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# Improving Routine Immunization Rates



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**Health**  
Oregon  
Authority

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## Today's topics:

- What factors impact rates in your clinic?
- Oregon CCO/Clinic Resource Guide
- Using data to identify reasons for low rates
- Identifying and addressing access barriers
- Reduce missed opportunities and recalling patients that fall behind
- Increase knowledge of immunizations

# Horrified Anti-Vaxxer Discovers Every American Who Got Smallpox Vaccine In 19th Century Now Dead

Published September 9, 2021



LYNCHBURG, VA—Astounded by the damning information, local anti-vaxxer Pete Dixon was reportedly horrified Thursday after discovering that every single American who got a smallpox vaccine in the 19th century was now deceased.

*“We’re expected to follow along blindly with the CDC, but if people would simply look to the history, they’d see that the thousands of people who were inoculated against smallpox in the 1800s have since dropped dead,”*



# What factors impact immunization rates in your area?



# Levels of Impact on rates

Community



Clinic



Individual



# Levels of Impact on rates

**Community**



**Clinic**



**Individual**



## Clinic level



What factors impact rates at your clinic?

# Clinic level



- How clinics follow up with no-shows
- Staff knowledge of immunizations
- Performing all AAP well-child exams
- Administering vaccines at sick visits
- Patient inability to take time off work
- Vaccine hesitancy (in staff and patients)
- Administering *all* doses due at every visit
- Pandemic related factors (travel/staffing/inventory)



# Oregon CCO and Clinic Resource Guide



## Evidence-based Strategies for Improving Childhood and Adolescent Immunization Rates: A Guide for CCOs, Health Plans and Clinics

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**Link:** [www.oregon.gov/oha/HPA/ANALYTICS/CCOMetrics/CCO-Immunization-Resource-Guide-2022.pdf](http://www.oregon.gov/oha/HPA/ANALYTICS/CCOMetrics/CCO-Immunization-Resource-Guide-2022.pdf)

**Keyword Search:** “Oregon CCO Resource Guide”



## Strategy 1: Use data to identify reasons for low immunization rates

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*Overview: Improving immunization rates begins with assessing and sharing information about rates with health care providers. Routine assessment of immunization rates can be used to monitor trends and to identify root causes for low vaccination rates. The Community Preventive Services Task Force recommends [assessment and feedback](#) based on strong evidence of effectiveness in improving vaccination rates.*

## What health care providers can do to identify reasons for low rates:

- ✓ **Routinely assess rates through the EHR or ALERT IIS.** Use data to identify appropriate improvement strategies and routinely track progress toward goals.
- ✓ **Create a plan for monitoring immunization data quality and submission to ALERT IIS.** Assign staff to regularly utilize reports in ALERT IIS and your EHR to reconcile data. If data quality issues are identified, contact the ALERT IIS Help Desk. When your EHR is updated, re-test with the ALERT IIS data exchange team to ensure that data submission is maintained.
- ✓ **Share information about the clinic's rates with clinic staff.** Involve all types of staff in identifying and implementing appropriate interventions to improve rates.
- ✓ **Participate in the Oregon Immunization Program's IQIP Program.<sup>2</sup>** IQIP (Immunization Quality Improvement for Providers) is a federal quality improvement partnership designed to improve immunization rates and services through clinical workflow improvement.

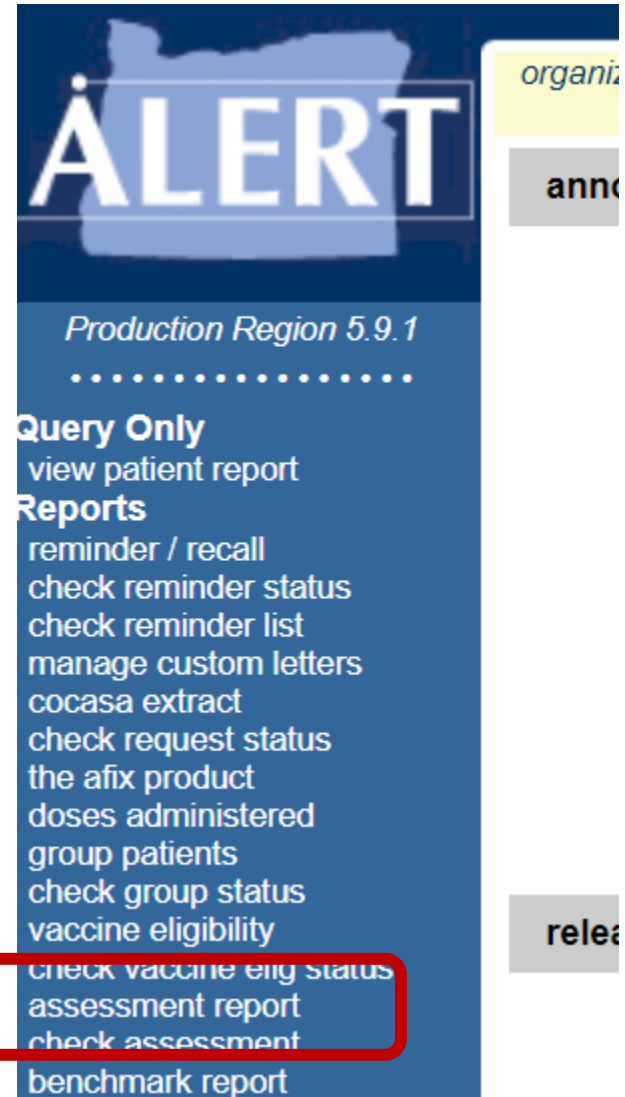
# Assessing rates at the clinic level

**Report name:** Assessment Report

**Location:** ALERT IIS

The ALERT IIS assessment report includes all active patients at your clinic. A good childhood-level report that any ALERT user can access. This report is not available for adolescent patients.

Tip sheet is available on the ALERT training page.



# Interpreting the assessment report: Overall Immunization Rates

First section offers an overall retrospective UTD rate for your 24–35-month-old population.

<b>Immunization Status</b>		
<b>Age(months)</b>	<b>Up-to-Date<sup>1-4</sup> (UTD)</b>	<b>Late<sup>1-4</sup> UTD@Assessment</b>
<b>36 - 72 Months of Age</b>		
72		
24		
12		
7		
<b>24 - 35 Months of Age</b>		
24	69.9%	78.0%
12	78.8%	84.1%
7	69.3%	84.1%

# Interpreting the assessment report: age specific benchmarks

Next section offers age-specific immunization status. This graph shows expected ages for each vaccine dose (w/1 month buffer).

UTD Grid	DTaP	Hep B	Hib	MMR	Polio	Prevnar	Varicella
@ 3 months	1	1	1		1	1	
@ 5 months	2	2	2		2	2	
@ 7 months	3	2	2		2	3	
@ 9 months	3	2	2		2	3	
@ 12 months	3	2	2		2	3	
@ 16 months	4	3	3	1	3	4	1
@ 19 months	4	3	3	1	3	4	1
@ 21 months	4	3	3	1	3	4	1
@ 24 months	4	3	3	1	3	4	1
@ 72 months	5	3	4	2	4	4	1











# ALERT IIS Assessment Report tipsheet



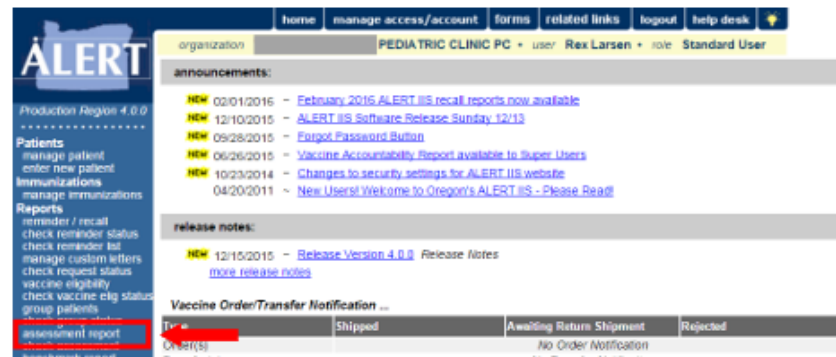
## Running and Interpreting the Assessment Report in ALERT IIS

The ALERT IIS Assessment Report can help you assess your clinic's immunization rates and reveal patterns of missing and late vaccinations across your clinic population. This will help you identify possible changes in clinic practices and design interventions to improve immunization rates at your clinic. This guide provides step-by-step instructions for running the Assessment Report and tips on interpreting the findings. The example below will assess the 4:3:1:3:3:1 series for your clinic's two-year-old population (4 DTaP, 3 Polio, 1 measles, 3 Hib, 3 Hep B, and 1 Varicella). For further assistance with this report contact the ALERT IIS help desk at 800-980-9431 or [alertiis@state.or.us](mailto:alertiis@state.or.us).

**NOTE:** The Assessment report cannot be exported from ALERT but includes lots of detail about your clinic's immunization practices such as late starts, missed opportunities, and much more.

### Running the Assessment Report

**Step 1:** From the reports menu on the left-hand side, select "Assessment Report".



# Oregon-wide rates available on our site:

## Access the Data



### Child Immunization Rates

Immunization rates for two-year-olds in Oregon - [static data](#)

Immunization rates for two-year-olds in Oregon - [interactive data](#)



### Adolescent Immunization Rates

Immunization rates for adolescents age 13 to 17 - [static data](#)

Immunization rates for adolescents age 13 to 17 - [interactive data](#)



### Maternal Immunization Rates

Immunization rates for women in Oregon who delivered their babies in 2017



### Adult Immunization Rates

Oregon immunization rates for adults, including healthcare workers.

## Who to Contact

### Questions about rates

ALERT IIS Help Desk

800-980-9481

9:00am - 4:00pm

### Information on clinic-specific rates

Quality Improvement Manager

[imm.info@dhsosha.state.or.us](mailto:imm.info@dhsosha.state.or.us)

### School immunization data

School Law Team

[oregon.imm@dhsosha.state.or.us](mailto:oregon.imm@dhsosha.state.or.us)

<https://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/Pages/research.aspx>



## Strategy 2: Identify and eliminate barriers to access

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*Overview: Insurance status is typically not a factor in access to childhood immunizations. The Affordable Care Act requires that vaccines are provided at no cost to families as routine preventive care.*

*The federal Vaccines for Children (VFC) program provides vaccines at no cost for patients 18 and younger enrolled in Medicaid, or who are uninsured, underinsured or American Indian/Alaskan Native. Oregon Administrative Rule prohibits providers who vaccinate Medicaid-enrolled children but are not enrolled in VFC from seeking reimbursement for the cost of vaccine or for administration fees ([OAR 410-130-0255](#)). CCOs and health care providers should reduce out-of-pocket-costs where they exist and address other barriers to access.*

# What health care providers can do to eliminate access barriers:

- ✓ **Use standing orders** so that RNs, PAs and MAs can assess immunization status and give vaccines according to protocol, without the need for examination or direct orders from a physician. The Oregon Immunization Program publishes model standing orders for providers in Oregon.
- ✓ **Offer immunization-only appointments** with a nurse or MA when immunizations are due, but a well-baby visit is not. Immunization-only appointments are generally quicker than a complete well-child visit, and for patients with commercial insurance, may reduce out-of-pocket costs associated with office visit fees or other fees.
- ✓ **Offer expanded clinic hours and walk-in appointments** for immunizations. Walk-in appointments make immunizations convenient for families and eliminate long waits for an opening. Expanding hours to include evening and weekend options helps working parents.

# IQIP



IMMUNIZATION QUALITY IMPROVEMENT FOR PROVIDERS

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IQIP is the CDC's national quality improvement initiative for providers utilizing the Vaccines for Children program.

### **Focused on:**

- Improving clinical vaccination workflow
- Helping healthcare teams maximize opportunities to vaccinate patients

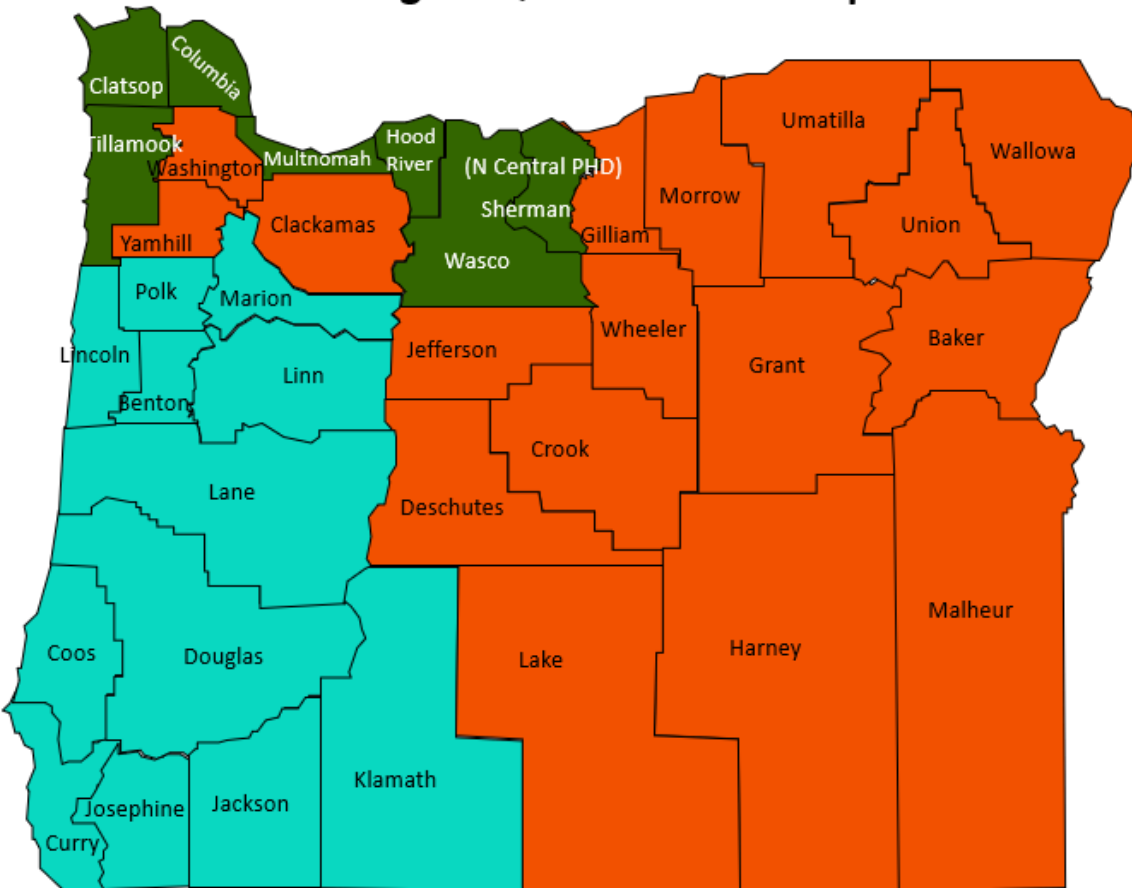
### **Benefits:**

- Help clinics meet CCO incentive metrics related to childhood and adolescent vaccination coverage
- Strengthen partnerships with other clinics in community and OHA
- Streamlined immunization workflow
- Increased patient satisfaction
- A healthier community



# Oregon Immunization Program IQIP Team

**Oregon IQIP Consultant Map**



Roughly 700 clinics total

FOR INTERNAL USE ONLY	
<b>Albert Koroloff</b> <a href="mailto:Albert.m.koroloff@oha.oregon.gov">Albert.m.koroloff@oha.oregon.gov</a>	VFC Helpdesk 971-673-4832
Yakima Valley Farm Workers Legacy Health Kaiser Permanente OHSU	ALERT IIS Helpdesk 800-980-9431
<b>Sam McClean</b> <a href="mailto:9samuel.mcclean@oha.oregon.gov">9samuel.mcclean@oha.oregon.gov</a>	Rex Larsen – QI manager 971-673-0328
Planned Parenthood (PPCW) St. Charles Health Mosaic Medical Tribal Health Providence PMG (NW Oregon)	Erin Corrigan – VFC Manager 971-673-0296
	XXXXXXX- Billing 971-673-0301
<b>Lauren Enciso</b> <a href="mailto:lauren.enciso@oha.oregon.gov">lauren.enciso@oha.oregon.gov</a>	Shelby Williams - Shipping 971-673-0313
Oregon Medical Group Samaritan Health PeaceHealth La Clinica Providence PMG (SW Oregon)	Nick Chew – VFC Policy Analyst 971-673-2376

# What does an IQIP visit look like?



- **Time commitment:** 2-hour initial meeting (in-person or virtual) followed by a 2, 6 and 12-month support call/check-ins.
- **Space Commitment:** Meeting room with space for the whole team and ability to project PowerPoint on-screen or ability to organize virtually.
- **Staff Commitment:** VFC coordinator, VFC back-up, clinic manager, QI coordinator, MAs, front desk and prescribing providers (whenever possible).

# Assessing Clinic Workflow



## The Community Guide

“The Guide to Community Preventive Services (The Community Guide) is a collection of evidence-based [findings](#) of the [Community Preventive Services Task Force \(CPSTF\)](#). It is a resource to help you select interventions to improve health and prevent disease in your state, community, community organization, business, healthcare organization, or school.”

<https://www.thecommunityguide.org/pages/about-community-guide.html>



# Assessing clinic workflow



## IQIP Vaccination Workflow Points



# Assessing clinic workflow

## CDC IQIP Strategy:

Facilitate Return for Vaccination



Leverage IIS Functionality to Improve Immunization Practice



Give a Strong Vaccine Recommendation



Strengthen Vaccine Communication






## Oregon Custom Strategy:



Recommend HPV at Age 9






# Assessing clinic workflow

Patient Check-In		
Strategy	Workflow Topic	Discussion Question
 	Patient Demographic Information	<ul style="list-style-type: none"><li><input type="checkbox"/> Do Staff verify/update patient contact information in EHR?</li><li><input type="checkbox"/> Do staff ensure any updated contact information is correct in ALERT IIS?</li><li><input type="checkbox"/> Do staff compare contact information with that listed in ALERT IIS?</li></ul>
	Vaccination Promotion	<ul style="list-style-type: none"><li><input type="checkbox"/> Are clinic staff aware of available resources from reputable organizations that highlight the importance of vaccination?</li><li><input type="checkbox"/> Does your clinic include your vaccination policy in new patient packets?</li><li><input type="checkbox"/> Is your vaccination policy posted in your waiting area?</li><li><input type="checkbox"/> Are all staff trained to offer positive vaccine messaging about vaccines due during that visit?</li></ul>

# Assessing clinic workflow

Provider Discussion and Exam		
Strategy	Workflow Topic	Discussion Question
	Vaccine Hesitancy	<ul style="list-style-type: none"><li><input type="checkbox"/> Does the provider use presumptive language about vaccines during the visit?</li><li><input type="checkbox"/> Are all immunization staff trained to use presumptive language about vaccines?</li><li><input type="checkbox"/> Are providers familiar with the common reasons why parents request an alternative schedule?</li><li><input type="checkbox"/> Do providers feel well-prepared to respond when parents express vaccine fear/concerns?</li><li><input type="checkbox"/> Are parents educated about the risks of delaying or not vaccinating their child?</li></ul>
	Documentation	<ul style="list-style-type: none"><li><input type="checkbox"/> Does the clinic document vaccine refusals?</li><li><input type="checkbox"/> Do staff document all details of the administered vaccines in their EHR?</li><li><input type="checkbox"/> Also document in ALERT IIS?</li></ul>

# Assessing clinic workflow

Patient Check-out		
Strategy	Workflow Topic	Discussion Question
	Documentation	<ul style="list-style-type: none"><li><input type="checkbox"/> Do you provide the parents with a copy of an updated immunization record if requested?</li><li><input type="checkbox"/> Does staff inform the parent of the IIS public access portal for independent lookup?</li></ul>
 	Scheduling	<ul style="list-style-type: none"><li><input type="checkbox"/> Does staff provide the parent an updated immunization record with next doses and due dates?</li><li><input type="checkbox"/> Are clear “on or after” date ranges provided by providers to help parents and check-out staff schedule the next vaccine appointment?</li><li><input type="checkbox"/> Does staff offer to issue appointment reminders?</li></ul>





## Strategy 3: Reduce missed opportunities and recall patients who are behind on vaccines

*Overview: Missed opportunities occur when a patient is seen at a health care provider's office, but they don't receive any vaccines, or they receive some but not all vaccines that are due. Patients with missed opportunities often fall behind schedule. Employing strategies to reduce missed opportunities and recall patients who are behind will result in improved rates by two years of age.*

# What health care providers can do to reduce missed opportunities & recall patients:

- ✓ **Forecast for immunizations at every encounter** including acute care visits and sports physicals. If no immunizations are due, provide an update on what immunizations will be given at upcoming visits.
- ✓ **Provide all vaccines** for which a patient is eligible on the day of the visit.
- ✓ **Schedule the next immunization visit** before the patient leaves the office. For most clinics, this is easier than trying to identify patients who are due for immunizations when no appointment has been scheduled.
- ✓ **Recall patients** who are behind on immunizations. Effective recall systems are narrow in focus, conducted routinely and follow a consistent process. Clinic staff can run recall lists in ALERT IIS and in many EHRs.
- ✓ **Contact patients who miss appointments** within 3 to 5 days to reschedule. Personal outreach by clinic staff reinforces the importance of well-child visits and immunizations to families.
- ✓ **Identify patients who follow an alternative schedule.** Alternative schedules typically require more visits to be up-to-date by two years of age. Ask families to document their intended schedule, ensure they adhere to it and make the planned schedule visible to clinic staff.
- ✓ **Recommend the HPV series starting at age 9.** The American Academy of Pediatrics [recommends](#) providers begin the HPV conversation starting at age 9. An earlier start has been shown to increase adolescent up-to-date rates.

# ALERT IIS Reminder/recall



<http://www.loc.gov/>

# ALERT IIS Reminder/recall

- Allows users to recall patients that need to come in for immunizations
- Recall at 13 months: ensure they don't fall behind
- Recall at 19 months: capture kids that haven't had all doses necessary in the second year of life

- Resources:

<https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/VACCINESIMMUNIZATION/ALERT/documents/ALERTIISReminderRecallRpt.pdf>

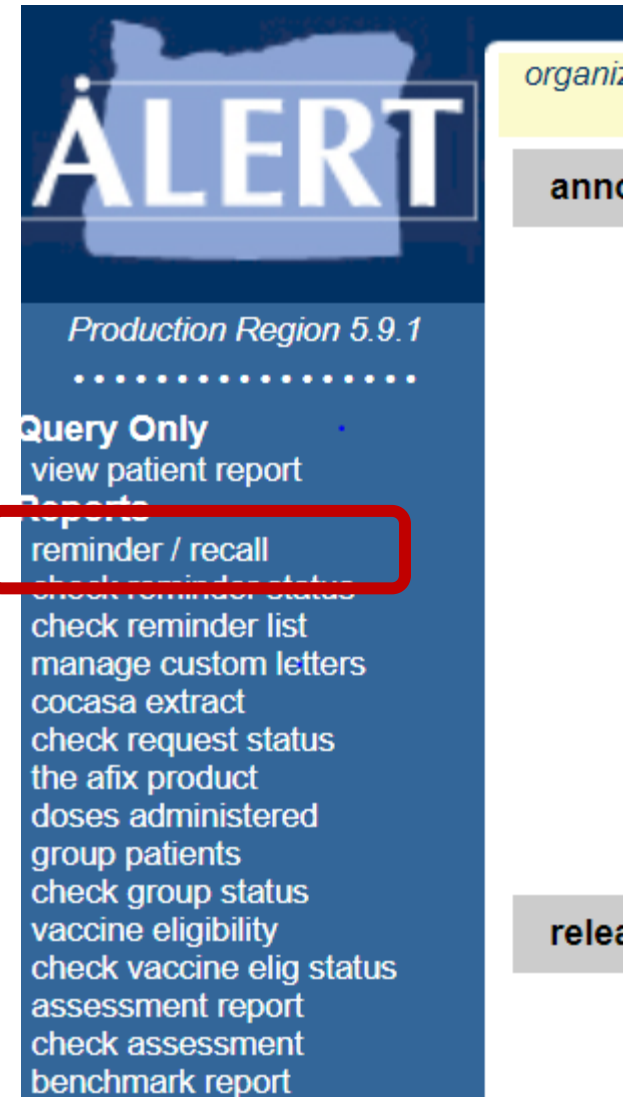
# ALERT IIS Reminder/recall workflow

**Report name:** Reminder/recall

**Location:** ALERT IIS

The ALERT IIS reminder/recall report can highlight those patients (of any age) due or past due for a specified vaccine(s). This report can be run monthly and used to recall patients back into the clinic.

Tip sheet is available on the ALERT training page.





Production Region 4.1.1

**Patients**

- manage patient
- enter new patient
- merge patients
- upload list
- check roster status
- manage roster list

**Immunizations**

- manage immunizations

**Reports**

- reminder / recall
- check reminder status
- check reminder list
- manage custom letters
- cocasa extract
- check request status
- vaccine eligibility
- check vaccine elig status
- doses administered
- group patients
- check group status
- assessment report
- check assessment
- benchmark report
- check benchmark
- ad hoc list report
- ad hoc count report
- ad hoc report status
- billing report request
- check billing report
- provider report

**Reminder/Recall Request**

**Create New List ...**

- Enter new Reminder Recall Request Criteria  List Name
- Use a previous Reminder Recall Request Criteria

**Select Patient Population ...**

- Patients Associated with CLINIC 2 - SHELBY'S TEST CLINIC
- Patients Residing in Klamath County
- Patients Associated with CLINIC 2 - SHELBY'S TEST CLINIC or Residing in Klamath County

**Indicate the Tracking Schedule ...**

- Use Tracking Schedule Associated with Each Patient
- Use Tracking Schedule Selected for All Patients

**Select the Vaccine Group To Report on ...**

- Use All Vaccine Groups
- Use Vaccine Groups Selected

Adeno	▲	Add	<input type="text"/>
Anthrax	▼		
		Remove	

- Vaccines Due Now
- Vaccines Past Due
- Both

# ALERT IIS reminder/recall workflow

Narrowing your criteria and running the report monthly will make the process more manageable.

## Reminder Request Process Summary

Reminder Request Criteria Name: 13 MONTH OLDS

Step	Criteria Evaluated at this Step	Patients
1	Patients <b>associated</b> with <i>ERIN'S TEST CLINIC</i> .	41
2	Patients <b>immunized</b> by <i>ERIN'S TEST CLINIC</i> .	39
3	Patients that are <b>active</b> within <i>ERIN'S TEST CLINIC</i> and <b>allow Reminder &amp; Recall Contact</b> . Additional criteria includes: <ul style="list-style-type: none"><li>• Patients <b>born between 06/07/2012 and 06/08/2016</b>;</li><li>• <b>School</b> is not specified;</li><li>• <b>Provider</b> is not specified.</li></ul>	2
4	Patients that have a <b>Valid Address</b> . Additional criteria includes: <ul style="list-style-type: none"><li>• <b>City</b> is not specified;</li><li>• <b>Zip Code</b> is not specified.</li></ul>	1
5	Patients that meet the following criteria regarding vaccination status: <ul style="list-style-type: none"><li>• Patients that are <b>Due Now or Past Due</b> for one or more vaccinations <b>as of 06/08/2017</b>;</li><li>• Use all <b>vaccine groups</b>;</li><li>• Use <b>ACIP</b> for all patients.</li></ul>	1
<b>Total Number of Patients Eligible for Reminder</b>		<b>1</b>

# ALERT IIS reminder/recall workflow

This report offers a bevy or output options including mailing labels and Excel spreadsheet.

## Reminder Request Output Options

Output	Description	Additional Input
<a href="#">Reminder Letter</a>	Standard Reminder Letter.	Duplex Printing <input type="checkbox"/> Report Name <input type="text"/> Free Text <input type="text"/> Phone # <input type="text"/>
<a href="#">Reminder Card</a>	Standard Reminder Card (4x5).	Report Name <input type="text"/> Free Text <input type="text"/> Phone # <input type="text"/>
<a href="#">Mailing Labels</a>	Avery 5160 Mailing Labels.	Report Name <input type="text"/>
<a href="#">Patient Query Listing</a>	A list of patients based on the report criteria.	Report Name <input type="text"/>
<a href="#">Extract Client Data</a>	Extract client data in XML format.	Report Name <input type="text"/>



# ALERT IIS Reminder/recall tipsheet



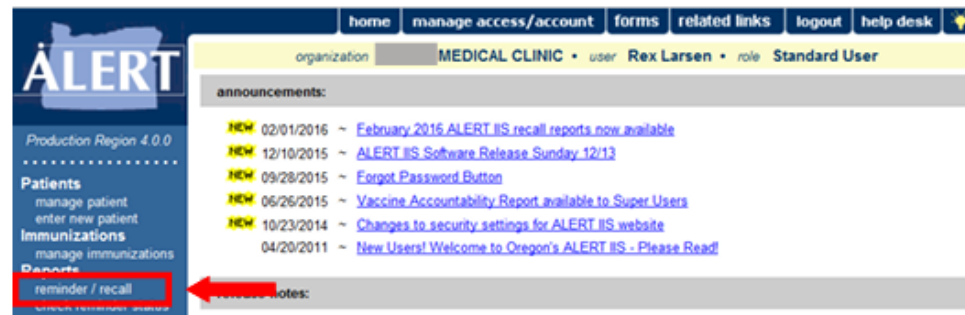
## Running Reminder/Recall in ALERT IIS

The ALERT IIS Reminder/Recall Report allows your clinic to pull a list of patients that are not up-to-date on their immunizations in ALERT IIS and contact them to schedule immunization visits. This guide provides step-by-step instructions for running the Reminder/Recall Report to improve 2-year-old immunization rates, but can be applied to any age group of vaccine series. The example below addresses completion of the 4:3:1:3:3:1:4 series by 2 years of age (4 DTaP, 3 Polio, 1 measles, 3 Hib, 3 Hep B, 1 Varicella, and 4 Pneumococcal). For further assistance with this report contact the ALERT IIS help desk at 800-980-9431 or [alertiis@state.or.us](mailto:alertiis@state.or.us).

**NOTE:** Before starting reminder/recall, please read the “Manage Your Active Patient List in ALERT/IIS” guide. Accurate patient lists make reminder recall much more effective.

**NOTE:** Reminder recall should be run in Internet Explorer set to “Compatibility View”. Known issues exist with Firefox and Chrome.

**Step 1:** From the reports menu on the left-hand side, select “Reminder/Recall”.





## Strategy 4: Increase knowledge and awareness about immunizations in clinics and for families

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*Overview: Most parents intend to fully vaccinate their children, and health care providers and clinic staff want to vaccinate patients according to the AAP [recommended schedule](#). Increasing knowledge and awareness of the recommended immunization schedule and providing resources to answer questions are effective strategies to improve immunization rates.*

# What health care providers can do to increase knowledge and awareness about immunizations:

- ✓ **Identify an immunization champion** to regularly bring resources and information to coworkers, track and report on progress toward goals and offer coaching to coworkers.
- ✓ **Build a culture of immunization in the clinic.** All staff members who interact with patients and their families have a role in maintaining a pro-immunization culture where immunization is the expectation. Employ methods such as ensuring each employee understands how their role supports immunizations and promoting vaccination of employees. Include nonmedical staff including front-desk staff in discussions about immunization expectations and goals.
- ✓ **Make resources readily available** to parents and clinic staff. The CDC and AAP publish resources for effective communication about vaccines with parents, understanding vaccine safety, and facts about specific vaccines and diseases. Make sure clinic staff know how to access resources.
- ✓ **Make a strong personal recommendation for immunizations** at every encounter. Studies show that a strong provider recommendation is one of the most important factors in whether parents choose to immunize. Practice communications skills so that conversations with parents about immunizations feel comfortable. Recommend HPV vaccine for adolescents the same way on the same day that you would recommend Tdap.

# Key resources



Centers for Disease  
Control and Prevention

CDC

<https://www.cdc.gov/vaccines>



BOOST Oregon

<http://www.boostoregon.org>



The Children's Hospital *of* Philadelphia

Children's Hospital of Philadelphia (CHOP)

<https://www.chop.edu>

immunization  
action coalition

**IAC**  
immunize.org

Immunization Action Coalition (IAC)

<https://www.immunize.org/>



American Academy of Pediatrics

<https://www.aap.org/>

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So...which activities could improve immunization rates at YOUR clinic?

Please wait...



I'm thinking!

# Oregon Health Authority

*thank  
you*

Oregon Immunization Program

1-800-980-9431

[imm.info@odhsoha.oregon.gov](mailto:imm.info@odhsoha.oregon.gov)