

**PACE MEASURE SPECIFICATIONS AND DATA COLLECTION INSTRUCTIONS
ON:**

PARTICIPANT INFLUENZA IMMUNIZATION

PACE STAFF INFLUENZA IMMUNIZATION

**PARTICIPANT EMERGENCY DEPARTMENT UTILIZATION WITHOUT
HOSPITALIZATION**

September 1, 2017

PACE Participant Influenza Immunization

Introduction

Influenza is one (1) of the leading causes of morbidity and mortality in the United States, especially among elderly persons aged 65 years and older. Each year, influenza and its complications are responsible for up to 250,000 hospitalizations, and up to 30,000 deaths are classified as influenza-related in this age group (Reed et al., 2014). As one (1) strategy to prevent and control influenza, the Centers for Disease Control and Prevention (CDC) recommends influenza immunizations annually for all persons aged six (6) months and older (Grohskopf et al., 2016). An annual influenza immunization is especially important to elderly persons, who have been recognized as a high-risk group for severe influenza illness.

Research findings have shown that influenza immunization is associated with significant reductions in the risk of hospitalization for influenza or pneumonia, as well as reductions in the risk of influenza-related death among elderly persons (Nichol, Nordin, Nelson, Mullooly, & Hak, 2007; Pop-Vicas, Rahman, Gozalo, Gravenstein, & Mor, 2015; Trucchi, Paganino, Orsi, Deflorentiis, & Ansaldi, 2015). Findings have supported that seasonal influenza immunization shows efficacy and effectiveness in reducing influenza risk in the elderly. Despite the benefits of an influenza immunization, estimates show that only 48.1 percent of adults aged 50–64 and 69.1 percent of adults aged 65 and above received an influenza immunization in 2015 (CDC, 2016). This statistic demonstrates opportunities for improvement in influenza immunization among the elderly.

Programs for All-Inclusive Care for the Elderly (PACE) Organizations provide care and services for frail elderly persons who need the influenza immunization. PACE Organizations can assess participants regarding the status of their seasonal influenza immunization and can provide immunization as appropriate. Measuring participant influenza immunization at PACE Organizations will be useful and beneficial as a quality indicator to encourage and improve performance in influenza immunization for participants. Furthermore, the endeavors of PACE Organizations to screen and provide influenza immunization among participants will contribute to preventing participants' influenza and influenza-related complications and thus keep participants healthy and cared for in the community settings.

Measure Specifications

This section of the instructions presents the definitions of the PACE Participant Influenza Immunization measure and specifies the numerator, denominator, and inclusion and exclusion criteria. It defines all key terms. Read and understand the instructions before you begin data collection. Refer to them as needed throughout the course of data collection. The PACE Participant Influenza Immunization domain has three (3) submeasures:

1. Percentage of PACE participants who received an influenza immunization.
2. Percentage of PACE participants who were offered and declined the seasonal influenza immunization.
3. Percentage of PACE participants who were ineligible to receive the seasonal influenza immunization due to contraindication(s).

Participant Influenza Immunization Measure	
Definition of Measure Terms	<p>Reporting influenza season: The influenza immunization season is defined as beginning on September 1 and ending on March 31 of the following year, a span that will be used as the time window of the numerator and denominator. Influenza data will be collected annually and reported after March 31 for the preceding influenza season.</p> <p>Each of the three (3) submeasure numerators will be computed and reported separately.</p>
Definition of the Measure	<ol style="list-style-type: none"> 1. Percentage of PACE participants who received an influenza immunization. <ul style="list-style-type: none"> • Numerator: Number of PACE participants who received an influenza immunization during the reporting influenza season, either in the PACE Organization or outside the PACE Organization. • Denominator: Number of PACE participants enrolled during the reporting influenza season. 2. Percentage of PACE participants who were offered and declined the seasonal influenza immunization. <ul style="list-style-type: none"> • Numerator: Number of PACE participants who were offered and declined the seasonal influenza immunization during the reporting influenza season. • Denominator: Number of PACE participants enrolled during the reporting influenza season. 3. Percentage of PACE participants who were ineligible to receive the seasonal influenza immunization due to contraindication(s). <ul style="list-style-type: none"> • Numerator: Number of PACE participants who were ineligible to receive the seasonal influenza immunization due to medical contraindication(s) during the reporting influenza season (e.g., anaphylactic hypersensitivity to components of the immunization; see https://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm). • Denominator: Number of PACE participants enrolled during the reporting influenza season.

Participant Influenza Immunization Measure	
Inclusion Criteria for the Denominator	<ul style="list-style-type: none"> - Include PACE participants who were enrolled in PACE for at least one (1) day during the reporting influenza season, regardless of enrollment status at the end of the reporting period. - Include PACE participants who died during the reporting influenza season, but were enrolled as PACE participants for at least one (1) day in the reporting influenza season.

Data Entry Instructions

Data will be reported on a Microsoft Excel spreadsheet. Data are to be collected from participant healthcare records—both paper and electronic. You will submit the spreadsheet through a secure online application.

Organization-level Data Entry

Participant Influenza Immunization Measure	
Number of PACE participants enrolled	Enter the total number of participants who were enrolled in PACE for at least one (1) day in the reporting influenza season.

Participant-level Data Entry

Participant Influenza Immunization Measure	
Auto-generated PACE participant number	1 through n, total number of non-excluded participants
Received influenza immunization	<p>1 = Yes, the participant received an influenza immunization during the reporting influenza season, either in the PACE Organization or outside the PACE Organization.</p> <p>2 = No, the participant did NOT receive an influenza immunization.</p> <p>99 = There is no documentation available as to whether the participant received an influenza immunization.</p>
Offered and declined influenza immunization	<p>1 = Yes, the participant was offered and declined the influenza immunization during the reporting influenza season, either in the PACE Organization or outside the PACE Organization.</p> <p>2 = No, the participant was not offered the influenza immunization.</p> <p>99 = There is no documentation available as to whether the participant was offered and declined the influenza immunization.</p>

Participant Influenza Immunization Measure	
Ineligible for influenza immunization	<p>1 = Yes, the participant was ineligible to receive the influenza immunization due to contraindication(s) during the reporting influenza season.</p> <p>2 = No, the participant was eligible for influenza immunization.</p> <p>99 = There is no documentation available as to whether the participant was ineligible for influenza immunization.</p>

References

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- Trucchi, C., Paganino, C., Orsi, A., Deflorentiis, D., & Ansaldi, F. (2015). Influenza vaccination in the elderly: Why are the overall benefits still hotly debated? *Journal of Preventive Medicine and Hygiene*, 56(1), E37–E43.

PACE Staff Influenza Immunization

Introduction

PACE Organizations provide care and services for frail elderly persons who need the influenza immunization. The benefits of staff members of healthcare providers (HCPs) receiving the influenza immunization on participant outcomes are well documented. According to the Association for Professionals in Infection Control and Epidemiology, providing the influenza immunization to staff members may reduce infection transmission of influenza to individuals at increased risk for influenza-related complications, including older staff members and patients (aged 65 years or older) and those who have underlying chronic medical conditions (CDC, 2009; CDC, 2017). Higher influenza immunization rates among staff members are associated with lower nosocomial influenza among hospital inpatients and long-term care residents (Ahmed, Lindley, Allred, Weinbaum, & Grohskopf, 2013). Staff influenza immunization rates have also been associated with decreased all-cause mortality among long-term care residents.

Incidentally, staff immunization also may reduce the incidence of healthcare personnel reporting to work while ill with influenza, staff sickness and absenteeism, and influenza-related complications and hospitalization, especially among staff members at increased risk for severe influenza illness (CDC, 2017).

There is little information on the incidence and prevalence of PACE staff influenza immunization. However, immunization data from CDC exist for various categories of HCPs in other healthcare settings. In the 2014–2015 early influenza immunization season, the immunization rates among HCPs in all care settings were 86.7 percent among pharmacists, 82.2 percent among physicians, 81.4 percent among nurses, 85.8 percent among nurse practitioners/physician assistants, 72.0 percent among other clinical professionals, and 43.4 percent among administrative staff and assistants (CDC, 2016). The influenza immunization rates among HCPs were higher (85.8 percent) where employers mandated immunization and lower (43.4 percent) among HCPs where employers did not have a policy or recommendation regarding influenza immunization (CDC, 2016). These results are consistent over time. An earlier study from Black et al. (2014) found that “HCPs working in settings where immunization was required had higher coverage (97.8%) compared with HCPs working in settings where influenza immunization was not required but promoted (72.4%) or settings where there was no requirement or promotion of immunization (47.9%).”

Low influenza immunization rates among PACE staff members may put participants at increased risk for influenza-related morbidity and mortality. Monitoring the uptake of influenza immunization rates among PACE staff members should result in (1) increased immunization rates and (2) reduced morbidity and mortality related to influenza virus infection among PACE participants. Monitoring and reporting on staff immunizations should provide PACE Organizations with information they need to improve the staff influenza immunization rate.

Measure Specifications

This section of the instructions presents the definition of the PACE Staff Influenza Immunization measure and specifies the numerator, denominator, and inclusion and exclusion criteria. It defines all key terms. Read and understand the instructions before you begin data collection. Refer to them as needed throughout the course of data collection. The PACE Staff Influenza Immunization domain has six (6) submeasures:

1. Percentage of PACE staff members who received an influenza immunization.
2. Percentage of PACE staff members who were offered and declined the seasonal influenza immunization.
3. Percentage of PACE staff members who were ineligible to receive the seasonal influenza immunization due to contraindication(s).
4. Percentage of PACE contractors who received an influenza immunization.
5. Percentage of PACE contractors who were offered and declined the seasonal influenza immunization.
6. Percentage of PACE contractors who were ineligible to receive the seasonal influenza immunization due to contraindication(s).

Staff Influenza Immunization Measure	
Definition of Measure Terms	<p>Reporting influenza season: The influenza immunization season is defined as beginning on September 1 and ending on March 31 of the following year, a span that will be used as the time window of the numerator and denominator. Influenza data will be collected annually and reported after March 31 for the preceding influenza season.</p> <p>Each of the six (6) submeasure numerators will be computed and reported separately.</p>
Definition of the Measure	<ol style="list-style-type: none"> 1. Percentage of PACE staff members who received an influenza immunization. <ul style="list-style-type: none"> • Numerator: Number of PACE staff members who received an influenza immunization during the reporting influenza season, either from the PACE Organization or from an outside provider. • Denominator: Number of PACE staff members during the reporting influenza season. 2. Percentage of PACE staff members who were offered and declined the seasonal influenza immunization. <ul style="list-style-type: none"> • Numerator: Number of PACE staff members who were offered and declined the seasonal influenza immunization during the reporting influenza season.

Staff Influenza Immunization Measure

- **Denominator:** Number of PACE staff members during the reporting influenza season.

3. Percentage of PACE staff members who were ineligible to receive the seasonal influenza immunization due to contraindication(s).

- **Numerator:** Number of PACE staff members who were ineligible to receive the seasonal influenza immunization due to contraindication(s) during the reporting influenza season (e.g., anaphylactic hypersensitivity to components of the immunization; see <https://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm>).
- **Denominator:** Number of PACE staff members during the reporting influenza season.

4. Percentage of PACE contractors who received an influenza immunization.

- **Numerator:** Number of PACE contractors who received an influenza immunization during the reporting influenza season, either from the PACE Organization or from an outside provider.
- **Denominator:** Number of PACE contractors during the reporting influenza season.

5. Percentage of PACE contractors who were offered and declined the seasonal influenza immunization.

- **Numerator:** Number of PACE contractors who were offered and declined the seasonal influenza immunization during the reporting influenza season.
- **Denominator:** Number of PACE contractors during the reporting influenza season.

6. Percentage of PACE contractors who were ineligible to receive the seasonal influenza immunization due to contraindication(s).

- **Numerator:** Number of PACE contractors who were ineligible to receive the seasonal influenza immunization due to contraindication(s) during the reporting influenza season (e.g., anaphylactic hypersensitivity to components of the immunization, see <https://www.cdc.gov/flu/professionals/vaccination/vax-summary.htm>).
- **Denominator:** Number of PACE contractors during the reporting influenza season.

Staff Influenza Immunization Measure	
Data Element Definitions	<p>Staff/Contractor (Denominator) Categories</p> <ol style="list-style-type: none"> 1. Include: <ol style="list-style-type: none"> a. PACE Organization staff. Employees include all persons who receive a direct paycheck from the PACE Organization for at least one (1) day of the influenza season (i.e., on the organization’s payroll), regardless of clinical responsibility or patient contact. <ol style="list-style-type: none"> i. Include all staff members who worked at the PACE Organization between September 1 and March 31 for at least one (1) working day. ii. Include staff members who were on extended leave during part of the reporting period. iii. Include staff members working part time. iv. Include persons who are owners of the reporting facility. v. Count persons as individuals rather than full-time equivalents. b. PACE-contracted HCPs. Licensed independent practitioners include physicians, dentists, advanced practice nurses, physician assistants, and therapists who are affiliated with the reporting organization but do not receive a direct paycheck from the organization. 2. Do not include: <ol style="list-style-type: none"> a. Volunteers who act as the PACE participant’s caregiver. <p>Staff Immunization (Numerator) Categories</p> <ol style="list-style-type: none"> 1. Received an influenza vaccination administered at the healthcare facility, or provided documentation (paper or electronic) that the influenza vaccination was received elsewhere. 2. Determined to have a medical contraindication/condition of severe allergic reaction to component(s) of the vaccine, or a history of Guillain-Barre Syndrome. 3. Declined influenza vaccination: <ol style="list-style-type: none"> a. Persons who declined vaccination and did not provide any other information should be categorized as declined vaccination. b. Persons with an unknown immunization status or who do not otherwise meet the definitional criteria for the other two (2) numerator categories should be counted as declined vaccination.

Staff Influenza Immunization Measure	
	<ul style="list-style-type: none"> c. Persons who did not receive the vaccination because of religious or philosophical exemptions should be categorized as declined vaccination. d. Persons who deferred vaccination all season should be categorized as declined vaccination. <p>Contractor Immunization (Numerator) Categories</p> <ul style="list-style-type: none"> 1. Received an influenza vaccination administered at the healthcare facility, or provided documentation (paper or electronic) that the influenza vaccination was received elsewhere. 2. Determined to have a medical contraindication/condition of severe allergic reaction to component(s) of the vaccine, or history of Guillain-Barre Syndrome. 3. Declined influenza vaccination: <ul style="list-style-type: none"> a. Persons who declined vaccination and did not provide any other information should be categorized as declined vaccination. b. Persons with an unknown immunization status or who do not otherwise meet the definitional criteria for the other two (2) numerator categories should be counted as declined vaccination. c. Persons who did not receive vaccination because of religious or philosophical exemptions should be categorized as declined vaccination. d. Persons who deferred vaccination all season should be categorized as declined vaccination. <p>The numerator categories are mutually exclusive. The sum of the six (6) numerator categories should be equal to the denominator.</p>
Inclusion Criteria for the Denominator	<p>Include PACE staff members who were employed for at least one (1) day during the reporting influenza season, regardless of employment status at the end of the reporting period.</p> <p>Include PACE contractors who provided contracted services at a PACE Organization for at least one (1) day during the reporting influenza season, regardless of contractual employment status at the end of the reporting period.</p>

Data Entry Instructions

Data will be reported on an Excel spreadsheet. Data are to be collected from staff records—both paper and electronic. You will submit the spreadsheet through a secure online application.

Organization-level Data Entry

Staff Influenza Immunization Measure	
Number of PACE staff members	Enter the total number of staff members who were employed by the PACE Organization for at least one (1) day in the reporting influenza season.
Number of PACE contractors	Enter the total number of contractors who were engaged by the PACE Organization for at least one (1) day in the reporting influenza season.

Individual-level Data Entry

Staff Influenza Immunization Measure	
Auto-generated staff number	1 through n, total number of non-excluded staff
Received influenza immunization: Staff	1 = Yes, the staff member received an influenza immunization during the reporting influenza season, either from the PACE Organization or from an external provider. 2 = No, the staff member did NOT receive an influenza immunization. 99 = There is no documentation available as to whether the staff member received an influenza immunization.
Offered and declined influenza immunization: Staff	1 = Yes, the staff member was offered and declined the influenza immunization during the reporting influenza season. 2 = No, the staff member was NOT offered the influenza immunization. 99 = There is no documentation available as to whether the staff member was offered and declined the influenza immunization.

Staff Influenza Immunization Measure	
Ineligible for influenza immunization due to contraindications: Staff	1 = Yes, the staff member was ineligible to receive the influenza immunization due to contraindication(s) during the reporting influenza season. 2 = No, the staff member was eligible for influenza immunization. 99 = There is no documentation available as to whether the staff member was ineligible for influenza immunization.
Auto-generated contractor number	1 through n, total number of non-excluded contractors
Received influenza immunization: Contractor	1 = Yes, the contractor received an influenza immunization during the reporting influenza season, either from the PACE Organization or from an external provider. 2 = No, the contractor did NOT receive an influenza immunization. 99 = There is no documentation available as to whether the contractor received an influenza immunization.
Offered and declined influenza immunization: Contractor	1 = Yes, the contractor was offered and declined the influenza immunization during the reporting influenza season. 2 = No, the contractor was NOT offered the influenza immunization. 99 = There is no documentation available as to whether the contractor was offered and declined the influenza immunization.
Ineligible for influenza immunization due to contraindications: Contractor	1 = Yes, the contractor was ineligible to receive the influenza immunization due to contraindication(s) during the reporting influenza season. 2 = No, the contractor was eligible for influenza immunization. 99 = There is no documentation available as to whether the contractor was ineligible for influenza immunization.

References

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PACE Participant Emergency Department Utilization Without Hospitalization

Introduction

Research indicates that the emergency department (ED) is playing an increasing role in unscheduled hospital admissions. Elderly patients commonly present to the ED with cardiovascular, gastrointestinal, and urinary tract complaints (LaCalle & Rabin, 2010). While many ED visits are warranted, ED use that does not lead to hospital admission may be for conditions that could have been treated in other settings, such as outpatient settings or at home. Evidence suggests the presence of unmet medical needs is an independent risk factor for ED use. The fact that frequent ED users are roughly six (6) times more likely to have been hospitalized in the preceding three (3) months supports claims of unmet healthcare needs (LaCalle & Rabin, 2010). Patient perception of the ED as an alternative to other primary care options also has been hypothesized as an essential driver of ED use. PACE Organizations work closely with the elderly, with the goal of helping them meet care needs in the community. As such, PACE Organizations may be an important contributor to national efforts to decrease unnecessary ED use.

As of 2009, 82 percent of unscheduled admissions were hospitalized through the ED compared to 65 percent in 2000 (Kocher, Dimick, & Nallamothu, 2013). The elderly (65 years and older) have been identified as a subpopulation that uses the ED much more frequently than other population groups. In addition, research indicates that a high proportion of Medicare and Medicaid patients frequently seek ED care (LaCalle & Rabin, 2010). In fact, one (1) national survey found the odds ratio for Government-insured individuals who are frequent users of the ED to be 2.1 ($p < .001$) (Zuckerman & Shen, 2004). Frequent users consist of just 4.5 percent to 8 percent of all ED patients, but they account for 21 percent to 28 percent of all ED visits (LaCalle & Rabin, 2010). In 2014, the Centers for Medicare & Medicaid Services issued an informational bulletin expressing a strong interest in reducing unnecessary hospital ED usage (Mann, 2014).

Measure Specifications

This section of the instructions presents the definitions of the PACE Participant Emergency Department Use Without Hospitalization measure and specifies the numerator, denominator, and inclusion and exclusion criteria. It defines all key terms. Read and understand the instructions before you begin data collection. Refer to them as needed throughout the course of data collection.

Emergency Department Utilization Measure	
Definition of the Measure	<ol style="list-style-type: none">Percentage of PACE participant ED visits that did not result in being admitted to the hospital.<ul style="list-style-type: none">Numerator: Number of PACE participant ED visits with no subsequent acute care hospitalization during the reporting quarter.Denominator: Number of PACE participant ED visits during the quarter.

Emergency Department Utilization Measure	
Definition of Observation Stay	ED visits with an observation stay are those that have documentation of an order for observation services written by the medical doctor/advanced practice registered nurse/physician assistant regardless of where those services are provided in the hospital or the ED.
Exclusion Criteria for the Numerator	<ul style="list-style-type: none"> - Exclude ED visits that resulted in a hospitalization - Exclude ED visits that resulted in an observation stay
Inclusion Criteria for the Denominator	<ul style="list-style-type: none"> - Include ED visits of participants who were enrolled in PACE for at least one (1) day in the reporting quarter, regardless of enrollment status at the end of the quarter. - Include ED visits of participants who died during the quarter, but were enrolled as PACE participants for at least one (1) day in the reporting quarter.

Data Entry Instructions

Data will be reported on an Excel spreadsheet. Data are to be collected from participant health care records—both paper and electronic. You will submit the spreadsheet through a secure online application.

Emergency Department Utilization Measure	
Auto-Generated ED Visit Number	Assign the first (1st) participant ED visit of the quarter a 1, the second (2nd) participant ED visit of the quarter a 2, the third (3rd) a 3, etc., through the total number of included ED visits in the quarter. A participant could have multiple ED visits in a quarter. Each ED visit should be counted separately and assigned its own visit number.
Acute Care Hospitalization	<p>1 = Yes, the participant was admitted for acute care hospitalization because of the ED visit.</p> <p>2 = Patient was admitted as observation status because of the ED visit</p> <p>3 = No, the participant did NOT have an acute care hospitalization because of the ED visit.</p> <p>99 = There is no documentation available as to whether an acute care hospitalization occurred.</p>

References

Kocher, K. E., Dimick, J. B., & Nallamothu, B. K. (2013). Changes in the source of unscheduled hospitalizations in the United States. *Medical Care, 51*(8), 689–698.

LaCalle, E., & Rabin, E. (2010). Frequent users of emergency departments: The myths, the data, and the policy implications. *Annals of Emergency Medicine, 56*(1), 42–48.

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