical Contraindication, the Seasonal Influenza Vaccine (short stay)):

Step 4a: Identify the total number of patients or short-stay residents who were ineligible due to medical contraindication(s) (O0250C = [3]).

Step 4b: Divide the results of Step 4a by the result of Step 1.

Step 5: For the overall measure (NQF #0680: Percent of Residents or Patients Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)):

Step 5a: Aggregate Step 2a, 3a, and 4a [Sum the total number of short-stay residents or patients who met any one of the following criteria: who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]); OR who were offered and declined the seasonal influenza vaccine (O0250C = [4]); OR who were ineligible due to medical contraindication(s) (O0250C = [3]).]

Step 5b: Divide the results of Step 5a by the result of Step 1. Available at measure-specific web page URL identified in S.1

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

The calculation algorithm for the overall measure and submeasures a-c are:

Step 1: Identify the total number of residents meeting the denominator criteria.

For the first submeasure (NQF #0681a: Percent of Residents Who Received the Seasonal Influenza Vaccine (long stay)):

Step 2a: Identify the total number of long-stay residents who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]).

Step 3a: Divide the results of Step 2a by the result of Step 1.

For the second submeasure (NQF #0681b: Percent of Residents Who Offered and Declined the Seasonal Influenza Vaccine (long stay)):

Step 2b: Identify the total number of long-stay residents who were offered and declined the seasonal influenza vaccine (O0250C = [4]).

Step 3b: Divide the results of Step 2b by the result of Step 1.

For the third submeasure (NQF #0681c: Percent of Residents Who Did Not Receive, Due to Medical Contraindication, the Seasonal Influenza Vaccine (long stay)):

Step 2c: Identify the total number of long-stay residents who were ineligible due to medical contraindication(s) (O0250C = [3]).

Step 3c: Divide the results of Step 2c by the result of Step 1.

For the overall measure (NQF #0681: Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)):

Step 2d: Aggregate Step 2a, 2b, and 2c [Sum the total number of long-stay residents who met any of the following criteria: who received the seasonal influenza vaccine during the current or most recently completed influenza season, either in the facility (O0250A= [1]) or outside the facility (O0250C = [2]); OR who were offered and declined the seasonal influenza vaccine (O0250C = [4]); OR who were ineligible due to medical contraindication(s) (O0250C = [3]).]

Step 3d: Divide the results of Step 2d by the result of Step 1. Available at measure-specific web page URL identified in S.1

1659 Influenza Immunization

Numerator: Inpatient discharges who were screened for Influenza vaccine status and were vaccinated prior to discharge if indicated.

Denominator: Acute care hospitalized inpatients age 6 months and older discharged during October, November, December, January, February or March.

Variable Key: Patient Age

1. Start processing. Run cases that are included in the Global Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.
2. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the critical feedback messages into the measure specific algorithms.
3. Check Patient Age
   a. If the Patient Age is less than 6 months old, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
   b. If the Patient Age is greater than or equal to 6 months, continue processing and proceed to ICD-10-PCS Principal or Other Procedure Codes.
4. Check ICD-10-PCS Principal or Other Procedure Codes
   a. If at least one of ICD-10-PCS Principal or Other Procedure Codes is on Appendix_A.Table 12.10 Organ Transplant codes.xls the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
   b. If all of ICD-10-PCS Principal or Other Procedure Codes are missing or none of ICD-10-PCS Principal or Other Procedure Codes is on Appendix_A.Table 12.10 Organ Transplant codes.xls, continue processing and check Discharge Disposition.
5. Check Discharge Disposition
   a. If Discharge Disposition equals 4, 6, or 7 the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
   b. If Discharge Disposition equals 1, 2, 3, 5, or 8 continue processing and proceed to Discharge Date.
   c. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
6. Check Discharge Date. Note: 'yyyy' refers to the specific year of discharge.
   a. If the Discharge Date is 04-01-yyyy through 09-30-yyyy, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
   b. If the Discharge Date is 10-01-yyyy through 03-31-yyyy, continue processing and proceed to Influenza Vaccination Status.
7. Check Influenza Vaccination Status
   a. If Influenza Vaccination Status is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Influenza Vaccination Status equals 6, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Influenza Vaccination Status equals 1, 2, 3, 4, or 5, continue processing and recheck Influenza Vaccination Status.

8. Recheck Influenza Vaccination Status

a. If Influenza Vaccination Status equals 5, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

b. If Influenza Vaccination Status equals 1, 2, 3, or 4 the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing. Available at measure-specific web page URL identified in S.1

Submission items

0680 Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

5.1 Identified measures: 0681 : Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

1659 : Influenza Immunization

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: The current measure for Nursing Homes is expanded to both additional post-acute care settings (LTCHs and IRFs), as well as to additional data sources (MDS 3.0 remained the data source of nursing homes, IRF-PAI is the data source for IRFs, and the LTCH CARE Data Set is the data source for LTCHs).The proposed measure is harmonized to the NQF Voluntary Consensus Standards for Influenza and Pneumococcal Immunizations.

A possible competing measure is the National Committee for Quality Assurance (NCQA) measure titled: Flu vaccinations for adults ages 65 and older: percentage of Medicare members 65 years of age and older who received an influenza vaccination between July 1 of the measurement year and the date when Medicare CAHPS survey was completed.

This NCQA measure is based on the CAHPS Health Plan Survey and targets a different and non-institutionalized population, so while this is a related measure, it does not complete with NQF #0680, which provides distinctive value.

Another possible competing measure for IRFs and LTCHs is NQF #1659 titled: Influenza Immunization for Hospital/Acute Care Facility AND Institute for Clinical Systems (ICS). The measure suggests immunizations of adult patients 18 years and older to be up to date with all immunization vaccines with follow up time periods.

NQF #1659 targets a different population in multiple settings and does not include those assessed but not given the vaccine. ICS is not NQF endorsed and has a different target population with a broader numerator (multiple other vaccines). NQF #0680 targets a different population in multiple settings, so while it is a related measure, it does not compete with NQF# 0680.

0681 Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

5.1 Identified measures: 0680 : Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

1659 : Influenza Immunization

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact:

5b.1 If competing, why superior or rationale for additive value: NQF #0680 Percent of Residents or Patients Assessed and Appropriately Given the Seasonal Influenza Vaccine (SS) applies to short-stay nursing home residents as well as additional post-acute care settings (LTCHs and IRFs), and is based on different data sources for each setting (MDS 3.0 for nursing homes, IRF-PAI is the data source for IRFs, and the LTCH CARE Data Set is the data source for LTCHs). Both NQF #0680 and the current measure #0681 for long stay nursing home residents were developed together and harmonized to the NQF Voluntary Consensus Standards for Influenza Immunizations and each other as much as possible.

A possible competing measure is NQF #1659: Influenza Immunization for Hospital/Acute Care Facility AND Institute for Clinical Systems (ICS) suggest immunizations of adult patients 18 years and older, to be up to date with all immunization vaccines with follow up time periods. NQF #1659 targets a different population in a different setting and does not include those assessed but not given the vaccine. ICS is not NQF endorsed and has a different target population with a broader numerator (multiple other vaccines). NQF #0680 targets a different population in multiple settings.

Another possible competing measure is the National Committee for Quality Assurance (NCQA) measure titled: Flu vaccinations for adults ages 65 and older: percentage of Medicare members 65 years of age and older who received an influenza vaccination between July 1 of the measurement year and the date when Medicare CAHPS survey was completed.

This NCQA measure is based on the CAHPS Health Plan Survey and targets a different and non-institutionalized population, so NQF #0681 offers distinctive value.

1659 Influenza Immunization

5.1 Identified measures: 0680 : Percent of Residents or Patients Who Were Assessed and Appropriately Given the Seasonal Influenza Vaccine (short stay)

0681 : Percent of Residents Assessed and Appropriately Given the Seasonal Influenza Vaccine (long stay)

0226 : Influenza Immunization in the ESRD Population (Facility Level)

0038 : Childhood Immunization Status (CIS)

0039 : Flu Vaccinations for Adults Ages 18 and Older

0041 : Preventive Care and Screening: Influenza Immunization

0431 : Influenza Vaccination Coverage Among Healthcare Personnel

0522 : Influenza Immunization Received for Current Flu Season (Home Health)

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Measures focus on different patient populations based on age, health conditions or location (e.g., home health, physician office, short term skilled, long term stay, acute care hospital, etc.). There are some differences in Exclusions and Inclusions specific to the population. These differences are in part based upon procedures that may be performed in an acute care hospital that would not be performed in a skilled setting or physician office setting. Additionally IMM-2 excludes cases in which the vaccine has been ordered but it has not yet been received. We´ve found in the past that there have been some seasons in which the vaccine became available much later than expected and seasons in which there were shortages. We prefer to exclude these cases if there is documentation in the chart to support either of these scenarios

5b.1 If competing, why superior or rationale for additive value: Multiple measures are justified because they each focus on a different patient population. A single measure could not capture the variability inherent in these different populations.

IMM-2 is the only measure that focuses on patients in the acute care hospital setting.