

Improving HCP vaccination rates in long-term care: The Vaccination Initiative for Nursing Assistants and Aides (VINAA)

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May 10, 2016

Disclosures

- The findings described reflect research conducted independently by Ofstead & Associates, Inc. and the Immunization Action Coalition unless otherwise stated
- This study was supported by a partnership grant from Pfizer Inc. to the Immunization Action Coalition
- Pfizer Inc. did not have access to study data or participate in the development of this presentation

Research team and acknowledgements

- Co-Principal Investigators
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- Research team
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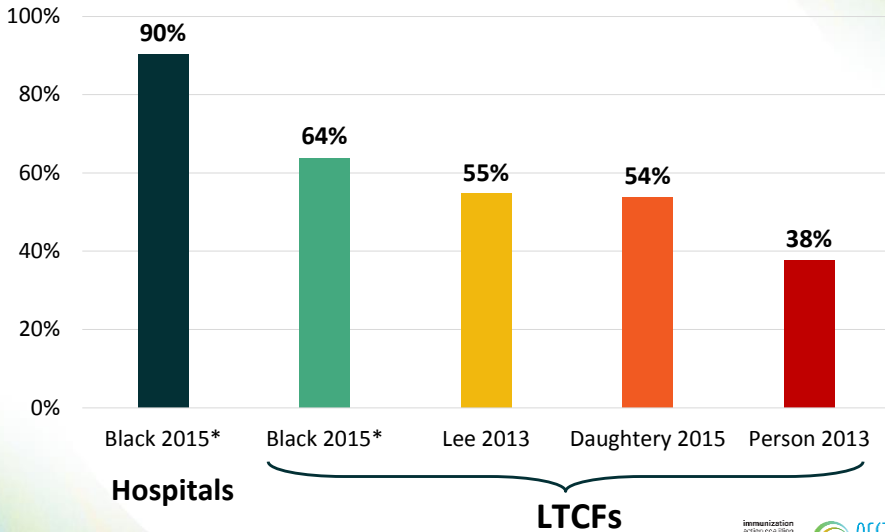
VINAA Study Goals and Activities

- Goals
 - Prevent influenza and pneumonia in LTCFs
 - Increase understanding of vaccine decision-making among HCPs
 - Improve vaccination rates among nursing staff (RNs, LPNs, CNAs)
- Activities
 - Baseline assessments (surveys, interviews, administrative data)
 - Development and implementation of customized interventions
 - Outcomes evaluation



HCP influenza vaccination rates nationally

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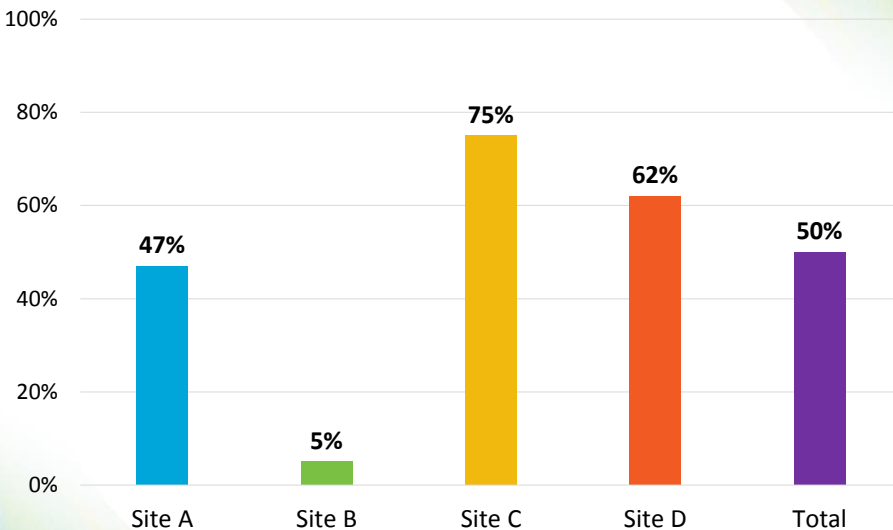
*CDC national internet panel survey

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Baseline nursing staff vaccination rates in study sites

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Study site characteristics

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Site	Location	Beds	Census*	Nursing staff*	Annual turnover	CMS quality rating*
Site A	WI	133	80	75	85%	★★★★★
Site B	IN	183	100	85	105%	★★★★★
Site C	IL	210	187	100	141%	★★★★★
Site D	MN	268	260	258	25%	★★★★★

*As of administrative data collection on March 31, 2014



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Nursing staff demographics at study sites

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Survey respondent demographics (%)		Overall
Role	CNA/RNA	65%
	LPN	18%
	RN	15%
Race	Caucasian	23%
	African American	48%
	Other	30%
Family members	Children (<14)	54%
	Elders (>64)	12%
Have health insurance		80%



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Nursing staff knowledge and beliefs about vaccine in study sites

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- 31% never heard of pneumococcal vaccine (“pneumonia shot”)
 - 41% CNAs
 - 12% LPNs
 - 8% RNs
- Among unvaccinated HCPs:
 - 59% believe vaccines can cause influenza
 - 55% believe vaccines can cause serious side effects



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Challenges found in study sites

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- Lower than expected resident vaccination rates
- Low HCP vaccination rates (50%)
- Low vaccination rates among HCP’s family members (31%)
- Outbreaks of respiratory illness
 - Closed units and facilities
 - Increased staff workload
 - Expensive to contain and treat
 - Hospitalized staff
- High absenteeism due to respiratory illness (31%)



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Significant gaps in vaccination programs at study sites

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- No formal programs, goals, or policies for HCP vaccination
- Lack of educational programs
- Misconceptions about influenza and vaccination
- Resistance from vaccine-reluctant or anti-vaccination managers
- Inadequate record-keeping and tracking
- High turnover among managers and nursing staff
- Severe resource limitations



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Study interventions implemented

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- Management engagement
- Assistance with goal-setting and policy development
- Support for policy implementation
 - Informed declination
 - Vaccination as a condition of hire
 - “Vax or mask”
- Improved documentation and tracking
- Educational programs customized for long-term care
- Incentives and staff engagement
- Multiple vaccination opportunities
- Accountability and feedback



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Example of worksheets for managers: Goal setting and policy development

Goal-setting

- Vaccination rates will be tracked for (select one):
 - Nursing staff only
 - All staff (including housekeeping, dietary, administration, etc.)
- Vaccination rate goals:
 - 75% after mass vaccination kick-off event in mid-October
 - 95% by October 31st
 - 95% by December 10th
 - 95% for the influenza season overall (including anyone working in the facility Oct. – Mar.)

Policy implementation

Staff vaccination policy

- Annual influenza vaccination offered free to all staff at work and (select one):
 - Strongly encouraged by management
 - Required unless a declination form is signed
 - Required as a condition of employment
- Accepted reasons (select all that apply)
 - Personal reasons
 - Religious objection

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Example of worksheets for managers: Goal setting and policy development

Goal-setting

- Vaccination rates will be tracked for (select one):
 - Nursing staff only
 - All staff (including housekeeping, dietary, administration, etc.)
- Vaccination rate goals:
 - 10% after mass vaccination kick-off event in mid-October *October 15th - Department Heads*
 - 30% by October 31st *October 16th 10-4 pm*
 - 50% by December 10th
 - 75% for the influenza season overall (including anyone working in the facility Oct. – Mar.)

Policy implementation

Staff vaccination policy

- Annual influenza vaccination offered free to all staff at work and (select one):
 - Strongly encouraged by management
 - Required unless a declination form is signed
 - Required as a condition of employment
- Accepted reasons (select all that apply)
 - Personal reasons
 - Religious objection
 - Medical contraindication

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Example of tracking mechanisms: Vaccination roster

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Hire Date (mo/day/yr)	Employee ID Number	Last Name	First name	Age	Department	Role	Termination Date (mo/day/yr)

Vaccination status (Accepted/Declined)	Documented Vaccination			Location	Date of vaccination (mo/day/yr)	Vaccinator (on-site only)
	Onsite	Offsite	Proof of off-site vaccination (Y/N)			



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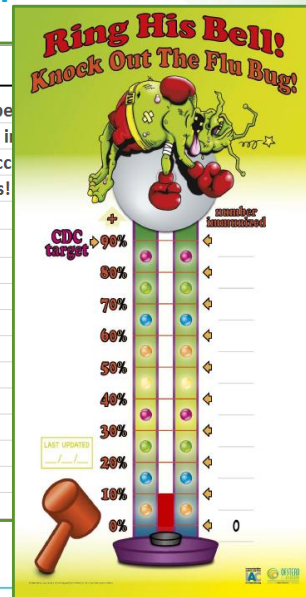
Example of tracking mechanisms: Vaccination gauge and rate calculator

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How to use the vaccination rate gauge

- Step 1. Enter the total number of staff at your facility in the yellow box below.
- Step 2. Excel will calculate how many staff members correspond to each increment.
- Step 3. Use these numbers to fill in the corresponding blanks on your vaccination gauge.
- Step 4. Update your vaccination gauge regularly and watch your progress!

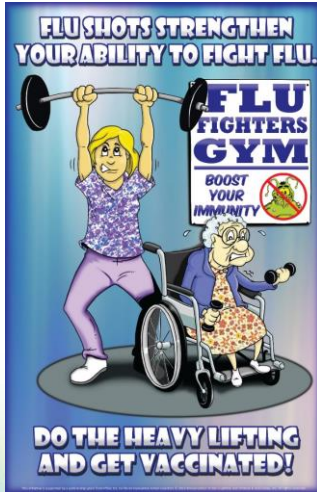
Number of staff:	
10%	
20%	
30%	
40%	
50%	
60%	
70%	
80%	
90%	
100%	



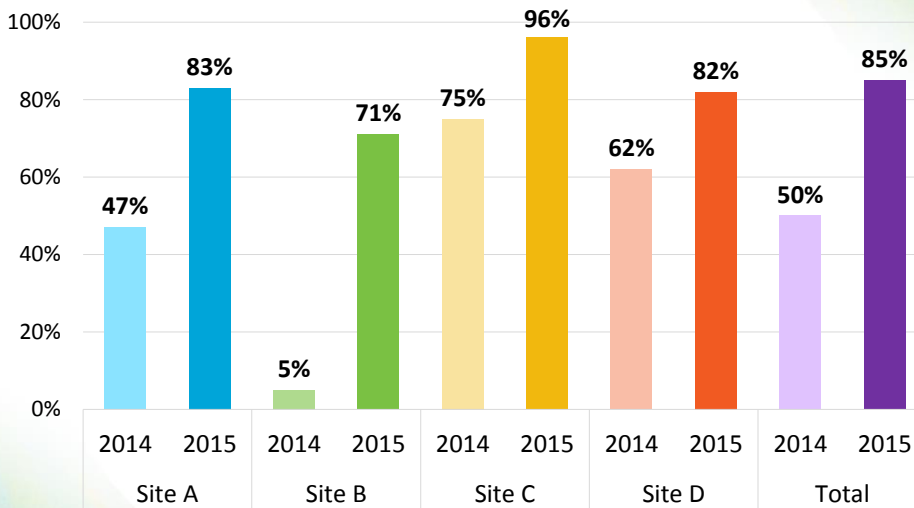
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Examples:

Educational posters with customized imagery for LTCFs

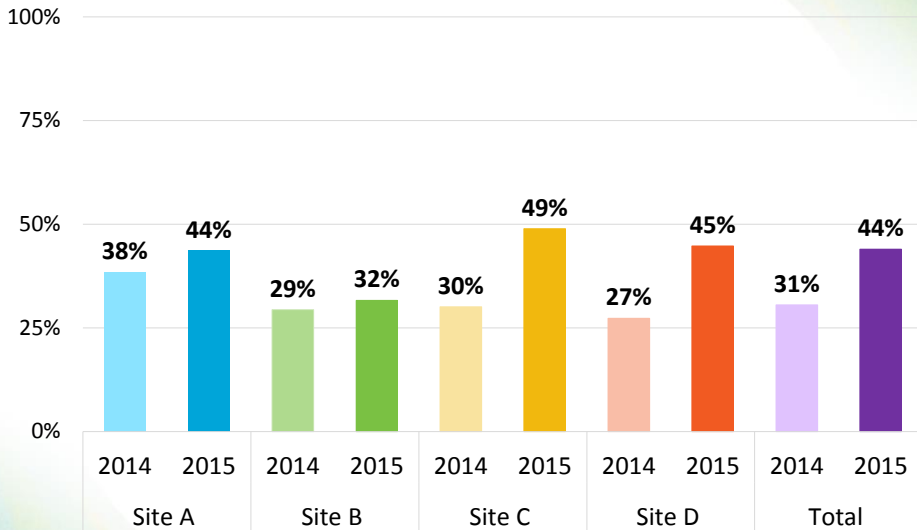


Nursing staff vaccination rates increased ($p < .01$)



Family member vaccination increased ($p < .01$)

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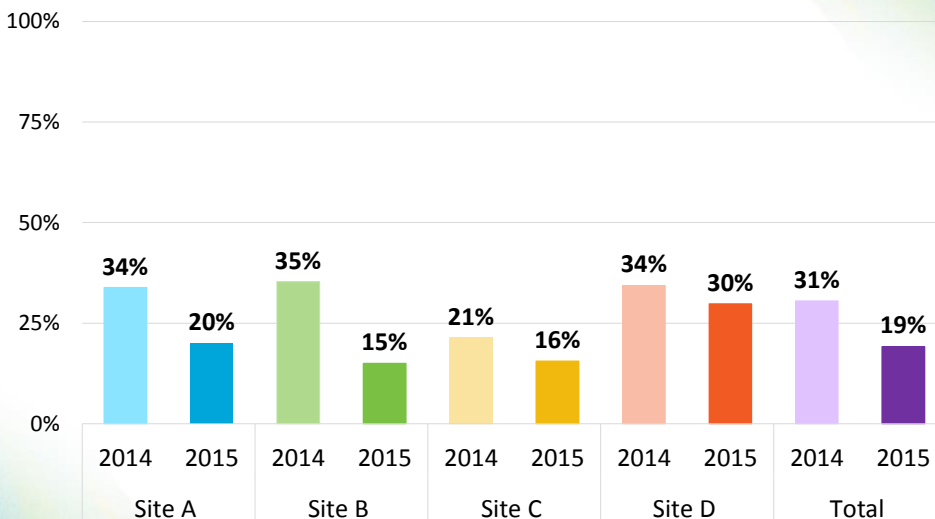
Data from 2014 survey, $n = 347$; 2015 survey, $n = 323$



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Absenteeism due to respiratory illness decreased ($p < .01$)

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Data from 2014 survey; $n = 347$; 2015 survey; $n = 323$



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Key insights from the VINAA Study

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- We can “move the needle” on HCP vaccination in LTCFs
- Vaccination program reduced absenteeism
- Policies, goals, and management engagement are critical
- Continued challenges include:
 - Limited resources
 - Competing priorities
 - Staff turnover
 - Entrenched misconceptions about vaccines
- Public policy and upstream interventions are needed



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