



Advancing High Performance Health

AMGA Foundation

**Adult Immunization (AI)  
Best Practices Learning  
Collaborative, Group 3:  
Case Study**

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***USMD  
Holdings, Inc.  
Dallas-Fort Worth, TX***



## Organizational Profile

USMD Holdings, Inc. (USMD), a multispecialty medical group, provides primary and specialty care to nearly 400,000 patients annually across the Dallas-Fort Worth area. The system is a large, integrated care organization that encompasses two acute care hospitals, nearly 50 physician clinics (many of which are multispecialty), and one cancer treatment center. USMD is now an affiliate of WellMed Medical Management, Inc. and OptumHealth Holdings, Inc.

The health system has more than 2,000 employees: 214 providers (109 primary care providers and 105 specialists, including two cardiologists), and 35 advanced practice clinicians (APCs), including nurse practitioners and physician assistants.

USMD uses NextGen as its electronic medical record (EMR) in primary care, women's services, and medical specialties. Allscripts is the EMR for all of the surgical specialists.

In 2016, USMD provided nearly one million patient encounters, of which more than 15% were conducted through the medium of "virtual medicine" (secured messaging between physician and patient).

The mission and vision of USMD Health System stems back to 1992, when a single specialty surgical group began to collaborate on excellence in patient outcomes—outcomes that would receive national recognition for the group before the close of the decade.

The nature of specialty health care is an interdisciplinary relationship with primary care. The premiere primary care medical group in the area included a variety of specialty group partnerships across the region. The collegiality of these two groups led to the single surgical specialty group joining forces with the premiere primary care physician group in 2012 in a merger that would absorb two physician-owned hospitals.

The Quadruple Aim mission of USMD—Better Care, Better Health, Better Cost, while pursuing the Joy of Medicine—is thus firmly rooted in a history defined by premiere physicians who collaborate across specialties because they have a common vision of superior patient outcomes throughout a continuum of care.

## Acronym Legend

**AI Collaborative:** AMGA's Adult Immunization Best Practices Collaborative  
**APC:** Advanced Practice Clinicians  
**CDC:** Centers for Disease Control and Prevention  
**EMR:** Electronic Medical Record  
**FTE:** Full-time Equivalent  
**HEDIS:** Healthcare Effectiveness Data and Information Set  
**HP2020:** Healthy People 2020  
**MACRA:** Medicare Access and CHIP Reauthorization Act of 2015  
**MIPS:** Merit-based Incentive Payment System  
**QA:** Quality Assurance  
**SDO:** Standing Delegated Order  
**SQL:** Structured Query Language  
**USMD:** USMD Holdings, Inc.

## Executive Summary

*"The reward for work well done is the opportunity to do more."* — Jonas Salk, creator of the inactivated polio vaccine

The impact that an organization can have on individuals and communities through consistent and compassionate vaccination practices is immeasurable. Because of that, USMD has been on a continuous process improvement journey around immunization practices. In the United States alone, the Centers for Disease Control and Prevention (CDC) have estimated that between 12,000 and 56,000 people have died due to influenza since 2010, with many more being negatively impacted either by hospitalization or outpatient illness.<sup>1</sup> This is especially true in populations of high-risk and at-risk individuals in the surrounding communities.

In addition, pneumonia can have a devastating physical, emotional, and financial impact on patients and their families. The CDC reported that in 2015, 544,000 emergency department visits occurred as a result of pneumonia<sup>2</sup> and, in 2016, it led to 48,632 deaths. It has also been estimated that the average inpatient cost of a pneumonia episode is between \$18,000 and \$27,000, which could prove devastating to most families' financial stability.<sup>3,4</sup>

Because there are relatively safe and effective vaccinations against influenza and pneumonia, improving the influenza and pneumococcal immunization rates of USMD patients and employees was targeted for intervention and aligned with USMD's Quadruple Aim philosophy of efficiently maximizing the health and quality of the patients' lives.

During the AMGA Adult Immunization Best Practices Collaborative (AI Collaborative), the health system created a multidisciplinary team that included specialists, leveraged technology and data, provided additional immunization education for providers, staff, case managers, and patients, and identified opportunities to standardize clinical processes, workflows, and standing delegated orders.

The results of the clinical measures for pneumococcal immunizations in the at-risk and high-risk 19- to 64-year-old population exceeded expectations and were maintained throughout the measurement period. There is additional work to be done to improve the combined pneumococcal vaccination rates in those patients 65 and older and the general adult population's influenza immunization rates; however, 2018 served as a year for learning how to build additional infrastructure, as well as how to utilize new protocols and technologies to support this effort, and the health system expects to yield positive results in 2019.

The lessons learned during the AI Collaborative include: the importance of a strong data analytics function along with claims data management and point of care alerts; immunization specific training for physicians, APCs, and staff; expanded care team members (e.g., case management) having access to immunization data; the value of accessing state immunization registries for adult patients; and standardized clinical workflows and standing delegated orders.

## Program Goals and Measures of Success

### **AI Collaborative Goals**

Collaborative goals were set for the Adult Immunization Collaborative (Groups 2 and 3 participants). The collaborative goals were set based on reviewing the Healthy People 2020 goals from the federal office of Disease Prevention and Health Promotion (HP2020),<sup>5</sup> baseline data for each group, and with input from the AI Collaborative advisors (see Appendix).

### **USMD Goals**

USMD had the following goals and objectives in entering into the AI Collaborative:

- Create a multidisciplinary team that involved specialists to create improvements in vaccination rates
- Create pneumococcal and influenza vaccine standing delegated orders (SDOs) and a formal annual competency program for 100% of primary care clinics
- Obtain access and create workflows and training around the state's adult immunization registry for 100% of primary care clinics
- Bring more focus on immunization rates via enhanced data reporting to providers and leadership
- Create provider and staff educational programs (live and webinar) and job aids for providers and staff to reduce variation of care
- Train the case management team who interfaces with high-risk and at-risk patients to enable them to identify and educate patients who are under-vaccinated
- Provide additional EMR and intake training for staff
- Create more patient-friendly standardized educational materials to display in the clinics and to provide direct to consumer

Internally, USMD was particularly focused on improving rates for high-risk patients aged 19 to 64 that receive both of their pneumococcal vaccines and improving documented influenza vaccine rates in patients and employees. There was also a goal to achieve 100% participation in the immunization standing delegated orders within the primary care clinics.

Some of the greatest challenges during the AI Collaborative included:

- Simultaneous integration of activities and competing operational interests
- Limited IT resources
- Clinical education team resources
- Physicians and staff being overwhelmed with number of reports

- Pneumococcal and influenza measures not in standard Healthcare Effectiveness Data and Information Set (HEDIS) package in current point-of-care tools
- Lack of tools for automated patient outreach (e.g., Interactive Voice Response [IVR] system, patient portal)

The outcomes for the other goals and objectives are discussed in more detail in the “Outcomes and Results” section below.

## Data Documentation and Standardization

The clinical analytics team used the AI Collaborative measure specifications to develop and test data extraction queries. Immunization data is stored in multiple locations in the EMR and comes in from external sources data sources and locally documented immunizations. The quality assurance (QA) process confirmed that the measure calculation included all available data.

## Population Identification

Throughout the Dallas-Fort Worth area, the organization has approximately 100 employed primary care providers (including physicians and APCs in family medicine, internal medicine, geriatric medicine, and internal medicine-pediatrics) located in nearly 25 primary care locations, with panels of varying sizes and degrees of complexity.

The entire population that was analyzed for the AI Collaborative was approximately 200,000 in the primary care setting. This population spanned all payors and all age groups that were included in the measure specifications and attributed to a primary care physician (as defined above). By the end of the measurement period, 101,252 patients were included in the influenza measurement, 42,381 in the 65-year-old and up pneumococcal measurement, 7,306 in the high-risk 19- to 64-year-old measurement, and 13,772 in the at-risk 19- to 64-year-old measurement.

The medical group used its existing EMR to create custom Structured Query Language (SQL) reports and capture all of the HEDIS data elements to measure the number of patients in each measure.

## Intervention

First, a work group was created to include the areas of clinical analytics, primary care leadership and medical directors, specialty care leadership, quality, clinical education, and information technology. This group met to decide what areas of the AMGA Adult Immunization Framework in which to engage, such as provider and staff education, patient education, information technology, clinical support, or compensation. After reviewing all of the options, it was decided to choose a few items in each area to enhance the USMD immunization program. The team initiated an action plan to tackle each of the areas of interest within this project. This group met every six to eight weeks to ensure that progress toward the action plan was being made and to assign additional duties as needed.

Initial work involved agreement around the evidence-based clinical standards and algorithms.

Once the clinical standards and algorithms were outlined and approved by clinical leadership, the next step was to create educational programming for all levels of the organization— clinic floor staff, health coaches, case management, associate practitioners, physicians and, mostly importantly, the patients. The educational outlets included PowerPoint presentations, seminars, handouts, social media announcements, posters, and CCTV announcements in the patient waiting rooms.

There were educational packets distributed and training specific to the staff given regarding the various types of influenza vaccine and all of the clinical, operational, and EMR-related information they needed to administer the needed vaccines. Webinars were also used to train staff to ensure they thoroughly understood the high-risk and at-risk pneumococcal vaccine protocols and documentation as well as those for influenza immunizations. In addition, training for new staff was added to the organization’s orientation process. There were also handouts for staff with algorithms for the pneumococcal protocol that distilled the essence of the protocol into a one-page, easy-to-read format.

The primary care, rheumatology, and urology divisions had educational seminars from national experts and local leadership on the importance of the influenza and pneumococcal vaccines and the clinical requirements around each vaccine.

Patients were able to access information via the organization’s social media page, posters displayed in the clinics, and

monitors in the patient waiting rooms. The staff was also trained to offer patients the needed vaccines in the course of their daily appointments.

Additional technology changes in the EMR and reporting avenues were also explored. The organization noted that there was no real-time alert in the EMR or in the point-of-care tool that highlighted the need for pneumococcal vaccine in all of the different age groups outside of the immunization template. Work was initiated to create language for new alerts and to set up a system to notify providers proactively during their daily huddles using the existing tools and EMR. In addition, plans for a new, more user-friendly immunization template and standard medication favorites in the EMR medication module were made. Lastly, the medical group noted that the state immunization registry was only unidirectional. A proposal was initiated to institute bidirectional data flow in the EMR for that registry as well.

Due to the short timeframe of the AI Collaborative and other prioritized needs, the initiatives had not been completed at the time of the writing of this paper. However, there are plans to resume that work by the end of 2019.

As the guidelines were reviewed and the action plans and educational framework were created, it was noted that the health system had several opportunities to enhance workflow and clinical support.

One opportunity for better patient access to vaccines was the standing delegated order process. A formal written standing delegated order for influenza and pneumococcal vaccine was created based on the aforementioned evidence-based guidelines and the entire primary care staff and some specialty staff (e.g., rheumatology, urology, and cardiology) was trained and formally tested for competency.

During this time, the immunization consent form was also reviewed and the team ensured that pneumococcal screening questions were included on every influenza vaccine consent form that is completed prior to vaccination. In this way, the clinical staff could offer pneumococcal vaccine consistently to every influenza vaccine patient coming into the office using the standing delegated order process.

Clinic staff and care management staff also received additional training on immunizations. Many of the organization's high-risk patients were in contact with the care management team and this provided an additional opportunity for reminders

and scheduling of vaccine appointments. Afterward, all of the staff showed an increased confidence in knowing which patients should receive which vaccines in order to maximize the patients' state of health. After all of the training materials were presented, the organization stored these on the staff clinical education intranet page to allow access by providers and staff at any time.

USMD also pulled a list of all the high-risk patients needing influenza vaccine at the beginning of the season to ensure there was special emphasis around recalling those patients as the shipments of influenza vaccine began to arrive.

It was also noted that the group had access to the pediatric state immunization registry and a process and workflow associated with it, but it did not have a formal process around the adult state registry. Work began to investigate and create new processes and workflows. Training documents were created and the staff and providers received that training and subsequently appropriate access to the state registry program. That process was completed and now, in phase two, additional EMR changes to support that process and to create bidirectional data flows are underway.

The organization's employees were also a focus for achieving strong immunization rates. The team has instituted a new influenza vaccination policy requiring all employees (including providers) to receive an influenza vaccine. USMD administered the vaccine free of charge to all employees, including those at the non-clinical locations. Webinars were held to answer questions about the new policy and to explain the safety profile of the vaccine and the reasons behind needing it as a healthcare worker. The organization has also started placing influenza vaccine stickers on employee badges to encourage all teams to get immunized and so that management can easily identify which employees need more rigorous masking protection. There is also a new system in place to track employee immunizations that will also send education and automated reminders to them about the importance of immunization and protecting themselves, patients, and their families.

Other future plans include creating a Clinical Process Champion in each clinic who can own the immunization process as well as other clinical programs that are in place. They will be the trainer for their site and own any central clinical projects that are enacted. There is also a project in place to send patients both postcard and IVR reminders about

immunizations that are potentially overdue and hope to have that enacted by the end of 2019.

Compensation was also addressed in a few ways. As mentioned above, the training department reviewed the proper billing codes and EMR documentation billing requirements with the clinical and operational team members. In addition, the primary care and specialty providers received additional education on the effect these measures could have on USMD's Medicare Access and CHIP Reauthorization Act of 2015 (MACRA)/Merit-based Incentive Payment System (MIPS) quality performance so that they would understand the Medicare Fee for Service implications on reimbursement as well.

Throughout the process, organizational leadership received updates on the program's processes, goals, objectives, and data.

## Outcomes and Results

As the group reviewed the baseline and ongoing data regarding influenza and pneumococcal vaccination.

Regarding Measure 1, USMD did show some small improvements over baseline for the first two quarters approaching 90%, which then leveled off and fell back slightly (see Appendix).

When looking further at Measure 1 for those patients who had both pneumococcal vaccine types, the medical group showed a similar pattern approaching the 60% AI Collaborative goal during the second quarter of the measurement period (see Appendix).

Upon evaluation of Measure 2 and the optional Measure 2A, it was noted that the trend mirrored the prior ones.

Targeted education occurred during the second quarter of the measurement year and that may account somewhat for the peak. Performance in both first and second quarters exceeded the AI Collaborative goal of 45% and the Healthy People 2020 goal of 60%. Again, toward the end of the year, performance slowed but remained close to the 60% mark (see Appendix). There was no AI Collaborative goal or Healthy People 2020 goal for the optional Measure 2A, but the medical group used the Measure 2 levels of 45% and 60% as a proxy goal. The group exceeded the 45% mark and almost reached the 60% mark by the end of September 2018 (see Appendix).

The baseline-to-performance year comparison shows steady year-over-year performance for the organization's influenza vaccine rates (see Appendix). The strategies to increase this measure will be fully implemented for the 2019 influenza vaccine season and USMD hopes to see significant increases once the gaps in data and system interoperability are closed with the new workflows.

USMD believes there is still opportunity to make additional strides in all of these measures. The second quarter peak may indicate that regular educational foci on immunizing high-risk and at-risk groups may need to be part of the standard annual curriculum to encourage constant attention each year. This also may indicate that the EMR alerts and the point-of-care tool changes would also be helpful to maintain constant focus for the clinic staff and providers when the patient is physically in the office.

Many of the results of the interventions the system made may not be evident until 2019. The team will continue to monitor the influenza and pneumococcal immunization rates even after the close of the AI Collaborative in order to determine if the inventions led to improvement. These vaccines will also be monitored under the Medicare Advantage Star program going

<b>Measure</b>	<b>Baseline (Jul 1, 2016-Jun 30, 2017)</b>	<b>Performance (Jul 1, 2017-Jun 30 2018)</b>	<b>Performance (Oct 1, 2017-Sept 30, 2018)</b>
Pneumococcal Vaccine 65 yr+	79.9%	80.1%	81.3%
High-Risk Patients 19-64 yrs Pneumococcal Vaccine (any)	56.9%	56.3%	56.5%
High-Risk Patients 19-64 yrs Pneumococcal Vaccine (both)	21.5%	24.5%	27.7%
At-Risk Patients 19-64 yrs Pneumococcal Vaccine	59.9%	58.6%	59%
All Patients 18+ Influenza Vaccine	48.4%	49.4%	44.2%

forward as a new display measure and hopefully that will afford more opportunities for learning and best practice sharing with organizations across the country.

While working on the AI Collaborative, it was noted that the system's more rural and underserved areas seemed to have a larger proportion of patients lacking both pneumococcal immunizations in the 65-years-old and up group. The same pattern held true for at-risk and high-risk patients needing pneumococcal immunizations and the influenza immunization. The organization may need to employ additional solutions in these distinct geographical areas to assist these communities (e.g., mobile clinics with influenza and pneumococcal vaccine available). The exact reasons are still unclear but it is likely that social determinants of health are involved in the disparity of results.

A slightly higher rate was noted in some of USMD's larger facilities and the team is still exploring the workflows that those offices employ in order to achieve the highest organizational rates. It was thought that having more capacity for nursing visits and influenza clinics outside of the physician's schedule might account for some of the difference.

As mentioned above, there was also an emphasis on increasing the number of employees receiving the influenza vaccine. The group's results steadily improved over quarters three and four of 2018 (see Appendix). As of December 8, 2018, the patient-facing employees achieved 82.6% influenza vaccine coverage and the total number of ambulatory employees (including the corporate offices) achieved 65.7% overall vaccine adherence.

## Lessons Learned and Ongoing Activities

The health system learned valuable lessons from participating in the AI Collaborative. The use of a multidisciplinary team (which included specialists) to create the project plan and to manage the project throughout was an approach that worked well. In retrospect, having more clinic-based "physician champions" and "staff champions" might have enhanced the project even more and may have led to additional innovation at the clinic level. Having additional "operational champions" was also identified as an area that could bring added value.

Another lesson learned was the importance of a strong data/IT infrastructure to enhance the EMR alert system around

immunizations, immunization templates, and the point-of-care tool. The team is still working on those items going into 2019.

The importance of utilizing and integrating the state's adult immunization registry was also found to be a critical missing element, in addition to having processes in place to transition pediatric immunization registry participants into the adult program to avoid losing their data. Creating an automated bidirectional flow with that registry will be another way to gain the most accurate data versus manually retrieving and entering it. The education for the adult primary care providers (who had not used the pediatric registry) was also a great adjunct to the work being done.

There was also a lesson about capturing data from outside pharmacies and standardizing workflow around clinical quality data capture. USMD's EMR has direct messaging capabilities that do not flow through the regular fax workflows. Finding ways to better manage and capture that data in discrete data fields, especially when pharmacies send immunization data, should improve the accuracy of the measurement and ensure continuity of care. Those areas are in progress and will apply to other important clinical metrics as well.

Expanding access is another area of opportunity for the organization. Lessons learned about the increased number of full-time equivalents (FTEs) (both providers and staff) needed to perform well in value-based care have been valuable. The group is still analyzing the ideal balance in going from volume to value but does plan to expand its primary care base. Even with adequate access, the system also found that achieving patient buy-in on coming to receive a vaccine that they may not perceive as important was also a barrier to success at times. Additional staff training in patient motivation and updated scripting may help to overcome that. It is the hope that a newly planned patient outreach program via postcards and IVR will also increase the number of patients who better understand the need of being up to date on their vaccinations.

Standardization of clinical processes and provider engagement in process improvement was found to be another area that will continue to be explored and addressed, and the organization will continue to look for ways to innovate there while being mindful of physician and staff burnout. Some providers and staff were not clear on the two-step pneumococcal vaccine process prior to the education. Having a codified process and a standing order in place created a common reference to reinforce the training and provided a more educated team

around the provider to ensure the highest level of care.

Enhanced staff training and education in immunizations was an area of focus that was very well received. The staff reported feeling more empowered after going through the formal programming and competency checks and were pleased to have the ability to enact standing orders and to be able to efficiently provide direct patient services. The organization is tracking to see if this will positively affect any potential lookalike/sound-alike errors around immunization as well.

Lastly, required employee influenza immunizations that were easily accessible and staff education helped to achieve successful completion rates. Having a better tracking and reminder system also was valuable in initiating this higher level of employee participation.

The organization's next steps will focus on areas such as:

- Complete primary care roll-out for state vaccine registry for adult vaccines
- Additional patient communications (public service announcements) in the offices and exam rooms (on electronic pads and televisions) that prompt patients to ask about pneumococcal vaccine
- Create/obtain new marketing materials around vaccines in conjunction with pharma partners
- Finish out alert system in the EMR for high-risk and at-risk patients
- Complete vaccine favorites in the EMR medication module for easy eRX capabilities as needed (especially for specialists who may not carry all immunizations)
- Upgrade the immunization template to make it easier to utilize
- Work with IT to find a way to send mass patient portal educational quality messages when patients are overdue for vaccines

- Create “clinical process champions” (vaccine champions) at each ambulatory site
- Celebrate success more for individual clinics and providers and share best practices
- Initiate an immunization campaign via postcards and IVR to encourage patients to receive needed vaccines

USMD is proud of the initial groundwork that was completed and looks forward to improving influenza and pneumococcal immunization rates even further in the years ahead with practical and sustainable action plans.

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## References

1. Centers for Disease Control and Prevention (CDC). Estimated Influenza Illnesses, Medical Visits, Hospitalizations, and Deaths Averted by Vaccination in the United States. [cdc.gov/flu/about/disease/2015-16.htm](http://cdc.gov/flu/about/disease/2015-16.htm).
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3. Sato R., Gomez Rey G., Nelson S., Pinsky B. Community-acquired pneumonia episode costs by age and risk in commercially insured US adults aged  $\geq 50$  years. *Appl Health Econ Health Policy* 2013; 11(3): 251-8; PMID: 23605251; doi.org/10.1007/s40258-013-0026-0.
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5. Office of Disease Prevention and Health Promotion (ODPHP). Healthy People 2020. [healthypeople.gov](http://healthypeople.gov).



## Collaborative Goals

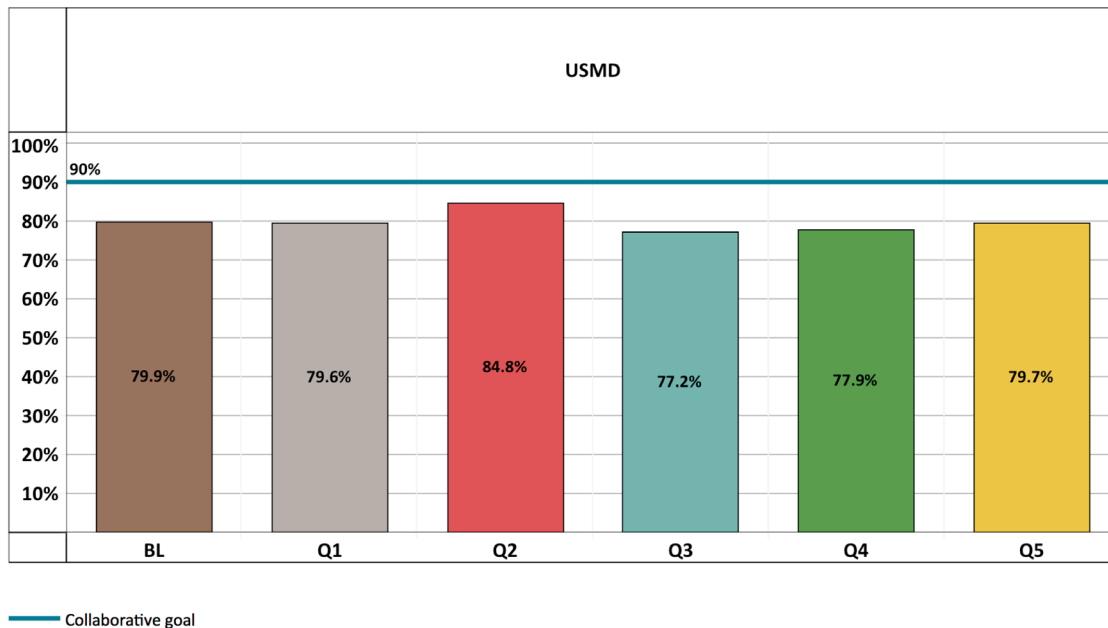
Measure	Healthy People 2020	Collaborative Goal
Measure 1 (65+) Any	90%	90%
Measure 1 (65+) Both PPSV and PCV*	90%	60%
Measure 2 (High-Risk)	60%	45%
Optional Measure 2a (At-Risk)**		
Measure 3 (Flu)	70%/90%***	45%

\* Increasing “Both” is a good goal for Groups which are already doing well on “Any”

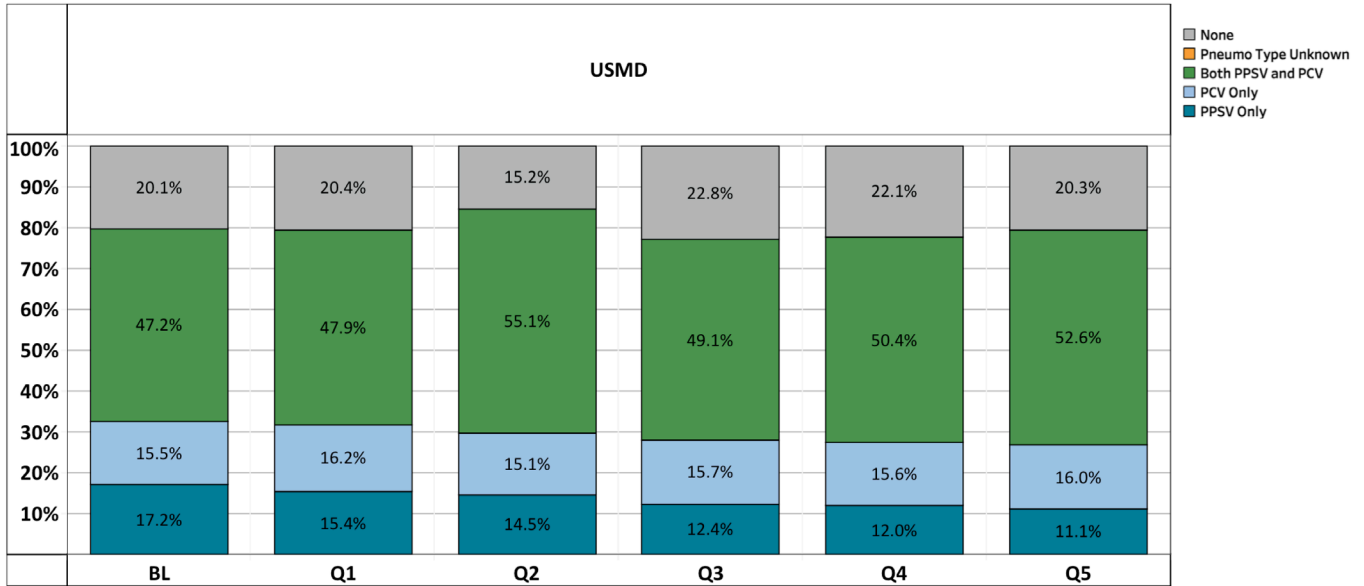
\*\* According to CDC guidelines, it is not currently recommended that the at-risk population receive PCV. Therefore, “PPSV” or “Unknown pneumococcal vaccination” are numerator options for Measure 2a.

\*\*\* 70% for all patients, 90% for Medicare patients

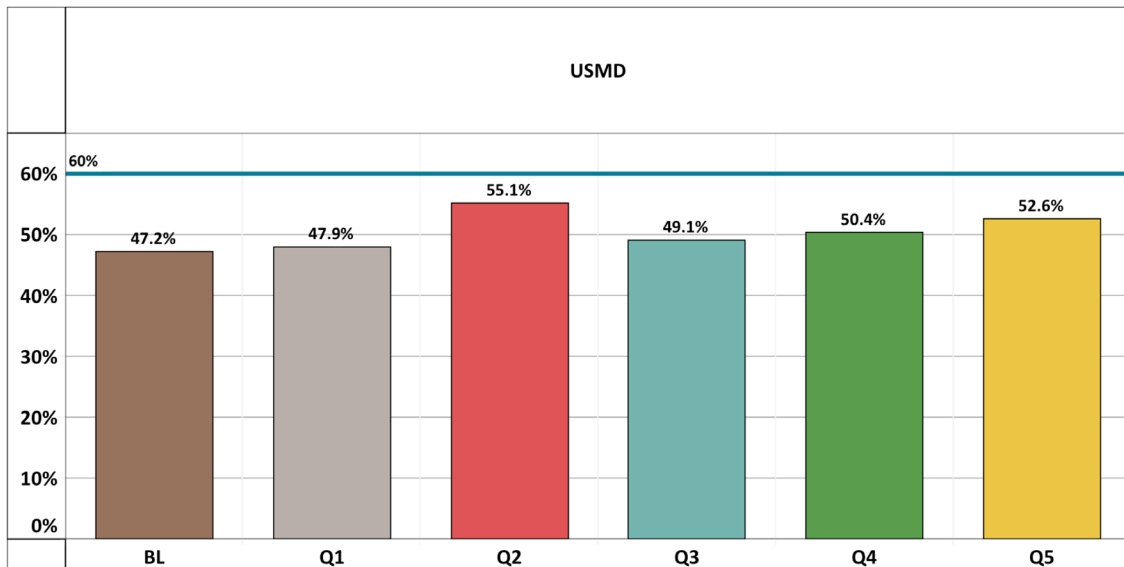
### Measure 1 – Pneumococcal (Any) Immunization for Adults Ages ≥ 65



## Measure 1 – Pneumococcal (Any) Immunization for Adults Ages ≥ 65

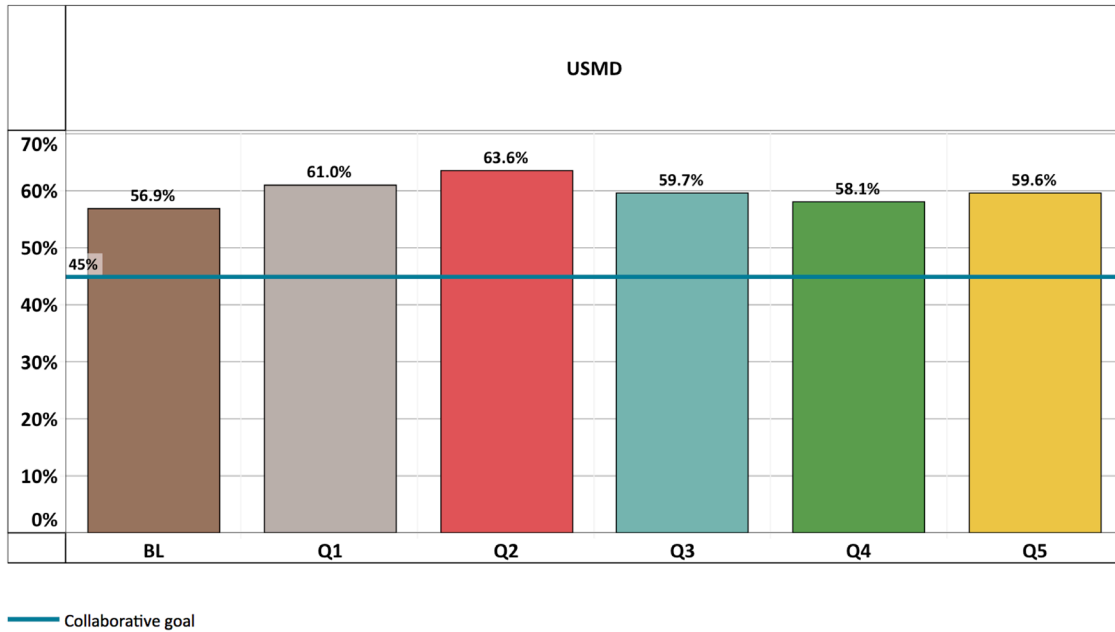


## Measure 1 – Both PPSV and PCV Immunization for Adults Ages ≥ 65

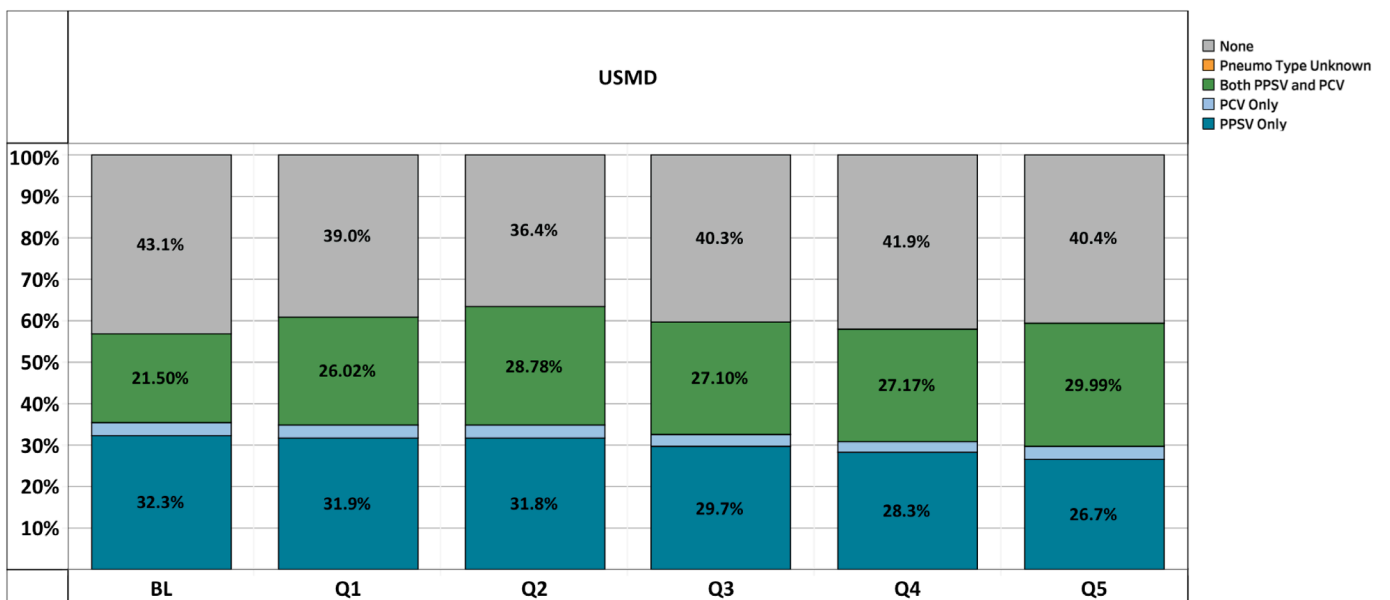


— Collaborative goal

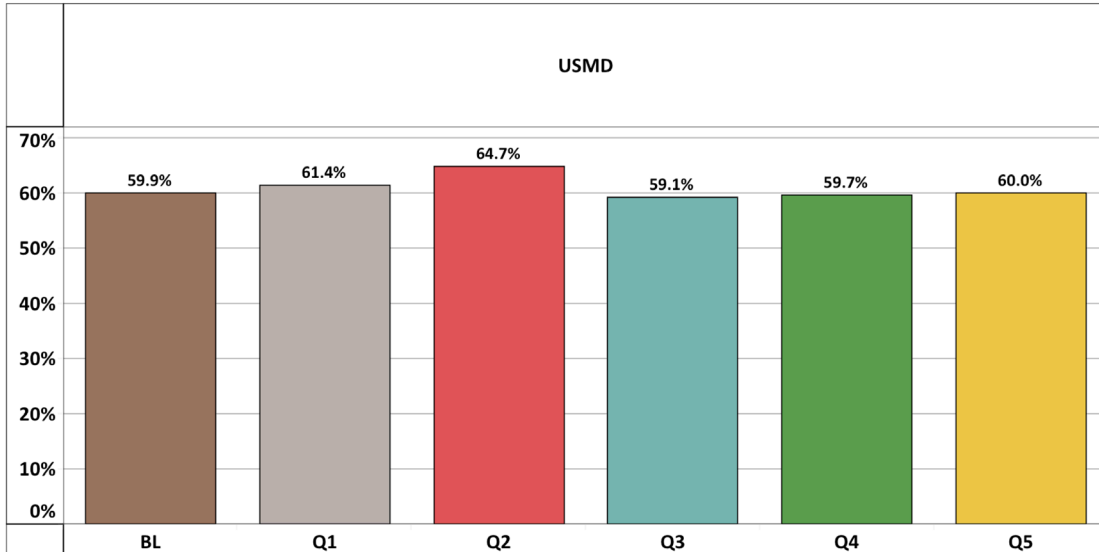
## Measure 2 – Pneumococcal (Any) Immunization for Adults Ages 19–64 with High-Risk Conditions



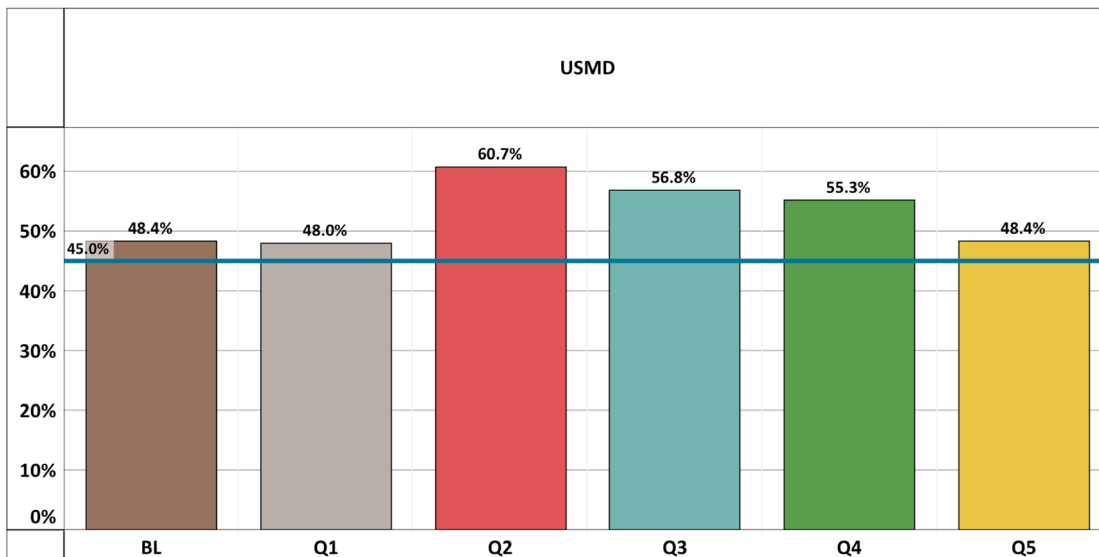
## Measure 2 – Pneumococcal (Any) Immunization for Adults Ages 19–64 with High-Risk Conditions



## Measure 2A – Pneumococcal (Any) Immunization for Adults Ages 19–64 with At-Risk Conditions



## Measure 3 – Influenza Immunization, Age ≥ 18



— Collaborative goal

## Demographics on the target population by measure:

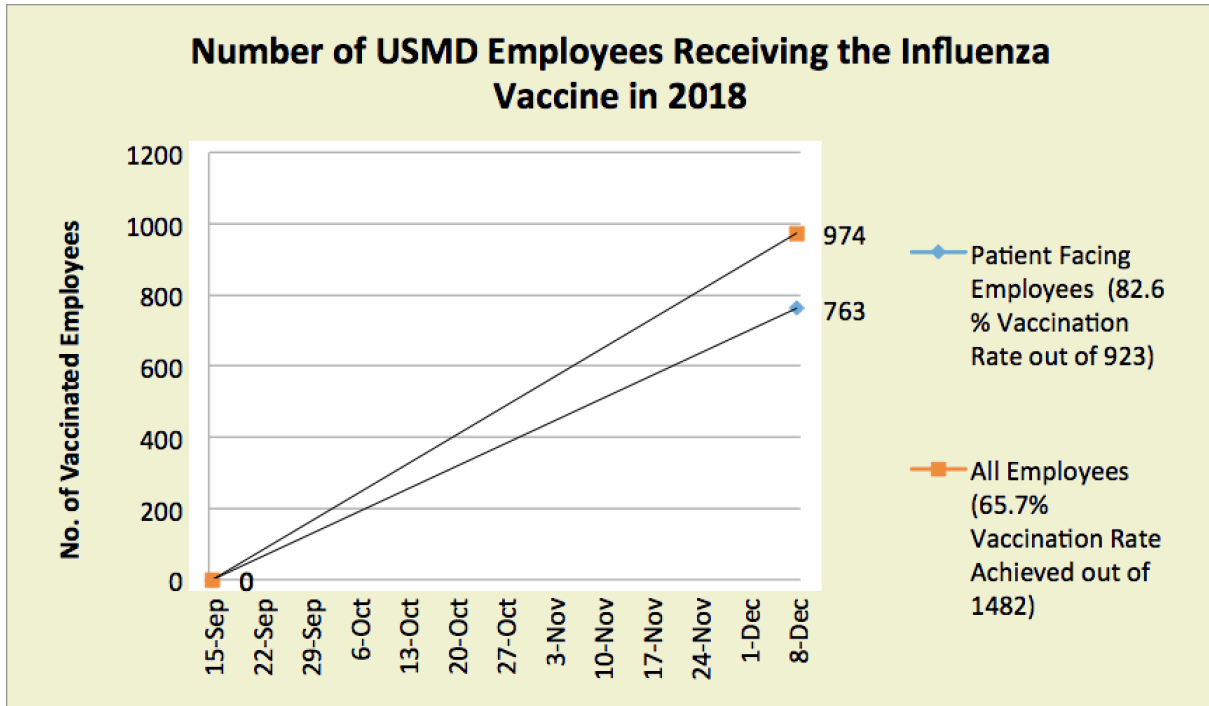
Denominator 1	
<b>Age</b>	
65-75	63.5%
76-85	27.8%
86+	8.7%
<b>Race/Ethnicity</b>	
None	0.9%
Asian/African American	0.4%
Unknown/Not Reported	0.1%
NULL	1.4%
Black Or African American	5.8%
American Indian or Alaska Native	0.2%
Declined to specify	0.2%
White	83.6%
Hispanic or Latino	4.8%
Native Hawaiian or Other Pacific Islander	0.5%
Other Race	0.1%
Asian	2.2%
<b>Gender</b>	
Male	41.6%
Female	58.4%

Denominator 2	
<b>Age</b>	
<30	3.4%
30-49	25.3%
50-65	71.3%
<b>Race/Ethnicity</b>	
None	1.5%
Asian/African American	0.8%
Unknown/Not Reported	0.2%
NULL	1.9%
Black Or African American	14.3%
American Indian or Alaska Native	0.3%
Declined to specify	0.4%
White	68.1%
Hispanic or Latino	8.7%
Native Hawaiian or Other Pacific Islander	0.7%
Other Race	0.1%
More than one race	0.0%
Asian	3.0%
<b>Gender</b>	
Male	43.2%
Female	56.8%

# Appendix

Denominator 2a	
<b>Age</b>	
<30	5.3%
30-49	31.7%
50-65	62.9%
<b>Race/Ethnicity</b>	
None	1.9%
Asian/African American	0.9%
Unknown/Not Reported	0.2%
NULL	2.4%
Black Or African American	14.3%
American Indian or Alaska Native	0.3%
Declined to specify	0.3%
White	63.3%
Hispanic or Latino	10.7%
Native Hawaiian or Other Pacific Islander	0.8%
Other Race	0.3%
More than one race	0.0%
Asian	4.6%
<b>Gender</b>	
Male	46.6%
Female	53.4%

Denominator 3	
<b>Age</b>	
<30	7.3%
30-49	25.5%
50-65	30.3%
>65	36.9%
<b>Race/Ethnicity</b>	
None	1.5%
Asian/African American	0.8%
Unknown/Not Reported	0.1%
NULL	2.4%
Black Or African American	9.3%
American Indian or Alaska Native	0.2%
Declined to specify	0.3%
White	72.4%
Hispanic or Latino	7.8%
Native Hawaiian or Other Pacific Islander	0.6%
Other Race	0.2%
More than one race	0.0%
Asian	4.4%
<b>Gender</b>	
Male	41.5%
Female	58.5%



## Project Team

**Rodney Briggs**

Director of Clinical Analytics and Outcomes

**Rupal Chiniwala, M.D.**

Chief Transformation Officer

**Stephanie Copeland, M.D.**

Chief Quality Officer

**Rosalie Drayton**

Project Manager and Admin Support

**Lynn Lester, M.D.**

Medical Director Primary Care

**Nebiat Negusse**

Associate Vice President of Quality Outcomes

**Janet Newman, R.N., CCM**

Associate Vice President for Clinical Services

**Darshana Rathod**

Director of Pharmacy

**Kelly Rothwell**

Director of Primary Care

**Charles Van Duyne, M.D.**

Chief Medical Information Officer



### AMGA Foundation

One Prince Street  
Alexandria, VA 22314-3318

[amga.org/foundation](http://amga.org/foundation)



AMGA's Distinguished Data and Analytics Collaborator



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