Final Recommendations to Increase Access to Childhood Vaccines Across Colorado

Submitted by the Senate Bill 13-222 Task Force to the Colorado Department of Public Health and Environment

June 3, 2014
I. Overall Goal of Senate Bill (SB) 222 Task Force:
Improve access to childhood vaccines by leveraging public/private partnerships to provide affordable, sustainable, and geographically diverse solutions that address vaccination barriers across Colorado.

II. Guiding Principles:
Three key and overarching points continued to surface as the Task Force (Appendix A) deliberated and finalized each recommendation as it relates to increasing access to childhood vaccines across Colorado. As such, the Task Force notes the following:

a. Vaccine administration should occur in the Medical Home.
The advantages of a strong medical home are well known and this model should be promoted as the standard of care. Medical homes that currently do not vaccinate children should be encouraged and incentivized to do so. For medical homes with successful processes in place, those processes should remain intact. Every effort should be made to have all medical homes in Colorado that care for children provide all Advisory Committee on Immunization Practice (ACIP)–recommended vaccines.

In certain areas, medical home providers may be unable to meet the need or demand for vaccinating children in their communities despite efforts to improve access in those settings. Maintaining high vaccination rates remains a priority so appropriate solutions should be explored, including making referrals to a Community Immunization Provider.

Community Immunization Providers represent health care settings that expand access to childhood vaccination services. They can support medical homes that do not provide vaccines or as sites for vaccination for families who do not yet have a medical home.

Community Immunization Providers should record vaccination encounters in the Colorado Immunization Information System (CIIS) and/or report vaccination encounters to the child’s medical home.

Health plan payment structures should reward medical homes that administer vaccines and meet pay-for-performance or quality-enhanced standards for plan patients based on vaccination rates and up-to-date status. Performance standards should accept vaccines received from a Community Immunization Provider for plan patients.

b. CIIS is the primary, consolidated source for immunization data in the state.
The Task Force recommends several strategies for increasing access to vaccines in Colorado, some of which would benefit from the implementation of the priorities identified by the concurrent CIIS Stakeholder Engagement process. CIIS can, and should, provide infrastructure support to successfully implement these strategies, where possible. While CIIS has been able to achieve great successes with the same staff and largely the same budget over the past 5 years, CIIS is at a crossroads. It is vital for additional
funding and resources to be secured to support substantial improvement in system capacity and reduce the provider waitlist for Electronic Health Records (EHR) interoperability. For more about CIIS, see Appendix B.

c. Implementation of SB222 Task Force recommendations will require ongoing commitment by the Colorado Department of Public Health and Environment (CDPHE) and SB222 stakeholders.
The SB222 Task Force process is grounded in engagement and dialogue among a diverse group of stakeholders. The ongoing input of stakeholders is a key ingredient to the successful implementation of Task Force recommendations and strategies. Dialogue among stakeholders will continue to be fostered and encouraged throughout the implementation phase.

Resources will be required to support implementation of the Task Force recommendations, either within CDPHE or at partner organizations. Requests may be made for state funds to support implementation, as well as exploring federal and private funding opportunities. Achieving certain SB222 Task Force recommendations may also require legislation and/or rule making through the State Board of Health.

III. SB222 Task Force recommendations for systems-based solutions to increase access to childhood vaccines.
Through the efforts of three workgroups focusing on the medical home, safety net providers, and the Child Health Plan Plus (CHP+) program, the Task Force recognized several cross-cutting issues or barriers related to access to vaccines in rural or urban settings and across different health care delivery systems. Addressing these issues will require strategies and systems-based solutions that can impact broad populations and providers and be applicable in geographically diverse communities. The Task Force acknowledges the challenges with finding appropriate system-based solutions and the need, in certain circumstances, to customize programming to address the specific needs of a particular community. There is also a need for comprehensive data on vaccination coverage rates that represents diverse populations and calls attention to disparities and gaps that impact access to vaccines across Colorado.

Strategy 1:
Establish infrastructure to support vaccination providers, particularly those that provide vaccination services at a relatively low volume and/or in underserved areas.

Objective 1a:
Offer optional centralized group (private or public) purchasing solutions that address low volume needs and/or underserved areas, offer competitive pricing, and allow the return and refund of expired vaccine in order to decrease financial barriers and risk associated with offering immunizations.

Objective 1b:
Offer optional centralized billing, credentialing, and contracting services for Local Public Health Agencies (LPHAs) and other interested providers in order to decrease logistical and financial barriers associated with billing for vaccination.
Objective 1c:
Obtain formal, mutual commitment from Colorado’s health plans (including CHP+), primary care associations, and the Colorado Association of Local Public Health Officials (CALPHO) to support health plan contracts with LPHAs and/or school-based health centers as in-network providers.

Objective 1d:
In order for CIIS to meet the needs and expectations of its user base and stakeholders, funding must be secured to support the development of additional billing and inventory management infrastructure, remove barriers for providers to submit data electronically, and support access to and utilization of immunization data.

Strategy 2:
Create a dynamic resource network to address capacity issues and support the needs of vaccination providers statewide.

Objective 2a:
Provide mentoring opportunities for practices seeking to improve administrative, clinical, and technical expertise in the management and delivery of vaccines, including:

- insurance contracting, credentialing, and billing,
- vaccine administration, storage and handling, and documentation, and
- patient outreach and education.

Objective 2b:
Promote models/best-practices in public-private partnership (providers, public health, pharmacies, etc.) to deliver vaccines in practices and communities where it is not feasible to provide vaccinations in a typical medical home setting, including full participation in CIIS.

Objective 2c:
Provide and promote a centralized, electronic (web-based) toolkit with existing resources relating to best practices in vaccine management and delivery.

Strategy 3:
Explore, in partnership with the Colorado Department of Health Care Policy and Financing (HCPF), the development of a Vaccines for Children (VFC)-like program to purchase and distribute vaccine to providers serving CHP+ patients, which allows HCPF to take advantage of cost-savings available through federal vaccine contract pricing.

Objective 3a:
Conduct a financial analysis to estimate the cost savings to HCPF for vaccines purchased by CHP+ at federal vaccine contract pricing as compared to the current practice of provider reimbursement. Assess cost impact for both CHP+ program as a whole and for CHP+ managed care organizations. Ensure involvement of key leaders at CDPHE and HCPF to determine a go-forward strategy based on the evaluation of cost-savings.
Objective 3b: Identify and examine the components necessary to implement a VFC-like program for CHP+ providers, taking into consideration factors such as vaccine distribution, inventory management, reporting, accountability, and data sharing.

Objective 3c: Work with stakeholders (including HCPF, CDPHE, CHP+ providers and managed care organizations, vaccine industry, the Centers For Disease Control and Prevention (CDC)) to address needs, concerns, and other financial or logistical barriers related to implementing a VFC-like program. Assure the process does not pose undue burden on participating CHP+ providers, particularly those who already serve as VFC providers.

Objective 3d: Determine the cost to build a VFC-like program for CHP+ program and investigate potential funding sources.

IV. Potential Partners for Implementation Phase
In an effort to help support the beginning of Phase II, the Task Force submits the following as potential implementation partners (but not limited to) for consideration by CDPHE.

Objective 1a:
- American Academy of Pediatrics (AAP)
- Colorado Academy of Family Physicians (CAFP)
- Colorado Association of Local Public Health Officials (CALPHO)
- Colorado Association of School-Based Health Centers (CASBHC)
- Colorado Children’s Healthcare Access Program (CCHAP)
- Colorado Children’s Immunization Coalition (CCIC)
- Children’s Hospital Colorado (CHCO)
- Regional Care Collaboration Organization (RCCO)
- Vaccine Industry Representation

Objective 1b:
- American Academy of Pediatrics (AAP)
- Colorado Academy of Family Physicians (CAFP)
- Colorado Association of Local Public Health Officials (CALPHO)
- Colorado Children’s Immunization Coalition (CCIC)
- Colorado Regional Health Information Organization (CORHIO)
- PedsConnect, Children’s Hospital Colorado
- Rocky Mountain Chapter of NAPNAP
- The Arizona Partnership for Immunization (TAPI)
- University Physicians Inc. (UPI)
- UPP Technology (other private billing companies)

Objective 2a:
- American Pharmacists Association (APhA)
- Colorado Children’s Healthcare Access Program (CCHAP)
Colorado Children’s Immunization Coalition (CCIC)
Children’s Outcomes Research (and other academic institutions)
Department of Healthcare Policy and Financing (HCPF)
Local Public Health Agencies (LPHA)
Medical Group Management Association, Medical Office Billing Training (MGMA)
Other: medical groups, schools, experts, immunization training, vendors, health plans, vaccine industry representation

Objective 2b
- Colorado Association of Local Public Health Officials (CALPHO)
- Colorado Children’s Immunization Coalition (CCIC)
- Local Public Health Agencies (LPHA)
Other: Existing opportunities, local champions, private sector (vaccine and insurance industry)

Objective 2c:
- California VFC Program (EZIZ)
- Centers for Disease Control and Prevention (CDC)
- Colorado Children’s Healthcare Access Program (CCHAP)
- Colorado Immunization Information System (CIIS)
- Immunization Action Coalition (IAC)
- Vaccines for Children Program (Federal/VFC)
- Vaccines for Children Program (CDPHE/VFC: Colorado Department of Public Health and Environment)
- World Health Organization, Immunizations (WHO)

V. Glossary and Other Commonly Used Terminology

317 Funding
Section 317 of the Public Health Service Act is a federal grant program administered by the CDC. The program provides grants to immunization programs in 64 states, cities and territories for vaccine purchase, as well as other functions, such as technical assistance, capacity-building and infrastructure support. The 317 program also supports vaccine purchase for time-sensitive and urgent public health vaccination needs, such as providing unrestricted vaccines during pertussis outbreaks.

Affordable Care Act
Enacted in March 2010, the comprehensive health care reform law known as the Patient Protection and Affordable Care Act (ACA) requires health plans to cover preventive services and eliminates cost sharing for certain services, including vaccination. The ACA requires all new health plans to cover ACIP-recommended vaccines for adults and children, without cost-sharing, as long as they are administered by a health plan in-network provider.

Accessibility
The goal of SB222 is to improve access to childhood vaccines. Accessibility typically refers to the availability of affordable, quality vaccine delivery services, as well as access to the full
complement of ACIP-recommended childhood vaccines within a patient’s medical home or community. Assuring access involves key considerations, such as the cost, coverage, and distribution of vaccination resources. Accessibility also refers to the absence of financial, geographic, or other barriers that impede timely vaccine delivery.

**Advisory Committee on Immunization Practices**
The ACIP is a group of medical and public health experts that develop recommendations on how to use vaccines to control diseases in the United States. The ACIP recommendations stand as public health advice that will lead to a reduction in the incidence of vaccine preventable diseases and an increase in the safe use of vaccines and related biological products. ACIP was established under Section 222 of the Public Health Service Act (42 U.S.C. § 217a) and is governed by a charter. (Source: CDC, 2012).

**Colorado Immunization Information System**
CIIS is a confidential, population-based, computerized system that collects and disseminates immunization information for Coloradans of all ages. CIIS is an important public health tool that can be utilized to increase and sustain high vaccination coverage rates; minimize over-vaccination by consolidating immunization records; use reminder/recall to keep children up-to-date on vaccination schedules; facilitate vaccine inventory management; and identify missed opportunities for vaccination.

**Community Immunization Provider**
Refers to non-medical home health care settings that expand access to childhood vaccination services. The primary Community Immunization Provider is the LPHA vaccination clinic. School-based health centers (SBHCs) may serve as a Community Immunization Provider for students enrolled in schools that have a SBHC, and in certain circumstances, for other children in the community as well. Other potential, alternate settings that may offer vaccines, include hospitals, birthing centers, pharmacies, obstetrics-gynecology practices, post-secondary student health centers, emergency departments, retail medical clinics, urgent care clinics, family planning clinics and teen/adolescent clinics.

**Competitive Pricing**
Refers to prices available to small-volume providers that are commensurate with prices available to high volume purchasers or through discount programs.

**Contracting/Billing**
Contracting and billing are the administrative processes required for a health care provider to be reimbursed for vaccinations by an insurance company (also referenced as a health plan). Contracting is defined as a provider completing a participation and credentialing application with an insurance company, from which follows a contractual agreement allowing that provider to administer vaccines to persons covered by that insurance company and establishing contractual reimbursement rates for vaccine acquisition and administration. Billing is defined as submitting requisite information to the insurance company about vaccination services provided for the purpose of reimbursement.

**Credentialing**
Credentialing is a systematic approach to the collection and verification of a provider's professional qualifications, including but are not limited to, training, licensure, certification.
and/or registration to practice in a health care field, academic background, as well as criteria relating to professional competence and conduct.

**Electronic Health Records/Electronic Medical Records**

The Office of the National Coordinator for Health Information Technology defines electronic medical records and electronic health records as follows:

- **Electronic medical records** (EMRs) are a digital version of the traditional paper charts in a health care provider’s office. An EMR contains the medical and treatment history of the patients in a provider’s clinical practice. EMRs enable providers to track data over time, identify patients that are due for preventive services, and monitor and improve overall care quality within the practice. EMRs are therefore useful within the practice, but may not easily be shared with other providers and facilities.

- **Electronic health records** (EHRs) are real-time, patient-centered health records that make information available instantly and securely to authorized users. While an EHR contains medical and treatment histories of patients, an EHR system is designed to go beyond standard clinical data collected in a provider’s office and can be inclusive of a broader view of a patient’s care. EHRs are built to share information with other health care providers and organizations – such as laboratories, specialists, medical imaging facilities, pharmacies, emergency facilities, and school and workplace clinics – so they contain information from all clinicians involved in a patient’s care.

**Group Purchasing Organization**

An entity that is created to leverage the purchasing power of a group of vaccination providers. It should strive for access to all vaccines from all manufacturers. In some instances provider preferences, limited demand, financial considerations, and product availability may result in certain products being excluded.

**Immunization**

Refers to the process by which a person becomes protected (immune) against a disease.

**In Network**

Refers to health care providers who have a contractual arrangement with an insurance company to provide health care services to patients covered by that insurance company. ACA provisions state that “first dollar coverage,” or the absence of insurance deductibles, copayments or coinsurance for immunizations, require a visit to an in-network provider. Enrolled individuals that receive services outside of the plan’s network may incur higher deductibles, higher coinsurance or non-discounted charges from providers.

**Interested Providers**

Refers to medical home providers that are experiencing logistical challenges in billing, credentialing, and contracting for vaccination because of limited experience or capacity.

**Local Public Health Agencies**

Refers to the 54 county or district LPHAs across Colorado.

**Low Volume Health Care Providers**
Refers to providers or clinics that serve a relatively low number of pediatric patients and may face barriers regarding purchasing, storing, administering or billing for childhood vaccines.

**Medical Home**
Refers to a partnership between the patient, family, and primary provider in cooperation with specialists and support from the community. The patient/family is the focal point of this model. The medical home is an approach to delivering care that is patient-centered, comprehensive, team-based, coordinated, accessible, and focused on quality and safety. The provision of medical homes may allow better access to health care, increase satisfaction with care, and improve health. Care coordination is an essential component of the medical home. Public and private settings can serve as medical homes including federally qualified health centers (FQHC), rural health centers (RHC), SBHCs as well as private primary care clinics.

**Public**
Refers to the use of local, state, or federal governmental funds or resources

**Private**
Refers to the use of funds or resources from private individuals, businesses or groups.

**Public-Private Partnership**
Refers to an agreement between a public party and a private party.

**Reimbursement for Vaccination**
Reimbursement for vaccination should cover the cost of the vaccine, supplies, personnel and operating costs related to vaccine ordering, storage, administration, and billing.

**Storage and Handling**
Refers to the proper storage and transport of vaccines based on ACIP recommendations, the manufacturer's product information and studies from the National Institute for Scientific Technology.

**Underinsured**
Underinsured is defined by the CDC as: A child who has health insurance, but the coverage does not include vaccines; a child whose insurance covers only selected vaccines (VFC-eligible for non-covered vaccines only). Underinsured children are eligible to receive VFC vaccine only through a FQHC, or RHC or a deputized LPHA.

**Underserved**
The U.S. Health Resources and Services Administration (HRSA) defines Medically Underserved Areas as "a whole county or a group of contiguous counties, a group of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services." HRSA defines medically underserved populations as "groups of persons who face economic, cultural or linguistic barriers to health care." The vaccine underserved may similarly be defined in terms of geographic areas that lack vaccine resources, or populations who experience financial, transportation, linguistic, or other barriers.

**Vaccination**
Vaccination is the process of administering a vaccine to stimulate an immune response. In this document, the Task Force has preferentially chosen to use this term.

**Vaccines**
Refers to a biologic product that produces immunity thereby protecting the body from the disease. Vaccines are administered through needle injections, by mouth, and by aerosol. (CDC, 2012.)

**Vaccine Administration**
Vaccine administration is a critical component of a successful immunization program. Proper vaccine administration components are listed as the “Rights of Medication Administration”:

- Right patient
- Right vaccine and diluents
- Right time (correct age, correct interval, correct vaccine & diluents given before expiration)
- Right dosage
- Right route, needle length and technique
- Right site (location on patient)
- Right documentation
- Right screening for immunization contraindications and precautions
- Right cold chain, including right vaccine storage and handling

**Vaccination Coverage Rates**
Vaccination coverage rates measure the number of people who have received vaccines per population. Rates can be measured by individual vaccine or by vaccine series, and can be measured at different ages depending on the recommended vaccines for that age.

**Vaccination Documentation**
Refers to recording information as required under federal law (Section 2125 of the Public Health Service Act [42 U.S.C. §300aa-26]) including: the date the vaccination was given; the vaccine manufacturer and lot number of the vaccine administered; the name, address (location where the information will be stored), and the signature and title of the individual who administered the vaccine; date of publication of the Vaccine Information Statement (VIS) and the date the VIS was given to the patient.

**Vaccines For Children**
The VFC program is a federally funded entitlement program that provides vaccines at no cost to any child up to age 19 who is uninsured, underinsured, Medicaid-eligible, American Indian or Alaskan Native. CDC buys vaccines at a discount and distributes them to grantees—i.e., state health departments and certain local and territorial public health agencies—which in turn distribute them at no charge to those private physicians' offices and public health clinics registered as VFC providers. Children who are eligible for VFC vaccines are entitled to receive those vaccines recommended by the ACIP. (CDC, 2012).

**Vaccination Standards**
Vaccination standards, published by the National Vaccine Advisory Committee, represent the most desirable practices for administering vaccines, which all health care providers should strive to achieve.
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<th>Acronym</th>
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<td>ACA</td>
<td>Affordable Care Act</td>
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<td>CALPHO</td>
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<td>CDPHE</td>
<td>Colorado Department of Public Health and Environment</td>
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<td>CHP+</td>
<td>Child Health Plan Plus</td>
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<td>CIIS</td>
<td>Colorado Immunization Information System</td>
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<td>EMR</td>
<td>Electronic Medical Records</td>
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<td>FQHC</td>
<td>Federally Qualified Health Center</td>
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<td>HCPF</td>
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<td>VFC</td>
<td>Vaccines For Children</td>
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<td>VIS</td>
<td>Vaccine Information Statement</td>
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Appendix A: SB 222 Task Force Members and Participants

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<thead>
<tr>
<th>Name</th>
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<td>Jill Davies</td>
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<td>Joanna Leonard</td>
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<td>Luke Casias</td>
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<td>Manthan Bhatt</td>
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<td>Martha Hubbard</td>
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<td>Mary Brown</td>
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<td>Mary Beth Rensberger</td>
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<td>Michele Stanford</td>
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<td>Mike Kurtz</td>
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<td>Mike Ripperton</td>
<td>Pediatrics 5280 and Colorado AAP</td>
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Phyllis Arthur  Biotechnology Industry Organization (BIO)
Rachel Herlihy  Colorado Department of Public Health and Environment
Rachel Lee  Politicalworks - (Sanofi Pasteur)
Raquel Rosen  Colorado Academy of Family Physicians
Renee Karl  Colorado Community Health Network (CCHN)
Richard Duke  Colorado Institute for Drug Device and Diagnostic Development
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Sarah Rodgers  Denver Public Health
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Shannon Rossiter  Colorado Department of Public Health and Environment
Shannon Csotty  Glaxo Smith Kline
Shari Bohn  Walgreens
Stephanie Wasserman  Colorado Children's Immunization Coalition
Susan Pharo  Kaiser Permanente
Susan Rowley  Boulder Valley School District RE-2 and Rocky Mountain NAPNAP
Susan Williams  Colorado State University – Pueblo (Graduate Nursing)
Teresa Craig  Colorado Department of Health Care Policy and Financing
Appendix B:  Colorado Immunization Information System (CIIS) Summary

Background:
CIIS enables any immunization provider or school in Colorado to electronically track immunizations a person has received, thereby maintaining an ongoing and complete record to ensure that the person receives all recommended immunizations in a timely manner. CIIS provides critical infrastructure to providers, schools, health plans, healthcare partners and agencies by offering a single source for the tracking and management of immunizations in Colorado. CIIS offers value-added services such as forecasting needed immunizations, generating official certificates of immunization and administrative records, identifying persons coming due or overdue for immunizations, generating immunization coverage reports at the provider and jurisdiction level, managing public and privately-purchased vaccine inventory, ordering VFC vaccines, and interfacing with more than 20 EHR systems and Colorado Regional Health Information Organization, among other services.

Over the past several years, an increasing number of providers have been interested in submitting vaccination data electronically to CIIS to meet federal requirements for the Medicaid and Medicare EHR Incentive Programs (also referred to as “Meaningful Use”). While the demand to interface electronically with CIIS has increased, staff resources to support CIIS’s information technology infrastructure has remained stagnant. As of March 2014, approximately 500 provider clinics/health systems and 28 EHR vendors are waiting for an interface with CIIS – representing the single greatest contributor to incomplete patient immunization records in the registry.

Recently, CDPHE partnered with the Colorado Children’s Immunization Coalition to conduct a stakeholder engagement and strategic visioning process that focused on enhancing and expanding the capacity and functionality of CIIS. The stakeholder engagement process was designed to align CIIS expansion goals and objectives among key Colorado immunization and child health experts. Based on stakeholder feedback, the following were identified as priorities for CIIS:

- Priority #1 – Optimize CIIS Performance
- Priority #2 – Newborn Hearing/Screening Enhancements
- Priority #3 – Women, Infants, and Children (WIC) Enhancements
- Priority #4 – Schools & Child Care Center Enhancements

Statistics
Patient Saturation as of March 31, 2014 - 4.2 million patients with 44.9 million services
- 99% of children 0 – 6 years old have 2+ immunizations recorded
  - 52% of 19 – 35 month olds are up-to-date for the 4:3:1:3:1:4 series§

§ The 4:3:1:3:1:4 series refers to children who have received 4+ doses of diphtheria, tetanus and acellular pertussis (DTaP), 3+ doses of polio, 1+ doses of measles, mumps and rubella (MMR); 3 or 4+ doses of Haemophilus influenzae b (Hib); 3+ doses of hepatitis b; 1+ doses of varicella; and 4+ doses of pneumococcal conjugate vaccine (PCV13).

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- 76% of adolescents 11 – 17 years old have 2+ adolescent immunizations recorded
  - 81% of 13 – 17 year olds have 1+ dose of tetanus, diphtheria and acellular pertussis (Tdap)/tetanus, diphtheria (Td)
  - 29% of females 13 – 17 years old have 3+ doses of human papillomavirus (HPV)
- 40% of adults 19+ years old have 1+ adult immunization(s) recorded

Provider Saturation* as of December 31, 2013
- 80% VFC Providers
- 100% LPHAs
- 96% Community Health/Rural Health
- 91% Pediatrics
- 73% Family Practice clinics
- 100% Indian Health Services
- 95% School-based Health Centers
- 57% Internal Medicine clinics
- 59% OB/GYN clinics
- 89% Hospitals and associated clinics
- 68% Urgent Care Clinics
- 27% Pharmacies (chain and independent)
- 79% Major Health Plans
- 68% Specialty Clinics

*Estimates based on known providers with a signed letter of agreement

School Saturation* as of March 31, 2014
- 90% School Districts (including charter schools associated with the district)
- 10% Private Schools
- 5% Childcare Centers
- 68% Head Start Centers

*Estimates based on known schools with a signed letter of agreement

Electronic Interface Wait List Summary* as of March 31, 2014 - 500 organizations
- 9% Community Health, Rural Health, School-based Health and Public Health
- 45% Family Practice clinics
- 9% Hospitals and associated clinics
- 1% Health Plans
- 12% Internal Medicine clinics
- 7% OB/GYN clinics
- 10% Pediatric clinics
- 6% Specialty and other clinics

*Numbers may be off due to rounding; some providers on waiting list currently participate in CIIS