Challenges, Solutions, and Opportunities in Implementing Adult Immunization Interventions in Community Health Centers: A State-Level Approach

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**Methods**

- **Summary**
  - The VFA program has garnered eager interest among FQHCs and has increased access to vaccines for underserved populations
  - Despite this interest, uptake of adult vaccines in VFA clinics remains lower than expected
  - There are infrastructure barriers that need to be addressed in order to increase and routinize administration of adult immunizations
  - Most prominent barriers include: lack of provider and staff engagement, absence of workflows, and inadequate vaccine purchase and administration cost reimbursement
  - Most promising facilitators include: increasing engagement and education of provider and staff in VFA and consortium clinics through targeted trainings (in consortium) or implementation of a targeted intervention (VFA clinics)
  - There is an overlap of barriers and best practices/facilitators identified from both the VFA Key Informant Interviews and the CHC survey

- **Barriers**
  - Inadequate or late reimbursement
  - Immunization only visits without a qualified provider (Physician, Nurse Practitioner, Physician Assistant) are not billable
  - Few required adult immunizations measures
  - Identification of capitation changes (such as Medi-Cal Managed Care Plans, MCPs) work for capitation based payments (such as Medi-Cal Managed Care Plans, MCPs)

- **Solutions**
  - Encourage exploration of group purchasing options for adult vaccines to lower costs
  - Agreement with Independent Practice Association has incentives to improve adult immunization coverage rates
  - Few required adult immunizations measures
  - Advocate for the inclusion of adult immunization measures and related incentive payments

- **Results/CHC Survey**
  - Vaccine purchase and administration cost
  - Difficulty finding time or leadership to fully implement standing order protocols
  - Lack of continuing education on adult immunizations for providers
  - Limited staff to enter immunization data and check for immunization status of patient
  - Difficulty setting up data exchange with EHR and California Immunization Registry

- **Facilitators**
  - Patient registry and panel management
  - Utilization of EHR clinical decision guidelines
  - Routine screening of immunization at every appointment
  - Implementation standing orders
  - Chart "scrubs" or reviews and morning huddles (quick morning meetings) to strategize preventive health steps to be taken with each patient being seen that day

- **Next Steps**
  - The VFA program continues to support VFA sites in the program in addition to clinic-level interaction
  - Implement a focused campaign to improve vaccination coverage rates – vaccine specific, age and/or condition-based.
  - Continue collaboration between pilot clinic and CDPH staff to improve data exchange between EHR and Immunization Registry
  - Provide training to clinic staff on conducting care team huddles to identify immunization gaps

- **Acknowledgments**
  - This project was supported by Grant #1H23IP00997-01 from the Centers for Disease Control and Prevention (CDC).

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**Background**

- **Adult vaccine coverage rates in California, despite yearly increases, remain low**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pneumococcal LL6 64 yrs, high risk</th>
<th>Zoster</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>48%</td>
<td>83%</td>
</tr>
<tr>
<td>2014</td>
<td>50%</td>
<td>84%</td>
</tr>
<tr>
<td>2015</td>
<td>51%</td>
<td>84%</td>
</tr>
</tbody>
</table>

- The programs and work described are components of a grant awarded to the California Department of Public Health by the Centers for Disease Control and Prevention (CDC) to implement standards in a variety of settings.

**Objectives**

- **Vaccines for Adults (VFA) Program**
  - A Federally funded state-wide program in California intended to:
    - Expand access to routinely recommended adult immunizations to uninsured and underinsured adults using section 317 funding
    - Implement the standards for immunization practice into routine clinical care
    - Facilitate immunization practice within CHC organizations
  - Eligible sites were FQHCs and RHs that participate in the existing California Vaccines for Children (VFC) Program, to ensure:
    - Existence of infrastructure for vaccine ordering, stocking, handling, and documentation
    - Presence of staff that are trained in vaccine management and administration
    - Adequate targeting of eligible population of uninsured or underinsured adults

  **Regional Consortium of Community Health Centers (CHC)**
  - A project intended to:
    - Gain insight into barriers and successes in implementing adult immunization standards within CHCs
    - Support efforts to identify barriers to immunizing adults and documenting doses into the immunization registry and use quality improvement initiatives to test interventions that strengthen immunization practices in the adult population
    - Share lessons learned with all clinics in the consortium and other regional partners

  Grant awarded to a regional consortium that represents 10 CHC member organizations with 59 clinical sites in the San Joaquin region.
  - These clinical sites serve >175,000 patients (2015); two-thirds of these patients had incomes below 200% of the federal poverty level
  - 3 clinical sites chosen to pilot interventions

**Results/ VFA Key Informant Interviews**

- **Assess/Recommend/Administer/Document Adult Immunizations**
  - Structured interviews undertaken to discern best practices to share and better understand barriers to vaccine uptake
  - 36 RHQ sites were invited to participate based on parameters such as: geographic location, urban-rural designation, patient population size, VFA vaccine administration data

  **Barriers**
  - Lack of knowledge of adult immunization schedules and standards; adult immunizations perceived as low importance
  - Confusion where vaccine label is different from ACP recommendation
  - No established workflow; vaccine order needs to be placed by a clinician

  **Solutions**
  - Immunization champion role not well understood
  - Strong provider recommendation
  - Implementation of standing orders
  - Use of EHR – clinical decision guidelines/health maintenance forms, computer provider order entry (CPOE)

**Reimbursement and Vaccine Price**

- **Barrier**
  - Inadequate or late reimbursement
  - Immunization only visits without a qualified provider (Physician, Nurse Practitioner, Physician Assistant) are not billable

- **Facilitator**
  - One Medi-Cal Managed Care Plan (MCP) reimburses for immunization-only visit

- **Solution**
  - Identify mechanisms for determining set of core services that are included in MCP-provider agreements and advocate for the inclusion of adult immunizations
  - Encourage exploration of group purchasing options for adult vaccines to lower costs

**Clinical Quality - Requirements and Incentives**

- **Barrier**
  - Inadequate or late reimbursement

- **Facilitator**
  - Agreement with Independent Practice Association has incentives to improve adult immunization coverage rates

- **Solution**
  - Advocate for the inclusion of adult immunization measures and related incentive payments

**Results/CHC Survey**

- **Barrier**
  - Lack of knowledge of adult immunization schedules and standards; adult immunizations perceived as low importance

- **Facilitator**
  - Agreement with Independent Practice Association has incentives to improve adult immunization coverage rates

- **Solution**
  - Advocate for the inclusion of adult immunization measures and related incentive payments

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**Summary**

- **VFA Key Informant Interviews and the CHC Survey:**
  - Low sample sizes
  - Lack of external validity
  - Findings may not be fully transferable to other clinics (non-FQHC)

- **The CHC survey respondents were mostly Medical Directors; clinical staff may have more detailed knowledge of clinic-specific practices related to adult immunizations

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**Limitations**

- **VFA Program**
  - Continue to assess and support existing VFA locations
  - Expand program to additional sites within parent organizations that have VFA-enrolled sites

  - Engage the clinical and executive leadership of the FQHCs enrolled in the program in addition to clinic-level interaction

  - Implement a focused campaign to improve vaccination coverage rates – vaccine specific, age and/or condition-based.

- **Regional Consortium of CHCs**
  - Work with 3 pilot clinic sites within the consortium to:
    - Implement a standardized workflow that includes adult immunization with a focus on Tdap vaccine for pregnant women and Zoster vaccine for adult >65 years of age
    - More fully utilize Medical Assistants to be proactive in initial assessments of patient immunization gaps and report to provider
    - Routinely share immunization data with staff to drive improvement in coverage rates
    - Continue collaboration between pilot clinic and CDPH staff to improve data exchange between EHR and Immunization Registry
    - Provide training to clinic staff on conducting care team huddles to identify immunization gaps

- **All FQHCs and CHCs**
  - Dissemination of best practices to increase adult immunization coverage rates and decrease disparities
  - Continuous work with CDPH to improve data exchange to enhance data quality in the California Immunization Registry

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**Next Steps**

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