

Thank you for joining

The presentation will begin shortly





Rise to Immunize™ Monthly Webinar

Zoster 101

Featuring Nimit Patel, D.O., Premier Medical Group, P.C.

Additional insights from Jennifer Obenrader, PharmD, CDCES, Premier Medical Associates, P.C.





Campaign Updates

- Campaign Toolkit
- World Immunization Week
- Blinded Comparative Report

Zoster 101

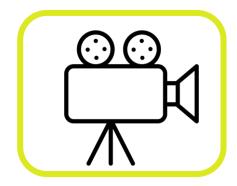
Today's Webinar

- Featuring Dr. Nimit Patel
- Additional insights from Jennifer Obenrader

Q&A Session



Webinar Reminders



Today's webinar recording will be available the week of **4/25**

- Will be sent via email
- Will be available on website

(RiseToImmunize.org \rightarrow "Resources" \rightarrow "Webinars")



Ask questions during the webinar using the **Q&A feature**

 Questions will be answered at the end of the presentation



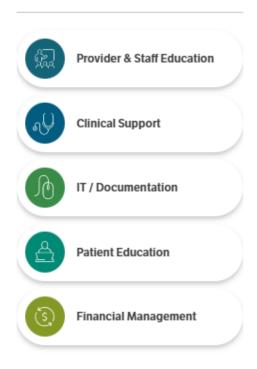
Implementing Campaign Planks

Rise to Immunize[™] offers care processes called "campaign planks" to help participants increase adult vaccination rates among their patient populations.

The campaign planks (each indicated by a box) fall under one of the five domains (each indicated by a circle): Provider & Staff Education, Clinical Support, IT/Documentation, Patient Education, and Financial Management. Campaign planks within each domain vary by difficulty—higher-level planks represent more advanced interventions.

Participating organizations will choose which "campaign planks" to implement based on areas of interest and resources available. We suggest tackling only one campaign plank within a given domain at a time. We also encourage participants to increase level in one domain annually (e.g., moving from a Level 1 to Level 2 campaign plank). By making stepwise improvements, we all will collectively rise.

Campaign Planks



Campaign Tools





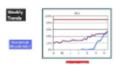
Point-of-Care Dashboard

Coastal Carolina Health Care, PA

Provides a point-of-care dashboard within a patient's electronic medical record to easily understand a patient's needs at each appointment. The dashboard includes care actions, including administering influenza and pneumococcal vaccines, as well as patient health goals.

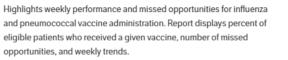
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Adult Immunizations Weekly Report

The Iowa Clinic, P.C.



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Patients Due for Pneumonia Vaccine Data thes 11/1/2005 Attain, Angelia

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	6/30/35	
	8/5/39	
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	12/14/87	1 [
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	11/34/55	1 (
	4/25/54	
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Patients Due for Pneumonia Vaccine Report

The Iowa Clinic, P.C.

Displays patient and appointment information for healthcare professionals to easily identify patients who will be in the office soon and are due for a pneumococcal vaccine.

View Tool \rightarrow



Employee Flu Vaccination Campaign Flyer and Sign-In Sheet

Norton Healthcare

Encourages healthcare employees to get their flu vaccine by providing a variety of locations and times to get vaccinated while at work and outlining the process for submitting proof of vaccination. This resource also features a printable sign-in sheet to be used at vaccination locations.





Diabetes Education Community Event Overview

Utica Park Clinic

Promotes a mobile vaccination clinic implemented by a population health department in tandem with a community diabetes program. This resource can be used to inspire similar programs within a practice setting.

View Tool \rightarrow



Considerations for Planning Curbside/Drive-Through Vaccination Clinics

Centers for Disease Control and Prevention (CDC)

Highlights an approach to vaccination that may be beneficial for mass community vaccination efforts, or when face-to-face routine medical visits are decreased as a result of COVID-19 surges or for any other reason.

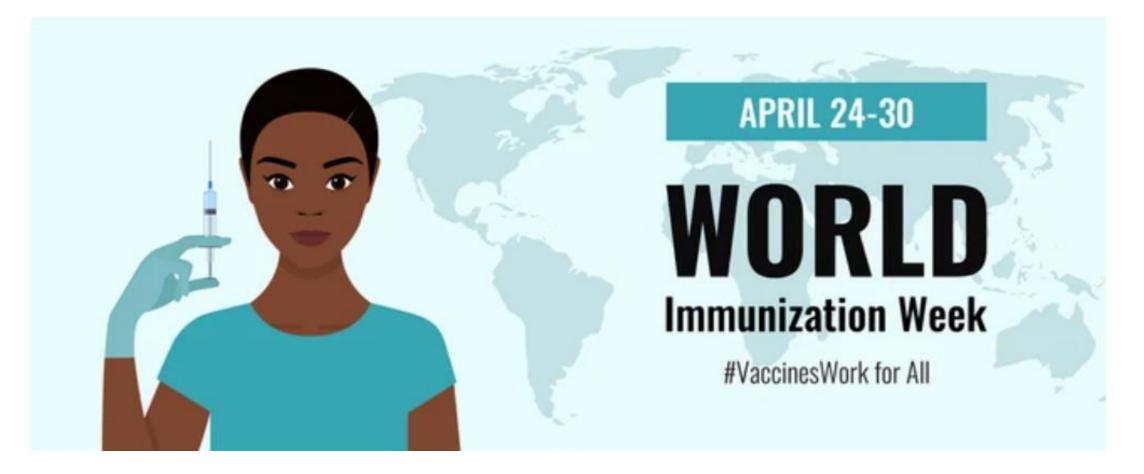


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World Immunization Week



Check out our Provider Resources and Patient Resources under "Resources" at RiseTolmmunize.org



Blinded Comparative Report

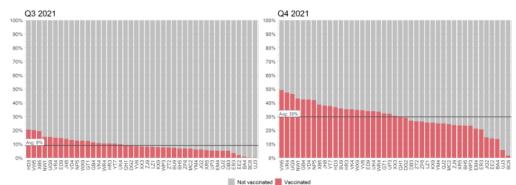
Rise to Immunize[™] **///** Blinded Comparative Report

March 25, 2022

Influenza (M1)

Intervention

Measurement Year 2021



Almost all organizations have lower influenza vaccination rates in Q3 2021 and Q4 2021 compared with Q3 and Q4 in both Baseline years (-6% on average in Q3 2021 vs. Q3 2020, -8% in Q4 2021 vs. Q4 2020). Some organizations have reported that there is a delay in influenza vaccination reporting from pharmacies and state registries, which may be contributing to the lower rates. If delayed reporting is the primary cause of the lower rates, than rates in Q1 2021 and Q2 2021 vould be expected to rise closer to Baseline levels. It is also possible—as some organizations have pointed out—that influenza vaccination rates are just lower this year.

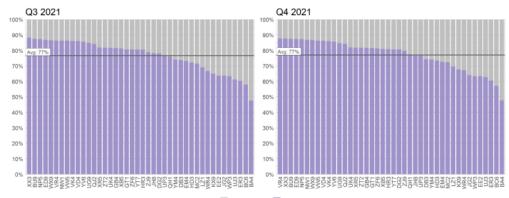
	Highest Ir tion Rates	nfluenza in Q4 2021		t Improved Orgs by Rank moved from Q4 2020 to Q4 2021	(or Sm	rgs with Largest Increase allest Decrease) in Rate
Org	Rank	Rate	Org	Increase in Rank	Org	Change in Rate
VW5	1	49.3%	XB5	10	BA4	4%
VR4	2	47.4%	ED9	8	ED9	-3%
UG9	3	46.4%	DB3	6	XB5	-4%
NW1	4	43.1%	YM4	6	YM4	-6%
GB4	5	42.4%	LZ1	5	VR4	-6%



Pneumococcal (M2)

Intervention

Measurement Year 2021

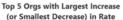


Not vaccinated Vaccinated

The average pneumococcal vaccination rate across organizations held steady at 77% in Q4 2021 compared to Q4 in both Baseline years (78% in Q4 2020 and 77% in Q4 2019).

Org	Rank	Rate
oig	T MIT IS	Here
VR4	1	87.7%
XX3	2	87.7%
BU9	3	87.5%
ED9	4	87.4%

Top 5 Most Improved Orgs by Rank @ of spots moved from Q4 2020 to Q4 2021 Org Increase in Rank WX9 9 DG2 8 UK4 6



Change from Q4 2020 to Q4 2021



Top 5 Highest Vaccination Rates in Q4 2021

 Congratulations to the 5 organizations with the highest pneumococcal vaccination rates in Q4 2021! These top performers are within <1% of each other, so the race is tight!

NW1

1169

Top 5 Orgs with Largest Increase (or Smallest Decrease) in Rate

 Unlike influenza vaccination rates, some organizations saw an increase in their pneumococcal vaccination rates from Q4 2020 to Q4 2021. The highest performer increased their rate by 8%!



Blinded Comparative Report

When reports are available, you will receive an email with your group's identification code

Hello -

We are happy to announce that the Rise to Immunize[™] (RIZE) quarterly data results are now available! The latest results include two Measurement Years of baseline data (Q3 2019-Q2 2020 and Q3 2020-Q2 2021) and two quarters of intervention data (Q3 and Q4 of 2021).

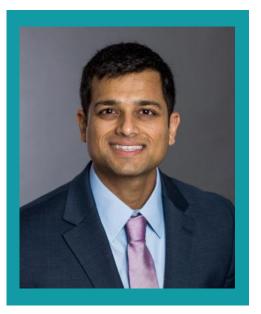
Each organization has been assigned a unique identification code for the duration of the campaign.

AMGA's identification code is

NOTE: Please add RiseToImmunize@amga.org to your safe sender list to receive our emails!

Today's Speaker





Nimit Patel, D.O.

Internal Medicine, Premier Medical Group, P.C. in Clarksville, Tennessee

Herpes Zoster 101

Nimit Patel, D.O.

April 21, 2022

Disclaimer and Disclosure

- Anything discussed during today's talk is for educational purposes only and should not be considered medical advice to prevent, diagnose, and/or treat any medical condition. Today's discussion does not constitute the practice of medicine, and this is not medical advice. No physician-patient relationship has been formed.
- I have no relevant financial disclosures.

Premier Medical Group

- Physician-owned, multi-specialty group in Clarksville, TN
- ▶ 45 miles northwest of Nashville, TN near the KY border
- Family Medicine, Pediatrics, OB/GYN, Occupational Medicine, Internal Medicine, staff Radiologists, Advanced Practice Providers- Total 51 providers
- Adult and Pediatric walk-in clinics including after hours and weekend hours that also can do vaccine nurse visits
- Vaccine Committee
- Care Coordinators
- Tennova Clarksville is the major local hospital

What is Shingles a.k.a. Herpes Zoster?

- It is a "reactivation" of prior acquired Varicella-Zoster virus (VZV)¹
- This virus also causes "chickenpox"
- VZV can remain dormant in one's body for decades until it can manifest as shingles later in life
- About 1 million cases in the U.S. per year¹
- ▶ 4 cases/1,000 people incidence annually in the U.S.¹
- For those 60 and older the incidence is 1/100 in the U.S.¹

Shingles: Clinical Manifestations

- A painful rash that can present differently in its stages
- Typically confined to 1-2 dermatomes but can be widespread, however does NOT cross midline¹
- Symptoms such as paresthesia, pain, and itching can occur before the rash appears¹
- Shingles presents as a cluster of vesicles which can grow over few days then start to crust¹

Shingles: Risk Factors

- ► Having prior Varicella virus or having been vaccinated against VZV¹
- ► Age: incidence rises after age 50¹
- Suppressed immune system¹
- Females have higher incidence of shingles¹

Shingles: Transmission

- One is considered infectious if one has active shingles lesions (not yet crusted). This can cause Varicella in those who have not had Varicella or had vaccination against Varicella Zoster Virus¹
- Direct contact via vesicular fluid is one method of transmission¹
- Airborne transmission of vesicular fluid is another method of transmission

Shingles: Complications

- Postherpetic Neuralgia
 - Occurs in 10-13% of people age 60 and above with shingles¹
- Herpes Zoster Ophthalmicus: involvement of ophthalmic nerves
 - > Can lead to vision loss, requiring urgent diagnosis and treatment
- Cranial and peripheral nerve palsies
- Bacterial superinfection
 - Dermal staph and strep infection¹
- Meningoencephalitis
- Pneumonitis
- Hepatitis
- Acute retinal necrosis
- ▶ 1-4% of those with complications require hospitalization¹

Shingles: Treatment

- Antivirals such as acyclovir, valacyclovir, and famciclovir²
 - ▶ Help to reduce both the duration and severity of infection
 - Ideally these are started as soon as possible after breakout occurs
- Analgesia for both neuralgia and pain of the active infection and also for post herpetic neuralgia

Shingles: Prevention

- Getting vaccinated against shingles
- Reducing transmission during flares³:
 - Covering up active lesions with clothing
 - Limit touching the active lesions
 - Wash hands frequently during active shingles outbreak
 - Avoid contact with high risk individuals
 - pregnant women
 - premature or low birth weight infants
 - Immunocompromised individuals

ZVL (Zostavax)

- The "old" shingles vaccine
- Licensed by FDA in 2006⁴
- 1 dose, live-attenuated vaccine
- ▶ No longer available in the U.S. as of November 2020⁴
- It is contraindicated in those who are immunocompromised or pregnant⁴
- A study of 38,000+ people showed that Zostavax reduced shingles infection by 51% and post herpetic neuralgia by 67%⁴

Recombinant Zoster Vaccine (Shingrix) Studies

ZOE-50⁵

- 15,411 participants aged 50 or older
- Grouped by ages 50-59, 60-69, and 70+
- Overall vaccine efficacy was determined to be 97.2%

ZOE-70⁶

- 2nd trial, concurrently at same sites as ZOE-50
- 13,900 participants aged 70 and older
- ► Vaccine efficacy was 89.8%
- Pooled-analysis combining ZOE-50 and ZOE-70 showed efficacy of 91.3% in those aged 70 and older
- Vaccine efficacy in this same group against post herpetic neuralgia was 88.8%

RZV (Shingrix)

- The recombinant zoster vaccine. The "new" and now only shingles vaccine in the U.S.
- Licensed by FDA in 2017
- CDC recommends adults 50 and older and those who are 19 and older with immunocompromise get the two dose vaccine series⁷
- 2 doses are 2-6 months apart, however for those who are or are going to be immunocompromised can get 2nd dose in 1-2 months⁷
- May receive even if patient has had shingles, had Zostavax, or had the VZV virus in the past⁷
- Do NOT administer to those who have had allergic reaction to the vaccine, have active shingles, or are pregnant⁷

RZV (Shingrix)

- In those with weakened immune systems, Shingrix was 68-91% effective in preventing shingles. Effectiveness was variable and depended on the reason for being immunocompromised⁷
- Side effects typically subside in 2-3 days but may prevent everyday activities⁷
 - Injection site pain and skin reaction
 - ▶ Fever, chills, and malaise
 - ► GI symptoms
- Guillain-Barre Syndrome (GBS) is a rare but serious side effect. GBS is an autoimmune condition involving the peripheral nervous system⁷.

Shingrix and Guillain-Barre Syndrome

- Per FDA, a post marketing observational study done at 42 days after Shingrix vaccination showing an increased risk of GBS⁸
- 3 excess cases of GBS per 1 million doses of vaccine administered in Medicare beneficiaries 65 years of age and older⁸
- In secondary analyses, it was found there were 6 excess cases of GBS per 1 million doses of vaccine administered to those 65 years and older⁸
 - ▶ Of note, no excess cases noted in the same time frame following the 2nd dose

RZV (Shingrix)

- In immunocompetent adults 70 years and older the vaccine showed 84% or higher efficacy at 7 years out⁹
- In 8 clinical trials of 10,000+ participants, there was a 1/10 grade 3 injection site reaction and 1/10 systemic symptoms reaction. Grade 3 reaction is classified as severe enough to prevent everyday activities⁹
- In 6 studies among five types of immunocompromised patients, *local* Grade 3 reactions were 10.7-14.2% (0-0.3% in placebo) and 9.9-22.3% (6-15.5% placebo) systemic Grade 3 reactions⁹

Anderson TC, Masters NB, Guo A, et al. Use of Recombinant Zoster Vaccine in Immunocompromised Adults Aged ≥19 Years: Recommendations of the Advisory Committee on Immunization Practices

- FDA approved RZV for immunocompromised individuals age 19 and older as of July 2021
- ACIP adopted recommendation October 2021
- Reasoning being that those who are immunocompromised experience higher rates of shingles and its complications. It is a major risk factor¹⁰

RZV (Shingrix): Fast Facts

- Those who never have had exposure to primary varicella nor have received the live-attenuated varicella vaccine (strain found in Varivax, ProQuad, and Zostavax) are not at risk for shingles.¹¹
- 99% of Americans born before 1980 have had primary varicella infection, hence no need to for additional screening before administering Shingrix to immunocompetent people born before 1980.¹¹
- For those who are or who will be immunocompromised, check for immunity to Varicella which will help determine need for Shingrix via¹¹
 - Documentation of varicella vaccination
 - Lab confirmation of immunity or disease
 - Provider documentation of prior varicella infection or shingles infection

RZV Shingrix: Fast Facts

- Can give Shingrix minimum 8 weeks after ZVL¹¹
- If more than 6 months since 1st dose, administer 2nd dose as soon as possible. Do not restart series¹¹
- The only true contraindication is severe allergic reaction to the component in the vaccine or reaction to a prior dose¹¹
- Precautions including not administering to patients with moderate or severe acute illness.¹¹
- Can administer vaccine after lesions are crusted¹¹
- ▶ No ACIP recommendation for use in pregnancy¹¹
 - Providers should consider delaying RZV until after pregnancy¹¹

"Improving Shingles Vaccination Rates in Family Medicine" by Jeffrey Luther

- Strategies for increasing vaccination rates section of the article:
 - Author recommends to identify patients by groups to help increase vaccination rates¹²
 - Those who adhere to vaccine recommendations
 - "Movable middle"- those who are unsure or hesitant to take a vaccine
 - "Vaccine detractors"
 - ▶ Shared-decision making conversation tips by the author¹²
 - Motivational interviewing- open-ended questions, conversational tone
 - Clarifying myths- keep facts simple, spending time here can be valuable
 - > Disconfirmation Bias- avoid discrediting, rather introduce information as a novel idea
 - Personal anecdotes

Potential Road Blocks

- Shingrix, being a two-shot series, can be troublesome to get 2nd dose administered within 2-6 month time frame for multiple reasons:
 - No follow up scheduled or reminder for patient when first dose given
 - Patient forgets to get 2nd dose or moves away
 - Lack of supply when patient is due for 2nd dose
- Generally, only Medicaid and commercial insurances are paying for in-office administration of Shingrix
 - Even with Medicaid and commercial insurers, patients should check to see if and how much of the cost is covered
 - Medicare patients have to obtain under Part D (generally, at pharmacies)

Potential Road Blocks

- Educating and having staff to administer the vaccine
- Cost vs. reimbursement to administer vaccine in the clinic
 - Could be potential loss of revenue for some clinics to administer shingles vaccines
- Having vaccine administration available only during traditional business hours

Premier Medical Group: Successes and room for improvement

- Things that have been helpful:
 - Supply has <u>not</u> been an issue recently
 - We have a Vaccine Committee that analyzes and makes decisions on both clinical and financial aspects of vaccines
 - "Standing order" recently placed in our walk-in-clinic for patients who are eligible for Shingrix vaccination to receive it in an efficient manner.

Premier Medical Group: Successes and room for improvement

- Thoughts on improvement:
 - Adding Shingrix vaccination status as a "quality measure" that is activated and flagged as a reminder in the EMR
 - Shingrix vaccination section added to prebuilt templates for Annual Wellness Visits and Comprehensive Physical Exams to verify if a patient is vaccinated or would like to be vaccinated
 - Using our social media outlets and website to spotlight vaccination against shingles and its benefits
 - Consider a "Get vaccinated" campaign or a Vaccine "fun day"
 - For those not eligible to receive it in the office, consider a printed prescription for for them to take to their pharmacy
 - > A physical reminder card and an email or text when 2nd dose of Shingrix is due

Resources

- 1. Shingles (Herpes Zoster)>For Healthcare Professionals>Clinical Overview. CDC website. <u>https://www.cdc.gov/shingles/hcp/clinical-overview.html</u>. Last reviewed October 5, 2020. Accessed April 7, 2022.
- 2. Shingles (Herpes Zoster)>About Shingles>Treating Shingles. CDC website. <u>https://www.cdc.gov/shingles/about/treatment.html</u>. Last reviwed July 1, 2019. Accessed April 7, 2022.
- 3. Shingles (Herpes Zoster)>About Shingles>Transmission. CDC website. 3. <u>https://www.cdc.gov/shingles/about/transmission.html</u>. Last reviewed July 1, 2019. Accessed April 7, 2022.
- 4. What everyone should know about Zostavax. CDC Website. <u>https://www.cdc.gov/vaccines/vpd/shingles/public/zostavax/index.html</u>.Last reviewed October 5, 2020. Accessed April 7, 2022.
- 5. Lal H, Cunningham AL, Godeaux O, et al. Efficacy of an adjuvanted herpes zoster subunit vaccine in older adults. New England Journal of Medicine. 2015; 372: 2087-2096.
- 6. Cunningham AL, Lal H, Kovac, M, et al. Efficacy of the herpes zoster subunit vaccine in adults 70 years of age or older. New England Journal of Medicine. 2016; 375: 1019-1032.

Resources

- 7. What everyone should know about the shingles vaccine (Shingrix). CDC website. <u>https://www.cdc.gov/vaccines/vpd/shingles/public/shingrix/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov/vaccines%2Fvpd%2Fshingles%2Fpublic%2Findex.html</u>. Last reviewed January 24, 2022. Accessed April 8, 2022.
- 8. FDA Requires a Warning about Guillain-Barré Syndrome (GBS) be Included in the Prescribing Information for Shingrix. Food and Drug Administration website. <u>https://www.fda.gov/vaccines-blood-biologics/safety-availabilitybiologics/fda-requires-warning-about-guillain-barre-syndrome-gbs-be-included-prescribing-information-Shingrix</u>. Updated March 24, 2021. Accessed April 10, 2022.
- 9. Vaccines and Preventable Diseases>Vaccines by Disease>Shingles>For Healthcare Professionals>About the Vaccine. CDC Website. <u>https://www.cdc.gov/vaccines/vpd/shingles/hcp/shingrix/about-vaccine.html</u>. Last reviewed January 24, 2022. Accessed April 8, 2022.
- ► 10. Anderson TC, Masters NB, Guo A, et al. Use of Recombinant Zoster Vaccine in Immunocompromised Adults Aged ≥19 Years: Recommendations of the Advisory Committee on Immunization Practices – United States, 2022. MMWR Morb Mortal Wkly Rep 2022;71:80-84. DOI: <u>http://dx.doi.org/10.15585/mmwr.mm7103a2</u>
- 11. Ask the Experts> Zoster (Shingles). Immunize.org website. <u>https://www.immunize.org/askexperts/experts_zos.asp</u>. Updated March 9, 2022. Accessed March 25, 2022 and April 8, 2022.
- 12. Luther, Jefffrey S. Improving Shingles Vaccination Rates in Family Medicine. The Journal of Family Practice. 2021; 70 (6) A special supplement on Hot Topics in Primary Care 2021: S13-S18. doi: 10.12788/jfp.0218. https://cdn.mdedge.com/files/s3fs-public/jfp_hot_topics2021_0722_v3.pdf. Accessed April 9, 2022.

Additional Insights





Jennifer Obenrader, PharmD, CDCES

Premier Medical Associates, P.C. in Monroeville, Pennsylvania



A Medicare Part D Vaccine Billing Solution for Healthcare Providers

Jennifer Obenrader, PharmD, CDCES April 21, 2022



Web-Based Medicare Part D Billing Platform



© 2021 Rise to Immunize[™] /

Claims and Payment Management Solution





- Includes all Part D covered vaccines, including zoster and Td/Tdap
- Convenient for patients, do not have to go to pharmacy for Part D vaccines
- Simple online provider credentialing set up process
- Check patient eligibility in real time
- Patient copayment information is available
- Claim can be "pended" for 24 hours to allow patient discussion
- Claim submission and acceptance in real time
- Claim transaction fee calculated into vaccine reimbursement rate

Office Workflow Process



- Vaccine gaps/opportunities are established during pre-visit planning
- Transact RX trained staff member checks vaccine eligibility
- Claim is placed in pending status with patient copayment information
- Provider reviews vaccine information with patient
- If patient is agreeable, vaccine is administered
- Claim is changed from a pending status to submitted status
- Patient responsible for copayment at checkout





Measure 4: Recombinant Zoster

Time Period	Denominator	% completed
7/1/2019–9/30/2019	22906	5%
7/1/2019–12/31/2019	23412	7%
7/1/2019–3/31/2020	23908	9%
7/1/2019–6/30/2020	24175	11%
7/1/2020–9/30/2020	24415	15%
7/1/2020–12/31/2020	24935	22%
7/1/2020–3/31/2021	25382	26%
7/1/2020–6/30/2021	25720	31%
7/1/2021–9/30/2021	25819	33%
7/1/2021–12/31/2021	26204	35%
7/1/2021-3/31/2022	26,415	37%

QUESTIONS?



Together, we will administer 25 million immunizations by 2025!







Upcoming Webinar



Date/ Time: May 19, 2pm ET

Presenter: Dr. Lawrence Shulman, D.O., F.C.C.P., ProHEALTH Care Associates

Questions?





Submit your questions using the **Q&A feature** at the bottom of the screen