Community Pharmacy: Identifying and Overcoming Barriers to Vaccinations

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Disclosures

- We have no financial interests or relationships to disclose
- Current employees at Ralphs Pharmacy

Objectives

- Identify factors affecting vaccine hesitancy
- Describe barriers to immunizations in a community pharmacy setting
- Describe strategies to improve immunization rates in a community pharmacy

Vaccine Hesitancy

Vaccine hesitancy refers to a delay in acceptance or refusal of vaccination despite availability of vaccination services.

Issues with Definition

- "Vaccine hesitancy" is represented as a behavior, even though it is a psychological state
- "Hesitancy" is applied to non-vaccination broadly, when in fact some non-vaccinators are forthright in their refusal, and may never have been hesitant

Factors that Influence Vaccine Hesitancy

- Contextual influences
- Individual/group influences
- Vaccine specific concerns

Contextual Influences

- Communication and media
 environment
 - Influential leaders,
 immunization program
 gatekeepers and anti- or
 pro-vaccination lobbies
 - Historical influences

- Religion/culture/gender/ socio-economic
- Politics/policies
- Geographic barriers
- Perception of the pharmaceutical industry

Anti-Vaccine Movements

- DPT: Vaccine Roulette
- Lancet article by Dr. Wakefield (now RETRACTED)
- Jenny McCarthy Generation Rescue
- VAXXED: From Cover-up to Catastrophe

Celebrity Anti-Vaxxers



Donald J. Trump 📀 @realDonaldTrump



Healthy young child goes to doctor, gets pumped with massive shot of many vaccines, doesn't feel good and changes -AUTISM. Many such cases!

5:35 AM - 28 Mar 2014

13,225 Retweets 11,635 Likes

👷 🕗 🌑 🚯 🖨 🎲 🎒 🗶 🍏



Donald J. Trump 📀 @realDonaldTrump

Follow

I am being proven right about massive vaccinations-the doctors lied. Save our children & their future.

6:30 AM - 3 Sep 2014

1,410 Retweets 1,335 Likes

👜 🚱 🚱 🚇 👤



California Gov says yes to poisoning more children with mercury and aluminum in manditory vaccines. This corporate fascist must be stopped.

6:03 PM - 30 Jun 2015

4,201 Retweets 5,570 Likes





Follow

Sharing Strategies on Avoiding Vaccinations on Social Media

OD 3

O 1

I like the way you think!! I will lie, cheat, and anything for my children's health or my own. I will protect my own, I will protect my house, I will protect myself, with what ever it takes!!

Like · Reply · Sunday, 4 February 2018 at 04:00 (4w)

Great minds think alike lol 😏 I have my "proof" I got it. Why they never faxed my results is not my issue a lol I honestly hope they try to fire me or let me go because with my lawyer I wont have to work for a very long time if they want to take that route. I'll get a nice paycheck

Like · Reply · Sunday, 4 February 2018 at 04:06 (4w)

Not going to poison my body for a job! Like - Reply - Sunday, 4 February 2018 at 04:06 (4w)

They wanted me to get the flu shot so I went to cvs, paid for it and left. That was my proof I "got my flu shot" lol 21 Like · Reply · Monday, 26 February 2018 at 16:14 (1d) i love this!! go you! 😂 👝 🛉 Like - Reply - Tuesday, 27 February 2018 at 05:21 (21h) 25 October 2017 Where are all the health care professionals? Who's masking this "flu season"??? I am!!! 😁 no 🥒 for this RN n' Like Comment 157 I do neither. They can't make me disclose my vaccination status to my patients. I let them know they dont want the lawsuit involved with breaching my privacy. I don't get a shot or a mask. RN also.



Individual/Group Influences

- Personal, family and/or community members' experience with vaccination, including pain
- Beliefs, attitudes about health and prevention
- Knowledge/awareness
- Health system and providers trust and personal experience
- Risk/benefit (perceived, heuristic)
- Immunization as a social norm vs. not needed/harmful

Vaccine Specific Concerns

- Risk/benefit (epidemiological and scientific evidence)
- Introduction of a new vaccine or new formulation or a new recommendation for an existing vaccine
- Mode of administration
- Mode of delivery (e.g., routine program or mass vaccination campaign)

- Reliability and/or source of supply of vaccine and/or vaccination equipment
- Vaccination schedule
- Costs
- The strength of the recommendation and/or knowledge base and/or attitude of healthcare professionals

Which factor do you see most often?

- a. Contextual influences
- b. Individual/group influences
- c. Vaccine specific concerns
- d. Other

Missed Opportunities

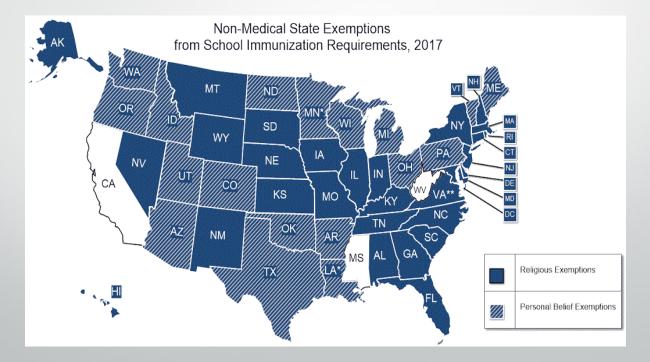
- Inability to screen patients for vaccination eligibility
- Perceived contraindications to vaccination
- Inconvenient clinic hours
- Parental or community resistance to immunizations

No single best practice intervention to address hesitancy in all its contexts

Increasing Vaccine Uptake

- Law
- School
- Physician offices
 - The practice of dismissing families from pediatric practices who refuse to vaccinate is common, although widely criticized.
- Technology (text messaging, social media, etc)

States with Vaccine Exemptions



Example

CK is a 12 year old white male, whose family belief is Christian Science. Christian Science does not believe vaccinations or medicine are effective in healing

> Due to school requirements, his mother brought him into our pharmacy to vaccinate him and is now about to complete his catch-up series

Increasing Vaccine Uptake

- Engagement of religious or other influential leaders to promote vaccination in the community
- Improving convenience and access to vaccination
- Communication training for employees to increase knowledge and awareness about vaccines

Communication Strategy

• Participatory Vs. Presumptive

Participatory:

"Do you want to vaccinate your child today?"

Presumptive:

"Today your child is due for 2 vaccines.
 We will be giving MMR and Varicella."

Communication Strategy

Corroborate

• Acknowledge the parents' concern and find some point on which you can agree. Set the tone for a respectful, successful talk.

About Me

• Describe what you have done to build your knowledge base and expertise.

• Science

- Describe what the science says
- Explain/Advise
 - Give your advice based on the science

Increasing Access to Vaccinations

- The average percentage of people receiving influenza immunizations in states was 35.1%, rising from 32.2% in 2003 to 40.3% in 2013.
 - Edward M. Drozd, Laura Miller, Michael Johnsrud, Impact of Pharmacist Immunization Authority on Seasonal Influenza Immunization Rates Across States, Clinical Therapeutics, Volume 39, Issue 8,2017.
- School nurses positively influenced immunization rates, the accuracy of student health records, and management of student health concerns.
 - Baisch MJ, Lundeen SP, Murphy MK. Evidence-based research on the value of school nurses in an urban school system. J Sch Health. 2011;81(2):74-80.

Barriers in Community Pharmacy

No time!

- Co-Pays
- Pharmacy personnel training
- Documentation and follow-up
- Lack of access to patient specific information
 - "Let me ask my doctor first..."

Strategies at Ralphs

- Appointment-Based Model (MedSync)
- Medication Therapy Management Platforms
 - OutcomesMTM©
 - Mirixa©
- System-based notifications and

monitoring

 (ex. Clinical Queue, patient notes, Reportal, etc)

- Educating pharmacy personnel on vaccine updates
- Biometric Screenings & Vaccinations Clinics
- Friendly Store vs Store Competitions

Appointment-Based Model

- Allows patients to pick up all prescriptions on one specified day
- Requires routine follow-up calls to confirm prescriptions
 - Built-In patient encounters allows pharmacists to screen for immunizations, drug-drug interactions, and identify need for other clinical services



Medication Therapy Management Platforms

- OutcomesMTM© and Mirixa©
- Patients are identified for comprehensive medication reviews and medication therapy management
 - Pharmacists are trained to screen for vaccinations during this encounter

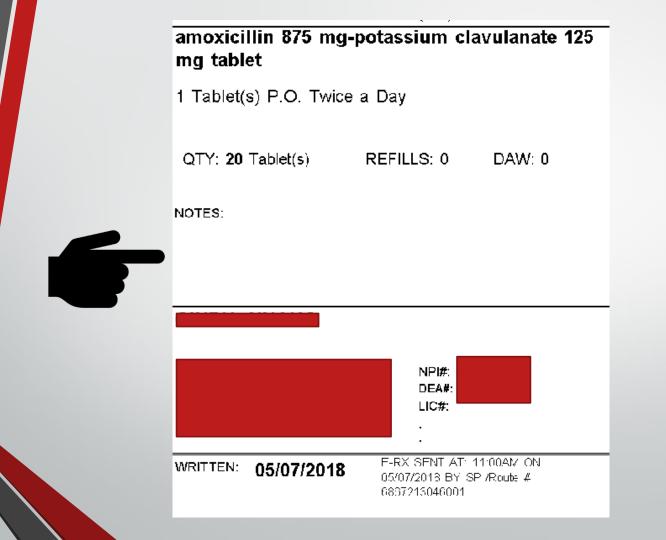
System-based Notifications and Monitoring

- Pharmacy software system allows pharmacy staff to schedule follow-up vaccinations in the "Clinical Queue"
 - Pharmacists are trained to check this queue on a daily basis to work on clinical tasks not identified through the traditional dispensing process
- Patient Note Functionality
 - Ability to create an alert that appears in every aspect of work flow
- Visual Icon Notification
 - Pharmacy personnel trained to request pharmacist consultation for all patients with this icon



This icon will always appear next to the patient's name in all queues until the clinical intervention is completed.

	Patient Last, First: 🗾 Expiry Date: 🗾 Follow Up Date From						
Clinical Type: ALL 💌 Plan: ALL 💌 Reason:SELECT 💌 Action:SELECT 💌 I							
	Follow-Up Date	Patient Name	Plan Name	TIP Title	Reason 🔺		
	05/04/2018		FOLLOW-UP		Immunization Needed		
	05/06/2018		FOLLOW-UP		Immunization Needed		
	10/06/2018		FOLLOW-UP		Immunization Needed		
	05/06/2018		FOLLOW-UP		Immunization Needed		
	10/06/2018		FOLLOW-UP		Immunization Needed		
	05/20/2018		FOLLOW-UP		Immunization Needed		
	05/21/2018		FOLLOW-UP		Immunization Needed		
	05/21/2018		FOLLOW-UP		Immunization Needed		
	05/21/2018		FOLLOW-UP		Immunization Needed		
	05/22/2018		FOLLOW-UP		Immunization Needed		
	05/23/2018		FOLLOW-UP		Immunization Needed		
	05/23/2018		FOLLOW-UP		Immunization Needed		
	05/23/2018		FOLLOW-UP		Immunization Needed		
	05/23/2018		FOLLOW-UP		Immunization Needed		
	05/24/2018		FOLLOW-UP		Immunization Needed		
	05/24/2018		FOLLOW-UP		Immunization Needed		
	05/26/2018		FOLLOW-UP		Immunization Needed		
	05/27/2018		FOLLOW-UP		Immunization Needed		
	05/28/2018		FOLLOW-UP		Immunization Needed		



Can a patient pay for the vaccine and skip the administration?

Screen Patients for Vaccinations

Recommend Vaccination

Patient Completes Vaccine Consent Form

> Process Vaccinations and Collect Copay

Provide Pharmacist with Receipt for Administration

Educating Pharmacy Personnel

- Technicians play an instrumental part in screening patients for vaccines
- Eases work-flow as the technician can identify patients and process all vaccinations prior to administration
- Ralphs Internal Daily Bulletin:
 - Contains important updates or brief educational material



Date:February 6, 2018To:All Pharmacy Managers and StaffFrom:Lord Sarino, Clinical Pharmacy Sales Manager

Subject: Shingrix Clinical Guidance



All Pharmacies should now have ample supply of Shingrix and be actively recommending this vaccine to all patients 50 years old and older. For those who have not yet read the published guidance on using this vaccine from ACIP, the Morbidity and Mortality Weekly Report (MMWR) can be found HERE.

REMINDERS

- o Shingrix and its diluent must be REFRIGERATED, not frozen
- o Administer Shingrix intramuscularly, not subcutaneously
- Remember to create a clinical intervention to remind patients of the required second dose 2 6 months after the initial dose
- o There is now guidance on the spacing between Zostavax and Shingrix
 - ✓ Patients previously vaccinated with Zostavax may receive Shingrix 8 WEEKS after their Zostavax dose
 - ✓ The zoster section of the Immunization Protocol has been amended to reflect this guidance

Biometric Screenings and Vaccination Clinics

- Employees are incentivized to complete biometric screenings for HRA benefits
 - Body fat, BMI, BP, cholesterol panel, blood glucose
 - Pharmacists use this encounter to promote wellness and vaccinations
- Vaccination Clinics
 - Many Ralphs Pharmacies have contracted with various companies for offsite vaccinations clinics

Friendly Competitions

"Flu-perbowl" Contest

Category	Description	
	Highest % increase in total flu and non-flu vaccines	
"Flu"per Bowl Champion	compared to last year	
	(All stores with an increase of 10% or more will be considered)	
District Champion	Highest number of flu and non-flu points combined	
District Champion	(One Pharmacy Per District – 4 Champions total)	
Fluper Bowl MVP	Highest number of Zostavax points total	

• Shingrix Contest

Category	Description	Additional Information
Shingrix District Champion	Highest % of immunized Pharmacy population ≥ 50 yo (All stores with at least 5% of their base population immunized will be considered)	 All Pharmacies' base eligible population identified 2018 YTD (3/19/18) All Shingrix doses given pre-contest publication are included and counted for the contest Contest will run until end of P5 BONUS: Each 2 (two) Tdap and/or Hep B dose provided from P2W4 to end of P5 will be equal to an additional Shingrix dose IE: if a Pharmacy provides 3 Tdap and 5 Adacel from P2W4 – P5, they will receive credit for 4 additional Shingrix (((3+5)/2) = 4 additional)

Ralphs Vaccination Count (Feb 4th - Apr 28th)

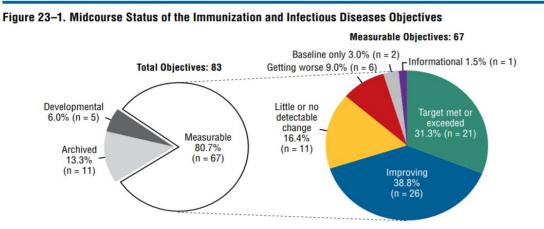
Division

- 4479 NON-FLU vaccinations administered
 - 2277 Shingrix administered
- Seal Beach
 - 167 NON-FLU vaccinations administered
 - 112 Shingrix administered

Healthy People 2020

- Goal: Increase immunization rates and reduce preventable infectious diseases.
- State/county and disparity level data for objectives available at healthypeople.gov

Status of Objectives



How do you currently combat vaccine hesitancy?

If Google Was a Person....





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Liked by randyhuonearthareyou, kevin_the_refugee and 28 others

__nancy.dao Time for a check up and vaccines! #shotsshotsshots



References

- Edward M. Drozd, Laura Miller, Michael Johnsrud, Impact of Pharmacist Immunization Authority on Seasonal Influenza Immunization Rates Across States, Clinical Therapeutics, Volume 39, Issue 8, 2017.
- Baisch MJ, Lundeen SP, Murphy MK. Evidence-based research on the value of school nurses in an urban school system. J Sch Health. 2011;81(2):74-80.
- Macdonald NE. Vaccine hesitancy: Definition, scope and determinants. Vaccine. 2015;33(34):4161-4.
- <u>https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/Pages/vaccine-hesitant-parents.aspx</u>
- https://www.thinkingmomsrevolution.com/vaccine-roulette-vaxxed-importance-documentaries
- <u>https://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases</u>
- https://www.boredpanda.com/anti-vaxxers-lie-mandatory-work-flu-vaccination/

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