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Immunization Standards of Practice: Tools for adherence

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Overview

- Standards of Practice for Immunizations
 - Using EHRs to promote adherence
 - Reminders
 - Reports
 - Current Immunization Coverage Data
 - Strategies to increase immunization coverage
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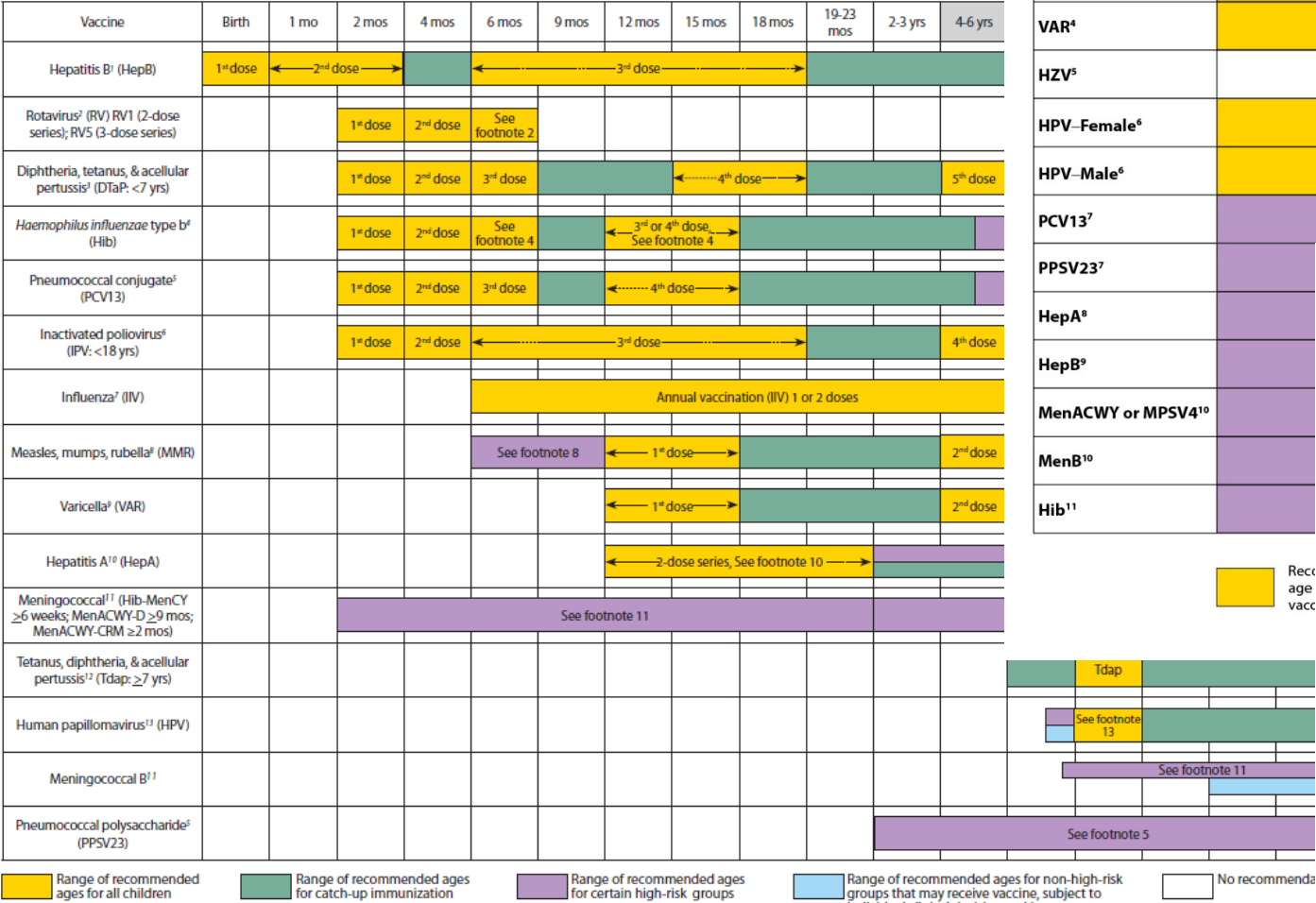


Immunization Standards of Practice

- Vaccine recommendations and schedules
 - Advisory Committee on Immunization Practices/CDC
 - Professional medical organizations (AAP, AAFP)
 - National Vaccine Advisory Committee Standards
 - Childhood and Adolescent Immunization Practices
 - Adult Immunization Practice
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Vaccine Schedules

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.



Range of recommended ages for all children Range of recommended ages for catch-up immunization Range of recommended ages for certain high-risk groups Range of recommended ages for non-high-risk groups that may receive vaccine, subject to clinical discretion No recommendation

Figure 1. Recommended immunization schedule for adults aged 19 years or older by age group, United States, 2017

Vaccine	19–21 years	22–26 years	27–59 years	60–64 years	≥ 65 years
Influenza ¹	1 dose annually				
Td/Tdap ²	Substitute Tdap for Td once, then Td booster every 10 yrs				
MMR ³	1 or 2 doses depending on indication				
VAR ⁴	2 doses				
HZV ⁵				1 dose	
HPV–Female ⁶	3 doses				
HPV–Male ⁶	3 doses				
PCV13 ⁷	1 dose				
PPSV23 ⁷					
HepA ⁸					
HepB ⁹					
MenACWY or MPSV4 ¹⁰					
MenB ¹⁰					
Hib ¹¹					

Figure 2. Recommended immunization schedule for adults aged 19 years or older by medical condition and other indications, United States, 2017

Vaccine	Pregnancy ^{1,4,9}	Immuno-compromised (excluding HIV infection) ^{3,7,11}	HIV infection CD4+ count (cells/ μ L) ^{3,7,9,11}		Asplenia, persistent complement deficiencies ^{7,10,11}	Kidney failure, end-stage renal disease, on hemodialysis ^{7,9}	Heart or lung disease, chronic alcoholism ⁷	Chronic liver disease ^{7,9}	Diabetes ^{7,9}	Healthcare personnel ^{1,4,9}	Men who have sex with men ^{6,9,9}
			< 200	\geq 200							
Influenza ¹	1 dose annually										
Td/Tdap ²	1 dose Tdap each pregnancy	Substitute Tdap for Td once, then Td booster every 10 yrs									
MMR ³	contraindicated		1 or 2 doses depending on indication								
VAR ⁴	contraindicated		2 doses								
HZV ⁵	contraindicated			1 dose							
HPV–Female ⁶		3 doses through age 26 yrs									
HPV–Male ⁶		3 doses through age 26 yrs			3 doses through age 21 yrs						3 doses through age 26 yrs
PCV13 ⁷		1 dose									
PPSV23 ⁷		1, 2, or 3 doses depending on indication									
HepA ⁸	2 or 3 doses depending on vaccine										
HepB ⁹						3 doses					
MenACWY or MPSV4 ¹⁰			1 or more doses depending on indication								
MenB ¹⁰					2 or 3 doses depending on vaccine						
Hib ¹¹		3 doses post-HSCT recipients only		1 dose							

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection Recommended for adults with additional medical conditions or other indications Contraindicated No recommendation

Standards for Childhood and Adolescent Immunization Practices

- Availability of vaccines
- Assessment of vaccination status
- Effective communication about vaccine benefits and risks
- Proper storage and administration of vaccines and documentation of vaccinations
- Implementation of strategies to improve vaccination coverage

Source: National Vaccine Advisory Committee. Standards for Child and Adolescent Immunization Practices. *Pediatrics*.2003; 112;(4).


Standards for Adult Immunization Practice

- Assess immunization status of your patients at every clinical encounter
- Strongly Recommend vaccines that patients need
- Administer needed vaccines or refer patients to a vaccine provider
- Document vaccines received by your patient

Source: Centers for Disease Control and Prevention: Standards for Adult Immunization Practice:
<https://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/>



EHR Tools

- Immunization Clinical Decision Support
 - Provider reminders/Forecasting
 - Patient Tracking
 - Reminder/recall
 - Coverage reports
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RPMS Provider reminders

- **All routinely recommended childhood vaccines**
 - Primary series at 6 weeks, 4, 6 months
 - DTaP, Polio, Hib, Hep B, PCV, Rotavirus
 - Remaining doses at 12 months
 - 4th DTaP, 3rd/4th Hib; 4th PCV; MMR, VAR, Hep A
- **All routinely recommended adolescent vaccines**
 - HPV 2 or 3 dose; MenACWY, Tdap
 - Men B IF first dose is administered
 - Catch up for all routine childhood vaccines
- **All routinely recommended adult vaccines**
 - Zoster at 60 yrs; PPSV23, PCV13 at 65 years;
 - Hep A and B IF previous dose administered
 - Optional high risk: Hep B for diabetes; PPSV23 for high risk < 65 years
- **Influenza for everyone 6 months and older**

RPMS Immunization Package Reports

IMMUNIZATION v8.5*4

* REPORTS MENU *
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Site: DEMO HOSPITAL
User: GROOM, AMY

ADO	Adolescent Report
ADL	Adult Report
ELI	Eligibility Report
FLU	Influenza Report
H1	H1N1 Accountability Report
PCV	PCV Report
QTR	3-27 Month Report
TWO	Two-Yr-Old Rates Report
VAC	Vaccine Accountability Report

You've got PRIORITY mail!



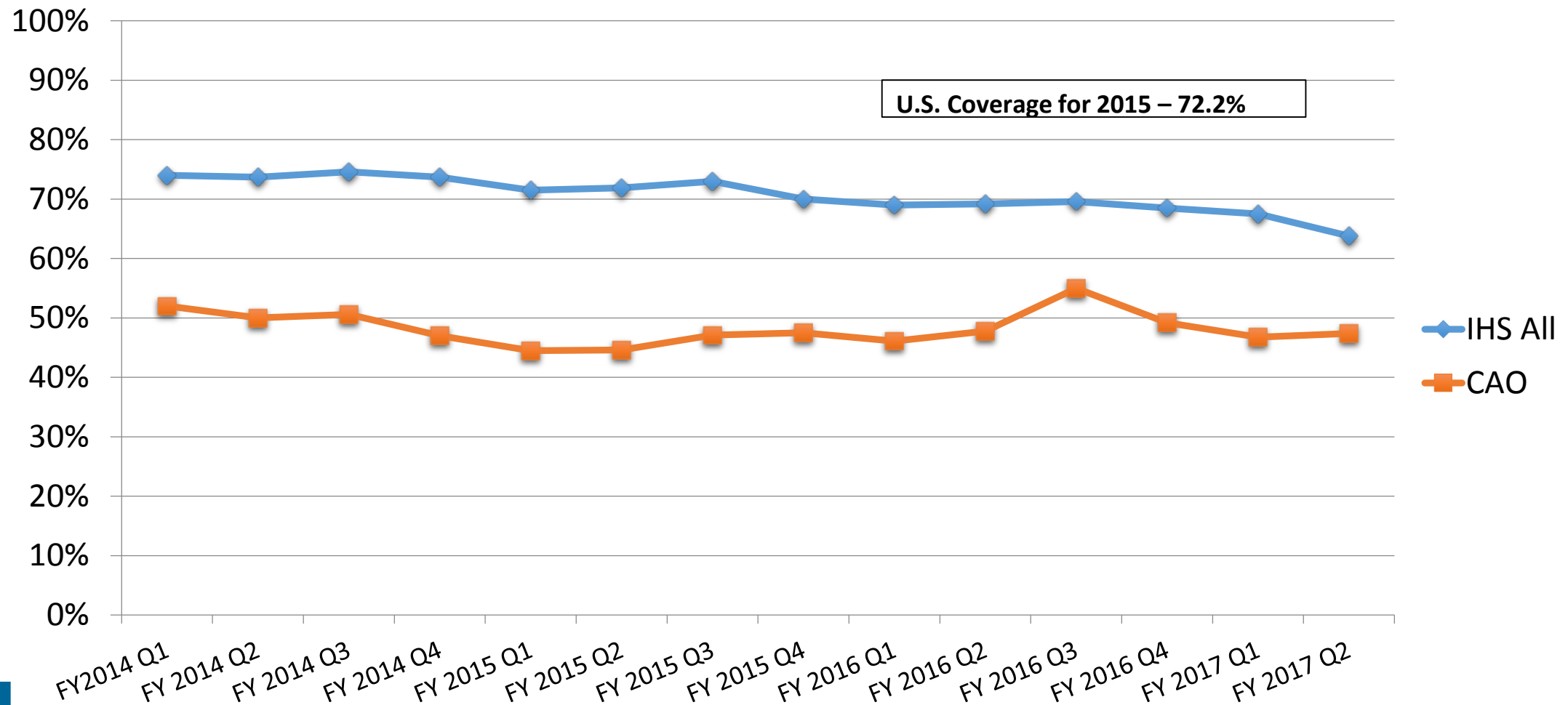
Quarterly Immunization Coverage Data

National Immunization Reporting System (NIRS)



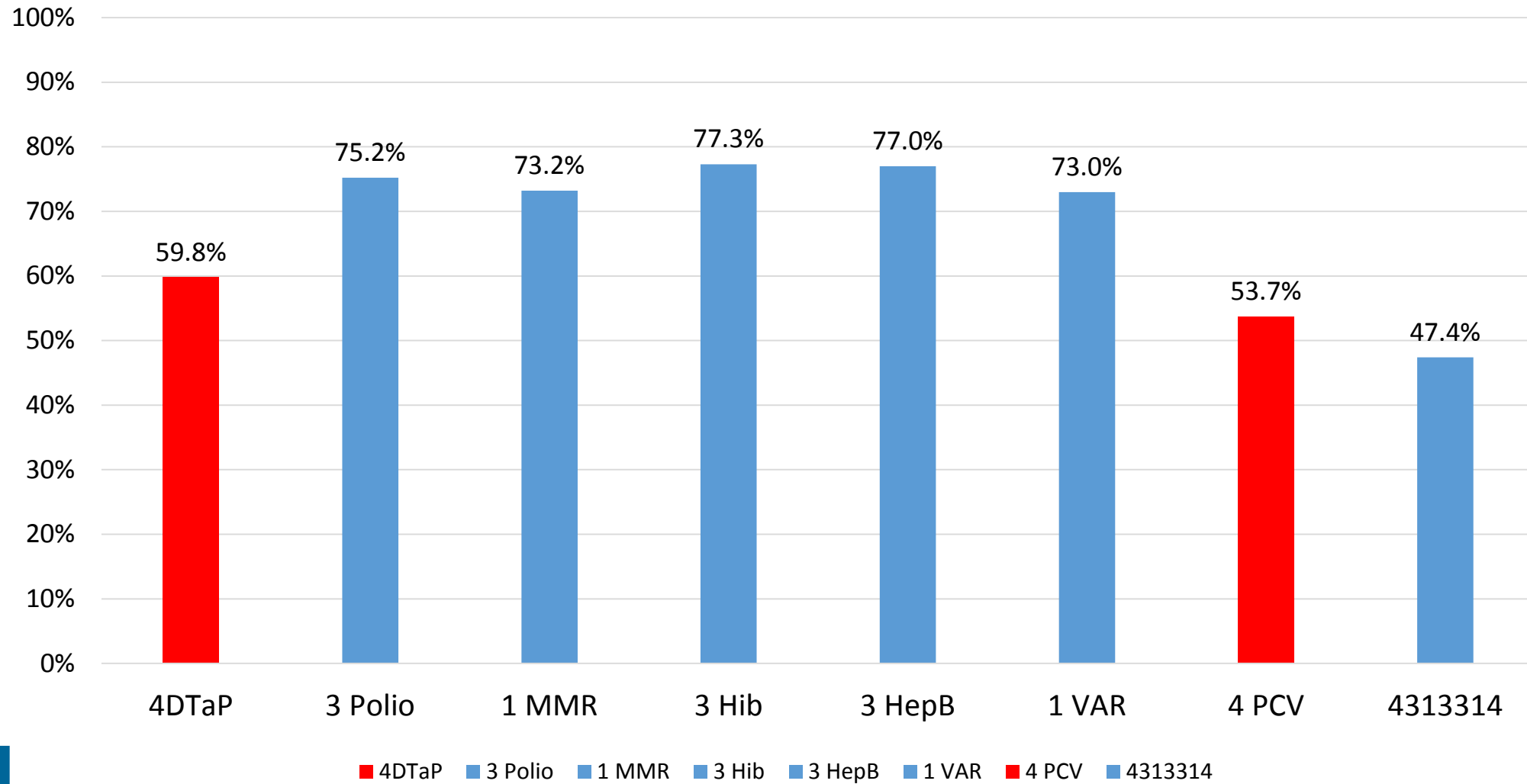
Facility	Reported on Date	Use RPMS	RPMS Data
» American Indian Health & Services (AIHS)	Monday - January 09, 2017	Yes	Yes
» Bakersfield American Indian Health Project	Friday - January 20, 2017	Yes	Yes
» Central Valley Indian Health, Inc	Friday - January 20, 2017	Yes	Yes
» Chapa De Indian Health, Inc	Thursday - January 19, 2017	Yes	Yes
» Colusa Indian Community Council			
» Consolidated Tribal Health Project, Inc	Wednesday - January 04, 2017	Yes	Yes
» Feather River Tribal Health, Inc	Wednesday - January 04, 2017	Yes	Yes
» Fresno American Indian Health Project			
» Greenville Rancheria	Tuesday - January 17, 2017	No	No
» Hoopa Valley Tribe	Thursday - January 19, 2017	Yes	Yes
» Indian Health Center of Santa Clara Valley			
» Indian Health Council, Inc	Tuesday - January 24, 2017	Yes	Yes
» Karuk Tribal Health	Monday - January 09, 2017	Yes	Yes
» Lake County Tribal Health Consortium			
» Lassen Indian Health	Tuesday - January 03, 2017	Yes	Yes
» M.A.C.T. Health Board , Inc	Friday - January 13, 2017	No	No
» Native American Health Center - Oakland	Tuesday - January 24, 2017	No	No
» Northern Valley Indian Health	Tuesday - January 03, 2017	Yes	Yes
» Pit River Health Services, Inc	Wednesday - January 18, 2017	Yes	Yes
» Redding Rancheria Indian Health Clinic	Wednesday - January 18, 2017	No	Yes
» Riverside/San Bernardino Indian Health	Thursday - January 05, 2017	Yes	Yes
» Round Valley Indian Health Center, Inc	Saturday - February 04, 2017	Yes	Yes
» Sacramento Native American Health Center	Thursday - January 19, 2017	No	No
» San Diego American Indian Health Center	Thursday - January 19, 2017	Yes	Yes
» Santa Ynez Band of Mission Indians	Monday - January 09, 2017	Yes	Yes
» Shingle Springs Tribal Health			
» Sonoma County Indian Health	Tuesday - January 17, 2017	Yes	Yes
» Southern Indian Health Council, Inc			
» Sycuan Band of Mission Indians	Tuesday - January 17, 2017	Yes	Yes
» Table Mountain Rancheria			
» Toiyabe Indian Health Project	Thursday - January 05, 2017	Yes	Yes
» Tule River Indian Health Center, Inc	Wednesday - January 18, 2017	Yes	Yes
» Tuolumne Me-Wuk Indian Health Center	Thursday - January 19, 2017	Yes	Yes
» United American Indian Involvement, Inc	Friday - January 20, 2017	Yes	Yes
» United Indian Health Services, Inc			
» Warner Mountain Indian Health Project			

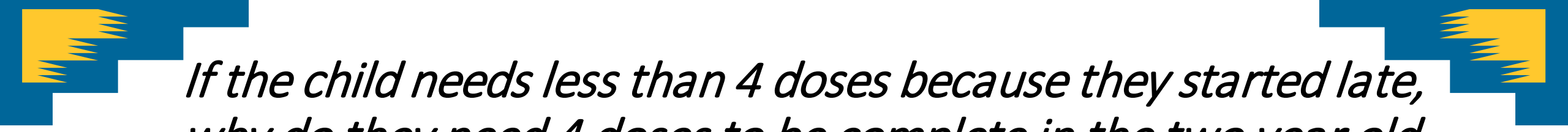
Two Year old Coverage: 4:3:1:3:3:1:4




Source: IHS Immunization Quarterly reports. www.ihs.gov/epi

CAO 2 year old report
4313314 coverage by vaccine antigen
FY17 Q2 (March 2017)





If the child needs less than 4 doses because they started late, why do they need 4 doses to be complete in the two year old report??

- The purpose of the two year old report/GPRA is NOT “Is the child up to date TODAY?”
 - Report measures how we did at MEETING THE RECOMMENDATIONS
 - E.g. did the child get the vaccines as recommended
 - PCV recommendation: 4 doses at 2,4,6 months, booster at 12-15 months
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PCV-13 Deadlines



- To meet GPRA
 - All PCV-13 doses need to be administered 4 weeks apart if less than 12 months old
- Latest Possible Administration
 - 1st PCV-13
 - Before they turn 6 months old
 - 2nd PCV-13
 - Before they turn 7 months old
 - 3rd PCV-13
 - Before they turn 1 year old

Your Secret Weapon

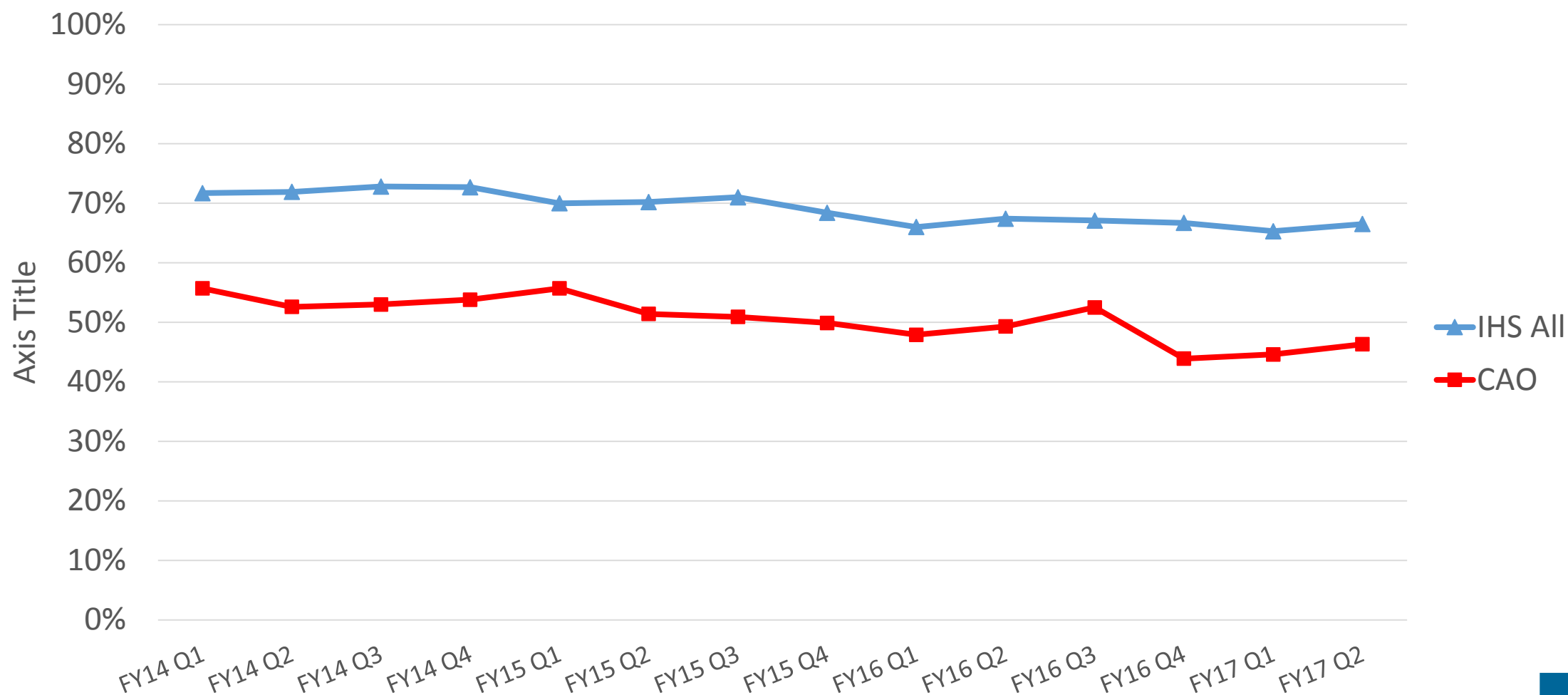




RPMS 3-27 month old immunization report

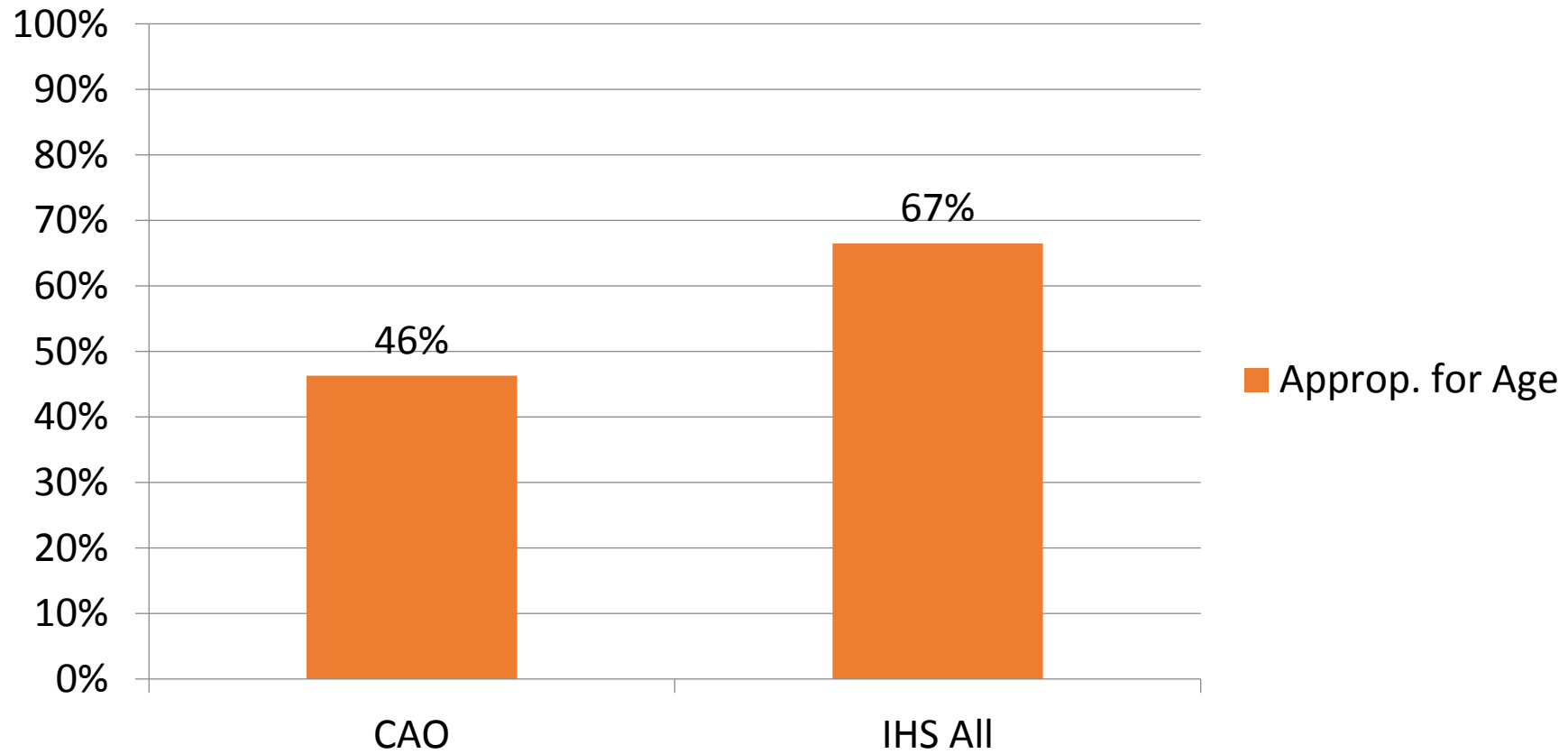
- Allows real-time monitoring of immunization coverage
 - Identifies children falling behind while there is still time to do something about it!
 - High coverage in 3-27 month old report = High 2 year old coverage = High GPRA measure coverage
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3-27 Month Old Coverage*

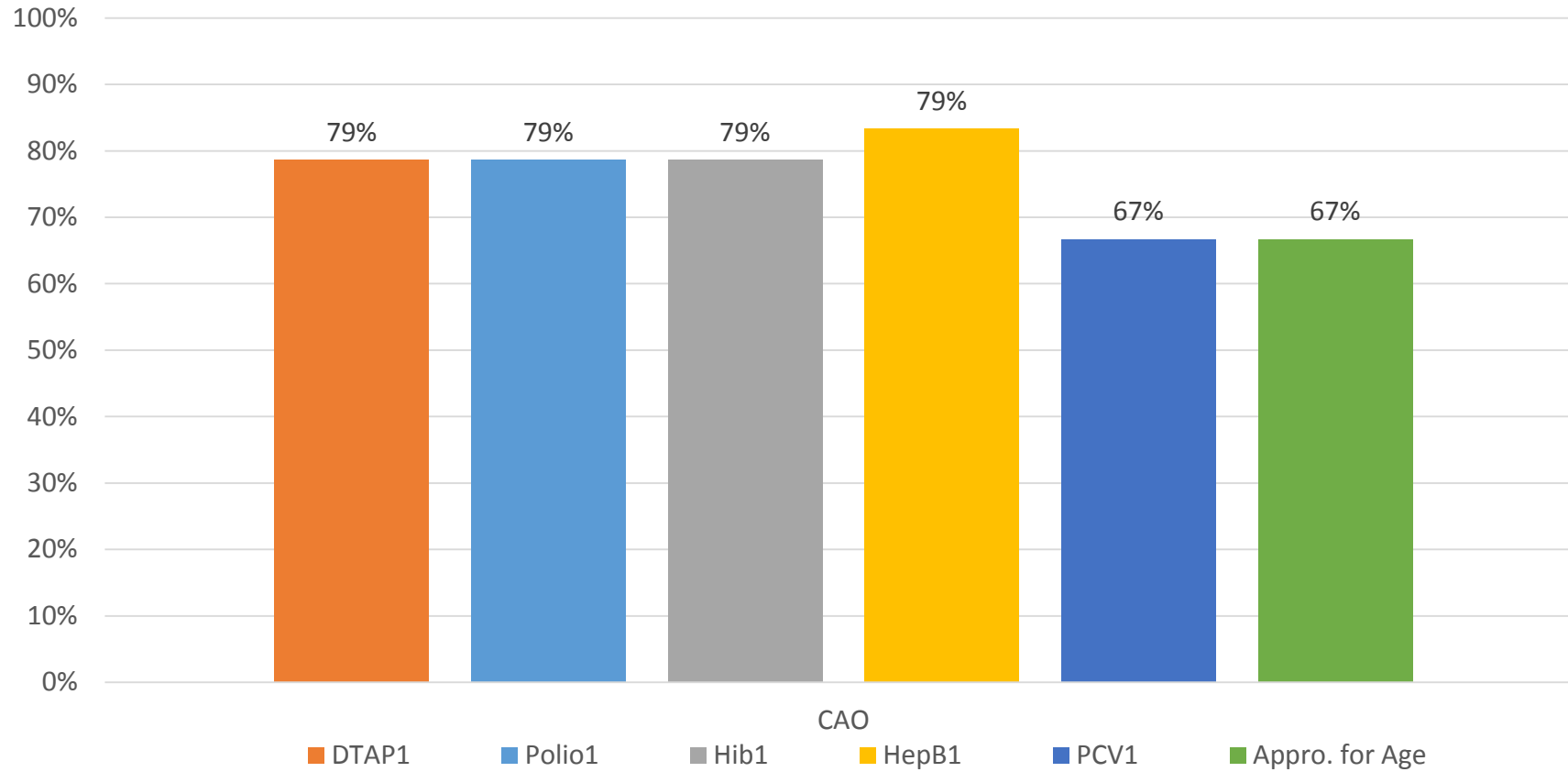


Source: IHS Immunization Quarterly reports. www.ihs.gov/epi

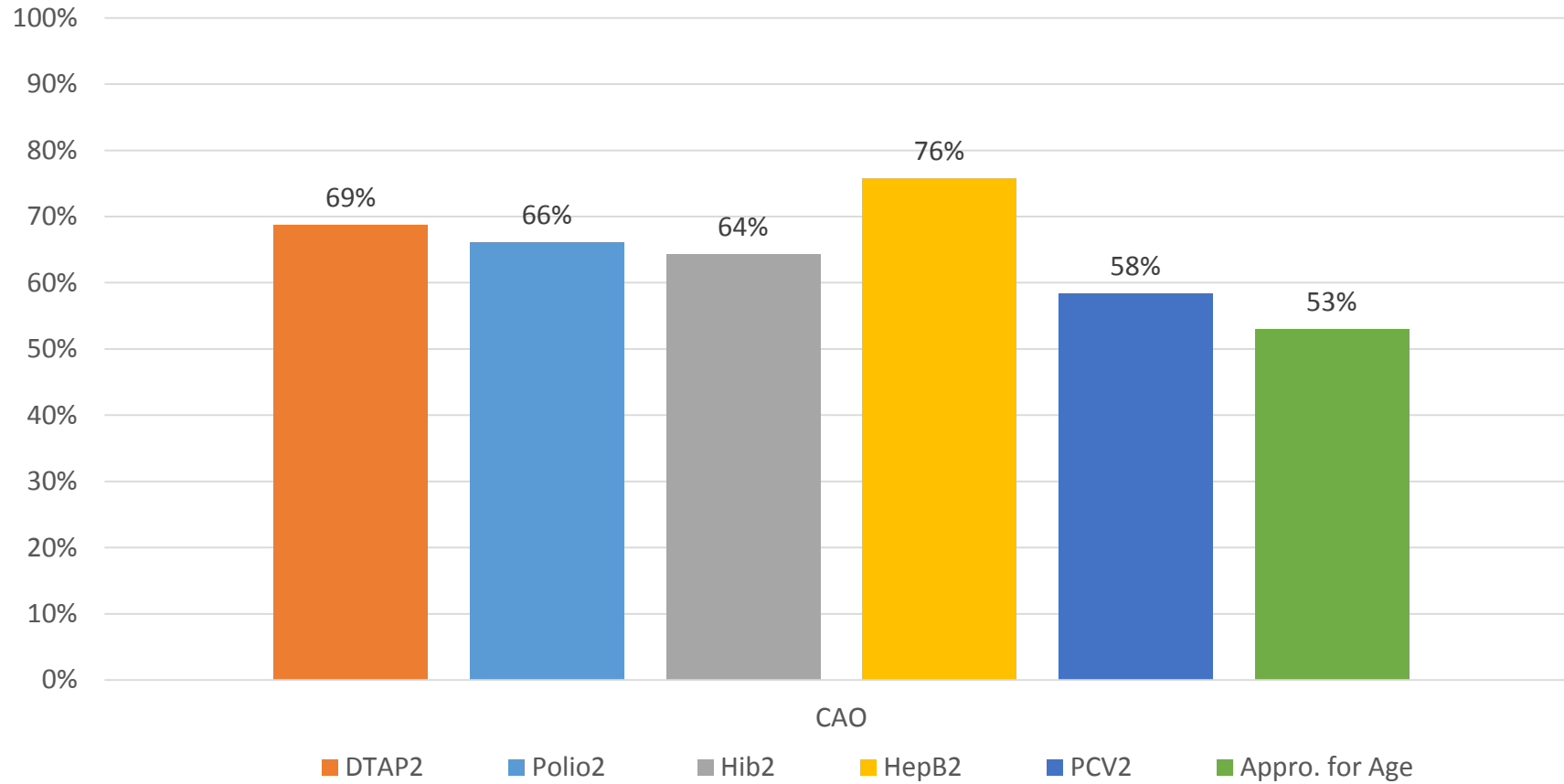
3-27 month old report
All ages (3-27 months)
FY17 Q2



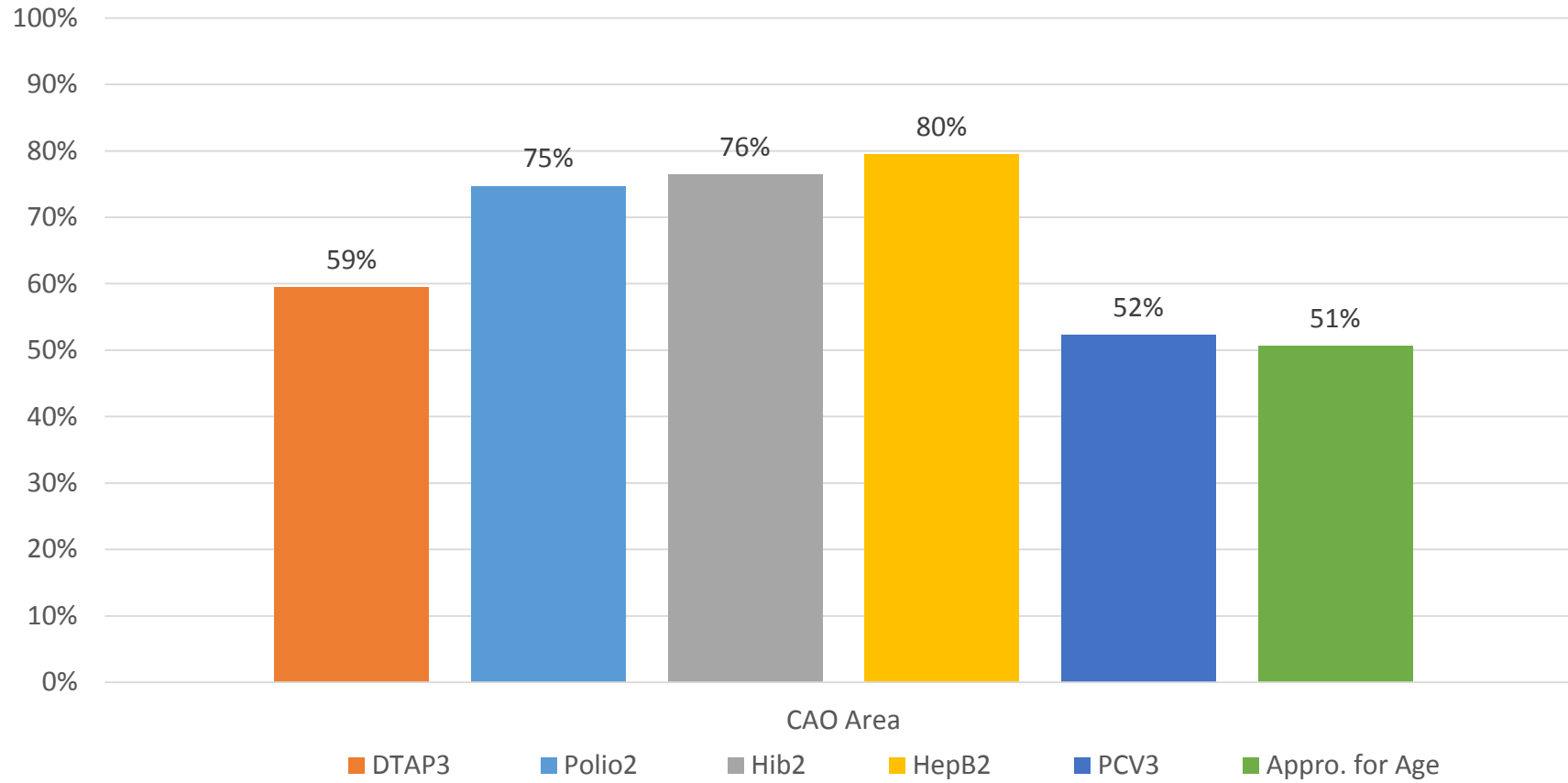
CAO 3-27 month old report
3-4 month coverage
FY17 Q2



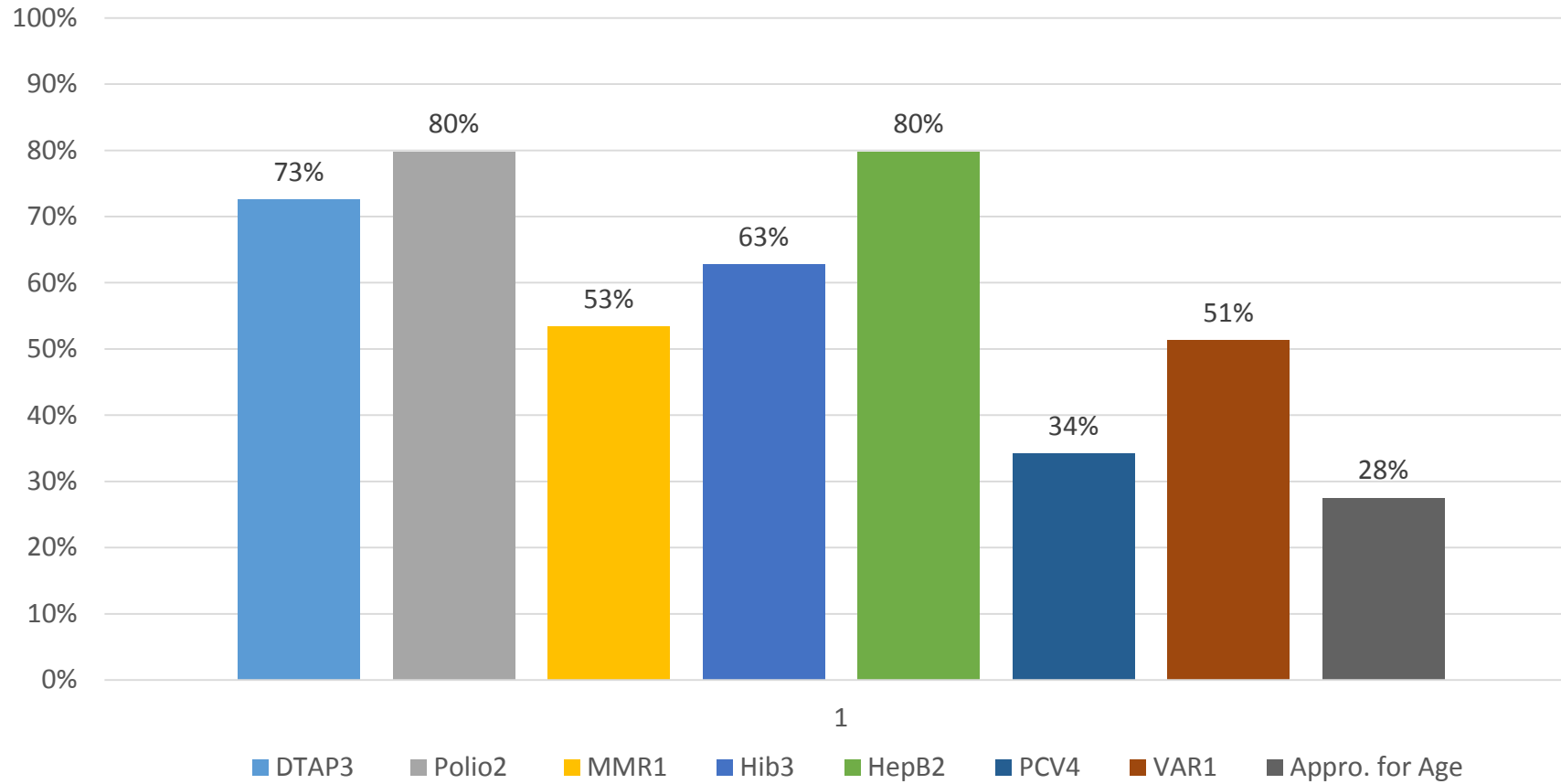
3-27 month old report
5-6 month coverage
FY17 Q2



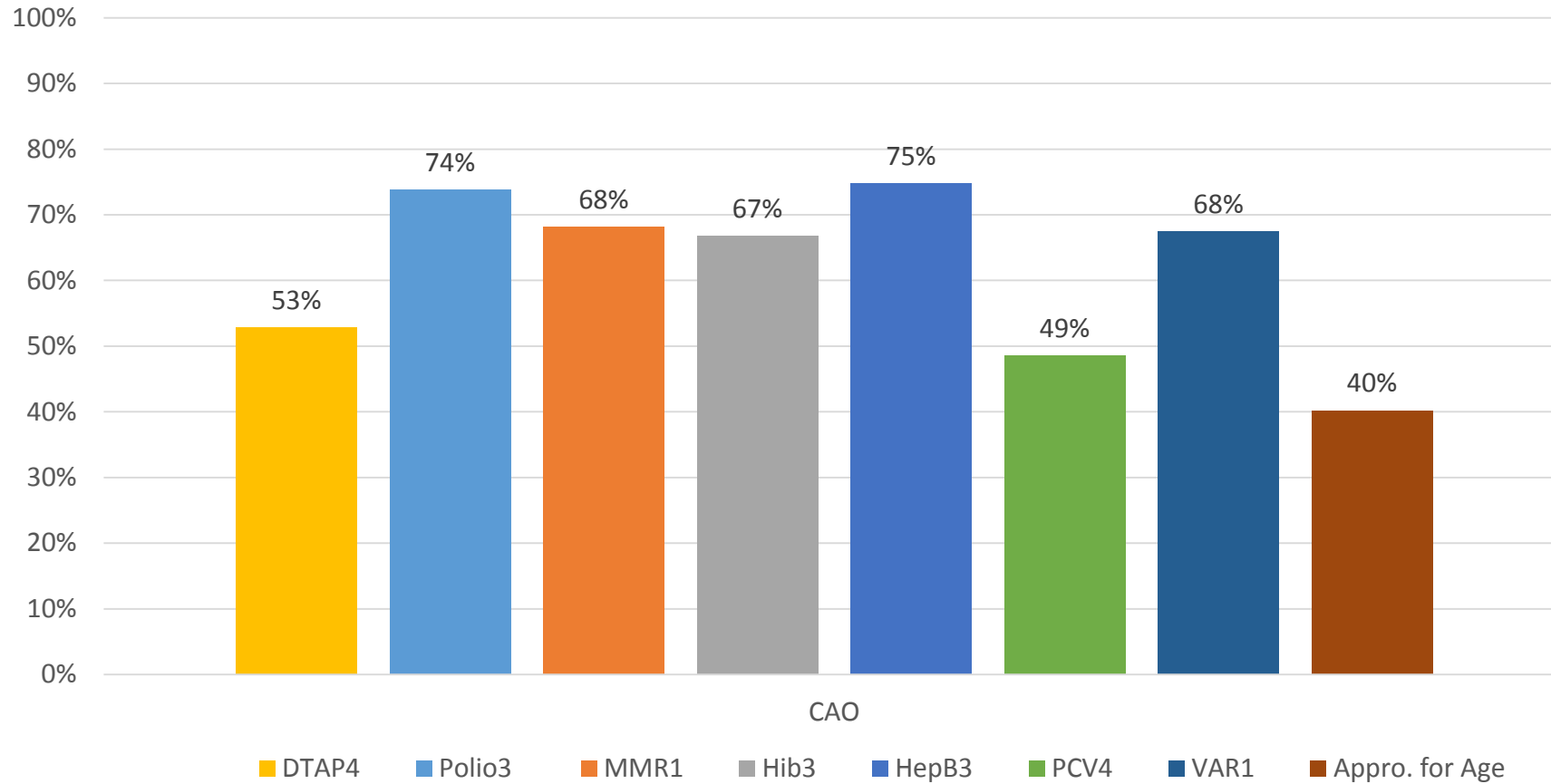
3-27 month old report
7-15 month coverage
FY 17 Q2



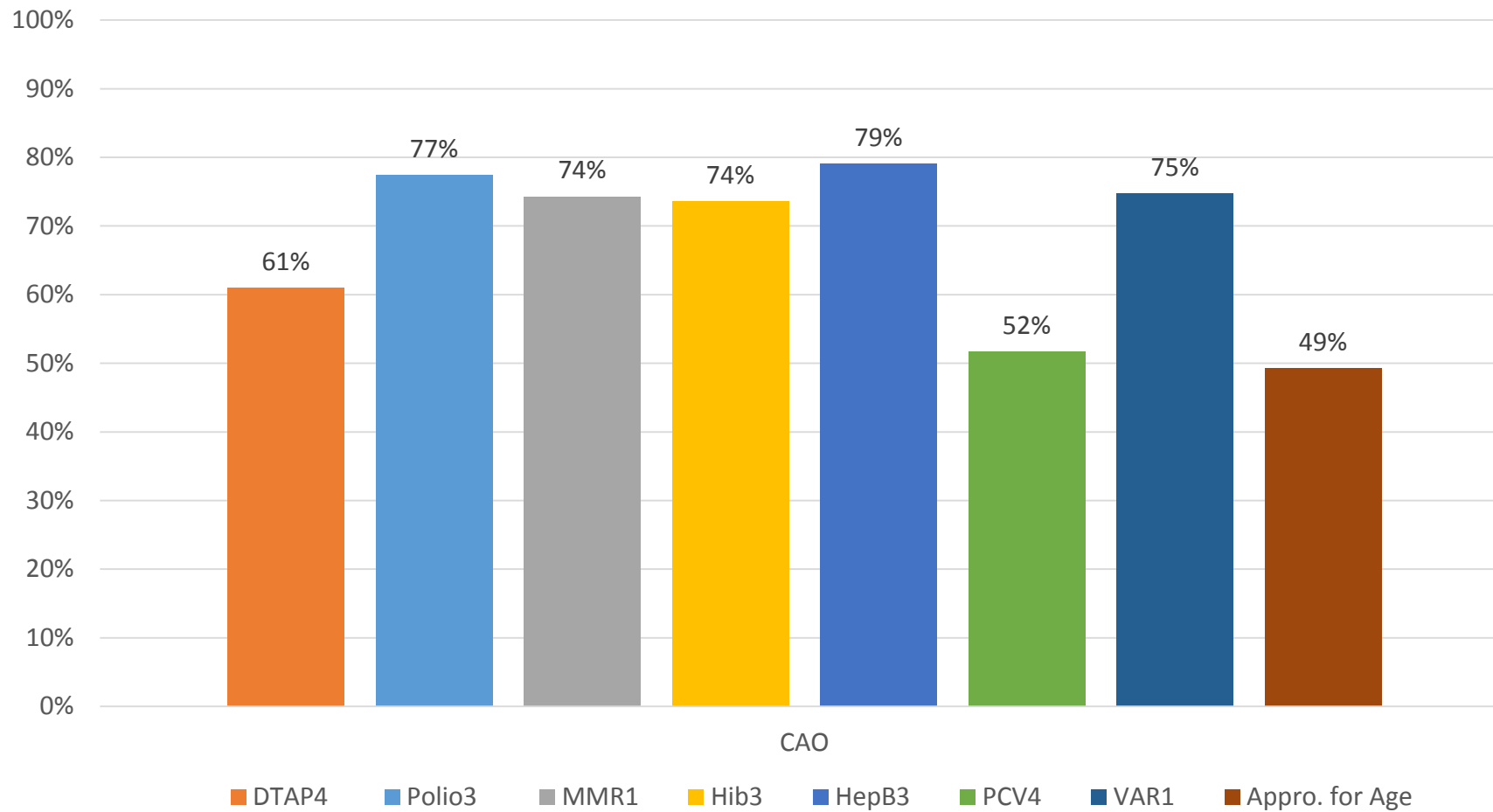
3-27 month old report
16-18 month coverage
FY17 Q2



3-27 month old report
19-23 month coverage
FY17 Q2



3-27 month old report
24-27 month FY17 Q2



Challenges

- Fourth doses of DTaP(DTAP4) and Pneumococcal Conjugate (PCV4) are the main challenges
- If children are delayed in getting their 3rd doses:
 - May not get 4th DTaP on time because of required interval between 3rd and 4th dose (6 months)
 - May not NEED 4th dose of PCV any longer - # of doses of PCV changes depending on age of receipt
- THE STANDARD OF CARE IS 4 DOSES!

PCV-13 Deadlines

- To meet GPRA
 - All PCV-13 doses need to be administered 4 weeks apart if less than 12 months old
- Latest Possible Administration
 - 1st PCV-13
 - Before they turn 6 months old
 - 2nd PCV-13
 - Before they turn 7 months old
 - 3rd PCV-13
 - Before they turn 1 year old





Strategies




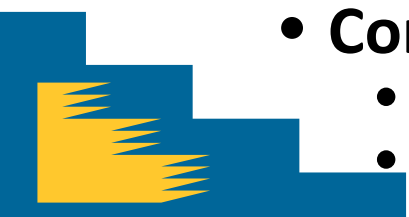



Health Systems Checklist

- ☐ Provider Reminders
 - ☐ Standing orders
 - ☐ Simultaneous administration of all recommended vaccines
 - ☐ Reminder/Recall for patients
 - ☐ Monitoring and Feedback
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Strategies

- **Review the data!!!!**
 - Monitor up to date coverage for children BEFORE they turn 2 years
 - Focus efforts on getting children who are falling behind back on track
 - **Reduce Missed Opportunities**
 - Vaccinate at EVERY visit
 - Simultaneous administration of all recommended vaccines!!!
 - Standing orders
 - **Increase Access**
 - Pharmacy-based immunization clinics
 - Community-based immunization clinics
 - **Use Reminder Recall**
 - RPMS letters, postcards/reminders
 - **Community Education**
 - Radio/Video Public Service Announcements
 - Community Health Representatives
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Best Practices/ Recommendations

- Open Discussion



Back Up Slides



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