



VFC Provider-Based Reminder/Recall through an Immunization Information System to Increase Immunization Rates in a Sentinel Site Childhood Population

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Outline

- ◆ Overview
 - DC
 - Sentinel Population
 - Immunization Information System
- ◆ Description of Reminder/Recall Project
- ◆ Results
- ◆ Lessons Learned
- ◆ Contacts



Who we
are...

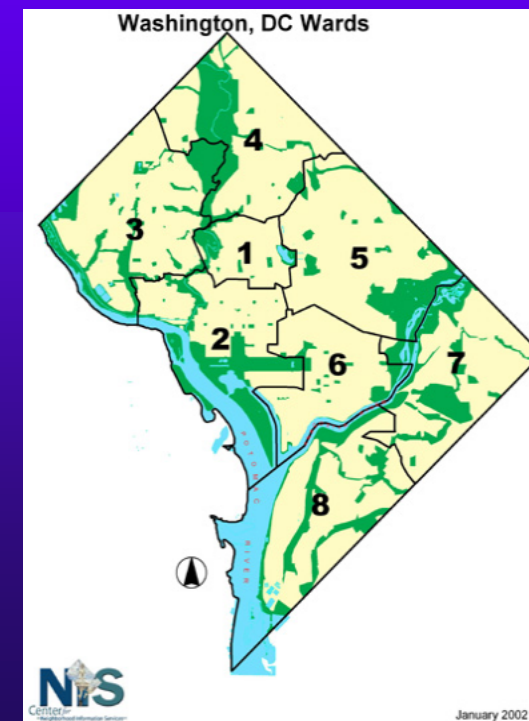
Washington, DC Overview

District of Columbia: “City-state”

- Self-governing
- Congressional budget approval & oversight
- Non-voting congressional representation

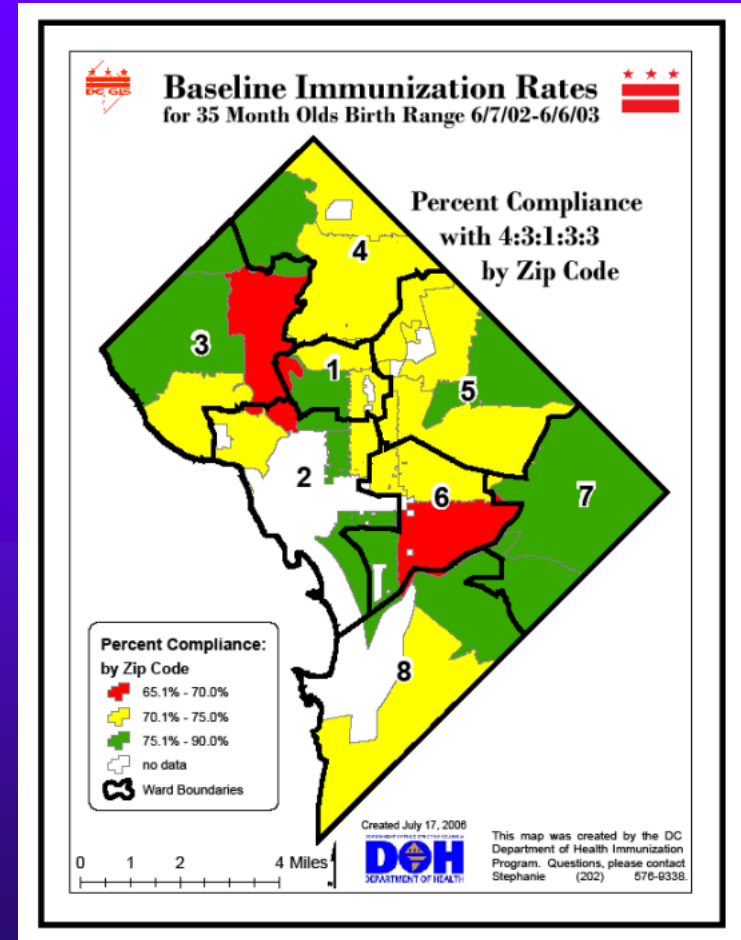
Overall population: **572,059** residents

- African-American: 60.0% 343,321
- White: 30.8% 176,101
- Hispanic 7.9% 44,953
- Asian/PI 2.7% 15,537
- 112,000 (20%) of residents are Children (2002)



Sentinel Site Overview: Southeast

- ◆ 90% African American, 8% white
- ◆ Household poverty 25%
- ◆ Infant mortality rate 27.5 (*US average 7.1, CDC*)
- ◆ Low birth weight 16% of live births (*US average 8.1%*)
- ◆ *Births to single mothers 82% (US average 33%)*
- ◆ *Immunization rate by 35 months 65-75% (without varicella)*





DC Immunization Information System (IIS) Overview

- ◆ 1992 – Began IIS
- ◆ 2000 – Linked to DC Birth Registry “population-based” and became internet-based
- ◆ 2000 – Became a CDC “Sentinel Site”
- ◆ **Covers 434,000 Adults and Children receiving care, attending school or child care, or residing in the District of Columbia**
- ◆ “Age-less” System: tracks records birth to death
- ◆ Information received from health records (not billing)
- ◆ Integrated into Immunization Program to provide information to VFC, Assessment, Clinical teams
- ◆ Linked to Medicaid & MCOs, Alliance, VFC Providers, schools, childcare, Head Start, WIC, etc.



What we
did...



VFC Reminder/Recall Project

◆ Collaborators

- IIS
- Vaccines for Children (VFC) Program
- DC VFC Providers

◆ Goal

- Increase immunization rates for Southeast 19-35 month old children for 4dtp:3pol:1mmr:3hib:3hepb:1var

◆ Method

- Contact to all DC parents (phone, mail)
- 2 month recheck

◆ Baseline Southeast immunization rate 61.45% for 4:3:1:3:3:1, similar across city₈

Project Tasks

◆ IIS

- Identify all DC preschool children needing immunizations using automated forecasting algorithm
- Create web-based report for all under-immunized 0-4-year-old children listing immunization needs and Provider

LAST NAME	FIRST NAME	MIDDLE NAME	BIRTH DATE	OVERDUE	DUE	ALSO CONSIDER	EXEMPTIONS
<LastName>	<FirstName>	<MiddleName>	11/01/2002	Hib, Pneumo Conj 7, DTaP, HepB	Varivax, MMR, IPV, Flu		
<LastName>	<FirstName>	<MiddleName>	01/29/2003		Flu, HepB	Hib	
<LastName>	<FirstName>	<MiddleName>	10/24/2002		Varivax, MMR, Hib, Pneumo Conj 7, DTaP, HepB	Flu	
<LastName>	<FirstName>	<MiddleName>	06/12/2002	Pneumo Conj 7		Flu, MMR	
<LastName>	<FirstName>	<MiddleName>	05/06/2003	HepB		Flu	
<LastName>	<FirstName>	<MiddleName>	03/18/2003	DTaP, Hib, Pneumo Conj 7	IPV, HepB	Flu	
<LastName>	<FirstName>	<MiddleName>	10/03/2003		HepB	Hib, DTaP, Pneumo Conj 7, IPV	
<LastName>	<FirstName>	<MiddleName>	07/24/2003	Hib, IPV, Pneumo Conj 7, DTaP	HepB	Flu	
<LastName>	<FirstName>	<MiddleName>	07/20/2003		HepB	Hib, DTaP, Flu, Pneumo Conj 7, IPV	
<LastName>	<FirstName>	<MiddleName>	11/24/2002		DTaP, Hib, Pneumo Conj 7		
<LastName>	<FirstName>	<MiddleName>	10/22/2002		MMR, DTaP, HepB	Flu	
<LastName>	<FirstName>	<MiddleName>	09/20/2002	MMR, Hib, Pneumo Conj 7, DTaP	IPV, Varivax, HepB	Flu	
<LastName>	<FirstName>	<MiddleName>	05/30/2003		HepB	Hib, DTaP, Flu, Pneumo Conj 7, IPV	
<LastName>	<FirstName>	<MiddleName>	03/18/2003	HepB		Flu	
<LastName>	<FirstName>	<MiddleName>	10/10/2003		HepB	Hib, DTaP, Pneumo Conj 7, IPV	
<LastName>	<FirstName>	<MiddleName>	07/19/2003	Hib, IPV, Pneumo Conj 7, DTaP, HepB		Flu	
<LastName>	<FirstName>	<MiddleName>	08/05/2002	MMR, Pneumo Conj 7	Varivax, Hib, IPV, DTaP	Flu	
<LastName>	<FirstName>	<MiddleName>	02/27/2003	HepB		Flu	
<LastName>	<FirstName>	<MiddleName>	06/05/2002	Pneumo Conj 7, HepB	Flu	MMR	
<LastName>	<FirstName>	<MiddleName>	06/05/2002	Pneumo Conj 7, HepB	Flu	MMR	
<LastName>	<FirstName>	<MiddleName>	06/25/2002	Varivax, MMR, Hib, IPV, Pneumo Conj 7, DTaP, HepB		Flu	
<LastName>	<FirstName>	<MiddleName>	06/11/2002	Pneumo Conj 7, HepB	IPV	Flu, MMR	
<LastName>	<FirstName>	<MiddleName>	09/18/2002	MMR, Hib, IPV, Pneumo Conj 7, DTaP, HepB	Varivax	Flu	
<LastName>	<FirstName>	<MiddleName>	08/17/2002		HepB	Flu, MMR	
<LastName>	<FirstName>	<MiddleName>	07/19/2003			Hib, DTaP, Flu, Pneumo Conj 7,	



Project Tasks (cont.)

◆ VFC

- Distribute IIS report to each provider (certified mail, secure transmission)
- Provide reminder cards for provider use
- Provide follow-up consultation as needed
- Conduct annual VFC coCASA-AFIX visit to monitor provider practices

◆ Provider

- Review list of children
- Initiate reminder/recall
- Immunize children appropriately
- Update IIS record

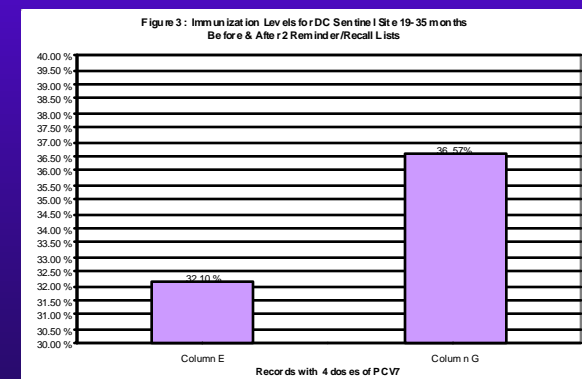
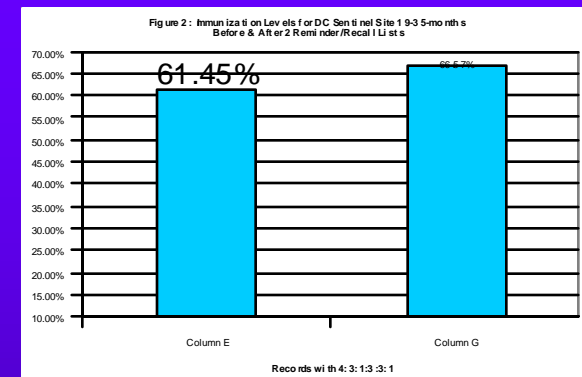


What
happened...



Results

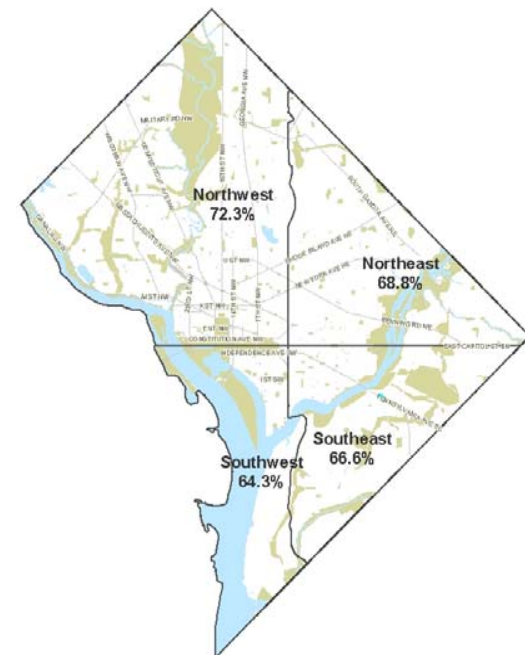
- ◆ Immunization rates increased in Southeast within 2 months for 19-35-month children
 - Overall 5% increase from 61.45% to 66.57%
 - 4th DTaP increased 5%
 - 4th PCV7 (not in overall measure) increased 4%
 - Most significant increases in recalled children who were overdue



Results (cont.)

- ◆ Immunization rates for children under 12 months remained unchanged
- ◆ Immunization rates in all parts of the city rose

Comparison of Immunization Levels after 2 Reminder/Recall Lists
Sentinel Site vs. Other Quadrants of Washington, DC





What we learned...



Lessons Learned

◆ Benefits

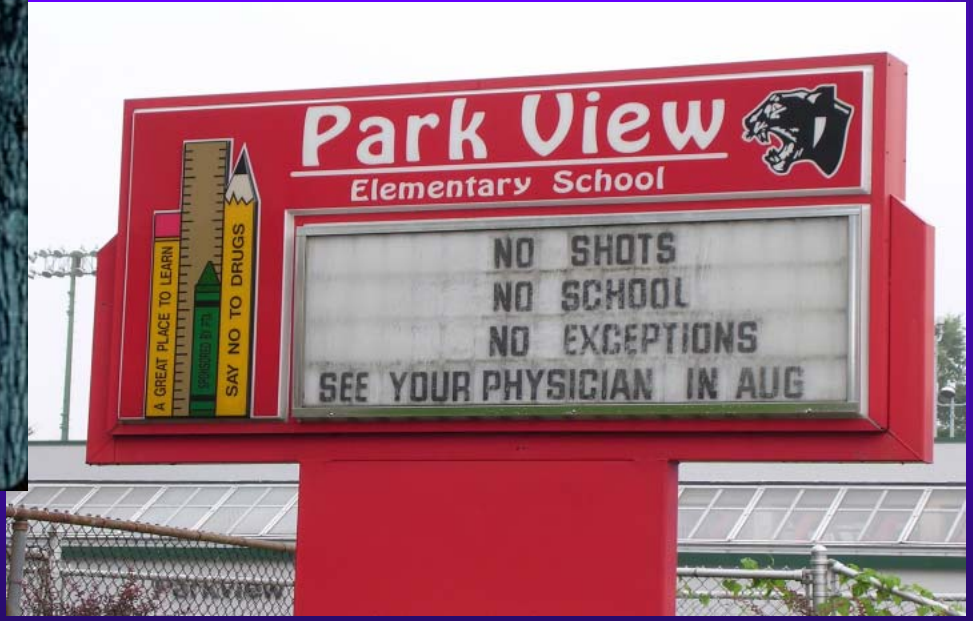
- IIS provided quick tool to identify children
- Provider contact with parent increased childhood immunization rates
- Enhanced relationships between IIS, VFC and Providers
- Focused attention on importance of immunization

◆ Challenges

- Burden on provider
 - Too many children identified for reminder/recall
 - Not enough staff time
 - Difficulty reaching some patients



*Thank
you!*





Contacts

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◆ IIS

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