

Public Health Detailing

An innovative approach to improving vaccination coverage

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COLORADO
Department of Public
Health & Environment

Overview

- Provider outreach initiative
- Foundational program development in late 2019
- Response to ↓ vaccination rates and ↑ exemption rates
- Program interrupted by COVID-19 pandemic in 2020
- Program re-initiated in 2023

Public Health Detailing defined

Detailing defined

Public Health Detailing is an evidence-based strategy to encourage clinical practice change through brief, educational, one-on-one provider interactions.



Detailing defined

Desired program outcomes:

- Relationship development
- Information sharing
- Increased or improved clinical best practices
- Increased immunization rates



Program objectives

- Develop a Public Health Detailing Program with at least 50 high impact immunization providers.
 - High impact provider: More than 50 kindergarten age patients and MMR vaccination coverage rate below 80%.



Project focus

- Short term focus: Work with providers to improve IIS patient management practices to increase the number of current kindergarten age patients who are up-to-date for MMR.
- Long term focus: Enhance overall kindergarten readiness vaccination practices to increase and sustain immunization rates over time.

Clinic selection

- 66 clinics with more than 300 kindergarten age patients.
 - 41 clinics with less than 80% up-to-date MMR coverage rate.
 - More than 25% of the clinics were from a single county.
- Additional clinics included had more than 50 kindergarten age patients and less than 80% up-to-date MMR rate.



IQIP + PH Detailing

- PH Detailing added as a customized Immunization Quality Improvement for Providers (IQIP) strategy.
- During project year five (2023-24), providers received the option to participate.
 - 97 out of 120 IQIP enrolled providers opted to participate.
- During project year four (2022-23), providers were invited to participate in PH Detailing if provider selection criteria was met.
- 26 out of 151 PH Detailing enrolled providers were **not** dual enrolled in IQIP.

Public Health Detailing dashboard



Public Health Detailing

The baseline cohort includes 2023-24 Kindergarten-aged patients in the Colorado Immunization Information System (CIIS) (turned five years old after Oct. 1, 2022 and will turn five years old on or before Oct. 1, 2023) who were active at the clinic and jurisdiction level. Baseline cohort inclusion, MMR status, and DTaP status were evaluated on July 1, 2023. Current cohort inclusion, MMR status, and DTaP status were evaluated on May 17, 2024. Because the current cohort is based on an updated evaluation of active patients in CIIS, the total number of Kindergarten-aged patients included in the current cohort may differ from the total number included in the baseline cohort.

The accuracy of MMR and DTaP rate estimates is dependent on the completeness and accuracy of the data in CIIS. Missing vaccinations in CIIS will impact the resulting rate estimates. Also, due to out of date clinic statuses in CIIS, the number of active patients assigned to a clinic in CIIS may not accurately represent the true clinic patient population.

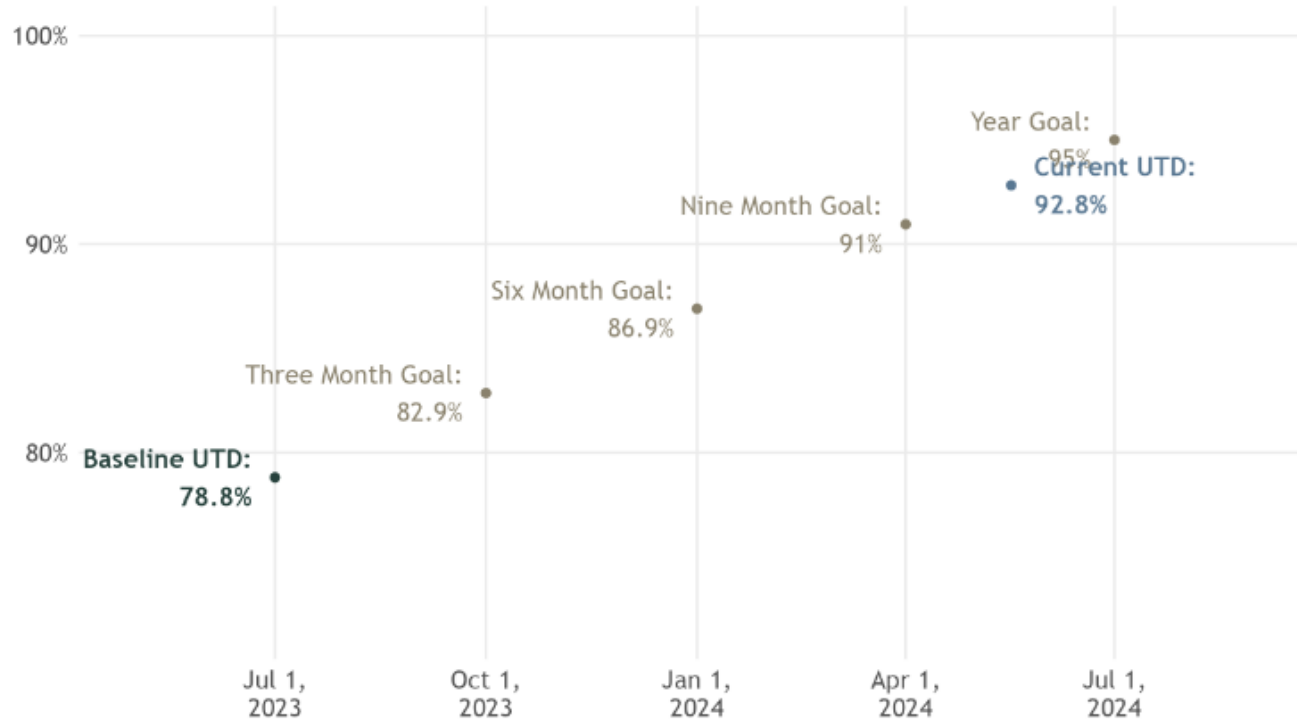
Select a clinic from the menu below. Graphs are click to download.

- ARDAS FAMILY MEDICINE (1633, Arapahoe County)
- ARVADA PEDIATRIC ASSOCIATES NORTH (641, Broomfield County)
- ARVADA PEDIATRIC ASSOCIATES, PC (720, Jefferson County)
- ASPEN PARK PEDIATRICS (430, Jefferson County)
- ASSOCIATES IN FAMILY MED FOXTRAIL (1030, Larimer County)

Public Health Detailing dashboard example

MMR

	Total K-aged Patients	Not Up to Date	Up to Date	Percent Up to Date
Baseline (Jul 1, 2023)	217	46	171	78.8%
Current (May 17, 2024)	209	15	194	92.8%



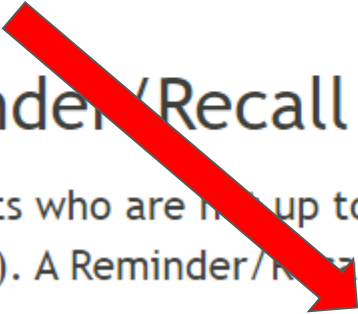
Public Health Detailing clinic population datasets

Clinic Population

519 Kindergarten-aged patients are assigned to ADVANCED PEDIATRIC ASSOCIATES CENT (154, Arapahoe County) in CIIS. A clinic population dataset is available for [download](#).

Reminder/Recall

19 patients who are not up to date for MMR and/or DTaP are available for Reminder/Recall outreach (18 both, 1 MMR only, and 0 DTaP only). A Reminder/Recall dataset is available for [download](#).



	B	C	D	E	F	G	H	I	J	K	
	first_name	last_name	dob	most_recent_vaccination_date	mmr_status	dtap_status	do_not_send	number	email_address	language	address
567	Sally	Test	10/5/2017	11/5/2022	UTD	UTD	N	NA	NA	NA	123
785	Bobby	Test	8/15/2018	9/14/2022	UTD	UTD	N	NA	NA	NA	567
875	Charles	Test	10/21/2017	1/2/2024	UTD	UTD	N	NA	NA	NA	456
464	Amelia	Test	12/12/2017	1/26/2024	UTD	UTD	N	NA	NA	NA	85



What is included in a PH Detailing visit



Public Health Detailing visit overview

12 month program cycle

Visit 1

- General overview of program
- Review key issues
- Review CIIS patient association and inactivation
- Discuss provider-level data and provide relevant reports

Visit 2

- Review current provider-level data
- Review clinic progress
- Discuss CIIS best practices
- Discuss strategies to optimize CIIS functionality

Visit 3

- Review current provider-level data
- Review clinic progress
- Discuss kindergarten readiness and best practices
- Review school immunization law and exemptions

Visit 4

- Share final provider-level data
- Share school-reported data, including provider's local county and school district data
- Provide additional resources



Initial provider communication

Metadata

Current cohort inclusion, MMR status, and DTaP status were evaluated on ***.

Because the current cohort is based on an updated evaluation of active patients in CIIS, the total number of Kindergarten-aged patients included in the current cohort may differ from the total number included in the baseline cohort.

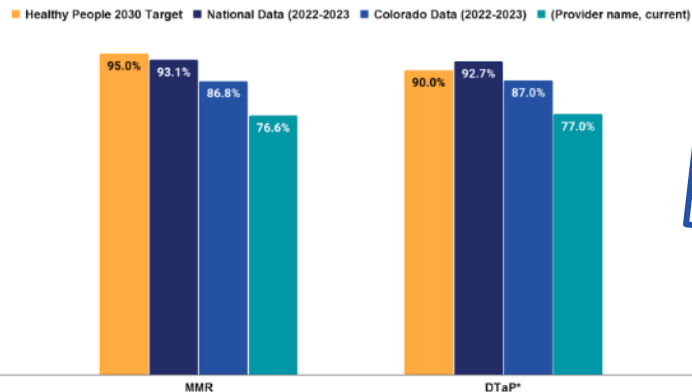
The accuracy of MMR and DTaP rate estimates is dependent on the completeness and accuracy of the data in CIIS. Missing vaccinations in CIIS will impact the resulting rate estimates. Also, due to out of date clinic statuses in CIIS, the number of active patients assigned to a clinic in CIIS may not accurately represent the true clinic patient population.

Current Clinic-Level Data

(Provider Name)			
Data current as of May 22, 2024			
Total kindergarten-aged patients associated with clinic in CIIS: 244			
MMR		DTaP*	
Up to Date	187	Up to Date	188
Not Up to Date	57	Not Up to Date	56
Percent Up to Date	76.6%	Percent Up to Date	77%

*Fully vaccinated = 5 valid doses of DTaP OR 4 valid doses of DTaP if dose 4 was administered at age 4 years or older. (State of Colorado 2023)

Kindergarten Immunization Rates: Fully Vaccinated MMR & DTaP*



*Fully vaccinated = 5 valid doses of DTaP OR 4 valid doses of DTaP if dose 4 was administered at age 4 years or older. (State of Colorado 2023)



PUBLIC HEALTH DETAILING 2023-2024

Educational outreach for immunizing providers to help support practice and encourage immunization best practices

The focus of this program is to increase MMR & DTaP rates in Colorado's Kindergarten-aged children

AT-A-GLANCE FOR CLINICIANS:
Public Health Detailing project, a custom strategy to increase MMR and DTaP for Colorado's kindergarten-aged children

VISITS ARE:

- >> Virtual
- >> Set for 15 minutes
- >> Offered at convenient times
- >> One-on-one; providers receive information customized for their clinic

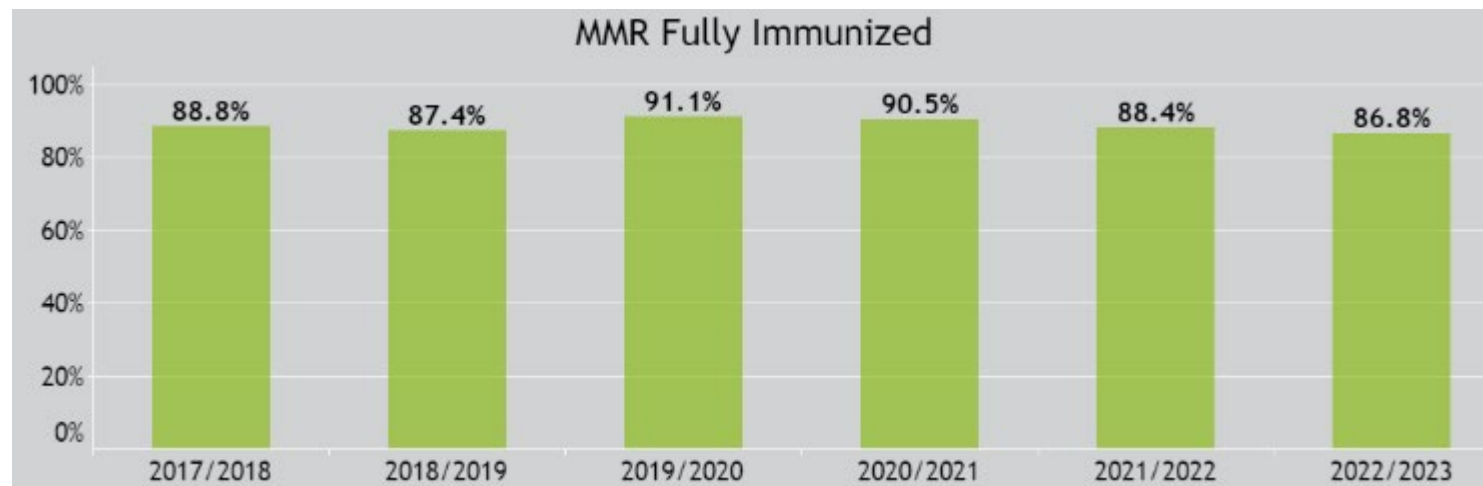
VISITS COVER:

- >> Review declining MMR and DTaP rates in Colorado's kindergarten-aged children
- >> Clinic/provider-level data
- >> Kindergarten readiness and best practices
- >> Customized information and resources



Background - Colorado kindergarten vaccination rates

- Colorado Board of Health rule requires schools and childcares to report immunization and exemption data to CDPHE annually.
- School reported data show kindergarten vaccination rates in Colorado consistently below national averages.
- 2022-2023 school year showed the lowest kindergarten immunization rates since school immunization data has been collected in this format.



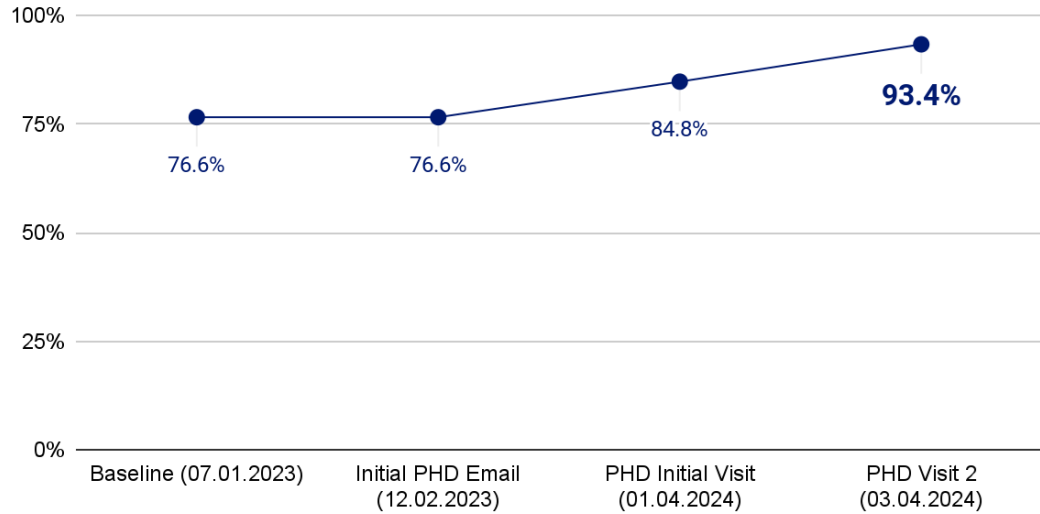
(Colorado Department of Public Health and Environment 2023)



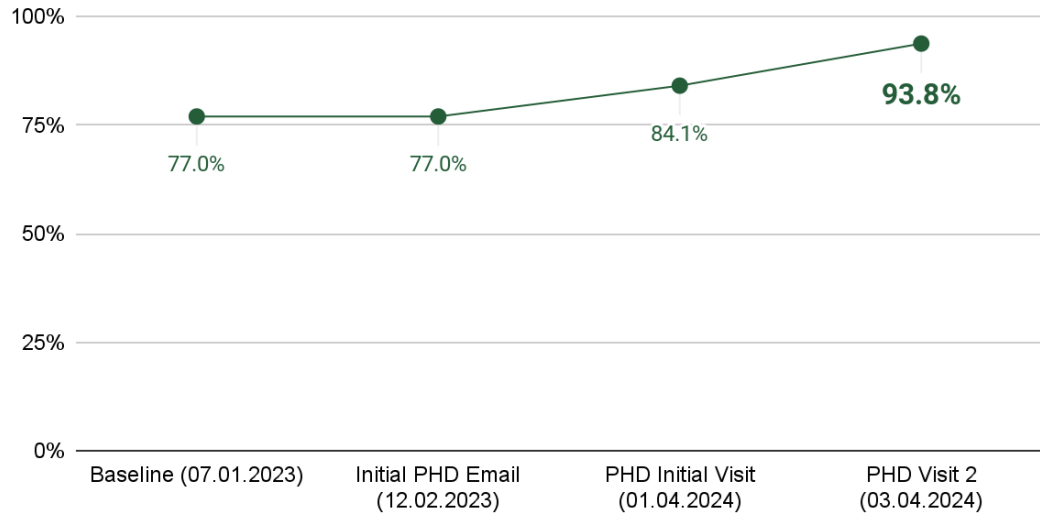
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Current provider-level CIIS Data

Provider-level CIIS data: Up to Date MMR



Provider-level CIIS data: Up to Date DTaP



Colorado Provider

Data current as of May 22, 2024

Total kindergarten-aged patients associated to clinic in CIIS: **242**

	MMR	DTaP*	
Up to Date	226	Up to Date	227
Not Up to Date	16	Not Up to Date	15
Percent Up to Date	93.4%	Percent Up to Date	93.8%

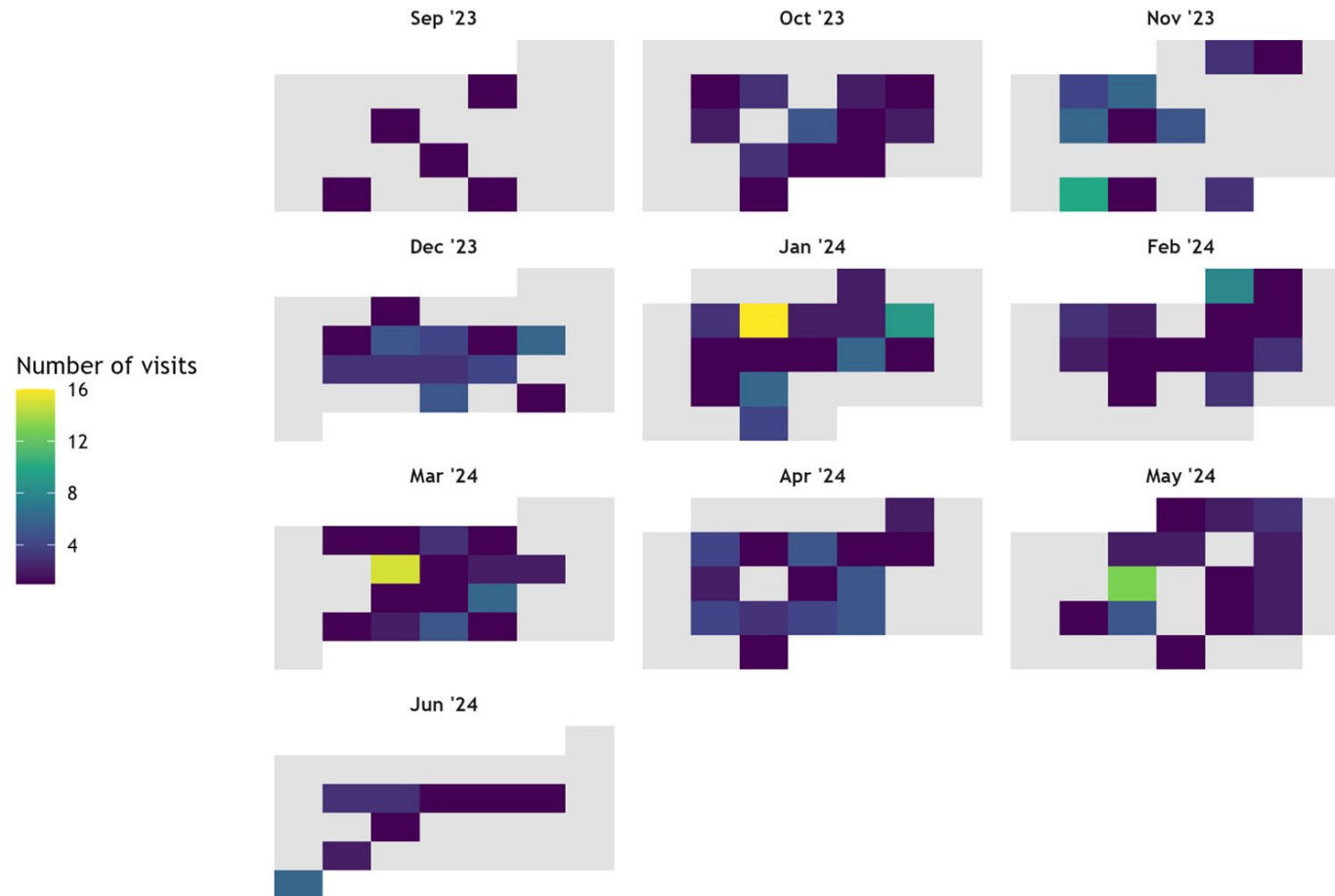
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Program evaluation / data

Number of visits - high level summary visualization

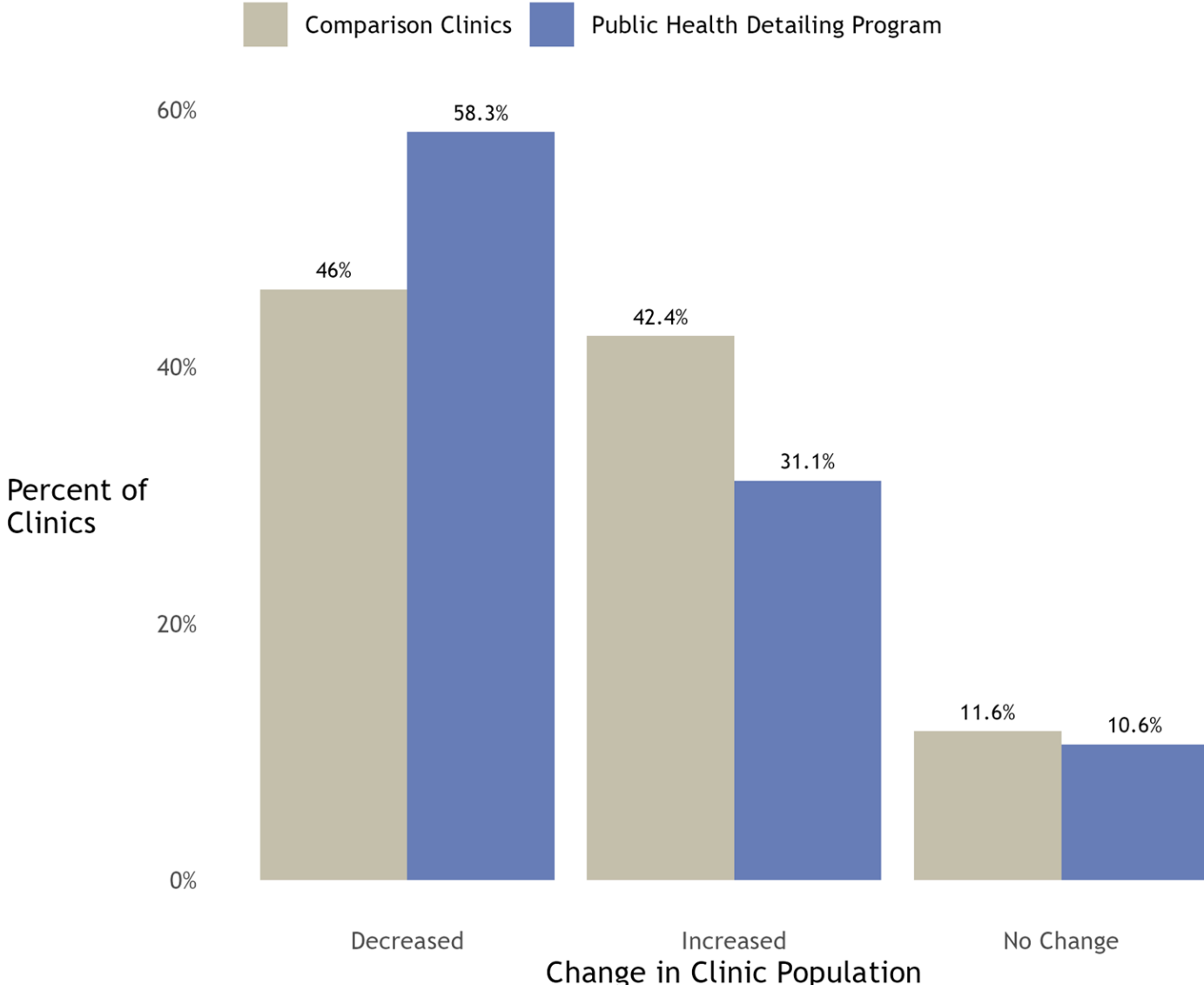
- 151 clinics participated and received at least an initial visit
- PH Detailers completed 326 total visits between Sept. 7, 2023 and June 30, 2024



Change in K-aged clinic populations

- **30,516** kindergarten-aged children belonged to the 151 clinics as of the baseline date.
- **29,032** kindergarten-aged children were assigned to the 151 clinics as of the most recent visit they received.
- **88** clinic populations decreased during the program, indicating that providers made efforts to clean up their active patient population. More accurate clinic populations in CIIS can help us more accurately estimate vaccination coverage rates using CIIS data.

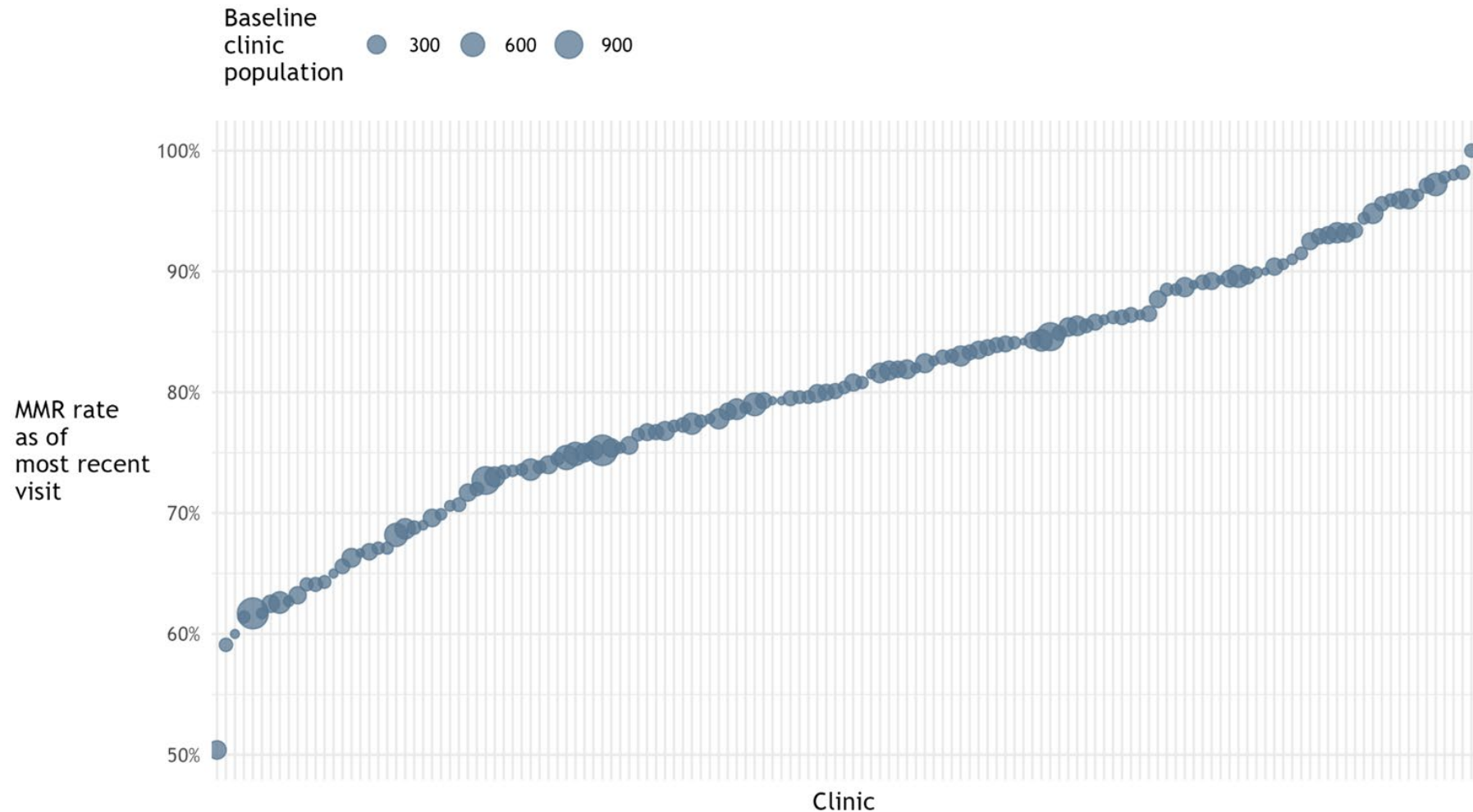
Change in clinic population



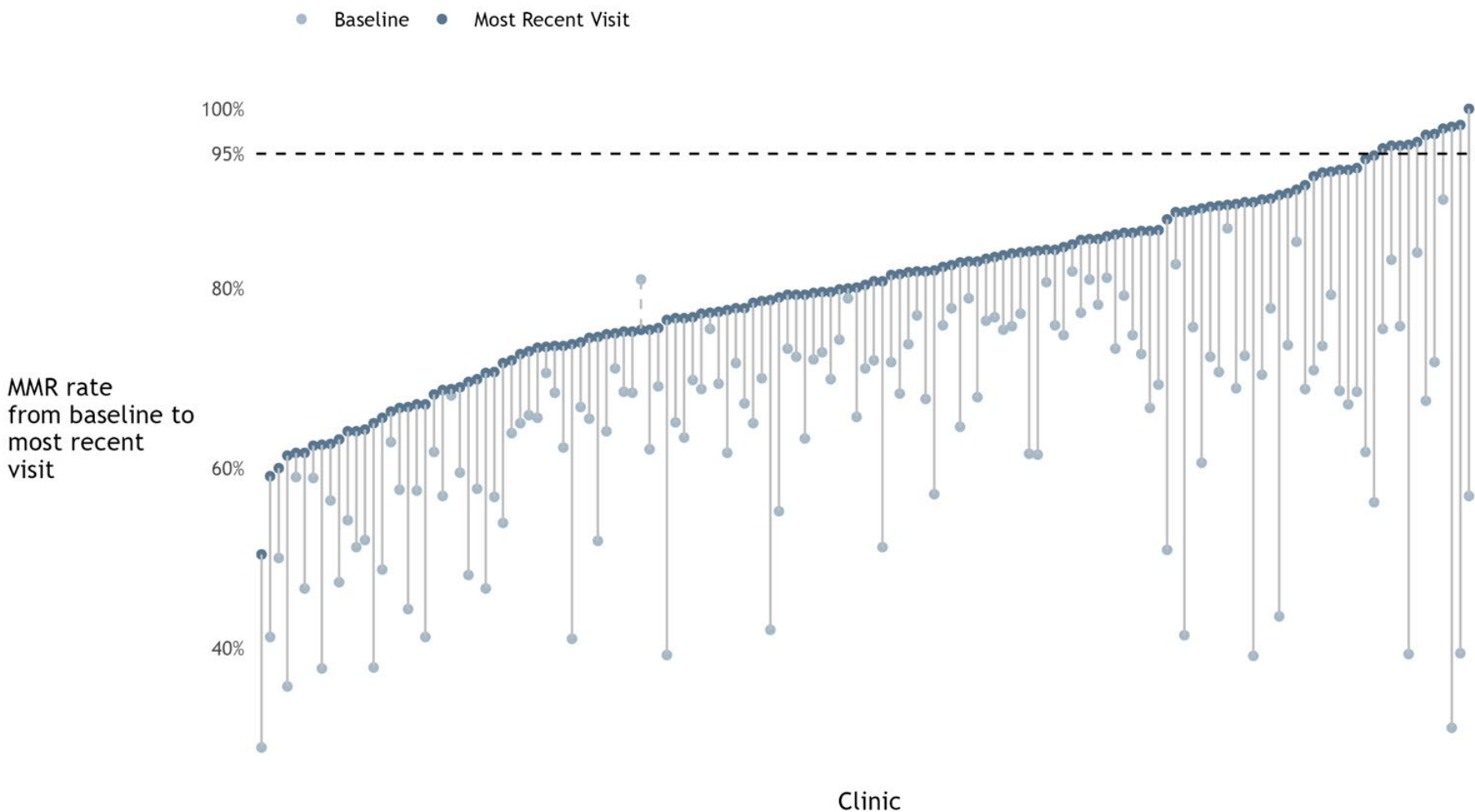
Compared to clinics who did not participate in the public health detailing program who had at least 50 kindergarten-aged children at baseline, a higher proportion of participating clinics experienced a decrease in their population in 2023-24.

MMR rate as of the most recent PH Detailing visit

11 clinics exceeded MMR rates of 95% as of their most recent visit. Rates ranged from 50.4% to 100%.



MMR rate change from baseline to most recent visit

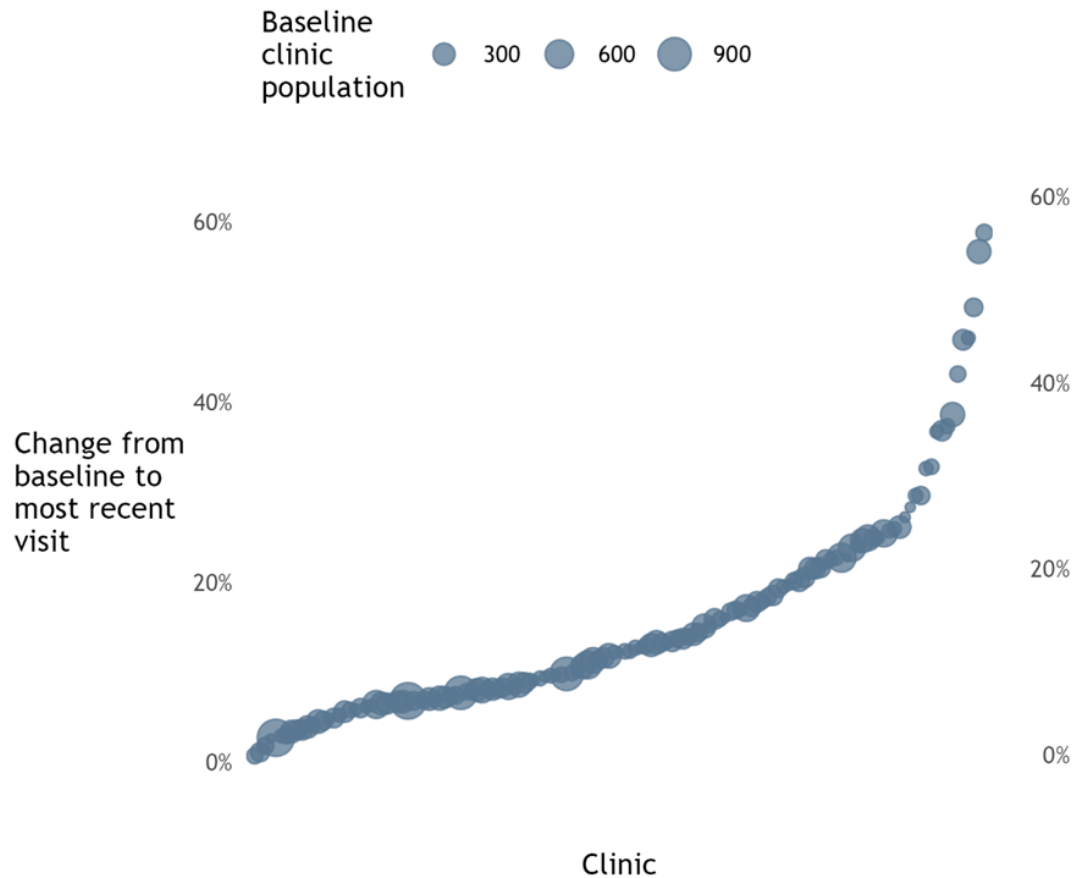


Among clinic participants with at least 50 kindergarten-aged children at baseline, all but one clinic's MMR rates increased from baseline to the most recent visit. Rates increased by at least 1% and by at most 67%. One clinic's MMR rate decreased by less than 1%.

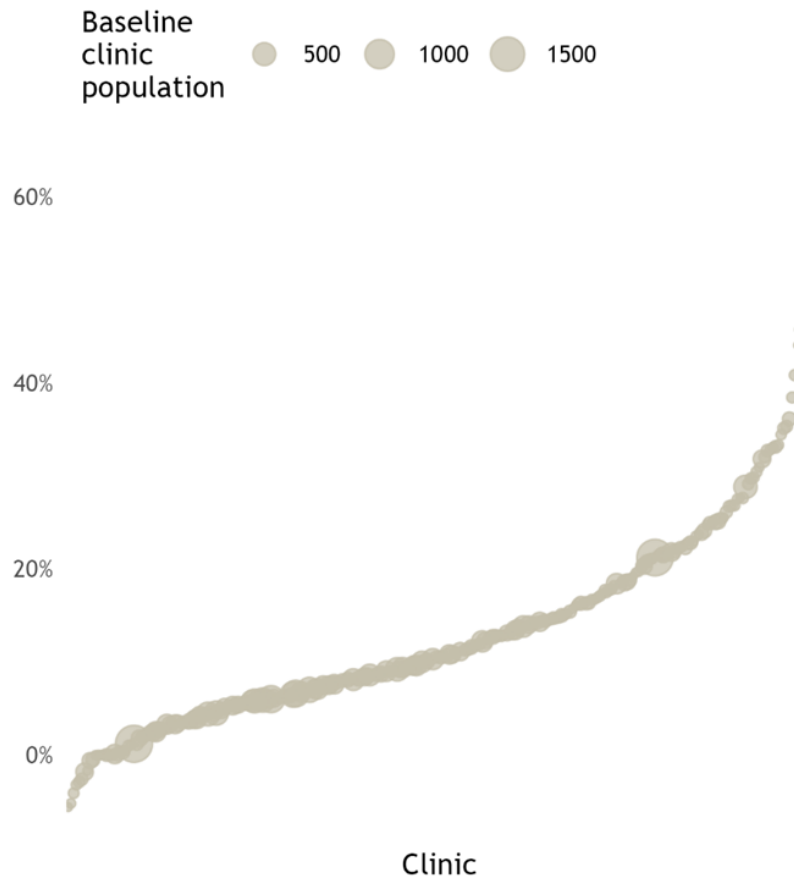


Changes in MMR rates

PHD participating clinics



Comparison clinics



Changes in MMR rates didn't differ significantly among public health detailing project-participating clinics compared to clinics who did not participate during the same time period.

Lessons learned and next steps

PH Detailing as an IQIP customized strategy

- Pros

- Ability to reach more providers with at least an initial visit.

- Cons

- Difficult to maintain a quarterly visit approach.
- Some providers did not complete four PH Detailing visits by the end of 2023-24 project year.
- Less K-aged focused since IQIP visits focus on other strategies as well.



Special thanks

Special thank you

A special thank you to the following people who have made this program possible:

- Savannah Destefano - Contract Nurse, Public Health Detailer
- Deb Zambrano - IQIP Coordinator
- Heather Roth and Robin Trujillo - Immunization Branch Chief/Deputy Branch Chief
- Rachel Severson- Data Unit Manager

Thank you!



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