

Using Immunization Information System Data to Improve Assessment of Eligibility for Vaccines for Underinsured Children

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Citywide Immunization Registry (CIR)

- Immunization Information System (IIS) for New York City (NYC)
- Started citywide in 1997
- Vital records (birth certificates) loaded 2x/week
 - ~122,000 births annually
- Mandatory reporting of all immunizations administered to children 0-18 yrs
 - Reporting for adults ≥ 19 yrs requires consent
- ~1,700 pediatric provider sites
- 5.6 million patients and 76 million immunizations

NYC Vaccines for Children (VFC) Program

- ~74% of NYC children 0-18 yrs eligible for publicly purchased vaccines distributed through VFC
 - ~67% VFC (Medicaid, uninsured, underinsured at FQHCs, American Indian / Alaskan Native)
 - ~6% S-CHIP; <1% 317 for underinsured
- ~3 mill doses distributed annually costing >\$130 mill
- ~85% of pediatric provider sites participate in VFC
- VFC distribution was linked to CIR reporting in 2006
 - Vaccine orders for providers reporting <80% of VFC doses received are reduced

NYC Vaccine Finance Policy

- NYC uses Section 317 Immunization Grant funds to purchase vaccines for underinsured children & adolescents
 - Section 317 is a discretionary federal grant to states, 6 cities, territories
 - Provides vaccines to underinsured children 0-18 yrs not served by VFC and, as funds allow, to uninsured & underinsured adults
- NYC's policy allows underinsured children & adolescents to be vaccinated at medical homes other than Federally Qualified Health Centers (FQHCs)
 - Underinsured may receive VFC vaccine at FQHCs

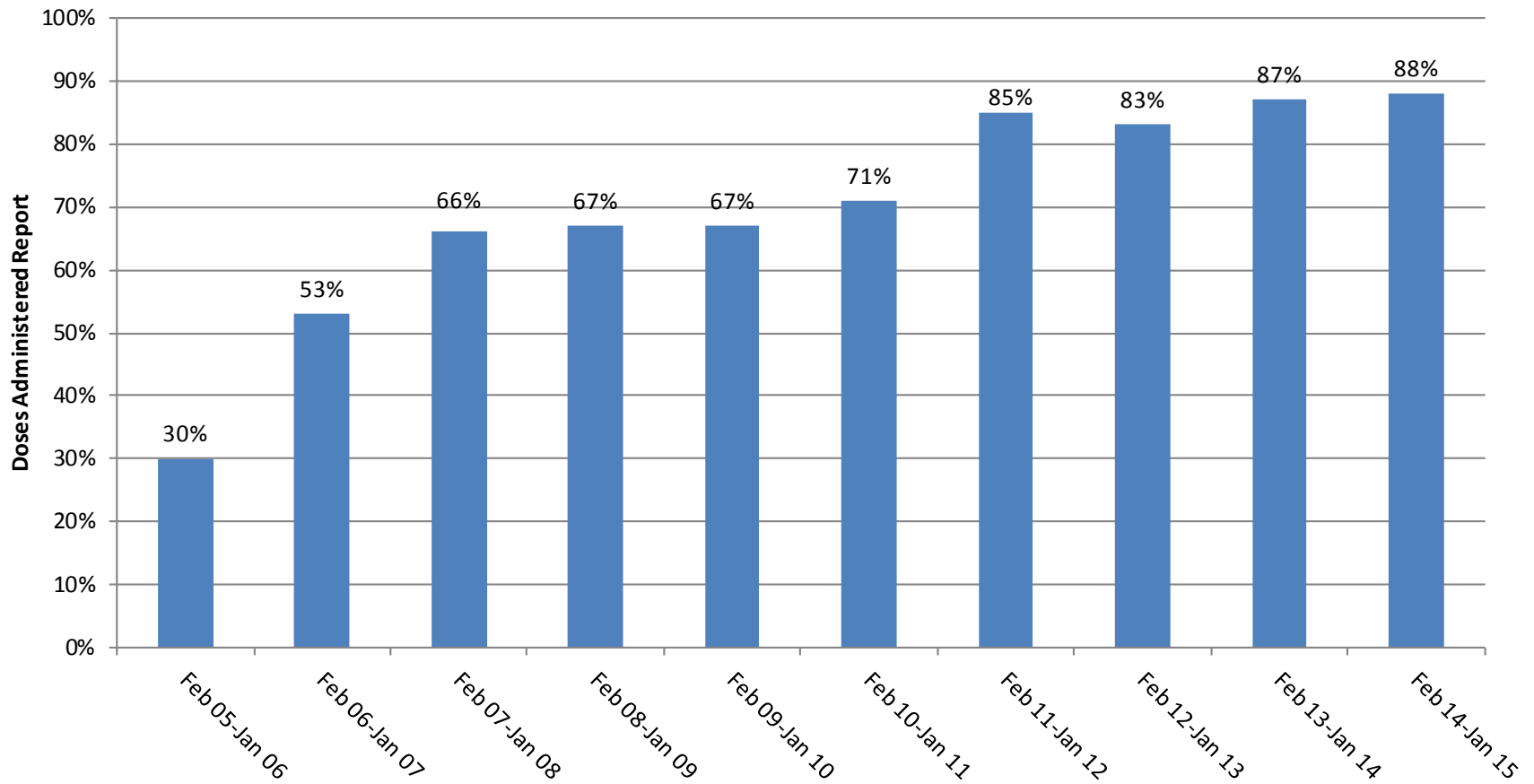
Underinsured Definition

- Underinsured children have health insurance, but it:
 - Does not cover vaccines, or
 - Does not cover certain vaccines, or
 - Covers vaccines but has a dollar limit or cap for vaccines – once limit is reached, child is eligible
- In 2013, CDC estimated the underinsured population of 0-18 yr-olds in NYC at ~1-1.5%
 - % is small - NYS law requires health insurance to cover all ACIP recommended vaccines
 - But numbers and costs were large: >26,000 children and ~\$2.2 million in 317 funds needed

Problem: 317 Budget Cut

- In 2013, 317 vaccine budget cut >50%
 - Threatened elimination of underinsured policy
- Prompted an examination of provider sites reporting to our IIS a high % of doses admin to underinsured
 - IIS receives regular reporting of childhood immunizations from 90% of pediatric sites
 - High % of VFC doses distributed are reported to IIS

Of All VFC Doses Distributed, % Reported to the CIR with Eligibility (VFC, S-CHIP, 317)



Objective: Use IIS to Improve Estimates
of Population of Underinsured Children
and 317 Vaccine Cost Projections

Methods

- Used IIS to generate lists of provider sites
 - All sites reporting underinsured: 457 (30% of VFC-enrolled)
 - 2013: sites reporting $\geq 10\%$ and ≥ 25 doses admin to underinsured patients <19 yrs in one year
 - 52 sites
 - 2014: sites reporting $\geq 5\%$ and ≥ 90 doses admin to underinsured patients <19 yrs in one year
 - 63 additional sites
- Conducted an intervention: telephone outreach, site visits, chart reviews
 - Evaluated provider assessment of underinsured eligibility
 - Educated providers on definition of underinsured

Results

Sites Receiving Intervention

- 61 sites were reached
 - 15 by telephone, 1 by site visit (no chart review), 45 by site visit, including chart review
 - Mostly private practices, 1 college, 2 school-based health ctrs
- Of 45 sites receiving chart review
 - 1,675 charts reviewed across sites – range: 10-75 per site
 - 1 site correctly assessed underinsured eligibility
 - Vaccinates international students
 - 5 sites had problems with reporting from EHR
 - 19 sites misused public vaccines (admin to private patients)
 - Asked for reimbursement totaling \$239,122
 - \$196,758 paid to date
 - 20 sites misunderstood definition of underinsured
 - Mostly misclassified Medicaid patients

Change in IIS Reporting

- Post intervention (July-October 2014), the 61 sites reported the following % of imms as administered to underinsured:
 - 33 sites reported 0%
 - 13 sites reported $\leq 1\%$
 - 8 sites reported $>1-10\%$
 - 5 sites reported $>10\%$
 - 2 sites stopped reporting
- Total vaccine doses reported as administered to underinsured by the 61 sites (July-October):
 - 12,712 doses in 2012
 - 2,808 in 2013
 - 933 doses in 2014

Changes in 317 Population and Vaccine Estimates

- In 2014 and thereafter, transitioned to estimating underinsured population based on IIS reporting
 - Large reduction in numbers and projected vaccine costs
 - Prevented elimination of NYC's underinsured policy

	CAT CY 2013	CAT CY 2014	CAT CY 2015
Number of underinsured children	26,151	7,911	3,224
Projected costs of vaccine (317 funds needed)	\$2,198,045	\$904,553	\$580,972

Conclusions

- IIS data, chart reviews, and education improved estimates of the population of underinsured children, thereby reducing 317 vaccine costs
- Underinsured children will continue to be vaccinated in their medical homes
 - 317 funds sufficient to maintain NYC policy
- 317 funds freed up for purchase of vaccines for under- and uninsured adults

Thank You!

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