# An Observational Study

The Value of the State Immunization Registry towards Improving Vaccination Rates and Quality of Care in Retail Pharmacies



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Photo online from: http://www.bartelldrugs.com

### Overview

- Introduction
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- Findings
  - o In store observations
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- Conclusions and Future directions



# Bartell Drugs

- Bartell's is a regional chain of 64 stores serving the greater Seattle/King County area in WA.
- Immunizations provided:
  - o Flu
  - o Hepatitis A, B
  - o Meningitis
  - o Shingles
  - Tetanus, diphtheria, and pertussis
  - o Pneumococcal
  - o HPV
  - o Chicken Pox
  - o MMR
  - Travel vaccinations:
     (polio, JE, Rabies, Typhoid, YF)



# The Challenges

Vaccination Rates

- Pharmacists role in vaccinations is increasing.
- Evidence shows that pharmacists can have a real impact on vaccination coverage rates and not just for flu.

Quality of Care • Evidence shows that retail-based vaccinators provide a niche to increase easy access to care, a known barrier to receiving vaccinations.

Registry Data Quality • Registry information is most valuable to providers when correct and complete... if pharmacists aren't using the registry to report vaccinations, then gaps in data result.





# Objectives

- Determine whether giving pharmacists access to the registry helps provide:
  - o More informed care
  - o Increase vaccinations given
  - o Improve overall quality of care
- Determine how using the registry will fit into pharmacy work flows.

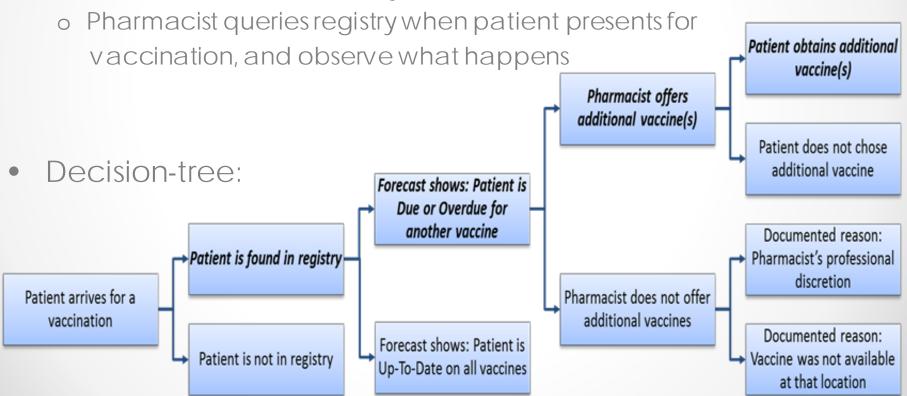


# Study Overview

#### A pilot observational study

- o 5 pharmacy stores participated
- o December 2013 February 2014

"These studies always remind me of an ant colony I had as a kid!"



# Pre-Study Survey

Time is the #1 main barrier to providing immunizations.

Answer Options	1 (highest)	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	6 (lowest)	Rating Average
Need for additional training as far as administration of vaccines	0	0	1	2	4	1	4.63
It's challenging to find time in my day	5	1	1	0	1	0	1.88
Need for additional knowledge around ACIP and CDC immunization guidelines	1	3	0	3	1	0	3.00
Insurance and/or billing issues	2	2	2	2	0	0	2.50
Lack of complete and easily accessible immunization histories	0	2	4	1	1	0	3.13
Other (optional)	0	0	0	0	1	7	5.88

### Observations - Patients

Ages ranged 5 to 85 years.

63% Female, 36% Male

#### Insurance

- 90.5% insured (partial or full coverage)
- 9.5% paid full price (\$35 for a flu shot)

63 patients

#### Race

- •79.4% White
- •9.5% Asian
- •1.6% Afr. Am.
- •1.6% Hispanic
- •7.9% Unknown





## Observations - Vaccinations

#### **Immunizations People Came In For:**

<b>65%</b>
11%
7%
3%
1%

Manual Look up - Time Spent Searching the Registry for a Patient

60.4% < 1 Min 17.5% < 2 Min



**78%** Patients
Searched were found

3% were up to date

~10% of those asked after "Forecast" opted for additional vaccinations

### Increased Satisfaction

How does access to increased patient information through the IIS change your job satisfaction as a patient care provider?

Answer Options	Response Percent		
Slightly satisfying	20.0%		
Moderately to Very satisfying	80.0%		

How likely are you to recommend using the IIS to a colleague or pharmacy student you are precepting?

Answer Options	Response Percent
Moderately likely	20.0%
Verylikely	80.0%

### Conclusions

- Average of 10+ years experience, but only 37.5% had ever used the registry before
- Patients were receptive to immunization advice from pharmacists
- Pharmacists expressed need for more complete registry records and the desire to participate by reporting their vaccinations to the registry.





### Conclusions

- Pharmacists don't innately know what to do with the forecast
  - Training should incorporate entering vaccinations given AND how to approach their patients and advise them

"The registry is a valuable tool for pharmacists, but it would have to be incorporated into workflow better (i.e. integrated into the pharmacy software) in order to be feasible for all vaccine encounters" -- pharmacist survey comment





# Looking Forward

Pharmacies present one of the best opportunities for increasing registry participation and improving adult immunization rates.

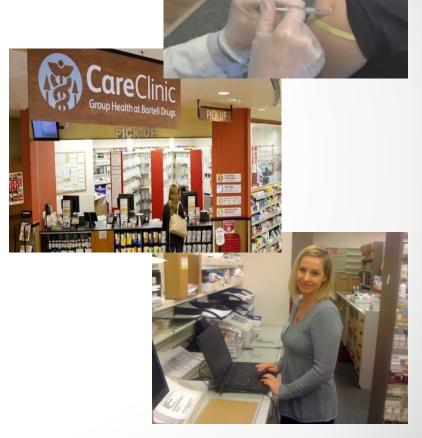
#### **Pharmacies**

- State IIS should proactively empower as many pharmacists and pharmacies in their states to:
  - o Create bidirectional exchanges
  - o Incorporate decision support for value add
  - o Provide Immunization education
- Measure the impact



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