CONTRA COSTA
HEALTH PLAN
A Division of Contra Costa Health Services

Agenda

Quarterly Community Provider Network (CPN) Meeting

Contra Costa Health Plan – Community Plan

When: **Time: 7:30 AM – 9:00 AM**
Date: April 16, 2013

Where: **West County Health Center**
13601 San Pablo Ave, San Pablo, CA
Room A-1194

The agenda for the meeting is as follows:

I.	**CALL TO ORDER and INTRODUCTIONS**	J. Tysell, MD
II.	**REVIEW and APPROVAL of MINUTES from previous meeting**	J. Tysell, MD
III.	**REGULAR REPORTS**	
	• Medical Director's Report Defer to new business • Immunization Update	J. Tysell, MD B. Jacobs, FNP
IV.	**NEW BUSINESS**	
	• Legislative Update: - Impact on CCHP • Pediatric Obesity Overview	J. Tysell, MD D. Dooley, MD
V.	• Provider Concerns	J. Tysell, MD
VI.	• Adjournment	

Unless otherwise indicated below, Contra Costa Health Plan – Community Plan hereby adopts all issues, findings, or resolutions discussed in the Agenda for Contra Costa Health Plan, dated January 22, 2013 and attached herein.

Our next scheduled meeting is:

Tuesday, July 16, 2013
7:30 AM – 9:00 AM

CONTRA COSTA HEALTH PLAN

West County

Quarterly Community Provider Network (CPN)

Meeting Minutes – April 16, 2013

Attending:

CCHP Staff: J. Tysell, MD, Chair; B. Jacobs, FNP; M. Berkery, RN; J. Galindo, RN, PHN; L.M. Perez, Secretary

CPN Providers: K. Ceci, MD; O. Eaglin, PA; R. Harrison, RN, NP; K. Kaminski, PA; A. Lopresti, DO; P. Mack, MD; A. Wallach, MD

Guests: D. Dooley, MD (CCRMC); L. Jensen, RN, (CCHP Quality Management)

Discussion		Action	Accountable
	Meeting called to order @ 7:45 a.m.		J. Tysell, MD
I.	Agenda approved with no revisions.		J. Tysell, MD
II.	**Review and Approval of Minutes from January 15, 2013:** Minutes were approved as presented.		J. Tysell, MD
III.	**Medical Director Report:** • Online Provider Web Portal access available • Pain Management - Guidelines being developed, still in review. When developed will be sent to providers • Enrollment Report - Total of patients as of 3/2013 - Increase of SPD of 17% - Medi-Cal (Voluntary) increase of 29% - Medi-Cal (Duals) Increase of 25% - Medi-Cal AFDC Increase of 2% - Healthy Families enrollment down due to transfers to Medi-Cal • CCHP/NCQA Accreditation Pending • Immunization Update - Revised advisory guidelines from CDC re: Tdap update for pregnant women - Background information on HPV vaccine for cervical cancer prevention • Map of States planning Medicaid Expansion - 25% Support (25) - Will not participate (14) - Possible support (7)		J. Tysell, MD B. Jacobs, FNP J. Tysell, MD
IV.	**New Business:** • Legislative Update - Pending legislative changes impacting CCHP/Public Hospital Systems - Affordable Care Act (ACA) – reviewed reforms to private insurance - Expansion of Medicaid - Creation of new health care marketplace – CCC one of three information centers selected by State. Office to be in Central County called "Connected California" through "Health Exchange" - Financial eligibility discussed - Expansion will cover non-elderly adults - Medi-Cal program fully expanded by January 2014		J. Tysell, MD

	- Insurance offered at various levels - Undocumented will have partial coverage - Expected that only 18-44% of eligible patients will be enrolled • Pediatric Obesity Overview - CCHP has Disease Management Unit (DMU) Diabetic management and Peds Obesity under NCQA proposed guidelines - DMU Will track referrals to treatment programs if notified by PCP – reports go back to PCP if not registered in treatment program - Developing classes with community and some medical groups on weight management. Classes in English and Spanish – all parts of county to be included		D. Dooley, MD L. Jensen, RN
V.	**Other Business:** • Demonstration of access to website of CCHP – various selections of resources and guidelines reviewed		M. Berkery, RN
VI.	• **Adjourn:** • Meeting adjourned @ 9:00 a.m.		J. Tysell, MD

Next meeting – July 16, 2013

CONTRA COSTA HEALTH PLAN
West County
Quarterly Community Provider Network (CPN)
Meeting Minutes – January 15, 2013

Attending:

CCHP Staff: J. Tysell, M.D., Chair; M. Berkery, RN; J. Galindo, RN, PHN; L.M. Perez, Secretary

CPN Providers: G. Aguilar, PA; N. Banks, MD; A. Barocio, PA; K. Ceci, MD; O. Eaglin, PA; R. Harrison, RN, NP; K. Kaminski, PA; P. Mack, MD; T. Smith, MD; A. Wallach, MD

Guests: S. Nairn, PHN

Discussion		Action	Accountable
	Meeting called to order @ 7:30 am.		J. Tysell, MD
I.	Agenda approved with no revisions.		J. Tysell, MD
II.	**Review and Approval of Minutes from October 16, 2012:** Minutes were approved as presented.		J. Tysell, MD

III.	**Medical Director Report:**
	• CCHP's website can be accessed at: www.contracostahealthplan.org
	  ○ Updated monthly
	• Announced: P. Mack, MD has joined CCHP's JCC (Joint Conference Committee). This group meets quarterly and includes 2 county supervisors.
	• Discussion re: Affordable Care Act
	  ○ Medicare reimbursement rates are still pending. Adjustment not anticipated until the State adjusts capitation to the Plans. Rates will include medical specialists; excludes OB/GYN and surgical disciplines.
	• CPN Providers concern re: claims payments. Reported improvements have been made. Claims submitted through December will be paid by February. Payment delay has been caused by implementation of new electronic accounting system.
	• Discussed web portal. Portal is still not ready for medical information.
	• Discussed CCHP Healthy Families children transition into Medi-Cal in March 2013.
	• State requires two quality improvement projects (QIPs). The following two projects were discussed: Reducing readmissions and OB care (Timeliness of Prenatal Care and Postpartum Care)
	• Pain Management policy currently under review and revision.
	• HEDIS Final Report – Item deferred.
	• Immunization Update – the following information was distributed:
	  ○ California Department of Public Health (CDPH)
	  • Combined Measles, Mumps, Rubella and Varicella (MMRV) Vaccine is Again Available from the California VFC Program (dated: 11/19/12)
	  • New online resource for reporting vaccine administration errors – http://verp.ismp.org/ (dated:
			J. Tysell, MD

	10/3/12) • Further Large Decrease in Pentacel® Vaccine Allocations Beginning October 2012 (dated: 10/2/12) • Preteen Vaccine Week – February 10-16, 2013 • Flu Mist® 2012-2013 Replacement Program ○ Centers for Disease Control and Prevention (CDC) • CDC Influenza Application for Clinicians and Health Care Professionals • FluView 2012-2013 Influenza Season Week 52 ending December 29, 2012 • Reviewed the CPN Care Matters Provider Bulletin, Volume10, Issue 4, Winter 2012.		
IV.	**New Business:** • Public Health Re-organization: ○ All divisions in Public Health Nursing are now under one Public Health Nursing Director. ○ Currently 13 school based clinics in the Richmond, Concord, Pittsburg and Antioch. Most clinics are conducted through medical buses/vans. Immunization and prevention services are major focus, all immunizations are recorded in CAIR (Immunization Registry). Free flu vaccines for children through the month of January through Target and Walgreens. • West County Health Center (WCHC) – there was orientation and tour of the new facility.		S. Nairn, PHN M. Berkery, RN
V.	• **Adjourn:** • Meeting adjourned @ 8:55 am.		J. Tysell, MD

Next meeting – April 16, 2013

California Association
of Public Hospitals
and Health Systems

California's Public Hospital Systems

Preparing for and Implementing Health Reform

Sarah Muller

January 30th 2013

Overview

- ACA Implementation: What will coverage expansion look like in CA?
- How are public hospital systems preparing for ACA implementation?
- Opportunities and challenges in the year ahead
- Conclusion

Overview of CAPH/ SNI

- CAPH
  - Non-profit trade association that represents 19 public hospital systems throughout the state, which serve as the foundation for health care delivery in California
  - CAPH works to strengthen the capacity of our members through research, policy and advocacy to provide high quality care and advance community health
- California Health Care Safety Net Institute
  - Non-profit affiliate of CAPH, which facilitates programs to accelerate spread of innovative practices among and beyond public hospital systems to enhance quality, promote coordinated care and efficient care delivery and eliminate health care disparities

California's Public Hospital Systems

- Coordinated Systems of Care
  - Serve 2.6 million patients annually with preventive, primary, specialty, pharmacy, emergency and hospitalization services
  - Deliver more than 10 million outpatient visits a year
  - Operate more than half of the state's top-level trauma centers and two-thirds of its burn centers, train roughly 43% of new doctors
- Leaders in Caring to California's Underserved Populations
  - Provide 30% of all hospital-based care to the state's Medi-Cal population and roughly half of all hospital care to the state's 7 million uninsured
- Providers of High Quality Culturally Competent Care

Patient Protection and Affordable Care Act (ACA)

- Making Insurance Available & Affordable
  - Reforms to the private insurance market
  - Expansion of Medicaid
  - Creation of a new health care marketplace (Exchanges), subsidies available
- Delivery system & financing reforms in Medicaid and Medicare

Reforms to the Private Insurance Market

- 2010
  - Parents can cover children up to age 26
  - No exclusions for preexisting conditions (kids only)
- 2014 and beyond
  - Individual mandate, subsidies if you are low/ middle income
  - Requires insurance companies to prohibit discrimination based on gender or pre-existing condition
  - Protects consumers from losing coverage when they get sick
  - Creates new restrictions to limit price increases by insurance companies
  - Minimum benefit package for most plans

Medicaid Expansion

- Expansion of the Medicaid (or Medi-Cal) program up to 138% of the Federal Poverty Level
  - Annual income of $14,856 for an individual
  - Current Medi-Cal program largely covers children, pregnant women and persons with disabilities
  - Expansion will insure all non-elderly adult citizens
- Federal government will pay for the **full** cost of the Medi-Cal expansion for the first 3 years
- Governor Brown announced in January that CA will fully expand the Medi-Cal program

Health Benefits Exchange

- California was the first state to create an Exchange, which is called Covered California
- Centralized marketplace for the purchase of health insurance
- Provide transparency for consumers and meaningful competition across plans
- Provide federal subsidies for premiums and cost-sharing on a sliding scale basis
- Affordability will continue to be a challenge
  - $22,000/year= $117 /month
  - $28,000 / year= $186/month

Health Reform in CA

- Medi-Cal- up to 1.7 million eligible (about 1 million will enroll)
- Covered California: up to 2 million will enroll
- Remaining uninsured: 3-4 million (in 2019)
- Coverage expansion will take a long time to achieve estimated enrollment goals
  - Despite mandate, Medicaid expansion and subsidies, many will likely remain uninsured
  - Only about ¼ of the remaining uninsured will be undocumented
  - For the uninsured patients public hospital systems serve, only an estimated 18-44% will enroll in coverage

Testing Delivery System & Financing Reforms in Medicaid & Medicare

- Major focus on the Triple Aim
  - Improving population health
  - Providing better care (quality and patient experience)
  - Reducing the cost of health care
- Medical homes
- Accountable care organizations
- Bundled payments for care transitions
- Pay-for-reporting & pay-for-performance

Health Reform Implementation and Public Hospitals

Health Reform in CA

- Public hospital systems will serve multiple roles:
- Continued role as a safety net provider
  - Expect demand for services to increase
  - Dramatic decline in federal funding for the uninsured
- Provider of critical community services- burn, trauma, etc
- Increased role as a provider of choice
  - Newly eligible Medi-Cal and Exchange population
- Our ability to continue serving the remaining uninsured will in part depend on our ability to compete as providers of choice

Coverage Expansion

Low Income Health Program

- California is leading the nation in early coverage expansion in advance of 2014
- Enrollment: 500,000 statewide
  - Each enrollee is assigned to a medical home for their primary and preventive care
    - Important given complexity/severity of patient population
    - Essential to improving outcomes, managing a patient's health
- Benefits are comprehensive, Medicaid like
- Financing: Counties must use local resources as a match to receive federal funds. Local funds are limited

Low Income Health Program

Transitioning to Medi-Cal:

- In January 2014, LIHP enrollees with incomes below 133% of FPL will be eligible for Medi-Cal
  - Create a smooth transition process between the Low Income Health Program and Medi-Cal
- Transition to Medi-Cal will be critical
  - Continuity of care for enrollees
  - Public hospital systems as providers of choice
    - Ability to provide high-quality, accessible and patient centered care to this population through the LIHP will be critical

Improving Care Delivery

- Public hospitals are two years into a massive pay for performance quality improvement effort
  - Unprecedented scope and scale: this work touches every part of their system
  - Focus on the Triple Aim= improving patient experience, improving population health and reducing costs
- Santa Clara Valley Medical Center Projects include:
  - Expand Primary and Specialty Care Capacity
  - Expand Medical Homes - Enhance Patient Experience
  - Integrate Behavioral Health with Primary Care Medical Homes
  - Report 21 Patient Experience and Population Health Measures
  - Reduce Sepsis Mortality and Central Line Associated Bloodstream Infections

System Transformation

- A nearly 300,000 increase in the number of primary care encounters provided
- More than 600,000 patients assigned to a medical home/primary care provider
- Over 1 million patients entered into a disease registries
- Improving patient safety:
  - 38% reduction in Central Line Associated Bloodstream Infections
  - Several hospitals reported improvements in stroke management and outperformed the benchmarks set by the Joint Commission

2013… and beyond
Opportunities and Challenges

External Landscape

- Economy: Improving, but unemployment still 7.9% in CA
- Politics: ACA survives! Those who took the wait and see approach are behind
- Budget pressures: facing the tough reality- no new money in health care
  - 2013: threats to Medicaid, cuts to state funding for counties/public hospitals that provide care to the uninsured
- Less than one year until 2014
  - A lot of work underway any moving very quickly- federal regulations, state legislation, etc
  - Time is not on our side

Opportunities

- Leaders in health reform implementation
  - Coverage Expansion: seamlessly transition half a million people from the LIHP into Medi-Cal/Exchange
  - Demonstrate expertise in improving quality and strengthening integration
  - Core elements exist for integrated systems of care
- Transition from providers of last resort to also serve as providers of choice
  - Compete for newly eligible for Medi-Cal and Covered California

Challenges

- Coverage expansion will take time, likely 3-5 years
- 3-4 million will remain uninsured and largely rely on public hospital systems for care
- Emerging Threats in 2013:
  - State is proposing to take funding from counties that is used to provide care to the uninsured
  - Federal level: ongoing threats to the federal Medicaid program
- Delivery system improvement is hard work and takes time

CCHP Enrollment Trend Report for March 2013

Product	CPN	KSR	RMC	Current Month	Previous Three Months Average	Last Year Same Month	Annual Change	% of Change
1) Medi-Cal								
Medi-Cal AFDC	20,745	8,924	28,276	57,945	57,923	56,670	1,275	2%
Medi-Cal (Duals)	684	385	2,059	3,128	2,993	2,500	628	25%
Medi-Cal (Voluntary)	1,476	638	1,746	3,860	3,772	2,995	865	29%
** Medi-Cal Low Income Child Program	2,536	38	1,447	4,021	12	N/A	N/A	N/A
MEDICAL SPD	4,209	1,781	8,170	14,160	14,203	12,100	2,060	17%
Subtotal	**29,650**	**11,766**	**41,698**	**83,114**	**78,904**	**74,265**	**8,849**	**12%**
2) Medicare								
Senior Health	25		395	420	419	419	1	0%
Medi-Medi (Crossover)*			49	49	50	56	(7)	(13%)
Subtotal	25	0	444	469	469	475	(6)	(1%)
3) County Employees								
PLAN A			7,468	7,468	7,519	7,587	(119)	(2%)
PLAN B	805		657	1,462	1,380	1,168	294	25%
PERS			20	20	20	21	(1)	(5%)
A2 T & P			87	87	88	95	(8)	(8%)
A2 ARCCC			155	155	158	155	0	0%
Superior Court *	5		95	100	99	102	(2)	(2%)
Subtotal	810	0	8,482	9,292	9,263	**9,128**	164	2%
4) IHSS (In-Home Supportive Services)	0	0	2,091	**2,091**	2,057	2,151	(60)	(3%)
5) Private Commercial								
Private Individuals / Families	27	0	81	108	**115**	125	(17)	(14%)
Private Small Groups	12	0	20	32	31	37	(5)	(14%)
Subtotal	**39**	**0**	**101**	**140**	146	162	(22)	(14%)
6) Healthy Families	139	0	49	**188**	4,374	4,926	(4,738)	(96%)
7) AIM (Access Infants / Mothers)	4	0	17	**21**	**24**	21	0	0%
8) MRMIP (Major Risk Program)	2	0	20	**22**	22	24	(2)	(8%)
CCHP MEMBER TOTAL	**30,669**	**11,766**	**52,902**	**95,337**	**95,258**	**91,152**	**4,185**	**5%**
UNINSURED RECEIPIENTS								
9) BHC Active (0%-300%FPL)	0	0	1,862	**1,862**	1,796	1,827	35	2%
10) HCCI Active (134%-200 FPL)	232	0	1,881	**2,113**	1,993	1,901	212	11%
11) MCE Active (100%-133% FPL)	305	0	9,387	**9,692**	9,697	10,045	(353)	(4%)
12) PENDING BHC/HCI (Rx Only)	0	0	1,351	**1,351**	1,485	2,002	(651)	(33%)
13) Mental Health (Rx Only)	0	0	1,541	**1,541**	1,487	1,423	118	8%
14) Pending Restricted Medi-Cal (Rx Only)	0	0	453	**453**	464	968	(515)	(53%)
15) (Undocumented)	0	0	41	**41**	40	118	(77)	(65%)
FOOTNOTES								
* Closed to new enrollments								
** Former HFP Children								
CCHP Managed Lives Total	**31,206**	**11,766**	**69,418**	**112,390**	**112,221**	**109,436**	**2,954**	**3%**

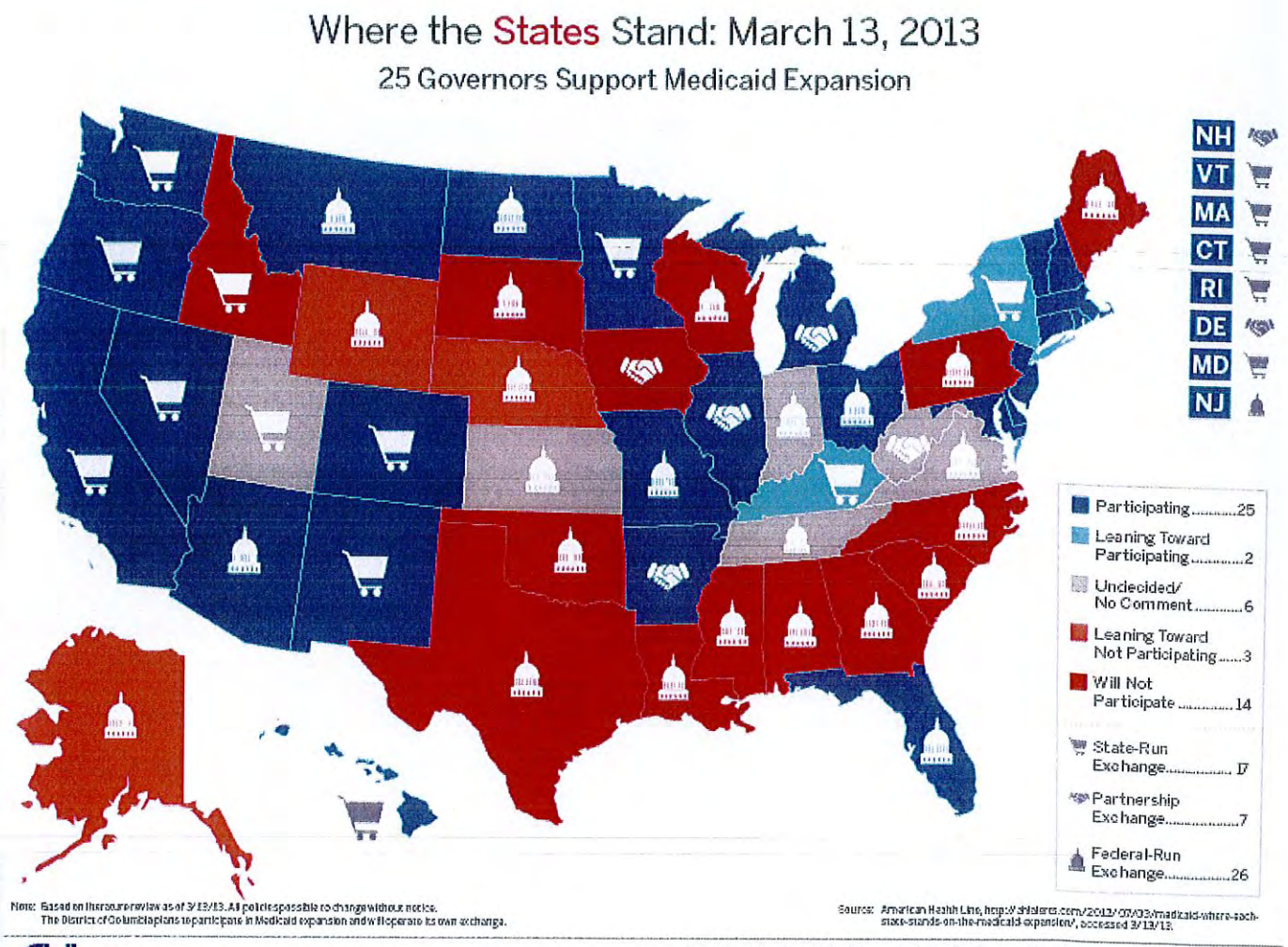
This report is a snapshot of eligible members for the previous month. These are Not current eligibility numbers and should not be used to compare with current membership.

AHLAlerts: American Health Line's Blog

Your Daily Health Care News Update

MEDICAID: Where Each State Stands on the Medicaid Expansion

with 16 comments



Click for an interactive map featuring more information about the decisions by states on the Medicaid expansion and type of insurance exchange.

Health Care Reform Impact on Contra Costa County

	2012	2013	2014			
	Medi-Cal	**Medi-Cal & Healthy Families**	**Medi-Cal**	**Medi-Cal Expansion (MCE)**	**BRIDGE**	**California Health Benefit Exchange (Exchange)**
FPL (Federal Poverty Level)	**100% FPL**	**100% FPL**	**100%** FPL	101% - **133%** FPL	134%-**200%** FPL	134% - **400%** FPL *or* 201% - 400% FPL (if BHP)
Family of 4 Yearly Income: Based upon 2011 Data	**22,350**	**22,350**	**$22,350**	**$29,726**	**$44,700**	**$89,400**
Populations Served	**Medi-Cal**	**3/1/2013** **4000 CCHP Healthy Families transition to Medi-Cal** **4/1/2013** **8000 Kaiser Healthy Families to CCHP Medi-Cal (assignment back to Kaiser)**	Medi-Cal	• Expanded Medi-Cal • In-Home Support Services (IHSS) - Providers	• Medi-Cal terminations only	All uninsured with governmental subsidies from 134% - 400% FPL (if no BHP)
Health Plans	**CCHP (Kaiser) Blue Cross**	**CCHP (Kaiser) Blue Cross**	Contra Costa Health Plan and Blue Cross	Contra Costa Health Plan and Blue Cross	Contra Costa Health Plan/ Blue Cross	Contra Costa Health Plan/ Multiple other plans
Benefits	**Existing**	**State Budget decreases rates CCHP pay providers less**	Existing	• Helps prevent churning between low income groups and helps families to remain in same Health Plan for continuity of care • Allows former Safety Net patients to remain in Public Hospital Networks • Much higher participation of uninsured due to lower premium costs		Creates 1 enrollment process for wider population with multiple Health Plans and Provider Network choices
Federal Funding to States	**50% Federal Funding**	**50% Federal Funding**	50% Federal funding	100% Federal funding	100% Federal funding to equal 95% of subsidies available under Exchange	Federal subsidies plus member premium deductible and copays

Patricia Tanquary, MSSW, MPH, PhD

March, 2013

Morbidity and Mortality Weekly Report (*MMWR*)

Updated Recommendations for Use of Tetanus Toxoid, Reduce Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap) in Pregnant Women — Advisory Committee on Immunization Practices (ACIP), 2012

Weekly

February 22, 2013 / 62(07);131-135

In October 2011, in an effort to reduce the burden of pertussis in infants, the Advisory Committee on Immunization Practices (ACIP) recommended that unvaccinated pregnant women receive a dose of tetan toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) (*1*). Vaccination of women with Tdap during pregnancy is expected to provide some protection to infants from pertussis until they are old enough to be vaccinated themselves. Tdap given to pregnant women will stimulate the development of maternal antipertussis antibodies, which will pass through the placenta, likely providing the newborn witl protection against pertussis in early life, and will protect the mother from pertussis around the time of delivery, making her less likely to become infected and transmit pertussis to her infant (*1*). The 2011 Tdap recommendation did not call for vaccinating pregnant women previously vaccinated with Tdap. On Octob 24, 2012, ACIP voted to recommend use of Tdap during every pregnancy. This report summarizes data considered and conclusions made by ACIP and provides guidance for implementing its recommendations. These updated recommendations on use of Tdap in pregnant women aim to optimize strategies for preventing pertussis morbidity and mortality in infants.

The United States has experienced substantial increases in reported pertussis cases over the past several years. Provisional case counts for 2012 have surpassed the last peak year, 2010, with 41,880 pertussis case and 14 deaths in infants aged <12 months (*2*) (CDC, unpublished data, 2012). To reduce this burden, optimizing the current vaccination program and protecting infants who are at highest risk for death are immediate priorities. Since the 2011 ACIP vaccination recommendation, uptake of Tdap among pregnant women has been low; one survey of 1,231 women (August 2011 to April 2012) estimated that only 2.6% of women received Tdap during their recent pregnancy (*3*). New data indicate that maternal antipertussis antibodies are short-lived; therefore, Tdap vaccination in one pregnancy will not provide high levels of antibodies to protect newborns during subsequent pregnancies (*4*).

Summary of ACIP Deliberations and Rationale

same subjects and in naïve controls receiving Tdap for the first time. Of the few serious adverse events reported, none were attributed to the vaccine. Fever was reported in 2.4%–6.5% of recipients of a Tdap booster; the frequency of fever was similar to that in the same subjects after their first Tdap dose and in naïve controls (*9,17–19*). Studies on short intervals (i.e., within 21 days or ≤2 years) between receipt of tetanus and diphtheria toxoids (Td) and Tdap or Tdap-inactivated polio vaccine in healthy, nonpregnant adolescents and adults found no serious adverse events (*21–23*). Fever was reported in 1.7%–6.8% of subjects who received Tdap ≤2 years after Td; rates were comparable to the control group and to cohorts that received Tdap longer after receipt of Td (*21,22*). The number of subjects in these studies was small, a therefore, the findings do not rule out the possibility of rare but serious adverse events.

A theoretical risk exists for severe local reactions (e.g., Arthus reactions, whole limb swelling) for pregnan women who have multiple closely spaced pregnancies. Arthus reactions and whole limb swelling are

hypersensitivity reactions that have been associated with vaccines containing tetanus toxoid, tetanus and diphtheria toxoids, and/or pertussis antigens. Historical data on multiple doses of Td and tetanus toxoid vaccines (TT) indicate that hypersensitivity was associated with higher levels of preexisting antibody (*24–26*). The frequency of side effects depended on antigen content, product formulation, preexisting antibody levels related to the interval since last dose, and the number of doses (*24–26*). Challenges to reviewing historical data on multiple doses of TT and Td include differences in adjuvant and toxoid amounts in vaccines over time and severity of adverse events by number of vaccines received (*24–26*). Most of the data are historical, and the risk for severe adverse events likely has been reduced with current formulations that contain lower doses of TT.

TT and Td have been used extensively in pregnant women worldwide to prevent neonatal tetanus; large studies on use of TT during pregnancy have not reported clinically significant severe adverse events (*27–30*). Safety data on use of Td during multiple pregnancies have not been published. ACIP believes the potential benefit of preventing pertussis morbidity and mortality in infants outweighs the theoretical concerns of possible severe adverse events.

ACIP concluded that experience with tetanus-toxoid containing vaccines suggests no excess risk for severe adverse events for women receiving Tdap with every pregnancy. ACIP stated the need for safety studies of severe adverse events when Tdap is given during subsequent pregnancies. Plans for safety monitoring in pregnant women following Tdap administration include enhanced monitoring in Vaccine Adverse Event Reporting System (VAERS) and utilizing the Vaccine Safety Datalink (VSD) to assess acute adverse events, adverse pregnancy outcomes affecting the mother, and birth outcomes; assessing risks for rare adverse events in pregnant women after Tdap will require data collection for several years (*31*).

Vaccination During the Third Trimester

Tdap may be administered any time during pregnancy, but vaccination during the third trimester would provide the highest concentration of maternal antibodies to be transferred closer to birth (*4*). After receipt of Tdap, a minimum of 2 weeks is required to mount a maximal immune response to the vaccine antigens (*32,33*). Active transport of maternal immunoglobulin G does not substantially take place before 30 weeks of gestation (*34*). One study of pregnant women who received Tdap within the prior 2 years noted that maternal antibodies waned quickly; even women immunized during the first or second trimester had low levels of antibodies at term (*4*). Therefore, to optimize the concentration of vaccine-specific antipertussis antibodies transported from mother to infant, ACIP concluded that pregnant women should be vaccinated with Tdap during the third trimester.

ACIP Recommendations for Pregnant Women

ACIP recommends that providers of prenatal care implement a Tdap immunization program for all pregnant women. Health-care personnel should administer a dose of Tdap during each pregnancy, irrespective of the patient's prior history of receiving Tdap.

Guidance for Use

To maximize the maternal antibody response and passive antibody transfer to the infant, optimal timing for Tdap administration is between 27 and 36 weeks gestation although Tdap may be given at any time during pregnancy. For women not previously vaccinated with Tdap, if Tdap is not administered during pregnancy, Tdap should be administered immediately postpartum.

Special Situations

Pregnant women due for tetanus booster. If a tetanus and diphtheria booster vaccination is indicated during pregnancy (i.e., >10 years since previous Td), then Tdap should be administered. Optimal timing is between 27 and 36 weeks gestation to maximize the maternal antibody response and passive antibody transfer to the infant.

Advisory Committee on Immunization Practices (ACIP) Recommended Immunization Schedule for Persons Aged 0 Through 18 Years — United States, 2013

ACIP Childhood/Adolescent Immunization Work Group
Iyabode Akinsanya-Beysolow, MD[1]
Renée Jenkins, MD[2]
H. Cody Meissner, MD[3]
[1]*Immunization Services Division, National Center for Immunization and Respiratory Diseases, CDC*
[2]*Department of Pediatrics and Child Health, Howard University College of Medicine, Washington, D.C.*
[3]*Tufts Medical Center, Boston, Massachusetts*
Corresponding contributor: Iyabode Akinsanya-Beysolow, iakinsanyabeysolow@cdc.gov, 404-639-5251.

Each year, the Advisory Committee on Immunization Practices (ACIP) reviews the current recommended immunization schedules for persons aged 0 through 18 years to ensure that the schedule reflects current recommendations for licensed vaccines. In October 2012, ACIP approved the recommended immunization schedules for persons aged 0 through 18 years for 2013, which includes several changes from 2012.

Health-care providers are advised to use both the recommended schedule and the catch-up schedule (Figures 1 and 2) in combination with their footnotes (pages 6–8) and not as stand-alones. For guidance on the use of all the vaccines in the schedules, including contraindications and precautions to use of a vaccine, providers are referred to the respective ACIP vaccine recommendations.

Printable versions of the regular and catch-up schedules are available at http://www.cdc.gov/vaccines/schedules in various formats, including landscape and pocket-sized, in regular paper or laminated versions. A "parent friendly" regular schedule is available at http://www.cdc.gov/vaccines/schedules/easy-to-read/child.html#print.

For 2013, several new references and links to additional information have been added, including one for travel vaccine requirements and recommendations (*1*). New references also are provided for vaccination of persons with primary and secondary immunodeficiencies. Changes to the previous schedules (*2*) include the following:

- Figure 1, "Recommended immunization schedule for persons aged 0 through 18 years" replaces "Recommended immunization schedule for persons aged 0 through 6 years" and "Recommended immunization schedule for persons aged 7 through 18 years."
  - Wording was added to bars to represent the respective vaccine dose numbers in the series.
  - The meningococcal conjugate vaccine (MCV4) purple bar was extended to age 6 weeks, to reflect licensure of Hib-MenCY vaccine.
  - The hepatitis A (HepA) vaccine yellow bar was extended to better reflect routine age recommendations for use of HepA vaccine. New green and purple bars were added to reflect hepatitis A vaccine recommendations for older children.
  - Abbreviations for influenza vaccine were updated with the anticipation of quadrivalent vaccine for the 2013–14 influenza season.
  - Pneumococcal polysaccharide vaccine (PPSV23) was added to Figure 1.
- Footnotes were combined and standardized formatting was used to provide recommendations for each vaccine related to routine vaccination, catch-up vaccination, and vaccination of persons with high-risk medical conditions or under special circumstances.
  - Meningococcal conjugate vaccine (MCV4) footnotes were updated to reflect recent recommendations (*3*).
  - Tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine footnotes were updated to reflect recent recommendations (*4*).
  - Influenza vaccine footnotes were updated to provide dosing guidance for children aged 6 months through 8 years for the 2012–13 and 2013–14 influenza seasons (*5*).
- Meningococcal conjugate (MCV4) vaccine minimum ages and intervals were updated in Figure 2, "Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind—United States, 2013," to reflect licensure of Hib-MenCY vaccine.

- Order free copies from CDC (http://wwwn.cdc.gov/pubs/ncird.aspx#schedules) (not available until early March)

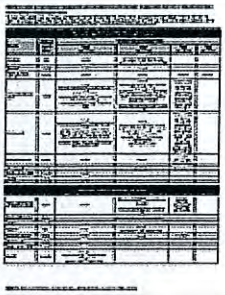
Single Page Formats

(/vaccines/schedules/hcp/imz/child-adolescent.html)

Birth-18 Years Recommended Immunization Schedule

Display and print this schedule on your website. NEW Feature

- See schedule as it will appear on your website (/vaccines/schedules/hcp/imz/child-adolescent.html)
  You can also print directly from this page too.
- Copy code to your site to display and print schedule on your website (/vaccines/schedules/syndicate.html)
  This method ensures schedules on your site will always be the most current; whenever CDC updates a schedule, your page will automatically display the same update. Your visitors can print the schedule from your Web page as well.



(/vaccines/schedules/hcp/imz/catchup.html)

Catch-up Immunization Schedule

Display and print this schedule on your website. NEW Feature

- See catch-up schedule as it will appear on your website (/vaccines/schedules/hcp/imz/catchup.html)
  You can also print directly from this page too.
- Copy code to your site to display and print catch-up schedule on your website (/vaccines/schedules/syndicate.html)
  This method ensures the catch-up schedule on your site will always be the most current; whenever CDC updates it, your page will automatically display the same update. Your visitors can print the catch-up schedule from your Web page as well.

Easy-to-read Versions for Parents

Available in English and Spanish.

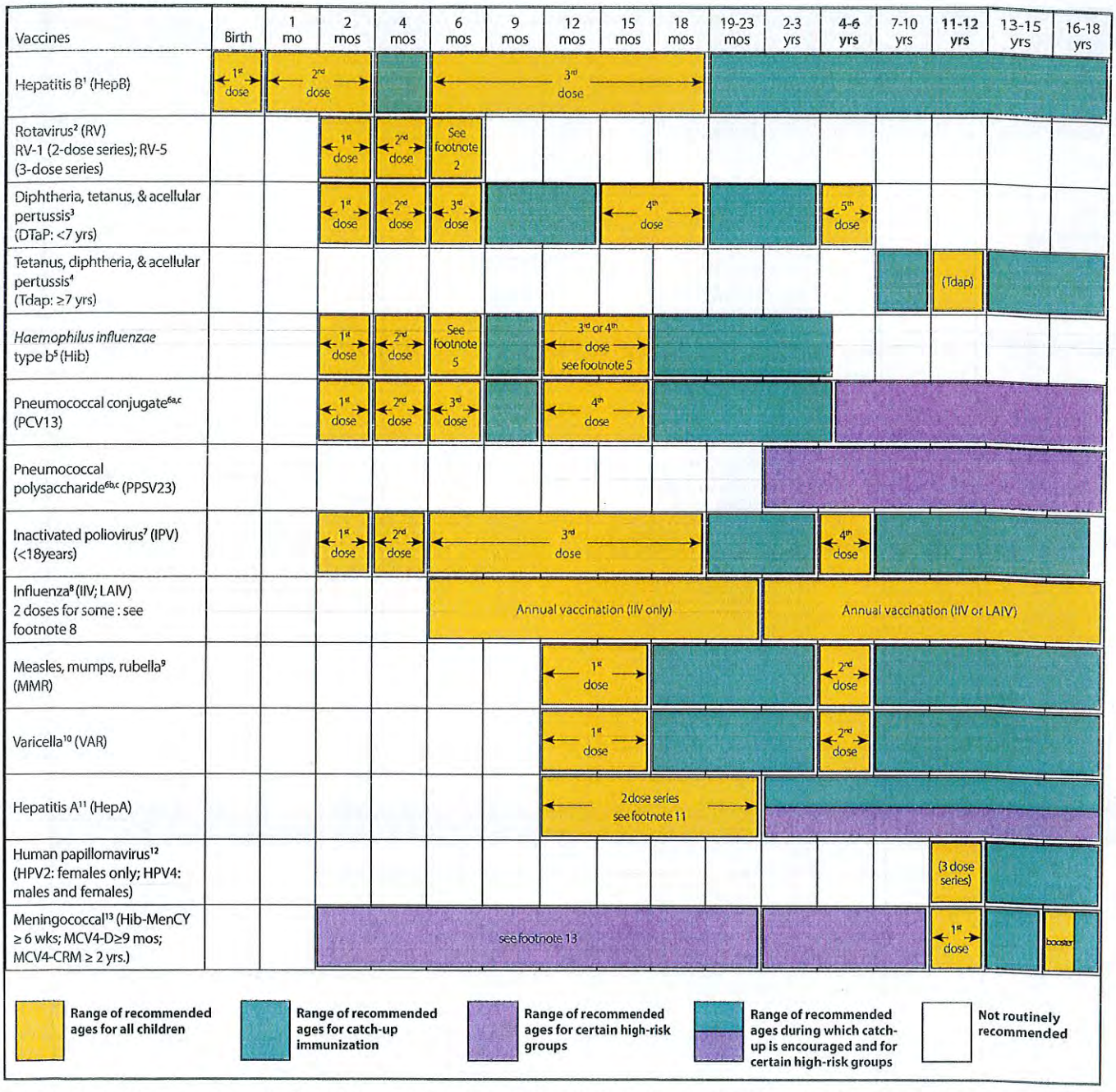
- Recommended Immunizations for Children (Birth through 6 years) (/vaccines/schedules/easy-to-read/child.html#print)
- Recommended Immunizations for Preteens and Teens (7-18 years) (/vaccines/schedules/easy-to-read/preteen-teen.html#print)

Create a Schedule of Vaccines Needed Since Birth

(http://www2a.cdc.gov/nip/kidstuff/newscheduler_le/)
Create a Customized Schedule of Vaccines Needed (birth to 6 years)
(http://www2a.cdc.gov/nip/kidstuff/newscheduler_le/)
Use this tool to create a personalized schedule you can give to and discuss with parents. Parents also can use this print-out to record their child's vaccinations. Just enter your patient's date of birth, click "get schedule", and then click "printable schedule."

FIGURE 1. Recommended immunization schedule for persons aged 0 through 18 years —2013 (for those who fall behind or start late, see the catch-up schedule [Figure 2])

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are in bold.



This schedule includes recommendations in effect as of January 1, 2013. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at http://www.cdc.gov/vaccines/pubs/acip-list.htm. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (http://www.vaers.hhs.gov) or by telephone (800-822-7967). Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including precautions and contraindications for vaccination, is available from CDC online (http://www.cdc.gov/vaccines) or by telephone (800-CDC-INFO [800-232-4636]).

This schedule is approved by the Advisory Committee on Immunization Practices (http://www.cdc.gov/vaccines/acip/index.html), the American Academy of Pediatrics (http://www.aap.org), the American Academy of Family Physicians (http://www.aafp.org), and the American College of Obstetricians and Gynecologists (http://www.acog.org).

NOTE: The above recommendations must be read along with the footnotes on pages 6–8.

FIGURE 2. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind — United States, 2013

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

Persons aged 4 months through 6 years					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to dose 2	Dose 2 to dose 3	Dose 3 to dose 4	Dose 4 to dose 5
Hepatitis B[1]	Birth	4 weeks	8 weeks and at least 16 weeks after first dose; minimum age for the final dose is 24 weeks		
Rotavirus[2]	6 weeks	4 weeks	4 weeks[2]		
Diphtheria, tetanus, pertussis[3]	6 weeks	4 weeks	4 weeks	6 months	6 months[3]
Haemophilus influenzae type b[5]	6 weeks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12–14 months No further doses needed if first dose administered at age 15 months or older	4 weeks[5] if current age is younger than 12 months 8 weeks (as final dose)[5] if current age is 12 months or older and first dose administered at younger than age 12 months and second dose administered at younger than 15 months No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months	
Pneumococcal[6]	6 weeks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months No further doses needed for healthy children if first dose administered at age 24 months or older	4 weeks if current age is younger than 12 months 8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age	
Inactivated poliovirus[7]	6 weeks	4 weeks	4 weeks	6 months[7] minimum age 4 years for final dose	
Meningococcal[13]	6 weeks	8 weeks[13]	see footnote 13	see footnote 13	
Measles, mumps, rubella[9]	12 months	4 weeks			
Varicella[10]	12 months	3 months			
Hepatitis A[11]	12 months	6 months			
Persons aged 7 through 18 years					
Tetanus, diphtheria; tetanus, diphtheria, pertussis[4]	7 years[4]	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at 12 months or older	6 months if first dose administered at younger than age 12 months	
Human papillomavirus[12]	9 years	Routine dosing intervals are recommended[12]			
Hepatitis A[11]	12 months	6 months			
Hepatitis B[1]	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Inactivated poliovirus[7]	6 weeks	4 weeks	4 weeks[7]	6 months[7]	
Meningococcal[13]	6 weeks	8 weeks[13]			
Measles, mumps, rubella[9]	12 months	4 weeks			
Varicella[10]	12 months	3 months if person is younger than age 13 years 4 weeks if person is aged 13 years or older			

NOTE: The above recommendations must be read along with the footnotes on pages 6–8.

DENISE M. LINTON, DNS, FNP-BC

Primary-care prevention of cervical cancer

To reduce the mortality and incidence of this disease, clinicians must be aware of the most recent vaccination and screening guidelines.

Certain genotypes of human papillomavirus (yellow) can cause cervical cancer.

Cervical cancer is a preventable disease, yet it remains a global problem. In the United States, an estimated 4,030 deaths from cervical cancer are expected in 2013, and an estimated 12,340 cases are expected to be diagnosed.[1] The signs and symptoms of cervical cancer usually become apparent when precancerous cells advance to cancer and metastasize. Abnormal vaginal bleeding is the most common symptom of cervical cancer. This bleeding may be heavier and/or longer than menstrual bleeding and tends to occur between regular menses, postcoitus, after douching, or after a pelvic examination. Cervical cancer should also be suspected in postmenopausal women with vaginal bleeding.

The risk factors for cervical cancer include (1) human papillomavirus (HPV) infection, (2) young age of first sexual activity, (3) multiple sex partners, (4) oral contraceptive use over a long period of time, (5) multiparity, and (6) cigarette smoking.[1] Multiparity and cigarette smoking, as well as immunosuppression, are associated with the persistence of the HPV infection and subsequent cervical cancer.[1]

TABLE 1. Cervical cancer vaccines

	Cervarix	Gardasil
Manufacturer	GlaxoSmithKline	Merck & Co., Inc.
FDA approval	2010	2006
Vaccine type	Bivalent	Quadrivalent
Indications for use	Prevention cervical dysplasia and cancer caused by HPV types 16 and 18	• Prevention of cervical, vaginal, vulvar, and anal dysplasia and cancer caused by HPV types 16 and 18 • Prevention genital warts caused by HPV types 6 and 11 in females and males
Age	Females age 10 to 25 years	Females and males age 9 to 26 years
Administration	0.5 mL intramuscularly	0.5 mL intramuscularly
Frequency of administration	Second dose one month after first dose; third dose six months after first dose	Second dose two months after first dose; third dose six months after first dose
Caution and contraindications	Latex allergy, pregnancy, nursing mothers	Yeast allergy, pregnancy, nursing mothers
Adverse effects	Fatigue, headache, myalgia, GI upset, arthralgia, syncope, local reaction	Headache, fever, dizziness, syncope, seizure-like activity, local reaction

TABLE 2. Cervical cancer screening guidelines

Organization	Age at first Pap test	Age at final Pap test	Frequency of screening
American College of Obstetricians and Gynecologists	21 years	65 to 70 years if more than three normal results and no abnormal results in the preceding 10 years	Every two years if younger than age 30 years; every two to three years if older than age 30 years with three consecutive normal results
American Cancer Society	21 years	65 years or older if at least three successive negative Pap tests or at least two negative Pap/HPV tests in the preceding 10 years	Every three years with either Pap test or liquid-based cytology if younger than age 30 years (every five years with Pap/HPV test preferred for women age 30-65 years)
U.S. Preventive Services Task Force	21 years	65 years	Every three years with Pap test or every five years with Pap/HPV tests

Precancerous lesions may be treated by destroying tissue with heat (i.e., electrocoagulation) or cold (i.e., cryotherapy). When there is extensive involvement of the cervical cells, laser ablation or local surgery may be performed. Invasive cervical cancers are generally treated with surgery, radiation, or both, and with chemotherapy in select cases.[1]

Strategies to prevent cervical cancer include vaccines, screening with the Pap test, and follow-up of abnormal Pap test results. A provider recommendation is a strong predictor of participation in a health-related behavior; primary-care clinicians are well positioned to assist women with participation in health-related behaviors that could result in a reduction in cervical cancer mortality and incidence.

Cervical cancer vaccines

More than 90% of all cases of cervical cancer are caused by HPV. Although there are more than 100 strains of HPV, types 16 and 18 are the etiologic agents in approximately 70% of all cases of cervical cancer.[2] Two pharmaceutical companies received FDA approval for cervical cancer vaccines that have proven to be effective against the two oncogenic HPV strains. Primary-care clinicians need to be knowledgeable about these vaccines to provide patients, families, and caregivers with accurate information. This will allow these individuals to make informed decisions regarding vaccination. *Table 1* contains relevant information about the Cervarix and Gardasil vaccines, including manufacturer; year of FDA approval; indications for use; indicated ages and gender; mode, dosage, and frequency

of administration; cautions and contraindications; and some adverse effects.[2-5]

Research findings

In addition to the information depicted in *Table 1*, primary-care clinicians need to be aware of the findings of research studies that surround the administration of the cervical cancer vaccines. This special information must than be applied to clinical practice.

Randomized clinical trials demonstrate that Gardasil:

- Prevents the development of cervical intraepithelial neoplasia 2 (CIN 2) or greater that is caused by HPV type 16 or 18 among women who have never been infected
- Is 97% to 100% more effective in individuals who have never had sex
- Has a 44% efficacy in individuals with or without prior infection
- Is effective against HPV types that are closely related to HPV types 16 and 18 and cause 20% of all cases of cervical cancer (HPV types 31, 33, 45, 52, and 58 are closely related to HPV 16, and HPV 45 is closely related to HPV 18)
- Provides an average duration of protection of 42 months (there is ongoing research to determine whether the duration of protection is longer).[2,3]

Additional observations were made during the pre- and post-licensure surveillance phases of Gardasil. Mild injection-site reaction occurred during pre-licensure. During post-licensure surveillance (between June 1, 2006 and December 31, 2008), more than 12,000 adverse events occurred. Fewer than 10% of the adverse events were serious, and most adverse reactions were similar to those of other vaccines.[2]

All adverse events, syncope, and venous thromboembolic events that were reported by individuals who received the vaccine are still being monitored by the CDC. Because of the possibility of syncopal episodes and subsequent falls and injury, any individual who is given Gardasil should be observed for at least 15 minutes after receiving the vaccine.[2] Thromboembolic events commonly occurred in women who were on oral contraceptive pills (OCPs) or who had a family history of clotting disorder,[2] so be sure to inquire about these topics when taking a patient's history. If an individual with a personal history of OCP use or a family history of clotting disorder decides to be vaccinated, he or she should be informed of the risk for adverse events and the signs and symptoms of thromboembolic diseases. Instruct patients to report to the emergency department immediately if such signs and/or symptoms occur.

Randomized clinical trials demonstrate that Cervarix:

- Is well tolerated
- Has a 93% efficacy in HPV-naïve individuals
- Has a decline in efficacy of 30% in individuals with or without HPV who have had sex
- Has a 50% efficacy among individuals with non-vaccine HPV types.[4]

There is no post-licensure surveillance on Cervarix at this time.

Special information

Primary-care providers need to be aware of some special clinical information regarding both available cervical cancer vaccines.

- HPV DNA serology is unnecessary prior to vaccination.
- It is not necessary to monitor individuals with post-vaccination titers.
- Vaccines are not contraindicated in individuals who were previously infected with HPV, since these patients could be infected with other strains of HPV.
- It is safe to administer Gardasil at the same time as the hepatitis B vaccine; the meningococcal vaccine; and the tetanus, diphtheria, and pertussis vaccine, but these should be administered at different sites.
- If the cervical cancer vaccine is administered to patients who are being treated with immunosuppressive therapies

TABLE 3. Indications for colposcopy

Persistent atypical squamous cells of undetermined significance (ASC-US), ASC-US with positive high-risk HPV
Atypical squamous cells cannot exclude a high-grade squamous intraepithelial lesion (ASC-H)
Atypical glandular cells (AGC)
Low-grade intraepithelial lesions (LSIL)
High-grade intraepithelial lesions (HSIL)
Invasive cancer that is suspicious
The presence of malignant cells

TABLE 4. Indications for endocervical curettage or sampling

ASC-US
LSIL
HSIL
AGC
Adenocarcinoma in situ

TABLE 5. Management of ASC-US or LSIL in women age 30 years or younger

Repeat Pap test in 12 months.
If less than HSIL, repeat Pap test in 12 months.
If repeat Pap test is negative, return to routine screening.
Refer for colposcopy if ASC-US or higher.

TABLE 6. Management of HSIL or higher in women age 30 years or younger

Refer for colposcopy.
If colposcopy is negative for CIN 2 or CIN 3, observe with colposcopy and repeat Pap test every six months for two years.
If HSIL persists without CIN 2 or CIN 3, perform diagnostic excisional procedure.
If HSIL or high-grade colposcopy persists for one year, perform biopsy. If biopsy is negative, patient is observed; further management is necessary if biopsy is positive.

TABLE 7. Management of nonpregnant adults with ASC-US

Repeat Pap test every six months for one year, if both tests are negative, return to routine screening; if ASC or higher, refer for colposcopy.
If colposcopy is negative and HPV status is unknown, repeat Pap test in one year.
If colposcopy is negative and HPV is positive, repeat Pap test every six months for one year or perform HPV DNA testing in one year.
If Pap test result is ASC or higher or HPV-positive, refer for colposcopy.
If HPV DNA test is negative, return to routine screening.

(e.g., corticosteroids or irradiation), there may be a reduced immune response to the vaccine.

- Pregnancy registries monitor the outcome of the fetus that is born to a woman who was inadvertently vaccinated during pregnancy.
- If an individual misses doses, it is not necessary to restart the series.
- Adverse events should be reported to Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or 800.822.7967.[2,4,5]

Vaccine limitations

In addition to discussing with patients vaccine benefits, effects, and contraindications as well as results of research studies, clinicians need to address the limitations of the cervical cancer vaccines. Patients need to be informed that (1) the vaccines are not used for the treatment of such active diseases as genital, anal, vulvar, vaginal, or cervical lesions and dysplasia; (2) the vaccines do not protect all recipients; (3) vaccine effectiveness has not been demonstrated in women who are older than age 26 years; and (4) women who are vaccinated need to continue Pap testing as recommended by their primary-care provider.[1,5]

The Pap test is the primary method of cervical cancer prevention because it facilitates the detection and treatment of precancerous lesions and the subsequent reduction of cervical cancer mortality and incidence. The steady decline in mortality rates from 1975 to 2003 were attributable to prevention and early detection as a result of screening with the Pap test; however, 2005-2009 rates have remained stable.[1] The precise reason for this stability is unknown, but in light of the Pap test's success in reducing mortality, it is vital that clinicians continue to refer patients for Pap testing or perform Pap tests on eligible individuals.

For many years, most Pap testing was conducted using the conventional method in which specimen was placed on a slide, fixed, and then sent to the laboratory for cytology testing. In the early 2000s, the FDA approved liquid-based cytology (LBC) testing (e.g., ThinPrep and SurePath). In LBC testing, specimens are placed in a liquid medium and sent to the laboratory for cytology testing. Although more expensive than the conventional Pap test, the LBC tests are more sensitive. As an added benefit, further testing can be performed on the sample that is already available, eliminating the need for a patient to revisit for additional sampling.

Remember that results can be falsely positive or negative. However, since the advent of LBC, true positives (sensitivity) have increased. DNA tests to detect HPV strains associated with cervical cancer may be used alone, in conjunction with the Pap test, or when Pap test results are equivocal. The Pap test has a sensitivity of 52% to 90%; HPV testing has a sensitivity of 71% to 100%; and combined Pap and HPV DNA testing have a sensitivity of 90% to 100%.[6,7] HPV DNA testing is often requested in women who are older than age 30 years.

According to the American Cancer Society, most cervical precancers develop slowly, so nearly all cancers can be prevented if a woman is screened regularly.[1] However, recommendations vary with regard to when to start and stop testing and how frequently to perform Pap testing. *Table 2* summarizes the guidelines of the leading organizations that make cancer-screening recommendations.[1,8,9]

Abnormal Pap results

Pap testing is effective as long as there is adequate follow-up and management of abnormal results. The follow-up of abnormal Pap test results and the identification and

treatment of precancerous cells prevent progression to cervical cancer. It usually takes approximately 10 years for precancerous cells to become cancerous. The five-year survival rate for women who are diagnosed with localized disease is 91%; the five-year relative survival rate for women with cervical cancer is only 68%.[1] Clearly, clinicians must do everything possible to promote adherence with the follow-up of abnormal Pap test results.

Educating women about diagnostic tests, the meaning of abnormal test results, and the importance of follow-up and treatment can promote adherence. An abnormal Pap result may be subsequent to non-neoplastic causes or cervical-cell abnormality. Non-neoplastic causes include infections and a miscellaneous category.

The list of infections that may be present on a Pap test result includes candidiasis, trichomonas, bacterial vaginosis, herpes, and actinomyces (more common in women who have an intrauterine device in place). The sequelae of these infections range from discomfort to chronic pelvic pain and infertility, so treatment is essential.

The miscellaneous category of non-neoplastic causes of abnormal Pap results includes reactive cellular changes, parabasal cells, and hyperkeratosis. Reactive cellular changes may be secondary to inflammation without infection; a repeat Pap test should be performed in four to six months only in women who are HIV-positive. Parabasal cells, which are common in postmenopausal women, are really immature-appearing cells and do not require repeat testing. Hyperkeratosis is usually related to inflammation associated with trauma or infection and is commonly seen in women who use a diaphragm. A repeat Pap test should be obtained in six to 12 months if the patient is at risk for cervical-cell abnormality (i.e., immunocompromised or younger than age 30 years). Although treatment is generally not necessary, local application of estrogen cream may be beneficial in persistent cases of hyperkeratosis.[10]

Types of cervical-cell abnormalities include: (1) such squamous cell abnormalities as, atypical squamous cells (ASC), atypical squamous cells of undetermined significance (ASC-US), and atypical squamous cells cannot exclude a high-grade squamous intraepithelial lesion (ASC-H); (2) such low-grade intraepithelial lesions (LSIL) as HPV mild dysplasia or CIN 1, and high-grade intraepithelial lesion (HSIL); and (3) such moderate or severe dysplasia as CIN 2 or CIN 3, carcinoma in situ (CIS), and squamous cell carcinoma.

Management of abnormal Pap results

The management of cervical-cell abnormality depends on the type of abnormality, the age of the patient, and the patient's pregnancy status. Treatment of cervical-cell abnormality is usually based on the management guidelines from the American Society for Colposcopy and Cervical Pathology.[11]

Generally, Pap tests are repeated if the result is ASC-US or lower and if the patient is not high-risk (e.g., HIV-positive). If the Pap test result is higher than ASC-US, diagnostic tests need to be performed.[12] Diagnostic tests include colposcopy (*Table 3*) and endocervical curettage (ECC) or endocervical sampling (ECS) (*Table 4*).

During a colposcopy, the cervix is visualized with a colposcope after the application of 3%–5% acetic acid solution. A biopsy is performed if any areas of abnormality are visualized. Colposcopy is an office procedure and is not usually painful, but individuals who are very anxious may require premedication with an oral analgesic or antianxiety agent.

ECC and ECS both involve sampling endocervical tissue with a curette during pelvic examination.[10] These procedures can be performed in the office. Women often experience a cramping sensation during the procedure and are premedicated with an oral analgesic.

A woman aged 30 years or younger should be managed conservatively to prevent infertility and cervical incompetence. Infertility occurs from scarring and stenosis of the cervical os resulting from such treatments as cryotherapy and electrocoagulation. Cervical incompetence may result from treatment procedures that include laser ablation and excisional procedures. Another reason for conservative management is that although

TABLE 8. Management of nonpregnant adults with ASC-H or LSIL

Refer for colposcopy
If colposcopy is negative for CIN 2 or CIN 3, repeat Pap test every six months for one year or perform HPV DNA testing in one year
If follow-up is negative, return to routine screening; refer for a colposcopy if follow up is ASC or higher

TABLE 9. Intial workup of nonpregnant adults with AGC

Atypical endometrial cells
• Sampling of the endocervical and endometrial areas
• Colposcopy if sampling is negative
Not atypical endometrial cells
• Colposcopy with sampling of the endocervix and
• HPV DNA testing and
• Sampling of the endometrium (endometrial sampling is beneficial among women who are age 35 years or older and those who are at risk for neoplasia of the endometrium).

The management of cervical cell abnormality depends on the type of abnormality, the age of the patient, and the patient's pregnancy status.

HPV is very prevalent in this age group, infection tends to clear without treatment. This could also explain why HPV DNA testing is not generally recommended in women who are younger than age 30 years.

The management of ASC-US or LSIL and HSIL or higher in a woman age 30 years or younger are depicted in *Tables 5* and *6*, respectively.[11]

The management of nonpregnant adults with ASC-US, ASC-H, LSIL, and atypical glandular cells is summarized in *Tables 7*, *8*, and *9*, respectively.[11] Individuals with the aforementioned abnormalities are usually referred for diagnostic tests, follow-up, and treatment. However, primary-care clinicians ought to be knowledgeable about the follow-up to educate patients with regard to what to expect. Providing this information will likely reduce patient anxiety and promote adherence.

In the case of a pregnant woman with LSIL, refer for colposcopy six weeks postpartum or refer for colposcopy immediately and follow up postpartum if negative for CIN 2 or CIN 3.[11] This recommendation is likely based on the fact that there is a precancerous phase before cervical-cell abnormality becomes cancerous. Furthermore, this progression takes more than a decade to occur.[1]

HPV DNA testing may be performed with or without a Pap test among women who are age 30 years or older. If HPV DNA testing is negative, repeat the Pap test in three years. If HPV DNA testing is positive, repeat the Pap test and HPV DNA testing in one year. If the Pap test is negative but HPV DNA testing is positive, refer the patient for colposcopy.[11]

Conclusion

It is fortunate that cervical cancer is preventable, but women are still being diagnosed with and dying from this disease. By simply becoming educated about cervical cancer prevention strategies, primary-care clinicians can contribute to the reduction of cervical cancer incidence and mortality. Applying this knowledge to clinical practice enables providers to positively influence patients, family members, and caregivers when it comes time to decide whether to participate in cervical cancer vaccination, obtain a Pap test, and follow up abnormal Pap test results. ■

Dr. Linton is Assistant Professor, University of Louisiana at Lafayette College of Nursing and Allied Health Professions.

References

1. American Cancer Society. Cancer Facts and Figures 2013. Available at www.cancer.org/Research/CancerFactsFigures/CancerFactsFigures/ACSPC-036845.
2. Gardasil [Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine, Recombinant] package insert. Merck & Co., Inc.; 2011. Available at www.merck.com/product/usa/pi_circulars/g/gardasil/gardasil_pi.pdf.
3. Monthly Prescribing Reference. Gardasil. Available at www.empr.com/gardasil/drug/1653/.
4. Monthly Prescribing Reference. Cervarix. Available at www.empr.com/cervarix/drug/3508/.
5. Castle PE, Cox JT, Palefsky JM. Recommendations for the use of human papillomavirus vaccines. In: *UpToDate*, Goldberger, AL (Ed), UpToDate, Waltham, Mass.: 2013.
6. Mariani SM. Conference report—early cancer diagnosis: beating the odds. *MedGenMed.* 2004;6:18. Available at www.ncbi.nlm.nih.gov/pmc/articles/PMC1435596/.
7. Reust CE. Does the increased sensitivity of the new Papanicolaou (Pap) tests improve the cost-effectiveness of screening for cervical cancer? *J Fam Pract.* 2001;50:175.
8. ACOG Committee on Practice Bulletins—Gynecology. ACOG Practice Bulletin no. 109: Cervical cytology screening. *Obstet Gynecol.* 2009;114:1409-1420.
9. U.S. Preventive Services Task Force. Screening for cervical cancer. Available at www.uspreventiveservicestaskforce.org/uspstf/uspscerv.htm.
10. Holschneider CH, Crum CP, Cervical cytology: interpretation of results. In: *UpToDate*, Goldberger, AL (Ed), UpToDate, Waltham, Mass.: 2012.
11. Wright TC Jr, Massad LS, Dunton CJ, et al. 2006 consensus guidelines for the management of women with abnormal cervical cancer screening tests. *Am J Obstet Gynecol.* 2007;197:346-355.
12. Feltmate CM, Feldman S. Colposcopy. In: *UpToDate*, Goldberger, AL (Ed), UpToDate, Waltham, Mass.: 2013.

All electronic documents accessed February 15, 2013.

New Easy Instructions!!!

Contra Costa Health Plan Interpreter Services for Community Providers

Not including hospitals. Hospitals please use your own contracted vendor.

WHEN YOU NEED AN INTERPRETER ACCESS FAST OVER THE PHONE:

1. **DIAL:** 1-866-874-3972

2. **PROVIDE:** your 6-digit Client ID 298935

3. **INDICATE:** the language you need or press
   - 1 for Spanish
   - 2 for all other languages and state the name of the language you need
   - 0 for assistance if you don't know what language you need

4. **PROVIDE**: Additional information, if required:
   -Patient Name
   -Patient Date of Birth
   -Doctor Name
   -Doctor Phone Number

5. **CONNECT**: to an interpreter, document his/her name and ID number in patient's chart for reference. Summarize what you wish to accomplish and give any special instructions.

When calling or receiving a call from a limited English proficient individual: Use the conference feature on your phone to make a 3-way call, and follow the instructions above to connect to an interpreter.

Face to Face Interpretation: CPN providers may also ask for in-person or face to face interpretation services for ASL (American Sign Language) or other languages. This service is only approved if the interpretation cannot be done over the phone such as ASL; is a sensitive topic such as serious diagnosis; requires visual explanation, etc. To arrange for Face to Face Interpreter Services call **1-877-800-7423 Press 4** for Advice Nurse, they will assist you.

We provide flyers for your reception area

We provide flyers you can post in your office which state: **Point to your language! We will get you an interpreter.**

To print a copy of the flyer, go to our website at:
www.cchealth.org/health_plan/provider_interpretation.php

If you have any problems accessing the Linguistic Services listed above you can call CCHP at: 925-313-6063.