



Quality Improvement Organizations

Sharing Knowledge. Improving Health Care.

CENTERS FOR MEDICARE & MEDICAID SERVICES

CMS Quality Innovation Network- Quality Improvement Organizations (QIN-QIOs) Improving Medicare Beneficiary Immunizations Among Disparate Populations

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Subject Matter Expert

The Centers for Medicare and Medicaid Services

NVAC February 8, 2018



QIO Program History Timeline

- **1971:** Congress authorized Experimental Medical Care Review Organizations (EMCROs) to evaluate services provided to Medicare beneficiaries
- **1972:** Title XI, Part B, of the Social Security Act created Professional Standards Review Organizations (PSROs) to replace EMCROs
- **1984:** 1st Scope of Work (SoW) issued
- **1999:** 6th SoW changed name to “Quality Improvement Organization”
- **2011:** Trade Adjustment Assistance Extension Law of 2011
- **2014:** 11th SoW began and Quality Innovation Network QIOs created
 - **Spring 2015: QIOs began Adult Immunization work**

QIO Program

By law (Sections 1152-1154 of the Social Security Act), the mission of the QIO Program is to improve the effectiveness, efficiency, economy, and quality of services delivered to Medicare beneficiaries

The strategy for execution of this mission has shifted over the decades from peer review of cases to include quality measurement and improvement

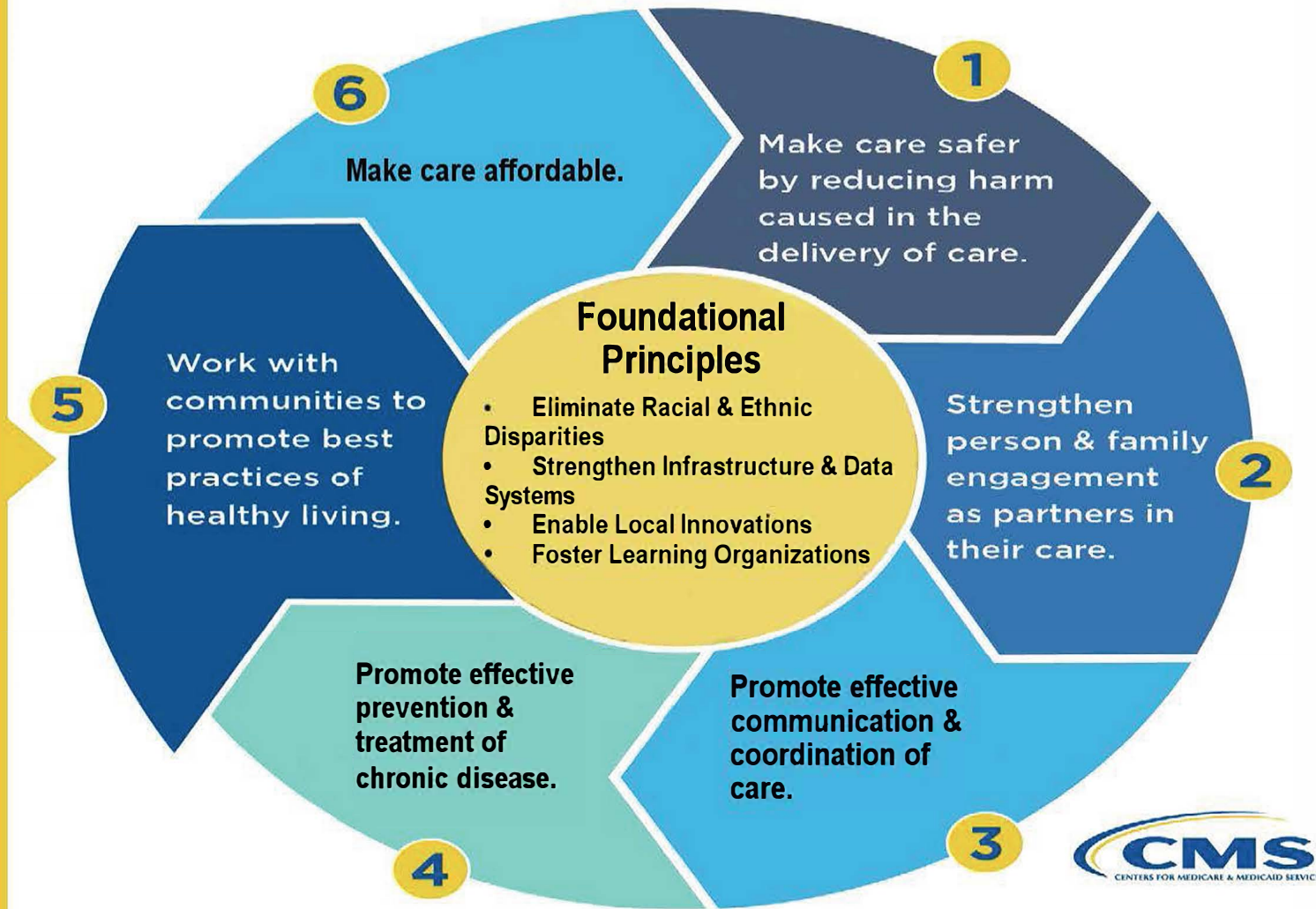
CMS Quality Strategy Aims and Goals

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/Downloads/CMS-2016-Quality-Strategy-Slides.pdf>



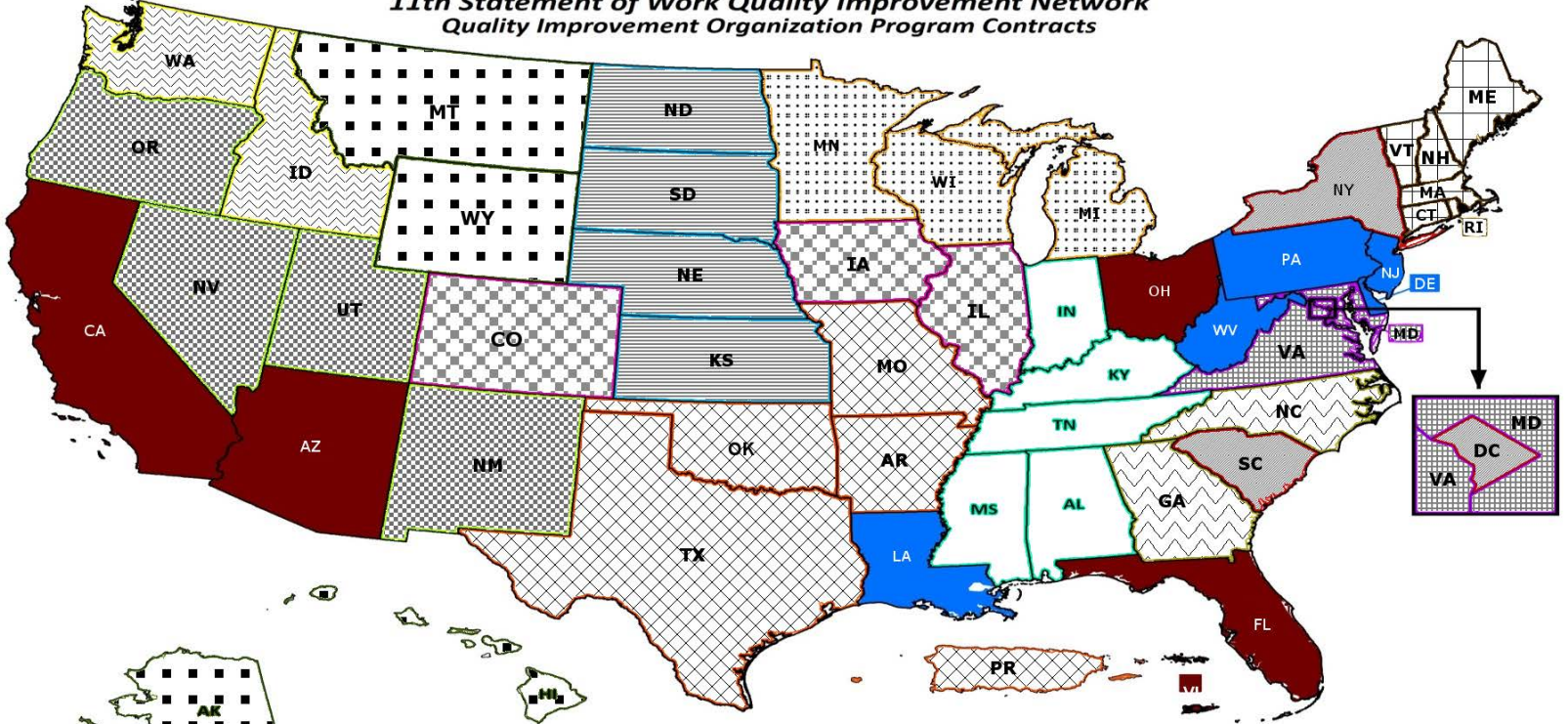
CMS Quality Strategy Goals

Better Care. Healthier People, Healthier Communities. Smarter Spending.



QIN-QIO Service Areas

11th Statement of Work Quality Improvement Network
Quality Improvement Organization Program Contracts



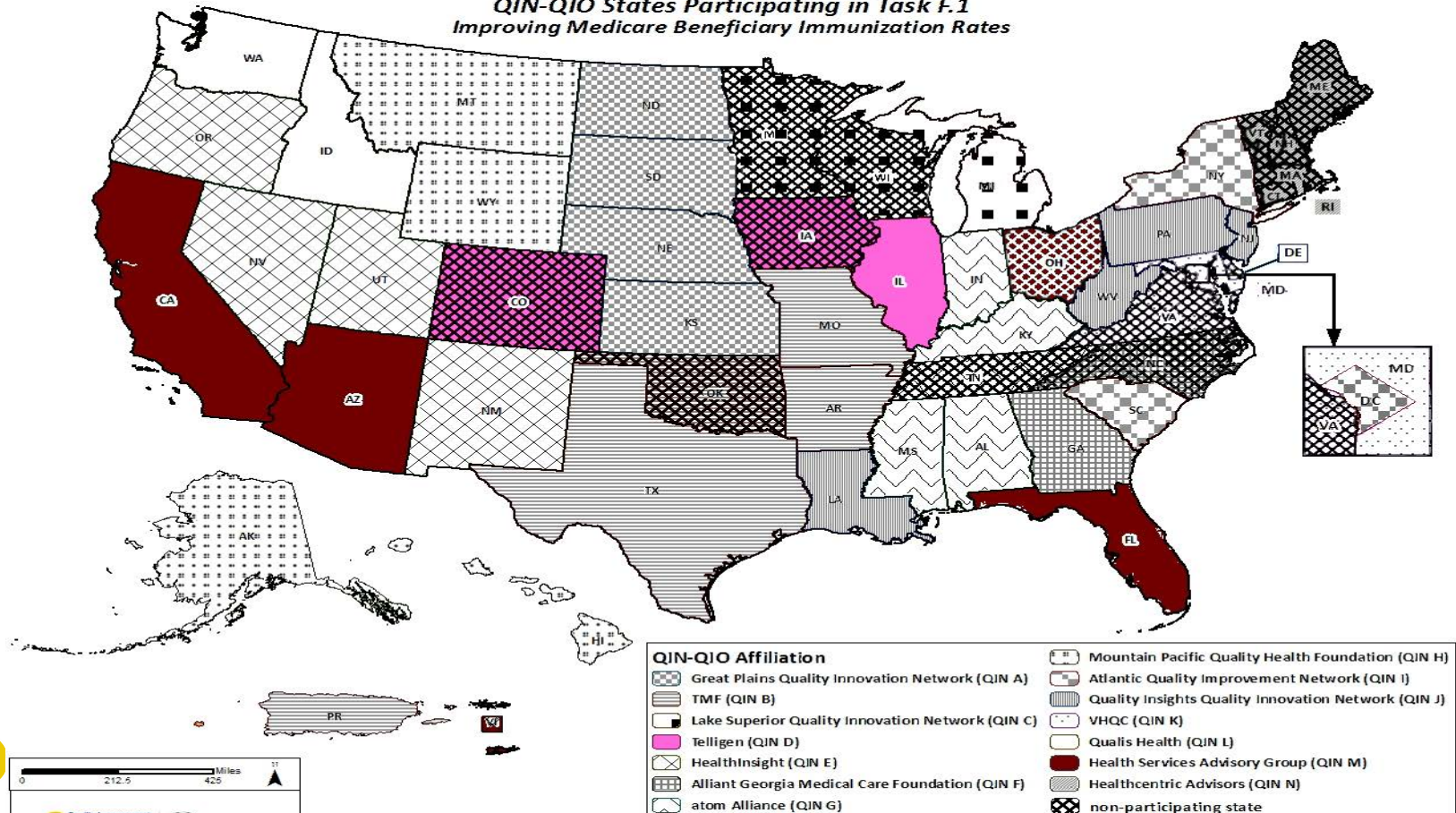
- | | |
|--|--|
| Great Plains Quality Innovation Network (QIN A QIO 4) | Mountain Pacific Quality Health Foundation (QIN H QIO 9) |
| TMF (QIN B QIO 13) | Atlantic Quality Improvement Network (QIN I QIO 2) |
| Lake Superior Quality Innovation Network (QIN C QIO 8) | Quality Insights Quality Innovation Network (QIN J QIO 11) |
| Telligen (QIN D QIO 12) | HQI (QIN K QIO 14) |
| HealthInsight (QIN E QIO 6) | Qualis Health (QIN L QIO 10) |
| Alliant Georgia Medical Care Foundation (QIN F QIO 1) | Health Services Advisory Group (QIN M QIO 7) |
| atom Alliance (QIN G QIO 3) | Healthcentric Advisors (QIN N QIO 5) |



updated 02/06/2017

Adult Immunization Task in 11th SoW

QIN-QIO States Participating in Task F.1
Improving Medicare Beneficiary Immunization Rates



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37 States/Territories Funded

QIN-QIO	States Covered
Great Plains	KS, ND, NE, SD
TMF	AR, MO, TX, PR
Lake Superior	MI
Telligen	IL
HealthInsight	NM, NV, OR, UT
Alliant	GA
atom Alliance	AL, KY, MS, IN
Mountain Pacific	AK, HI, MT, WY
Atlantic QIN	DC, NY, SC
Quality Insights	LA, NJ, PA, WV
HQI (formerly VQHC)	MD
Qualis	ID, WA
HSAG	AZ, CA, FL
New England QIN (Healthcentric Advisors)	RI

Adult Immunization Task in 11th SoW

Desired Outcomes

- Improve assessment and documentation of adult immunizations
- Improve immunization rates in Medicare beneficiaries, especially in minority and underserved populations
- Increase reporting of Medicare beneficiary immunizations to IISs, where available for adult patients
- Increase reporting to IISs from certified EHR technology (CEHRT)

Task Goals

By 2019, to align with the Healthy People 2020 goals

- National absolute immunization rates of
 - 70% for influenza
 - 90% for pneumonia
- Reduction of disparities among racial and ethnic minority, and rural Medicare beneficiaries and dual-eligible Medicaid and Medicare beneficiaries
- Implementing the National Vaccine Advisory Committee (NVAC) Standards for Adult Immunization Practice

By 2019:

- One million previously unimmunized Medicare beneficiaries will receive pneumonia immunization
- Improving adult immunization status assessment
- Appropriate immunization or referral, and documentation of Medicare beneficiary immunization status to include to reporting immunizations to the state or other Immunization Information System (IIS) via CEHRT and other electronic methods

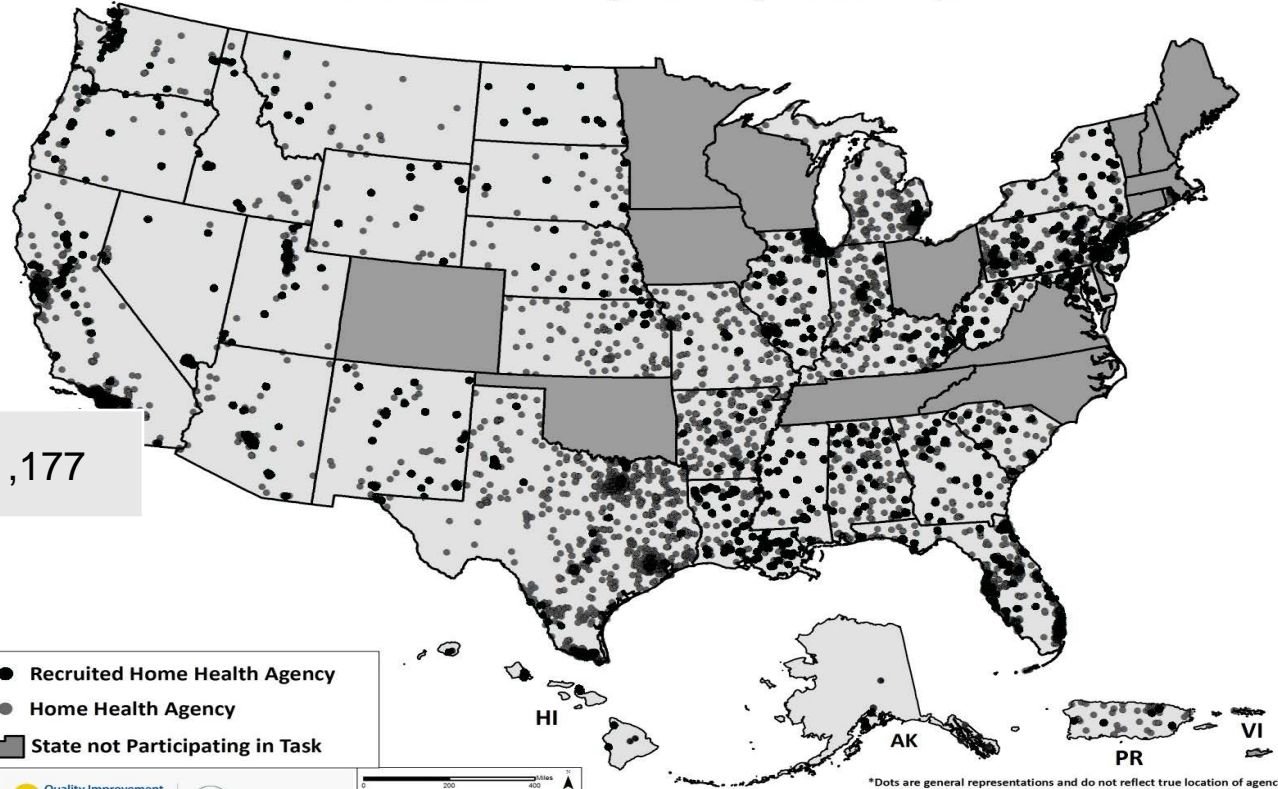
Progress: QIN-QIO Program Reach (QIO-Reported Data)

As of July 2017

Provider Type	Total Recruited
Clinicians	7,482
Hospitals, Nursing Homes, Health Departments	369
Pharmacies	557
Home Health Agencies	1,177
Medicare Beneficiaries	4,711,882

HHA Recruitment

F.1 Recruited Home Health Agencies as of December 31, 2016



Total Home Health Agencies Recruited

1,177

Why are immunizations difficult to measure?

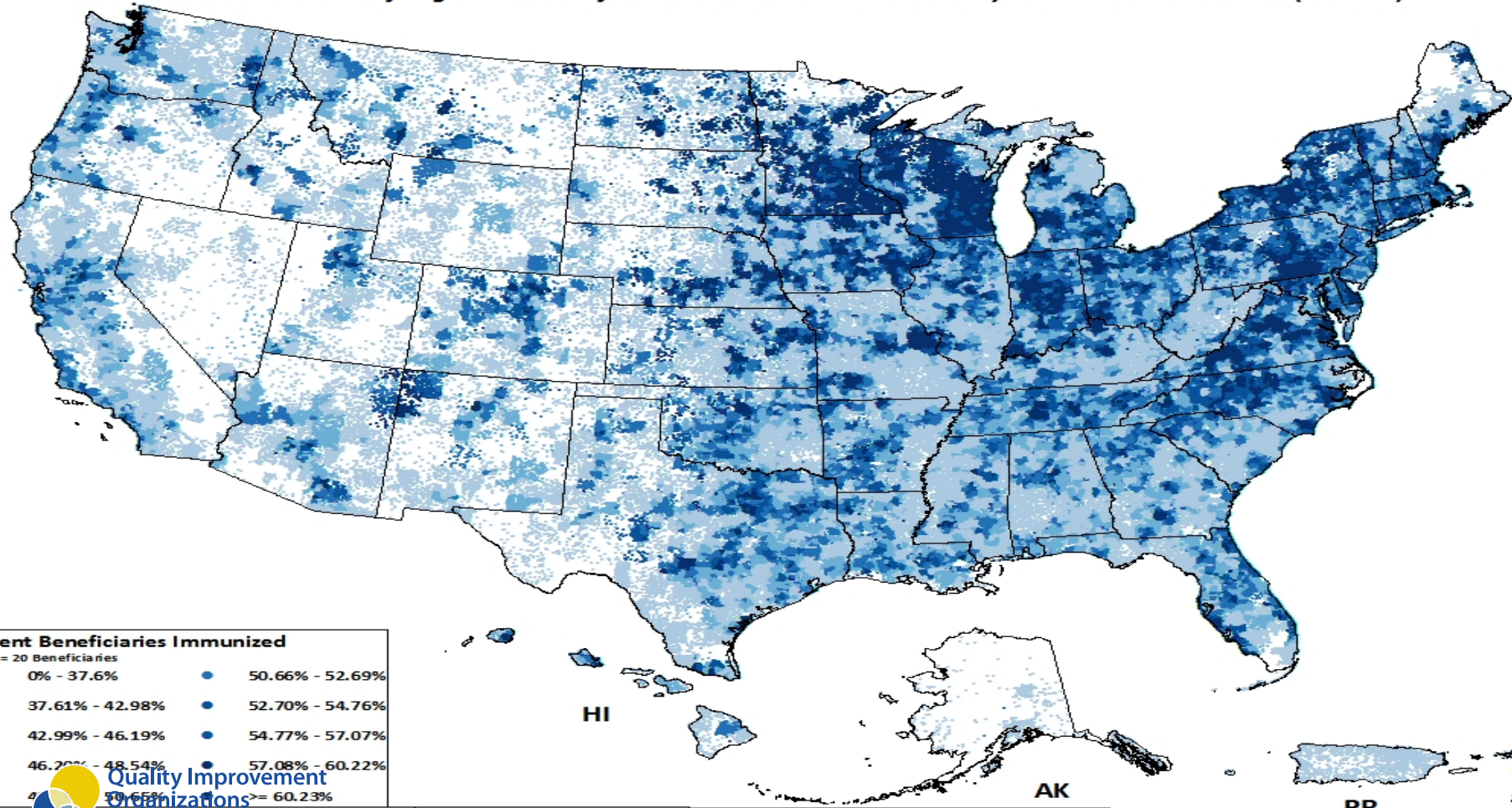
National Data Sources

- PQRS
- Claims
- OASIS

Variable State/Regional Data

- IIS (where the state collects adult data)
- EHR data (when available)
- QIO collected data

ZIP Code Level Percent of Eligible FFS Beneficiaries with a Pneumococcal Polysaccharide Vaccination* (CY 2014)



Percent Beneficiaries Immunized
 1 Dot = 20 Beneficiaries

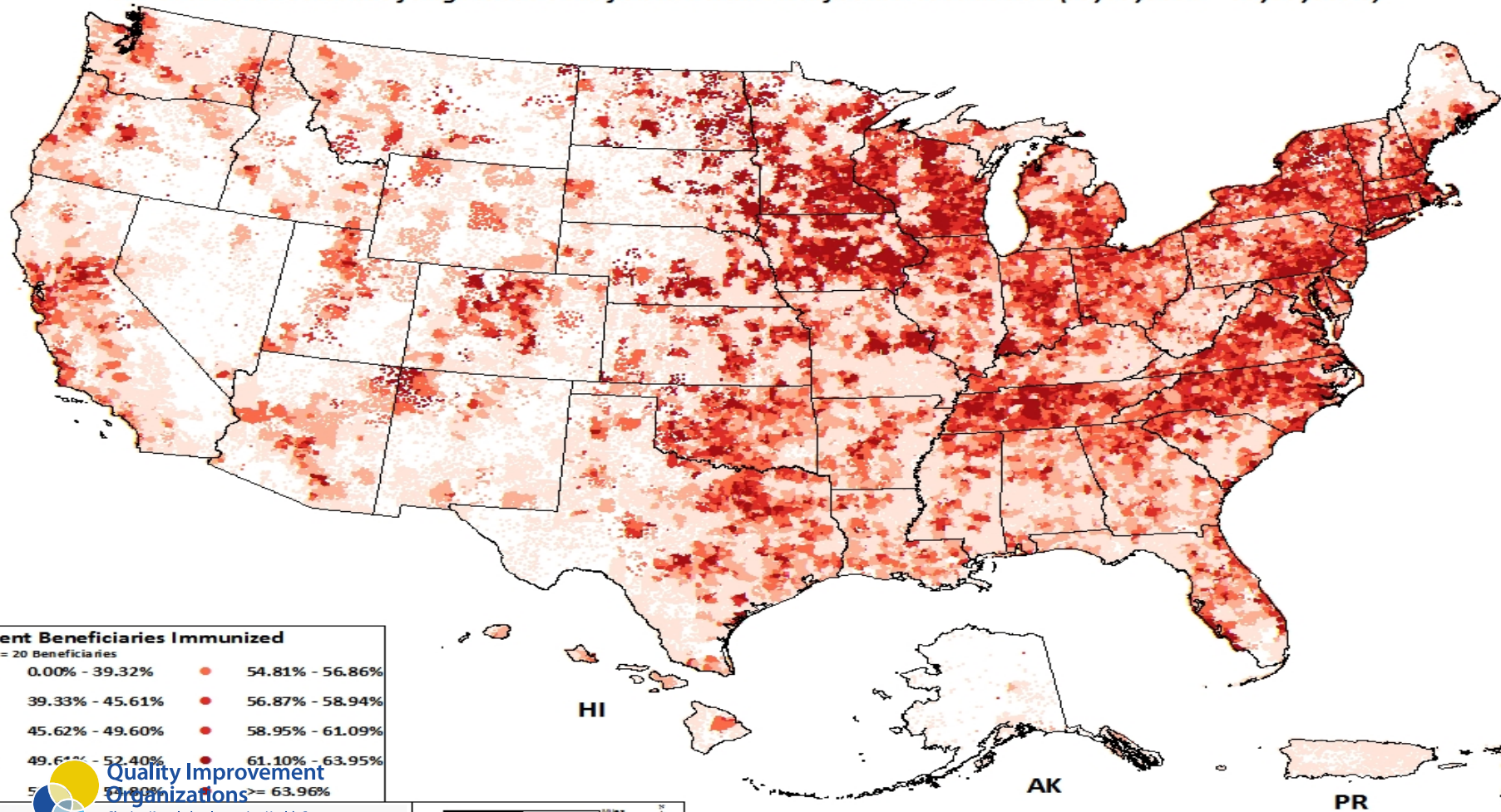
● 0% - 37.6%	● 50.66% - 52.69%
● 37.61% - 42.98%	● 52.70% - 54.76%
● 42.99% - 46.19%	● 54.77% - 57.07%
● 46.20% - 48.54%	● 57.08% - 60.22%
● 48.55% - 50.65%	● >= 60.23%

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 Quality Improvement Organizations for Medicare and Medicaid Services
 Centers for Medicare & Medicaid Services

0 100 200 Miles
 0 100 200 Kilometers
 N
 Vaccinated Between January 1, 1991 and December 31, 2014

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ZIP Code Level Percent of Eligible FFS Beneficiaries with an Influenza Vaccination (08/01/2013 – 03/31/2014)



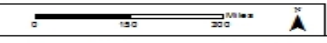
Percent Beneficiaries Immunized
1 Dot = 20 Beneficiaries

0.00% - 39.32%	54.81% - 56.86%
39.33% - 45.61%	56.87% - 58.94%
45.62% - 49.60%	58.95% - 61.09%
49.61% - 52.40%	61.10% - 63.95%
52.41% - 53.80%	63.96% - >= 63.96%

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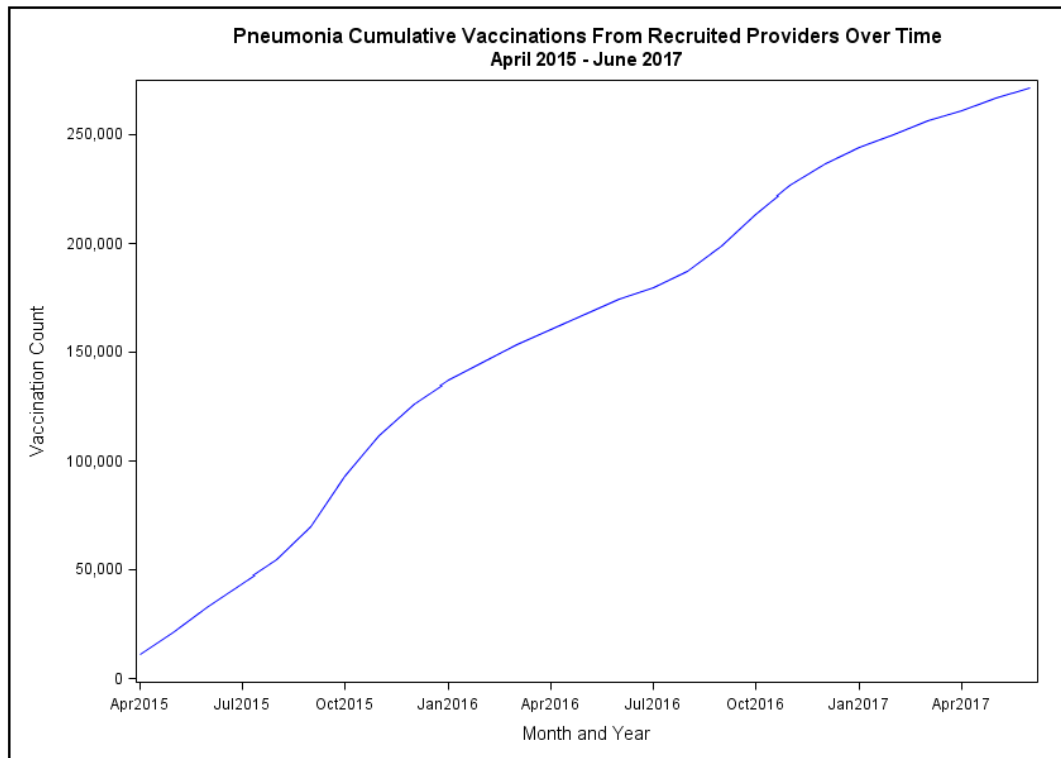
Quality Improvement Organizations FOR MEDICARE & MEDICAID SERVICES
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National Coordinating Center



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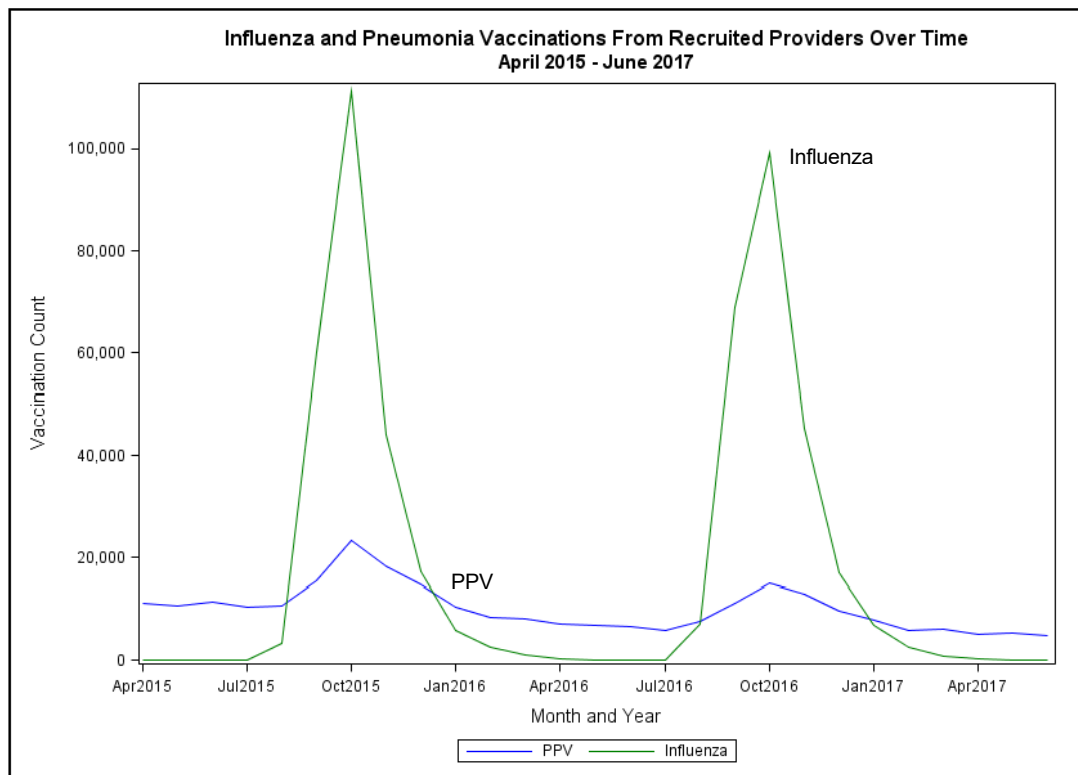
Cumulative PPV Immunizations from All Recruited Providers and Practitioners (Claims Data for every NPI Reported by QIN-QIOs)



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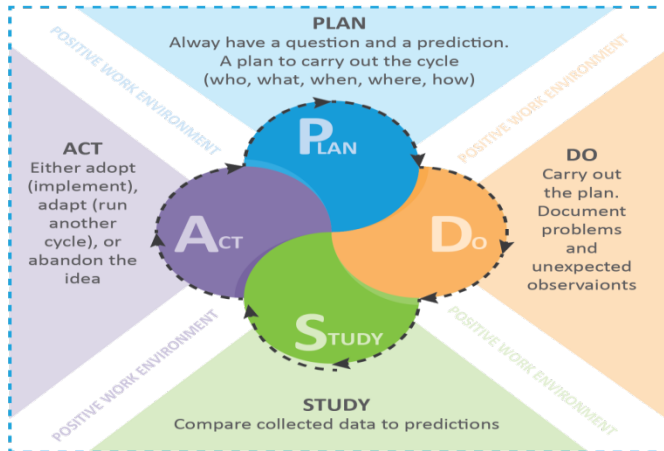
Month-to-Month Flu and PPV Immunizations from All Recruited Providers and Practitioners (Claims Data for every NPI Reported by QIN-QIOs)



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Interventions and Progress: Sample PDSA Cycle For Immunizations



Aim Statement: We will improve adult influenza and pneumococcal immunization rates by 20% by March 2017.

Test Cycle Date: Two-week test period. Identify pilot area (nursing unit, department, or all areas).

Plan: Test results of using patient messaging to improve patient influenza and pneumococcal immunization rates.

- **Expected Result:** If we use patient messaging, immunization rates will increase.
- **Need:** Staff training, patient materials.
- **Measure:** Develop baseline vaccine rate for each vaccine.

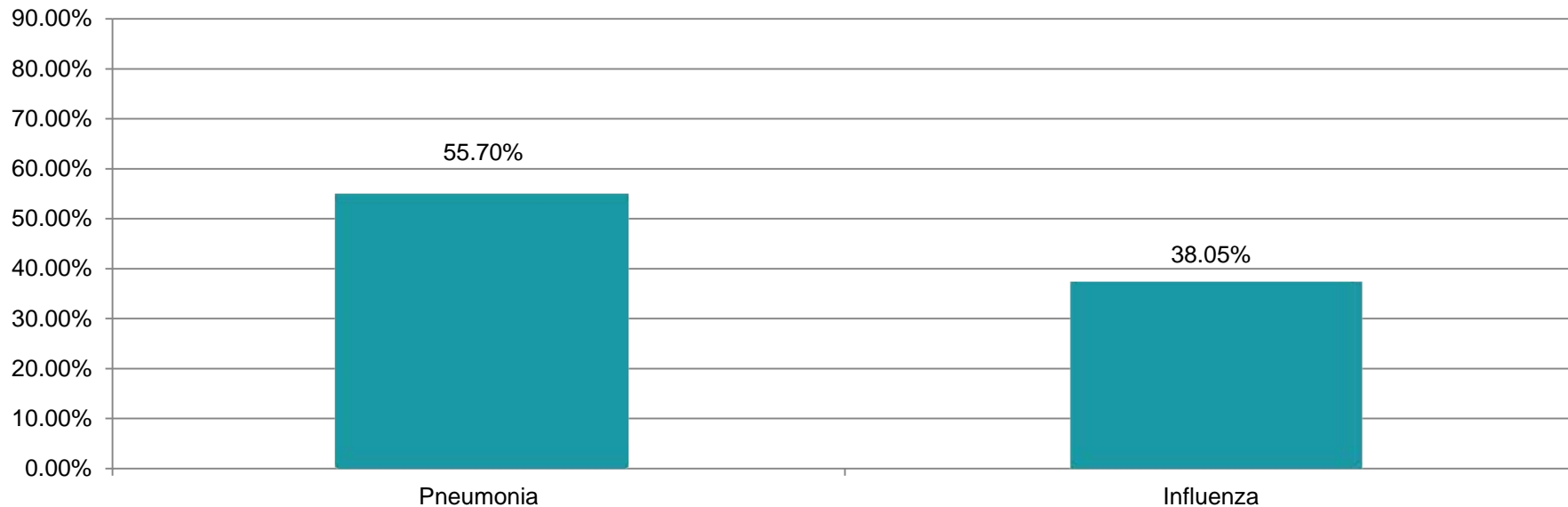
Do: Report what happened when you carried out the test. Describe observations and findings, problems encountered, special circumstances.

Study: Compare results to your predictions.

Act: What will you do next? Adopt, adapt or abandon and look for alternative method?

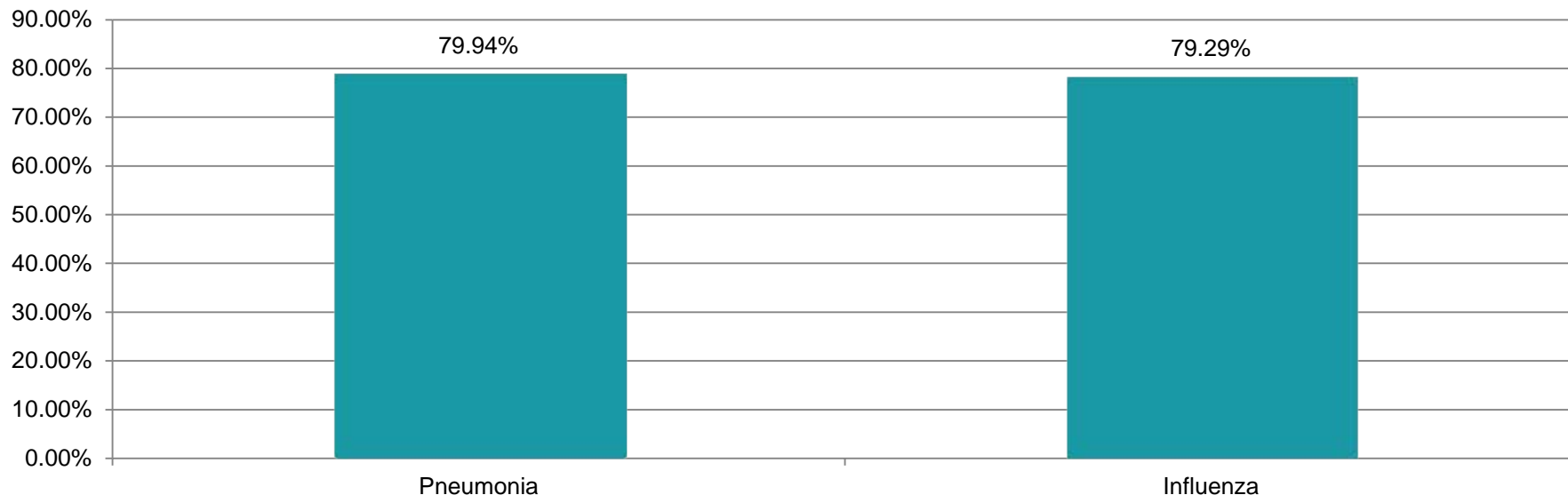
Vaccination Rates for Pneumonia and Influenza (Claims)

**National Vaccination Rates for Pneumonia and Influenza
from Part A and B Claims**



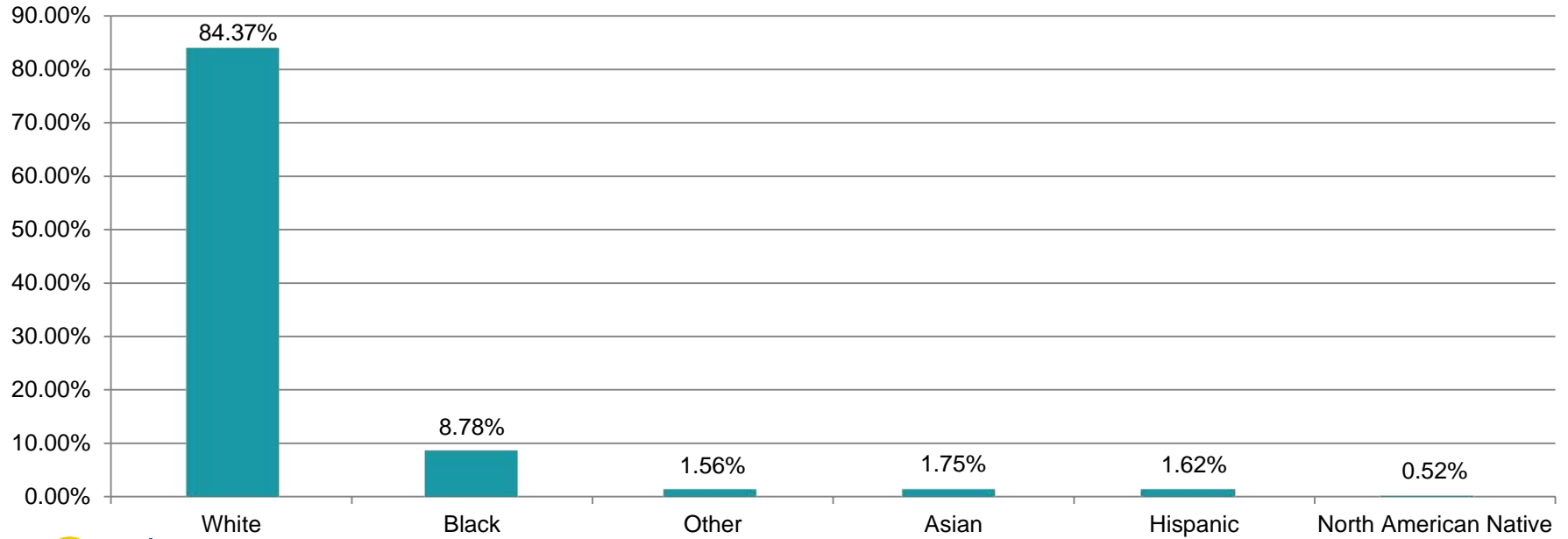
Vaccination Rates for Pneumonia and Influenza (OASIS)

National Vaccination Rates in Home Health Agencies for Pneumonia and Influenza from OASIS



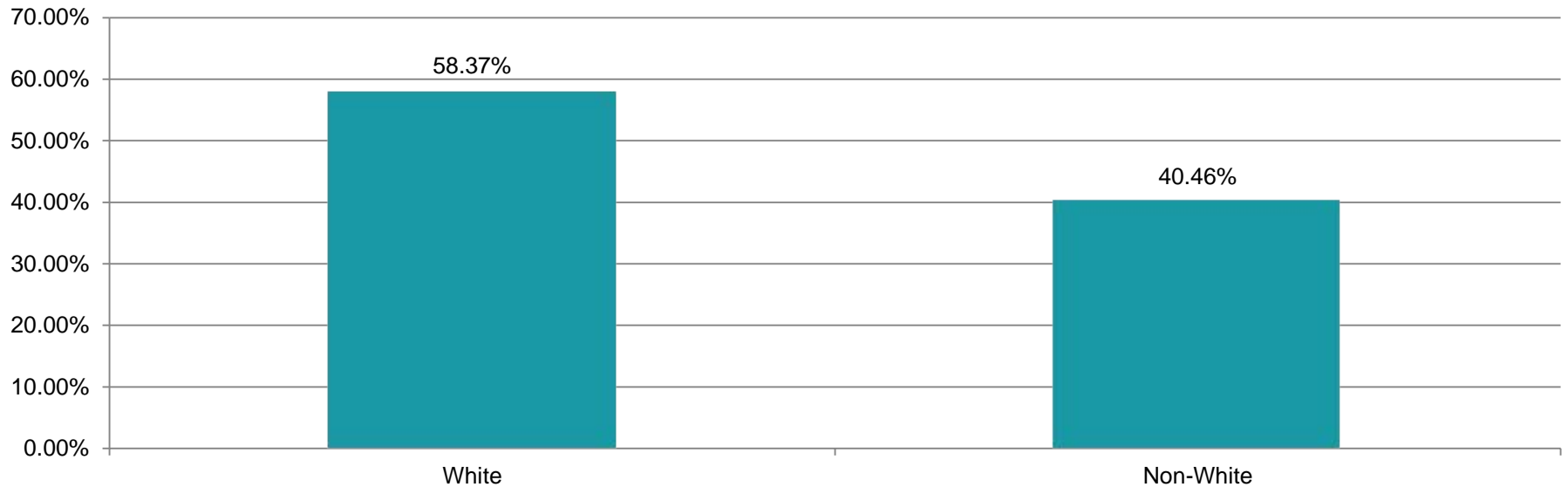
Race of Medicare Claims Beneficiaries

Race of Beneficiaries from Medicare Claims (Apr 2016 - Mar 2017)



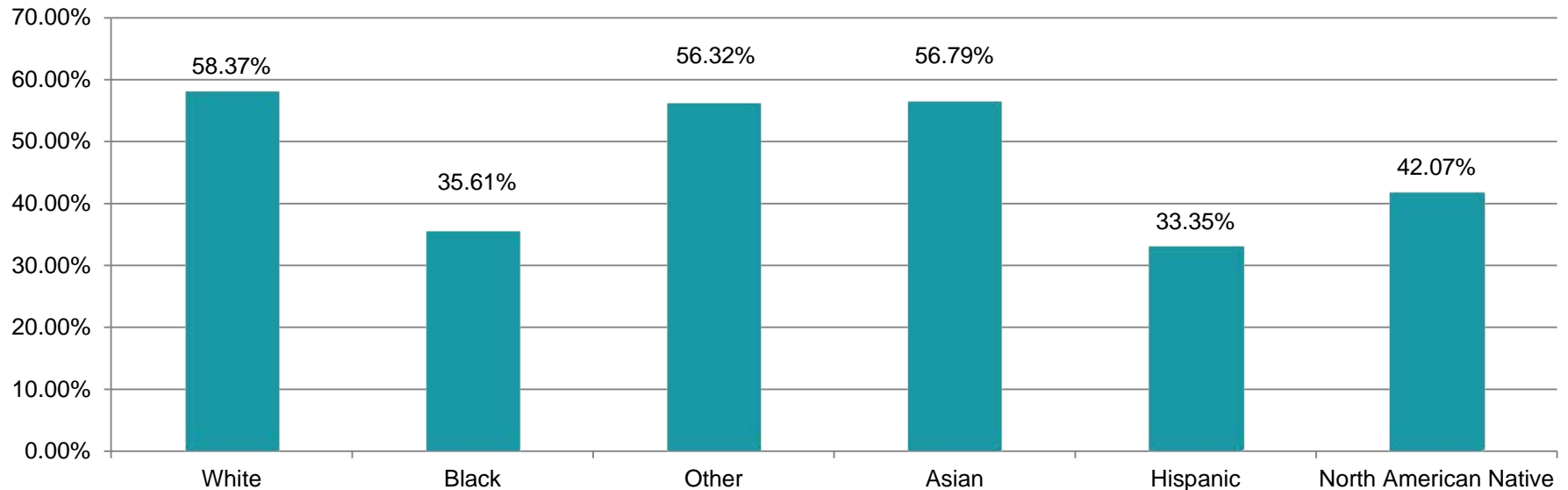
Pneumonia Vaccination Rates (Claims)

Pneumonia Vaccination Rates for White and Non-White Beneficiaries from Part A and B Medicare Claims (Jan 1991 - Mar 2017)



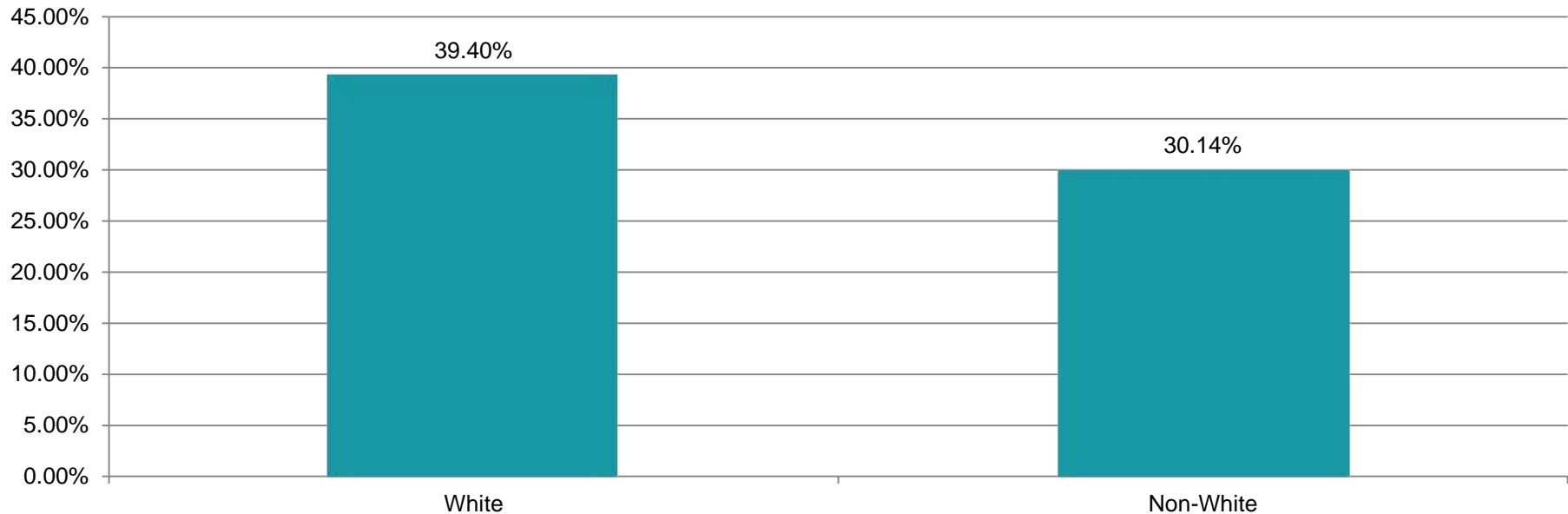
Pneumonia Vaccination Rates (Claims)

**Pneumonia Vaccination Rates by Race from Part A and B Medicare Claims
(Jan 1991 - Mar 2017)**



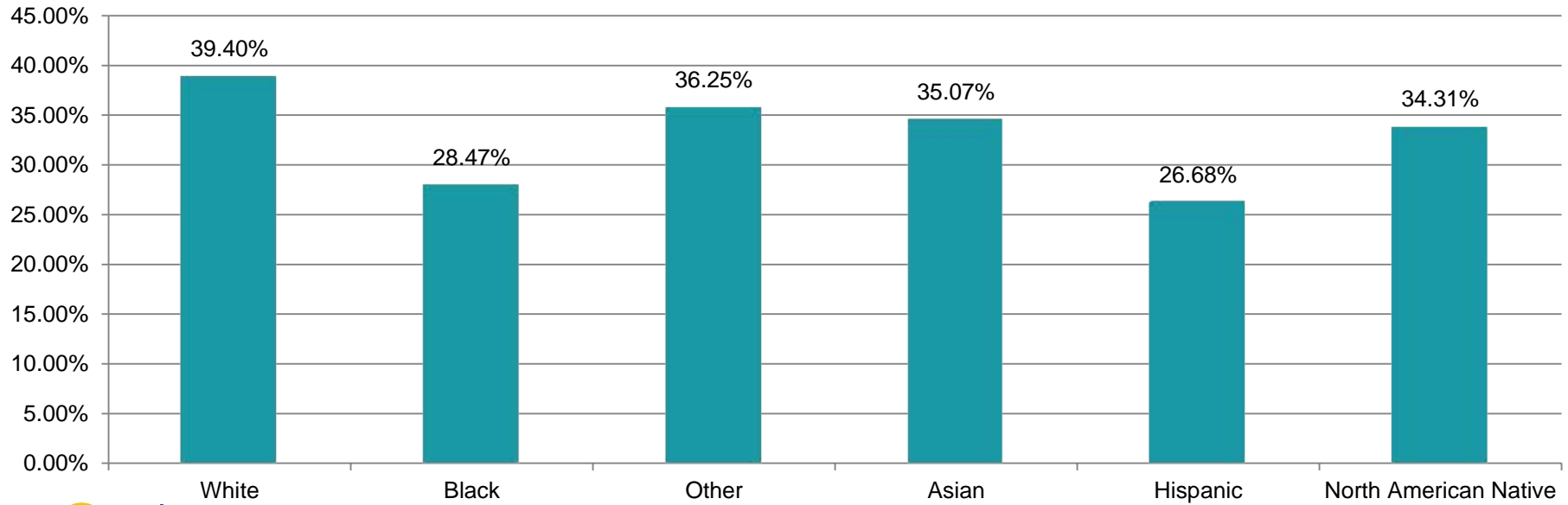
Influenza Vaccination Rates (Claims)

Influenza Vaccination Rates for White and Non-White Beneficiaries from Part A and B Medicare Claims (Oct 2016 - Mar 2017)



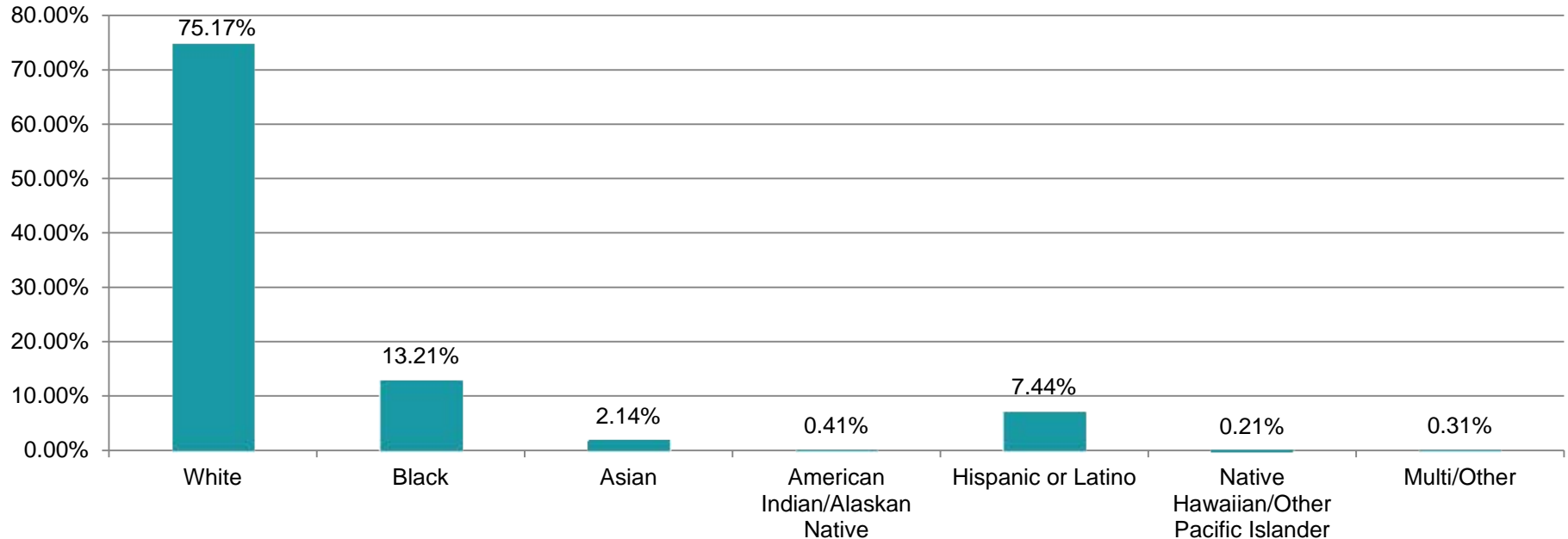
Influenza Vaccination Rates (Claims)

Influenza Vaccination Rates by Race from Part A and B Medicare Claims (Oct 2016- Mar 2017)



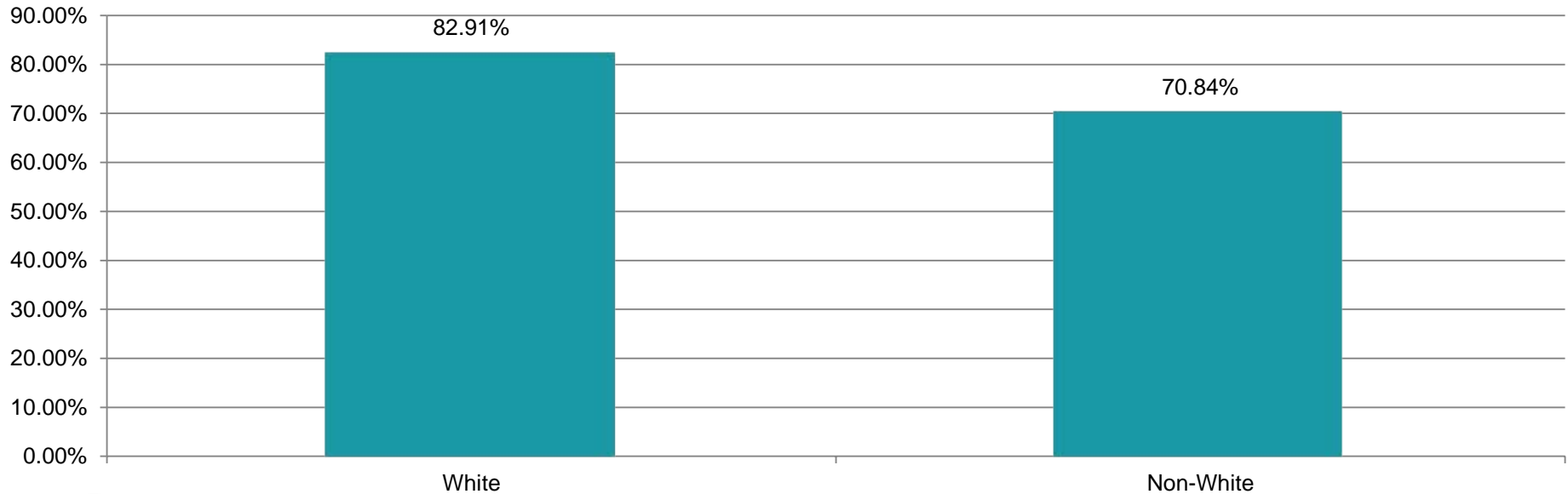
Race of Home Health Agency Patients

Race of Patients in Home Health Agencies from OASIS (2016)



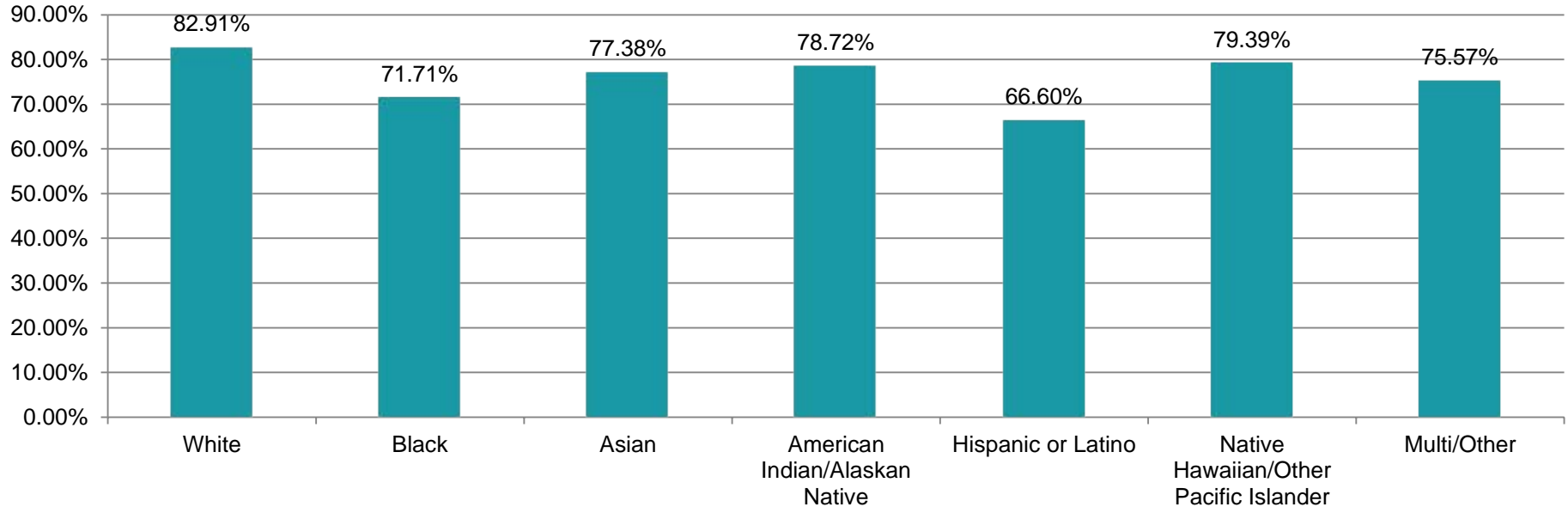
Pneumonia Vaccination Rates (OASIS)

Pneumonia Vaccination Rates for White and Non-White Patients in Home Health Agencies from OASIS (Jan 2016- Dec 2016)



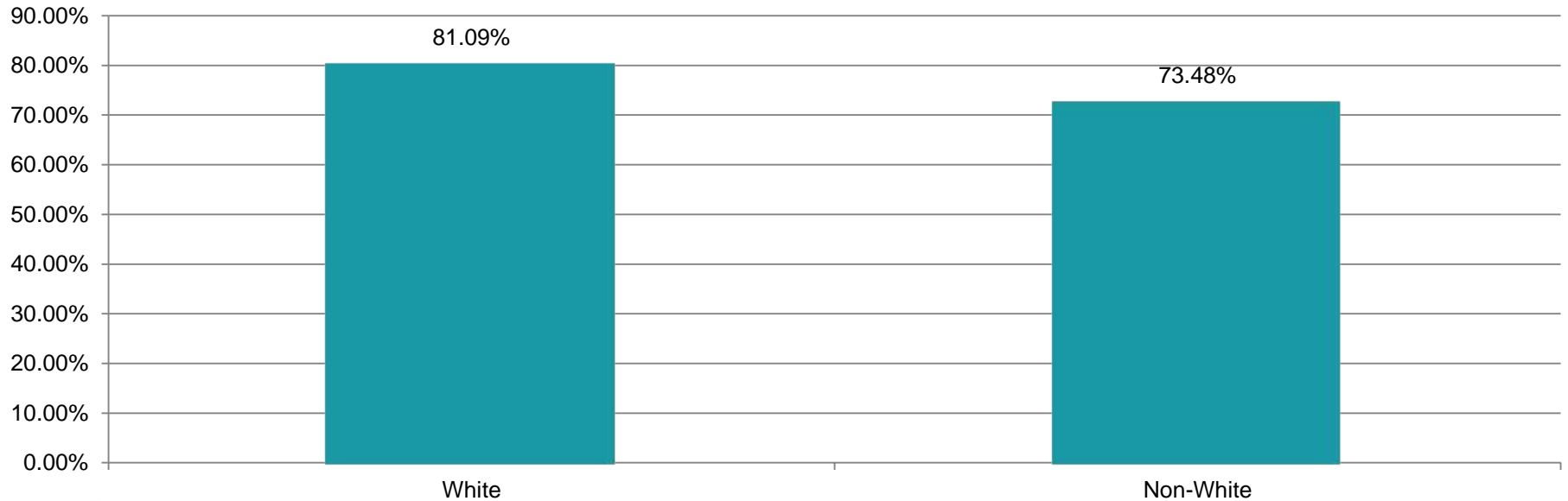
Pneumonia Vaccination Rates (OASIS)

**Pneumonia Vaccination Rates in Home Health Agencies by Race from OASIS
(Jan 2016- Dec 2016)**



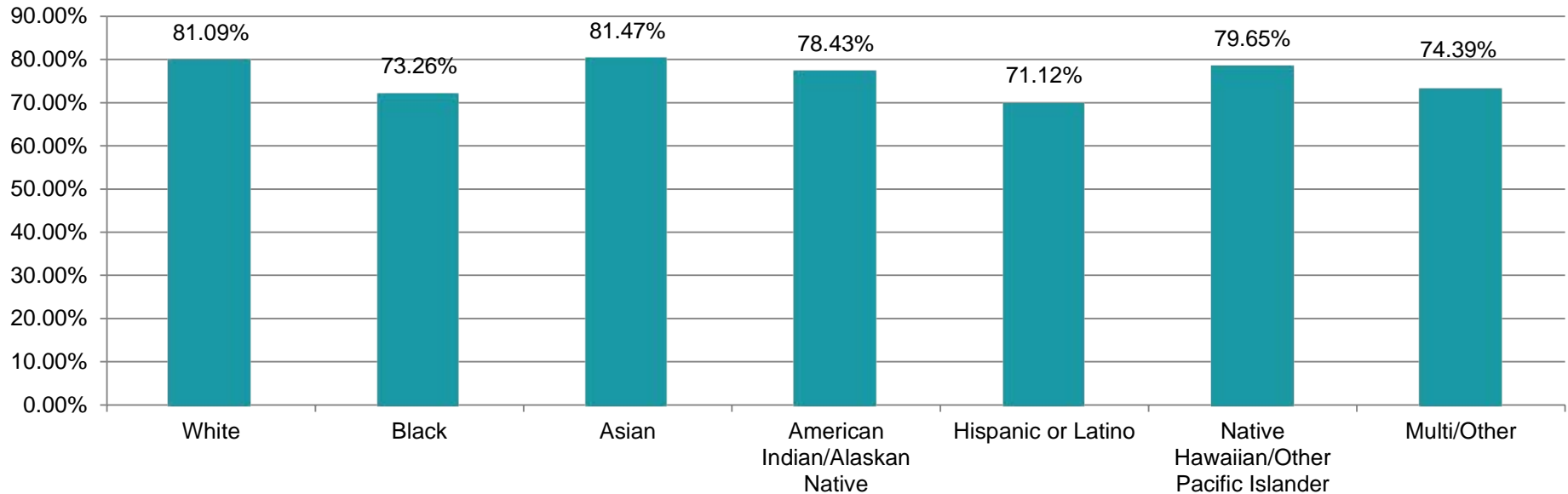
Influenza Vaccination Rates (OASIS)

Influenza Vaccination Rates for White and Non-White Patients in Home Health Agencies from OASIS (Oct 2016- Mar 2017)



Influenza Vaccination Rates (OASIS)

Influenza Vaccination Rates in Home Health Agencies by Race from OASIS (Oct 2016- Mar 2017)



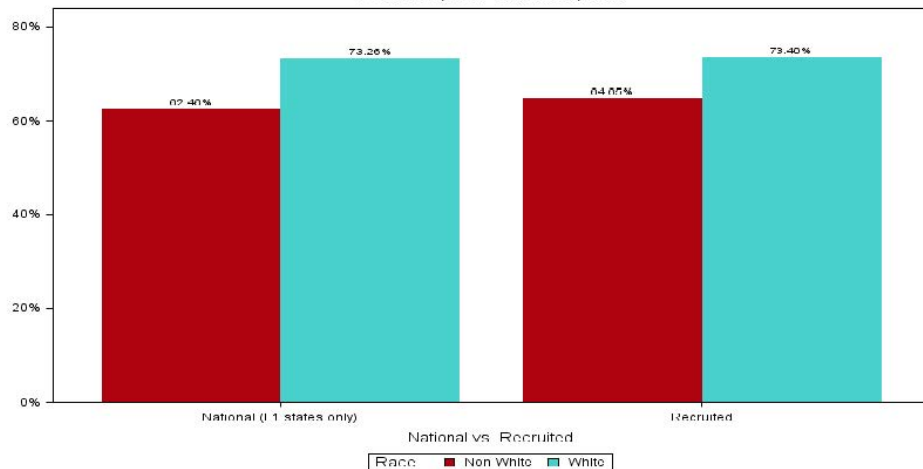
Interventions and Progress with HHAs

- HHAs were overwhelmed by the requirement from CMS to complete their Emergency Preparedness Plans by Fall 2017. QIOs worked to **combine assistance** creating these plans with immunization topics.
- **Providing education** to address and understand barriers to HHAs transporting, administering, billing and documenting vaccinations in the IIS.
- Exploring the benefits of **mass-screening patients** on a regular schedule, saving considerable time and assist in reporting.

HHA Influenza Vaccination Rates (OASIS Data)

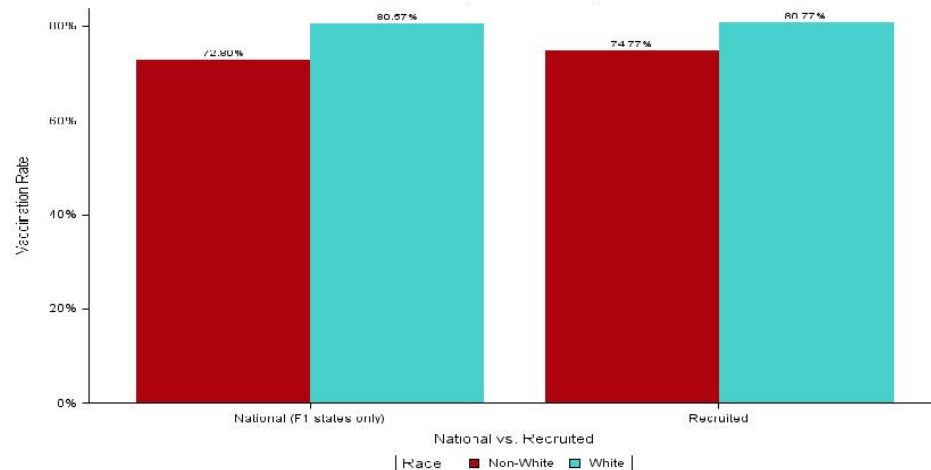
Baseline (2014-2015 Flu Season)

National Influenza Vaccination Rates for White and Non-White HHA Patients
October 1, 2014 - March 31, 2015



Re-measurement (2016-2017 Flu Season)

National Influenza Vaccination Rates for White and Non-White HHA Patients
October 1, 2016 - March 31, 2017

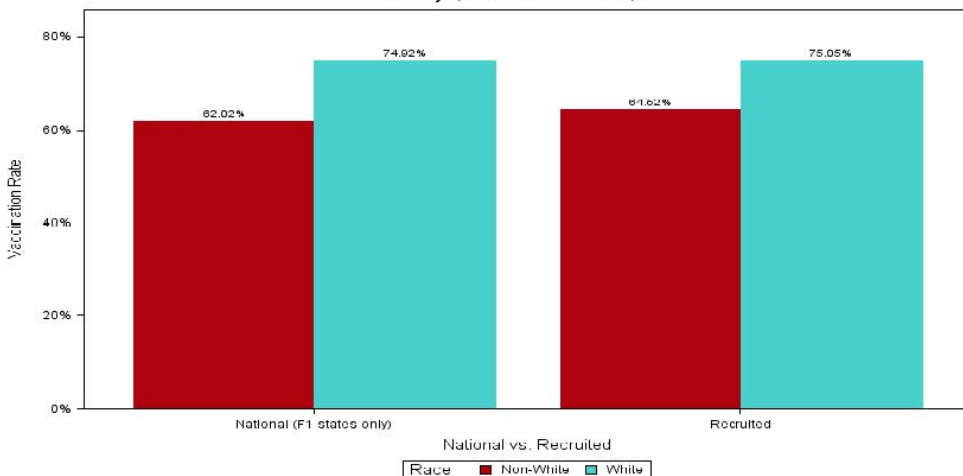


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HHA PPV Vaccination Rates (OASIS Data)

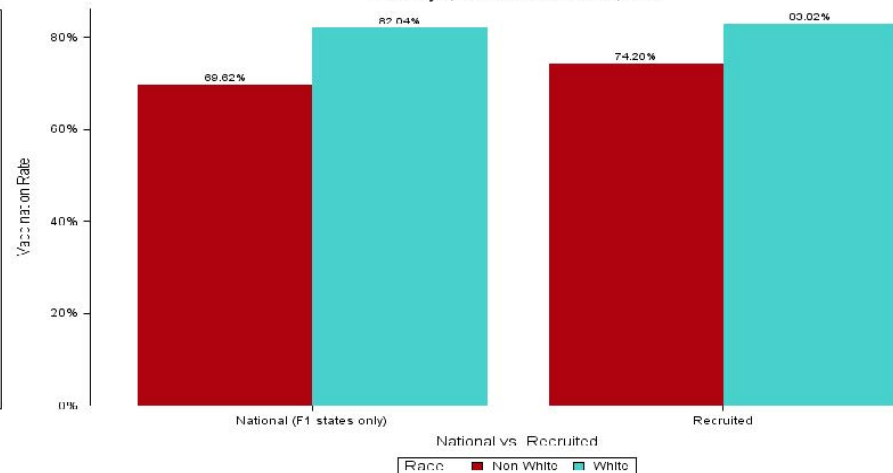
Baseline (2014)

National Pneumonia Vaccination Rates for White and Non-White HHA Patients
January 1, 2014 - December 31, 2014



Re-measurement (2016)

National Pneumonia Vaccination Rates for White and Non-White HHA Patients
January 1, 2016 - December 31, 2016



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Task Goal Progress

By 2019, to align with the Healthy People 2020 goals: Progress from recruited HHAs

- National absolute immunization rates of
 - 70% for influenza: **79.41% for recruited HHAs**
 - 90% for pneumonia: **81% for recruited HHAs**
- Reduction of disparities among racial and ethnic minority, and rural Medicare beneficiaries and dual-eligible Medicaid and Medicare beneficiaries: **Recruited HHAs closed the gap by 2.75% for Flu and 1.77% for PPV**
- Implementing the National Vaccine Advisory Committee (NVAC) Standards for Adult Immunization Practice: **Standards include Assess, Recommend, Administer, Document. Recruited HHAs are making progress on all of these (as seen by the overall immunization rate improvement).**

By 2019: See next slides for QIO progress from all recruited providers

- One million previously unimmunized Medicare beneficiaries will receive pneumonia immunization
- Improving adult immunization status assessment
- Appropriate immunization or referral, and documentation of Medicare beneficiary immunization status to include to reporting immunizations to the state or other Immunization Information System (IIS) via CEHRT and other electronic methods

Interventions and Progress: IIS Reporting

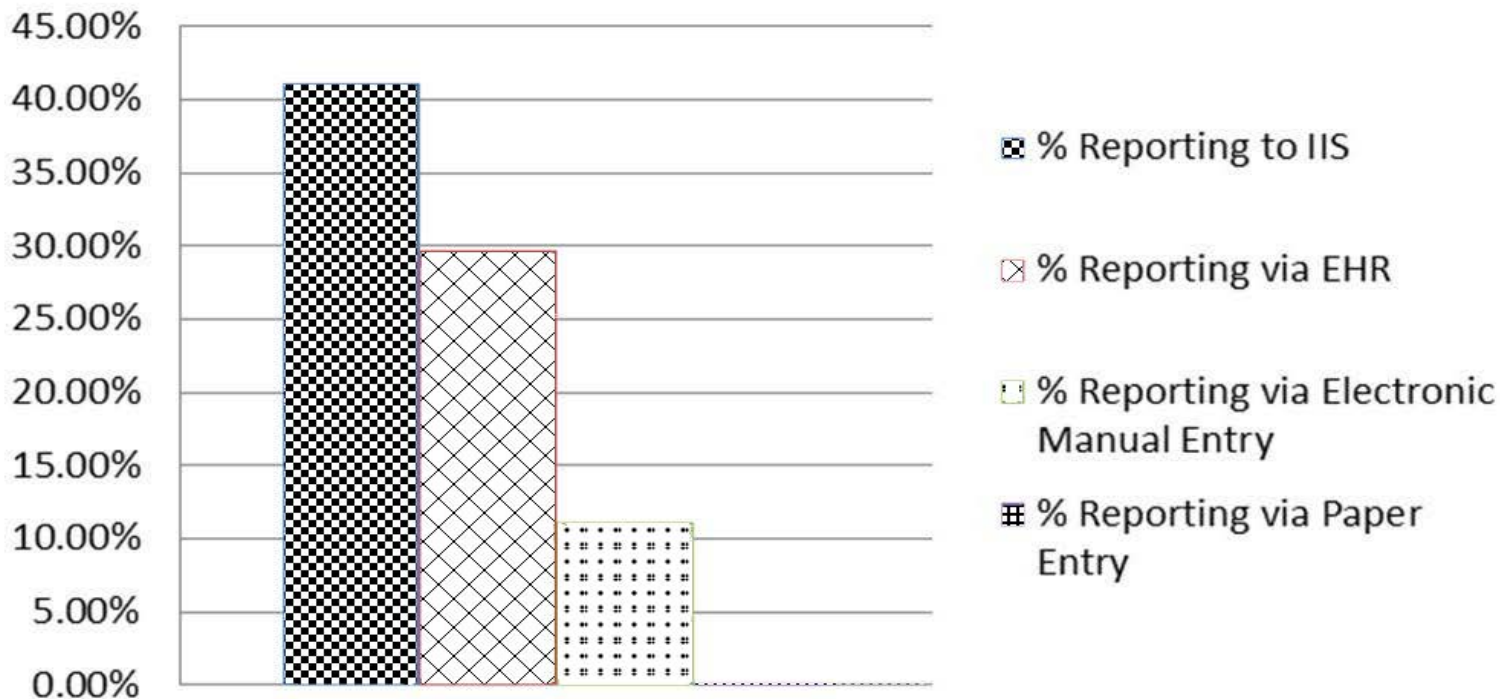
Encouraging **all provider types** have access to submitting and viewing data in the IIS (including pharmacies and HHAs).

Including EHR vendor representatives to be active in the conversations to ensure technological capabilities for transmitting and receiving.

Promoting selection of the Quality Payment Program (**QPP**) **Advancing Care Information measure** on Immunization Registry Reporting, but also encouraging providers to go beyond the minimum requirements.

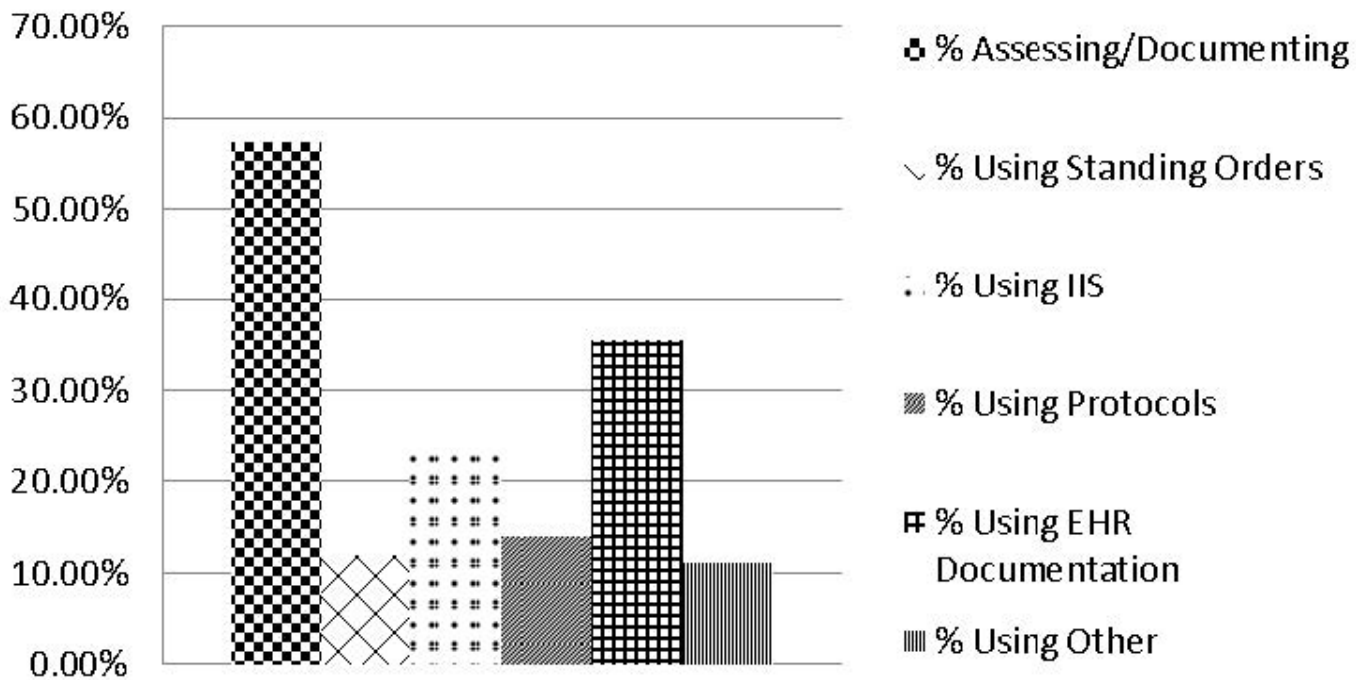
By 2019: Appropriate immunization or referral, and documentation of Medicare beneficiary immunization status to include to reporting immunizations to the state or other Immunization Information System (IIS) via CEHRT and other electronic methods (All Recruits – QIO-Reported Data)

IIS Reporting Methodology



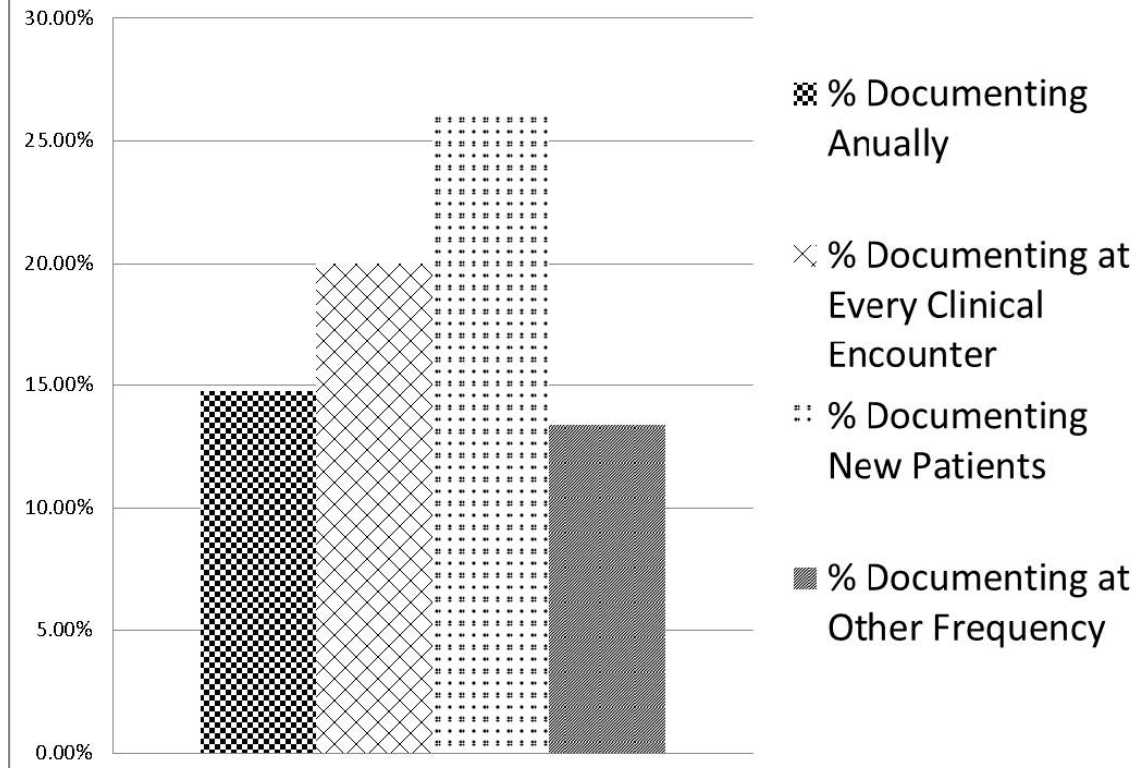
Interventions and Progress: Assessing and Documenting

Documentation Methodology



By 2019: Improving adult immunization status assessment (All Recruits – QIO-Reported Data)

Documentation Frequency



Interventions and Progress: Community Collaboration

Pharmacies

- **Educating pharmacy technicians** on how to talk to customers, ask every customer at every visit if they need a flu shot, and to offer consultation from a pharmacist.
- Where community pharmacies (i.e. Walgreens, Walmart, CVS) have developed an interface with IIS, the QIO can promote the benefit of **transmitting the data** from the community pharmacy to the clinic's EHR.

Partners

- Coordinating with **Local Immunization Coalitions**
- Engaging with **ESRD Renal Networks** to share resources, successes, and lessons learned to overcome challenges in dialysis facilities such as vaccination reconciliation.

Patients

- **Direct outreach** through educational letters, bus ads (in high volume, urban environments), statewide billboard campaigns, social media campaigns including Pandora, Facebook and blogs promoting adult immunizations.

Call to Action

Reach out to the QIO in your area!

- <http://qioprogram.org/>
- State-specific contact list to be included with slides the on the Summit website at <https://www.izsummitpartners.org/>
- **Opportunities for collaboration**
 - Identifying, creating, and distributing educational resources and strategies for targeting adult populations
 - Approaches and tools to facilitate the integration of immunizations into provider and patient priorities

Innovation Excerpt: QPP

HSAG (CA) - During the quarter, to foster engagement and provide technical assistance, the QIO staff had regular contact with the recruited providers either through phone calls, WebEx's or site visits. The primary focus of these contacts was to review practice performance and implement workflow and strategies to improve the administration rate for influenza and pneumococcal vaccines. Practices are encouraged to provide immunization information on their patient portals to promote patient engagement and awareness and incorporate the use of alerts and clinical decision support systems to set reminders when vaccinations are due. **As a part of transition to QPP, the QIO is advising MIPS eligible clinicians in appropriate quality measures and improvement activities aligned to this task. It is using a MIPS estimator tool to estimate the expected scores for immunization related measures based upon the provider performance.**

Quality Payment PROGRAM

Innovation Excerpt: Gameshow!

HealthInsight (NM) – The QIO sponsored a booth at the New Mexico Conference on Aging. Participants that stopped at the booth were asked to spin the **Wheel of Prevention** and asked to answer a question in order to win a cooling scarf. One of the topics was immunizations. Participants discussed issues related to immunization with QIO staff. The educational card titled Older Adults Need Vaccines, Too! was placed in each participants' conference bag.



Innovation Excerpt: Patient Advisory Input

HealthInsight (NM) - QIO staff met with the Patient Insight Group (patient advisory council for New Mexico) to engage them in spreading the word of the importance of immunizations for seniors. **The Patient Insight Group was issued a challenge to talk to as many friends, family members or acquaintances over the age of 65 regarding the importance of getting their flu, pneumonia, shingles and/or Tdap vaccines.** They were asked to use the “Older Adults Need Vaccines Too!” card to engage in conversation (English and Spanish) and the Flu Facts and Myths document. The group came up with ideas on how they could connect with their peers, this included: Conference on Aging (August 15); church groups; quilting groups; sewing groups; Red Hat Society meetings; and Grandparents Raising Grandchildren support groups. Prizes were awarded to the top two people who talked to the most seniors. Members of the group shared the sense of empowerment that they had talking to their peers and having the correct information to provide to their peers on the facts and myths of the flu vaccine. As an effort to facilitate in cross-state sharing, Patient Insight advisors will be presenting their experience to the Utah Family and Patient Council in November.



Innovation Excerpt: Pharmacy Visit Bonus Prize

Lake Superior (MI) - After receiving the adult vaccine guide cards, **one recruited pharmacy has been distributing them in the pharmacy bags when patients 60 and older pick up a filled prescription.** Over a months' time, they have distributed 250 cards as the pharmacist feels it is making a positive impact and is increasing the immunization rates at their pharmacy. As part of the pharmacy pilot, baseline data showing the number of doses for flu and pneumonia vaccines ordered and administered from the previous year has been received. This same data, along with reports from MCIR, will be provided and analyzed periodically over the next 6 months to measure the rates. This process is being shared with other recruited pharmacies as a best practice. Since the beginning of September, 600 cards have been disseminated to various settings where it will reach the largest number of beneficiaries.



Innovation Excerpt: Outreach and Reducing Disparities

HealthInsight (NM) is conducting community outreach activities in collaboration with health departments, pharmacies and other stakeholder groups like the American Cancer Society. **Beneficiaries are being reached at senior centers, food banks, libraries, churches, support groups, quilting groups, Red Hat Society meetings and via back to school campaigns.**



Atlantic (DC) launched a media campaign in communication and cooperation with the DC Department of Health (DOH). AQIN-DC **MetroBus media campaign with 28 x 11- inch posters of Adults Need Vaccines ask your doctor (graphic: African American older woman holding a child) in 150 buses in Wards 7 & 8 (disparities areas)** for 8 weeks starting Oct. 30, 2017 through Dec. 24, 2017. Estimated impressions/circulation per vendor = approximately 1.6 million. In cooperation with DC DOH that is also sponsoring media campaign from end of October to February 2018: a) COMCAST video (cable), b) Washington Post Express- free hard copy paper distributed in the Washington DC Metro subway, and c) AMC and Regal select theaters video. Plan to measure uptake by re-measurement of PQRS/MIPS and claims data for 2017-2018 year and immunization registry baseline Oct 2016- Sep 2017.

