OB/GYN Webinar Series 2017-2018

OB/GYN Webinar Series 2017-2018

Hot Topics in Obstetrical Care

Wednesday, November 29, 12pm- 1pm EST

Presented by:

THE University of Vermont MEDICAL CENTER

VERMONT DEPARTMENT OF HEALTH

OB/GYN Webinar Series 2017-2018

- **Topics to be Discussed:**

- What you need to know and do: Plan of Safe Care and DCF Notification for Substance-Exposed Infants (Vermont CAPTA)

Presented by:
Anne Johnston, M.D., Associate Professor
UVMMC Neonatal-Perinatal Medicine
Ilisa Stalberg, MCH Deputy Director
Vermont Department of Health

- Flu Vaccine & Miscarriage and
Postpartum Long-Acting Reversible Contraception (LARC)

Presented by:
Marjorie Meyer, M.D., Associate Professor
UVMMC Obstetrics & Gynecology, Maternal Fetal Medicine

What you need to know and do: Plan of Safe Care and DCF Notification for Substance-Exposed Infants (Vermont CAPTA)

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Vermont Department of Health

The heart and science of medicine.

UVMHealth.org/MedCenter

Substance-Exposed Newborns: Vermont's Approach to New Federal Regulations

- *Anne Johnston MD, Associate Professor of Pediatrics*
- *Sally Borden M.Ed., Executive Director KidSafe Collaborative*
- *Suzanne Shibley MBA, Policy and Planning Manager, DCF – Family Services Division*

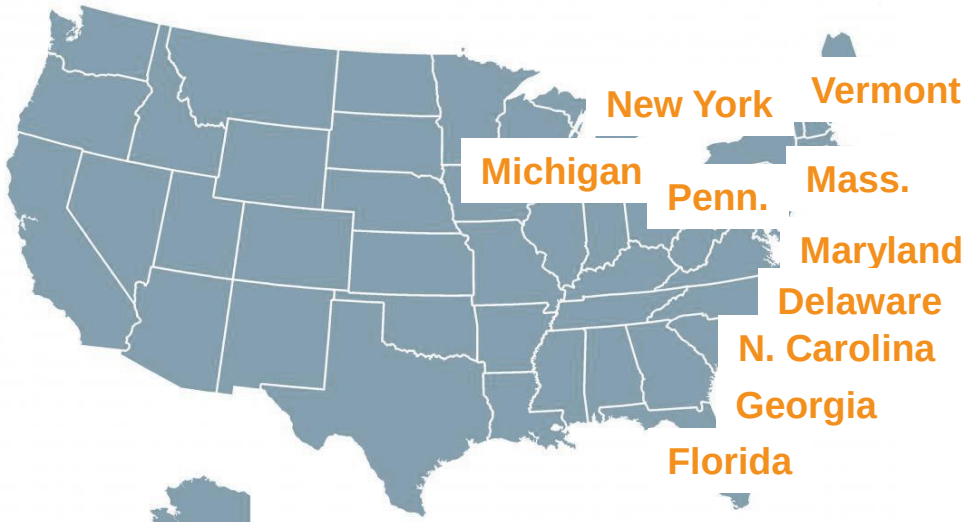
November 29, 2017

THE University of Vermont MEDICAL CENTER

Objectives

- 2017 Policy Academy: Improving Outcomes for Pregnant and Postpartum Women with Opioid Use Disorders and their Infants, Families, and Caregivers
- CAPTA: Child Abuse Prevention and Treatment Act
- Substance-exposed newborns in Vermont: background
- Implementation of amended CAPTA requirements

2017 Policy Academy: Improving Outcomes for Pregnant and Postpartum Women with Opioid Use Disorders and their Infants, Families and Caregivers



Baltimore, Maryland / February 7-8, 2017

Children's Bureau

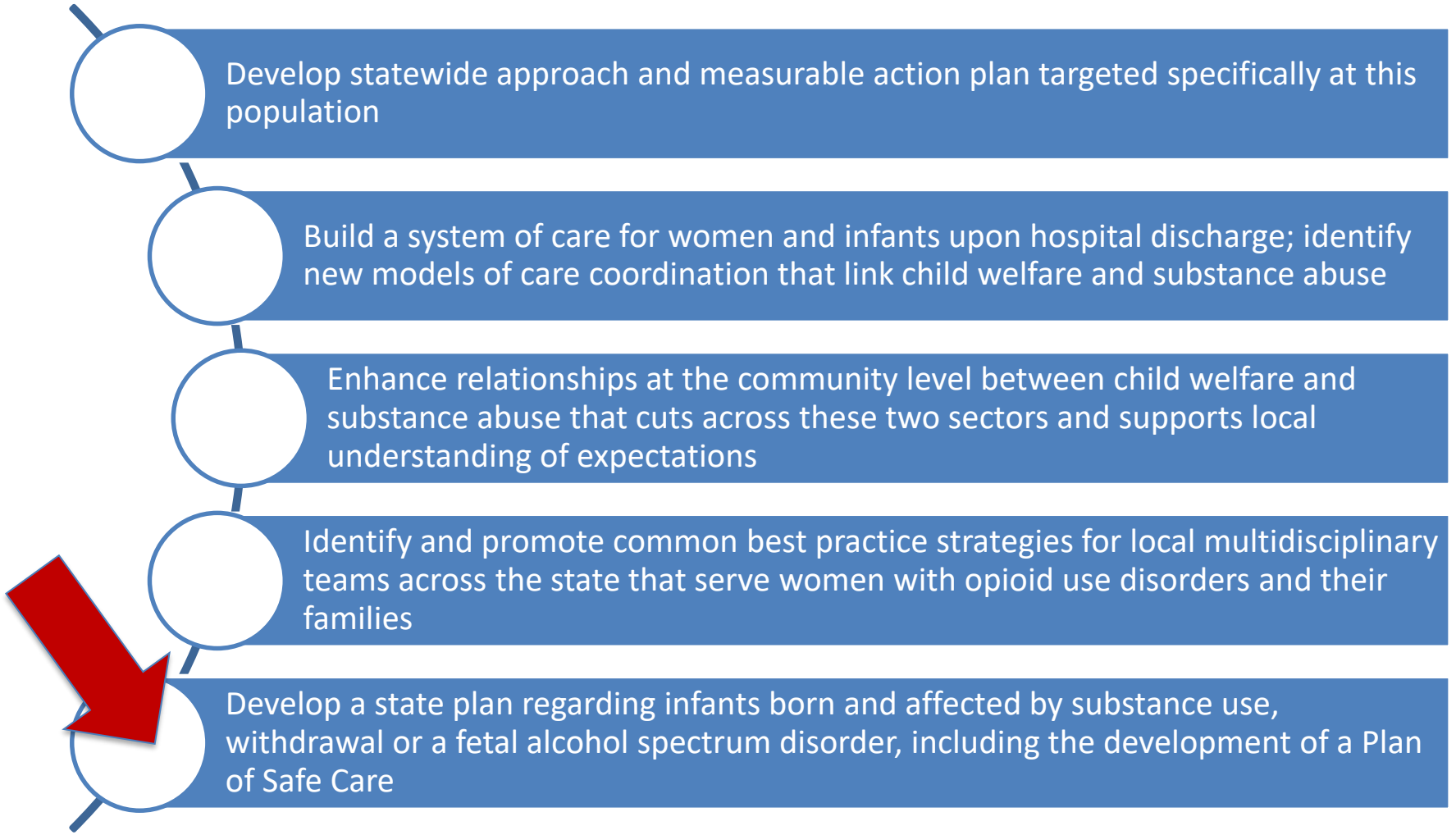
Substance Abuse and Mental Health Services Administration
SAMHSA
www.samhsa.gov • 1-877-SAMHSA-7 (1-877-726-4727)

N C S A C W
National Center on Substance Abuse and Child Welfare
Bringing Systems Together for Family Recovery, Safety, and Stability

Vermont Team

- Ilisa Stalberg, Maternal and Child Health Deputy Director, Department of Health
- Sally Borden, Executive Director, KidSafe Collaborative
- Kim Coe, Director of Residential and Community Treatment Programs, Lund
- Lorna Corbett, Nurse Program Administrator, DCF, Child Development Division
- Anne Johnston, Associate Professor, Department of Pediatrics, UVM
- Megan Mitchell, Division of Alcohol and Drug Abuse Programs, Department of Health
- Suzanne Shibley, Policy and Planning Manager, DCF
- Cindy Thomas, Division Director, Division of Alcohol and Drug Abuse Programs, Department of Health

Vermont Goals



CAPTA- *Child Abuse Prevention and Treatment Act*

1974

- Enacted to provide federal funding to support prevention, assessment, investigation, prosecution, and treatment activities related to child abuse and neglect

2003

- Amendment: governors must assure policies and procedures are in place to address the needs of infants "*born with and identified as being affected by **illegal** substance abuse or withdrawal symptoms resulting from prenatal drug exposure*"
- Plan of Safe Care

2010

- Amendment: clarified the definition of substance exposed infant and added **Fetal Alcohol Spectrum Disorder (FASD)**

2016

- Amendment: clarified population requiring a Plan of Safe Care: "*born with and identified being affected by **illegal** substance abuse withdrawal symptoms resulting from prenatal drug exposure or Fetal Alcohol Spectrum Disorder*"

Medication Assisted Treatment (MAT): Standard of Care for Pregnant Women with Opioid Use Disorder

- WHO 2014: “Pregnant women dependent on opioids should be encouraged to use opioid maintenance treatment…rather than…attempt opioid detoxification.”
- Facilitates retention of mothers/infants with decreased use of illicit substances when compared to no medication
- MAT results in NAS which needs Rx in 50-60% patients (Jones et al, 2010)
- The severity of NAS does not appear to differ according to the dose of methadone maintenance therapy mothers received during pregnancy"(Cleary et al, 2010; Jones et al., 2013)

Issues facing substance-using pregnant women and their children

- **Generational substance use**

- **Legal involvement**
- **Unstable housing**
- **Unstable transportation**

- **Limited parenting skills and resources**
- **Exposure to trauma**

- **Lack of positive and supportive relationships**

Slide adapted courtesy of H Jones

Shame

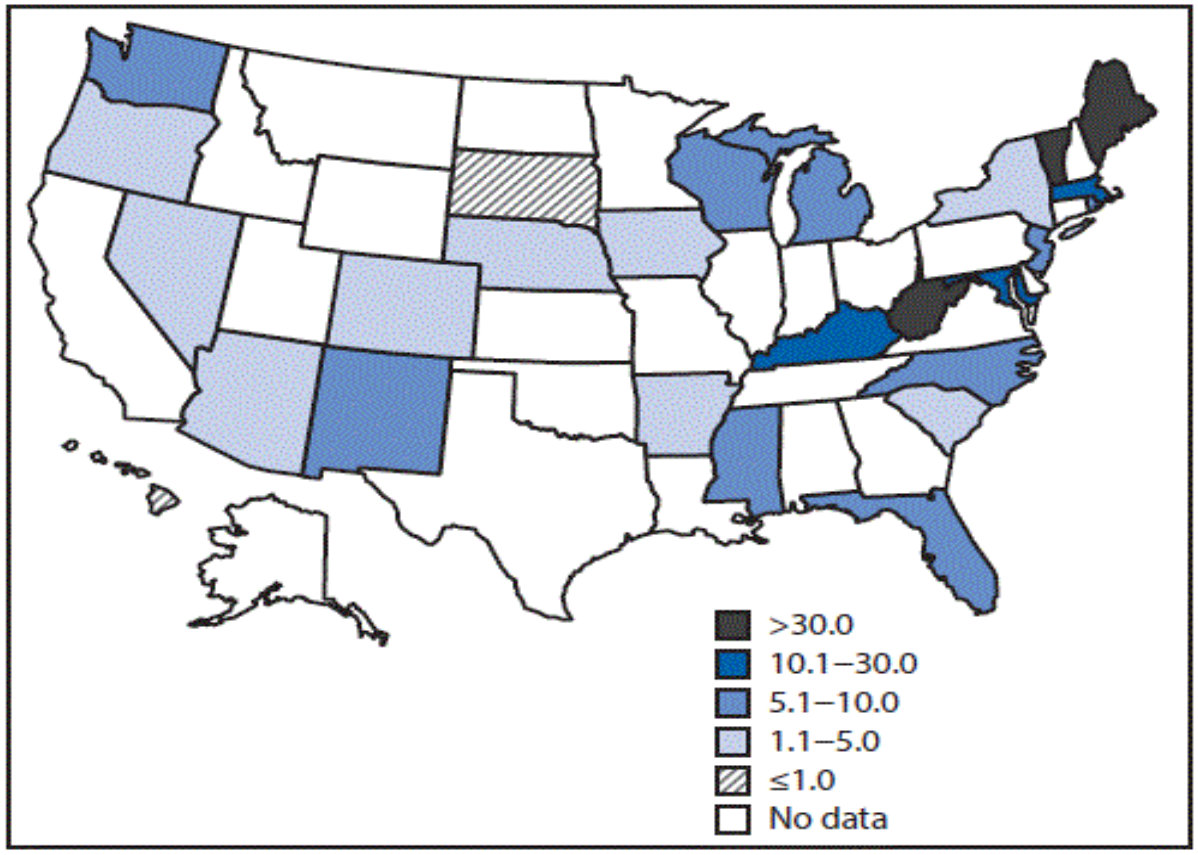
The **untreated** woman with opioid-use disorder who delivers a newborn

- Neonatal opioid withdrawal
- Neonatal complications
  - Prematurity, low birth weight
  - Meconium aspiration, transient tachypnea
  - Feeding difficulty, seizures, jaundice
- If recognized that mother is opioid-dependent
  - Child protective services involvement
  - Challenge of taking care of newborn and starting treatment for addiction

www.thefix.com

- If unrecognized and infant exhibits no withdrawal
  - After discharge infant may be particularly irritable
  - Family's ability to cope and seek help is impeded by fear of discovery
  - Mother will probably remain active in her addiction
  - Infant may be exposed to unsafe situations
  - Mother continuously "flying under the radar" and hiding her addiction
  - Mother often unwilling to come forward for fear of losing her child/children

Neonatal Abstinence Syndrome Incidence Rates – 25 States, 2012-2013



Maine	30.4*
Vermont	33.3*
W Virginia	33.4*

*per 1,000 hospital births

Vermont had the highest annual rate increase of states surveyed

Ko JY, Patrick SW, Tong VT, Patel R, Lind JN, Barfield WD. Incidence of Neonatal Abstinence Syndrome — 28 States, 1999–2013. MMWR Morb Mortal Wkly Rep 2016;65:799–802

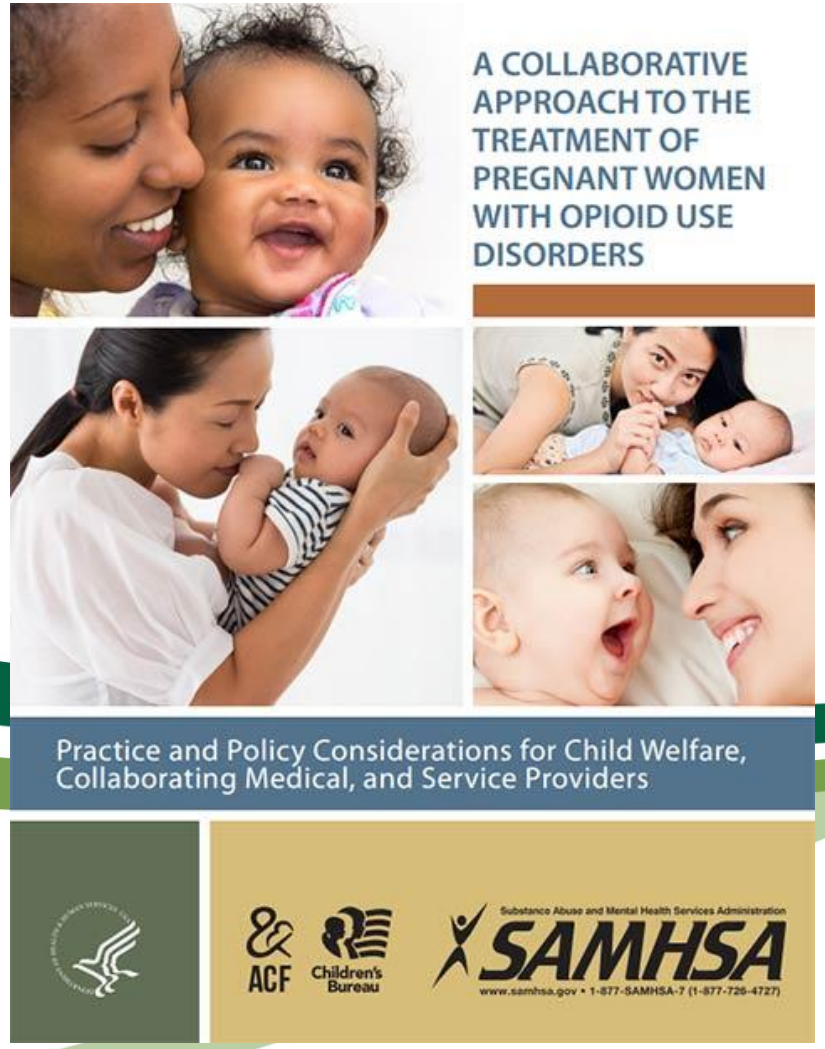
Increase in NAS in Vermont

Represents:

- **increased safe access to treatment**
- **increased identification**

This is a good thing!

CHildren And Recovering Mothers (CHARM) Collaboration in Burlington, Vermont



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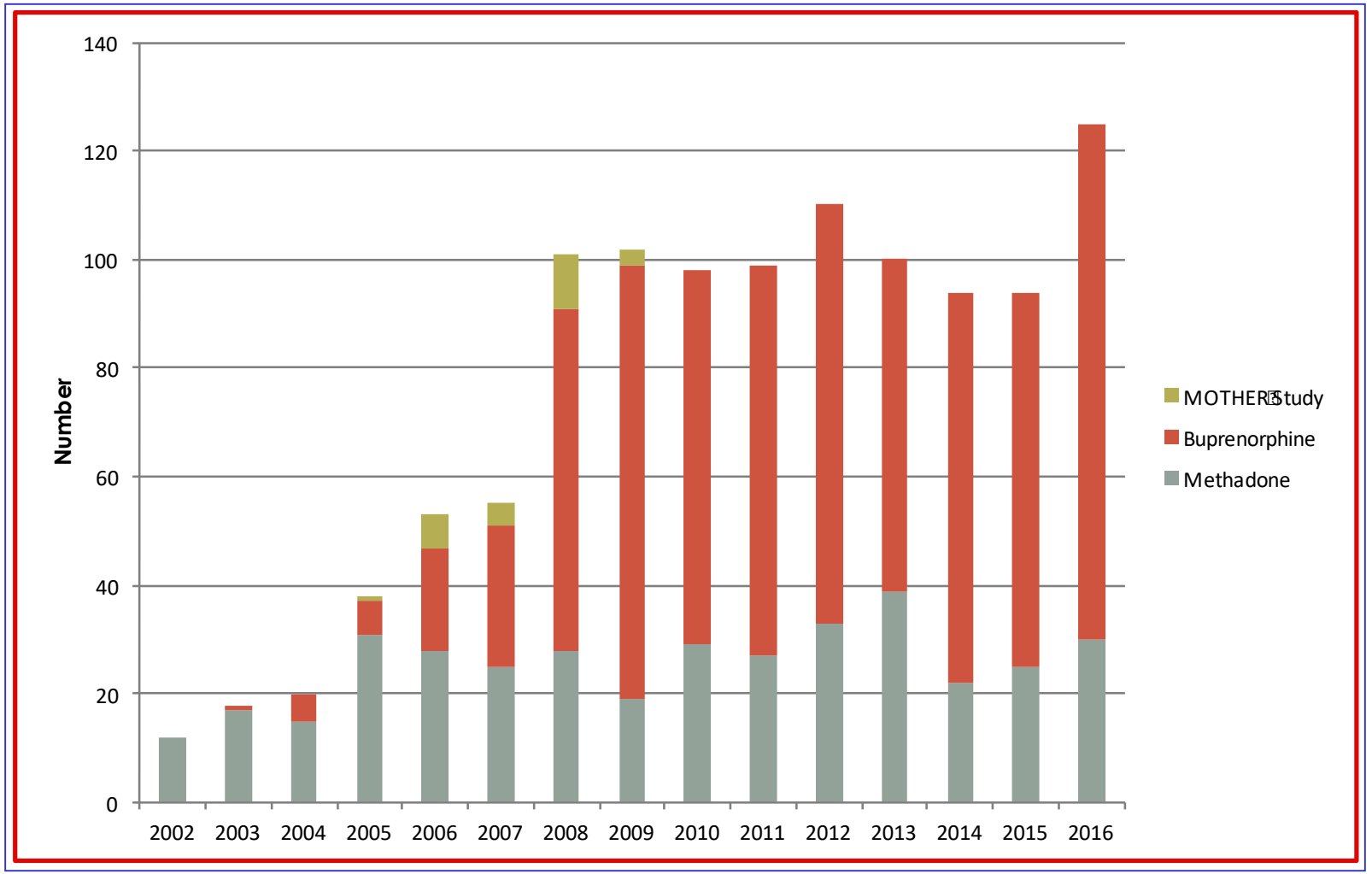
UVM Children's Hospital:

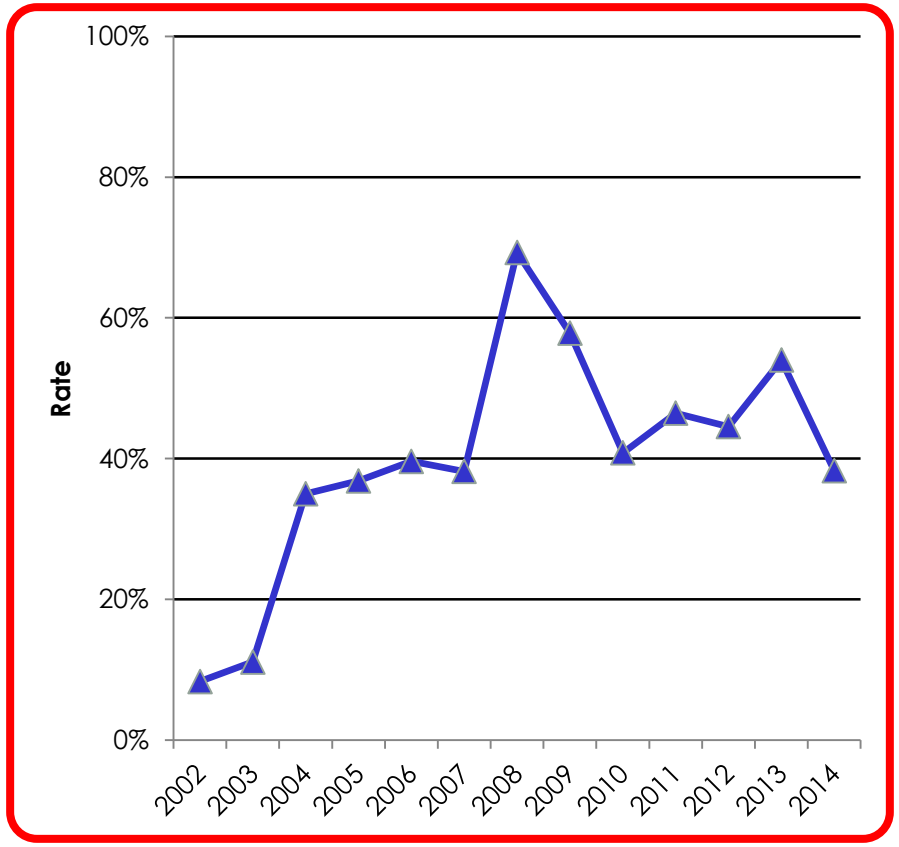
Infants born (at UVM) to opioid dependent women with substance use disorder on **methadone** or **buprenorphine** at delivery (N = 1119)



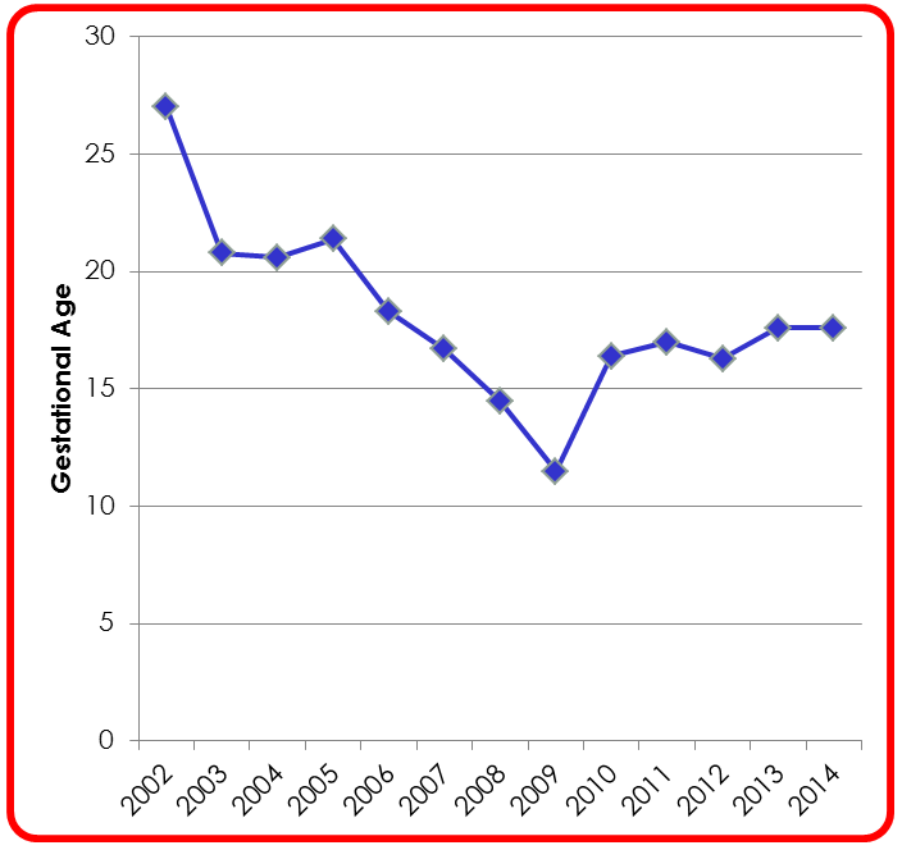
UVM Children's Hospital

Timing of initiation of Medication-Assisted Treatment(MAT)

% Mothers on MAT prior to conception

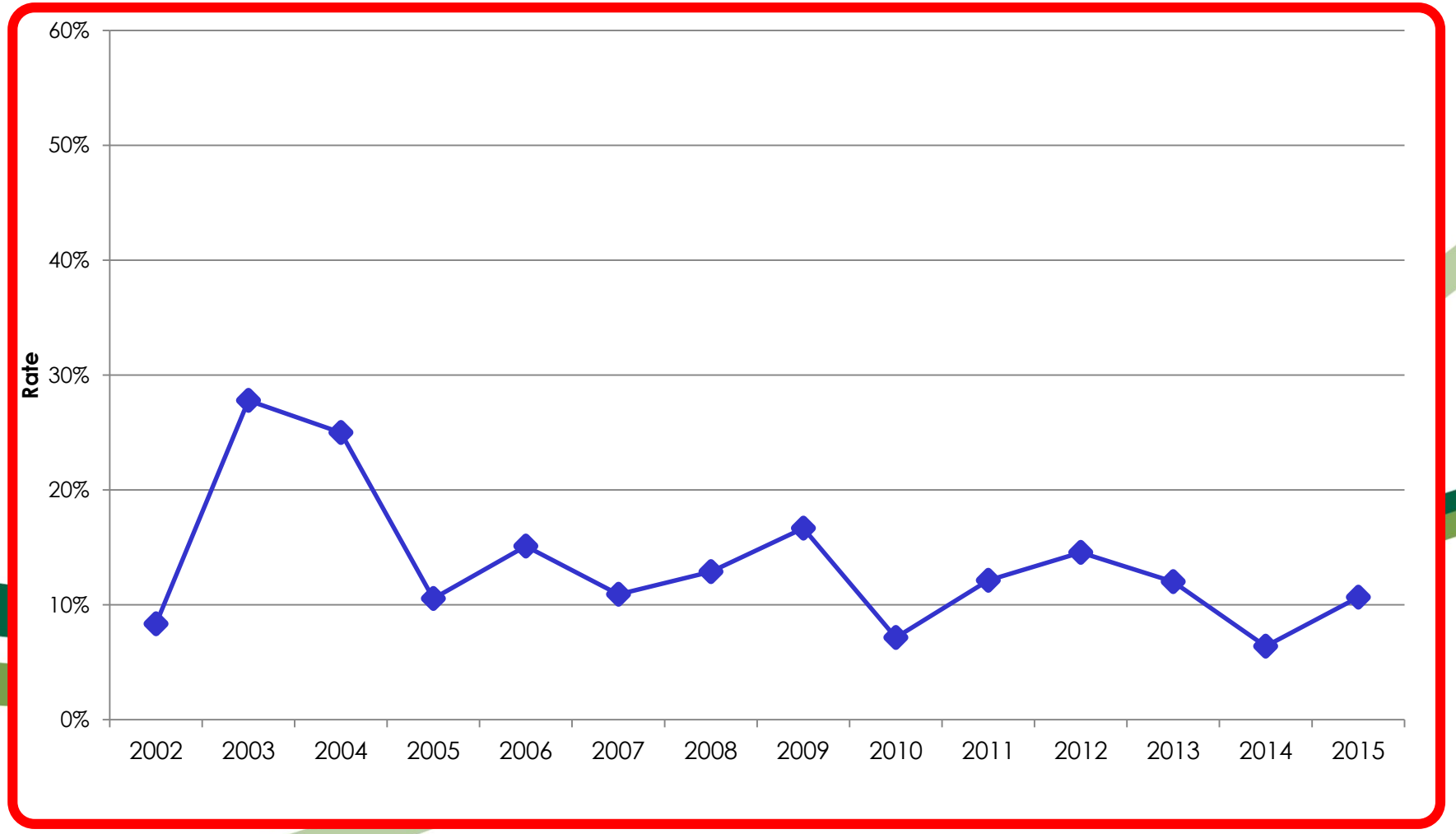


Average GA started MAT if not prior to conception



UVM Children's Hospital

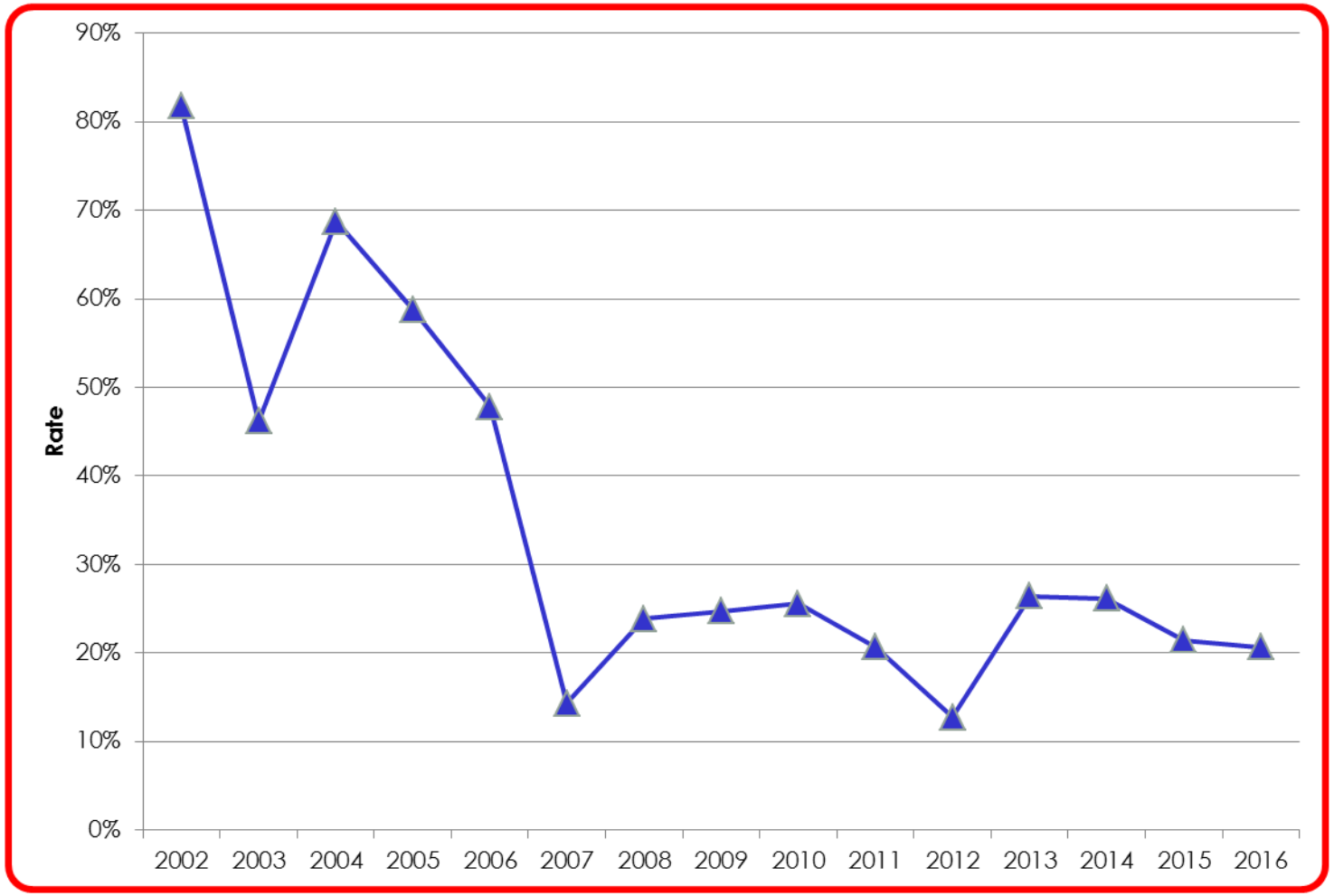
% Premature infants born (at UVM) to women on MAT



Average prematurity rate at UVM: 14%

UVM Children's Hospital

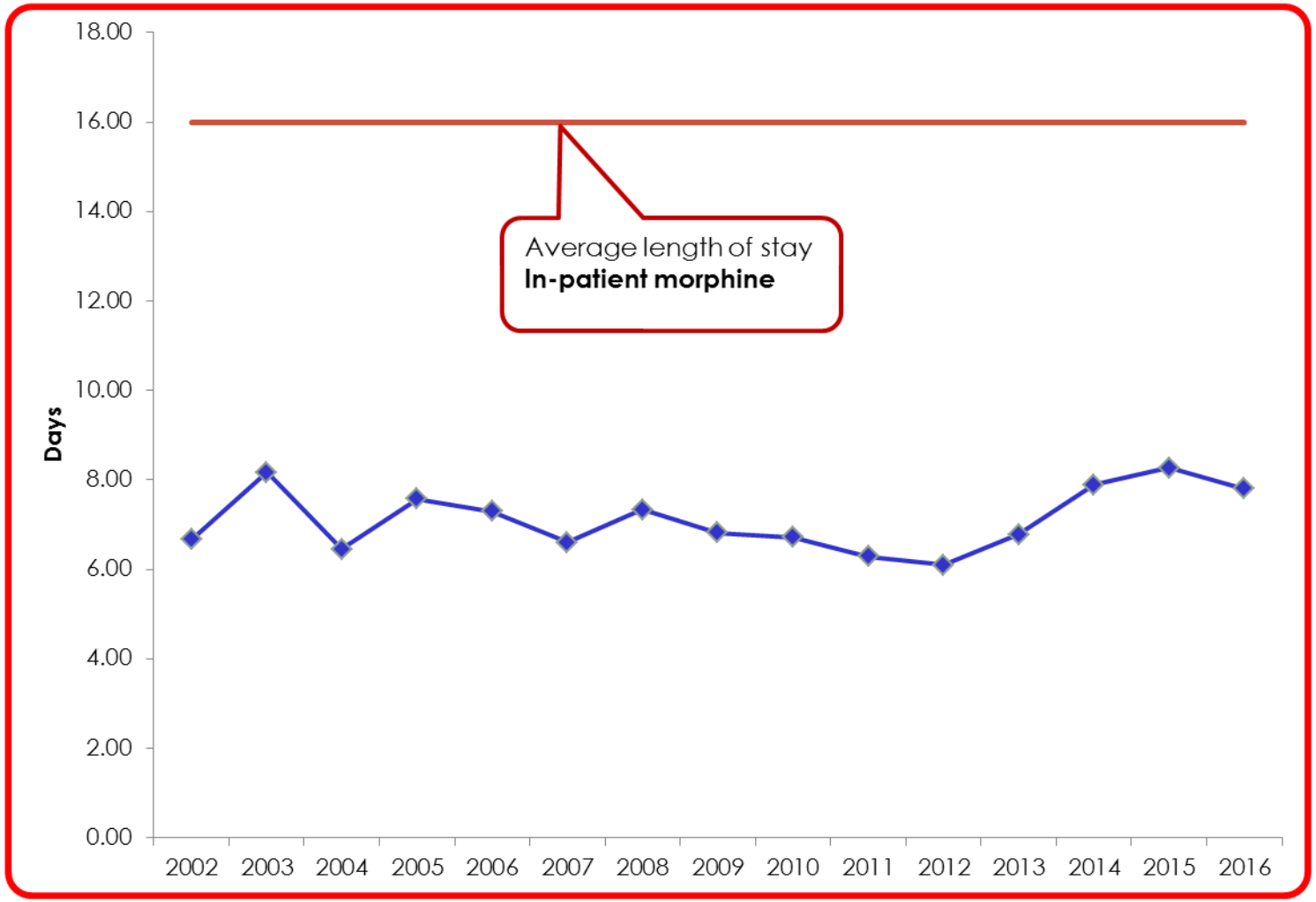
% Term newborns who received any pharmacologic therapy born to women on at UVM



National Average: 55%

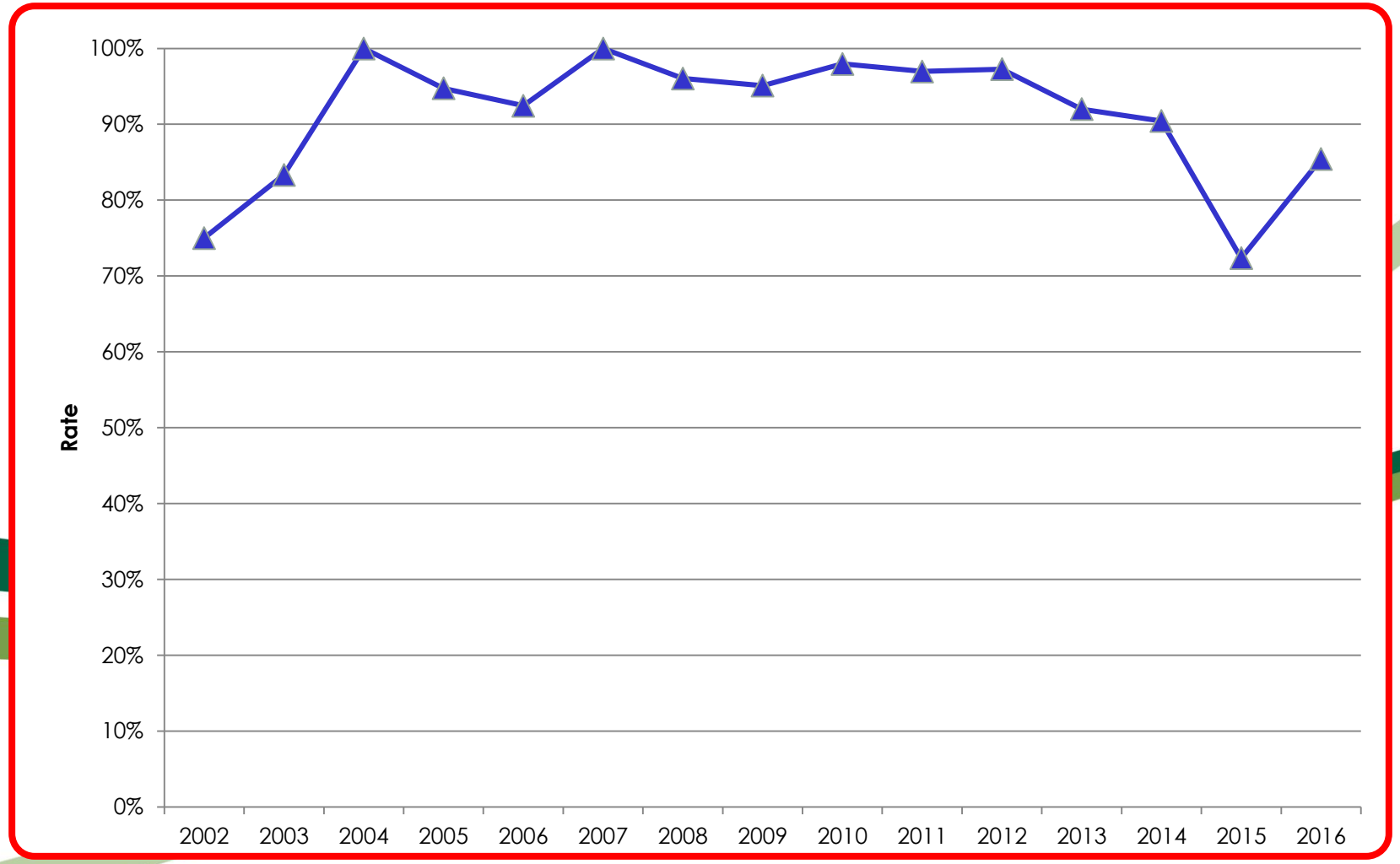
UVM Children's Hospital

Average length of hospital stay for methadone treated newborns



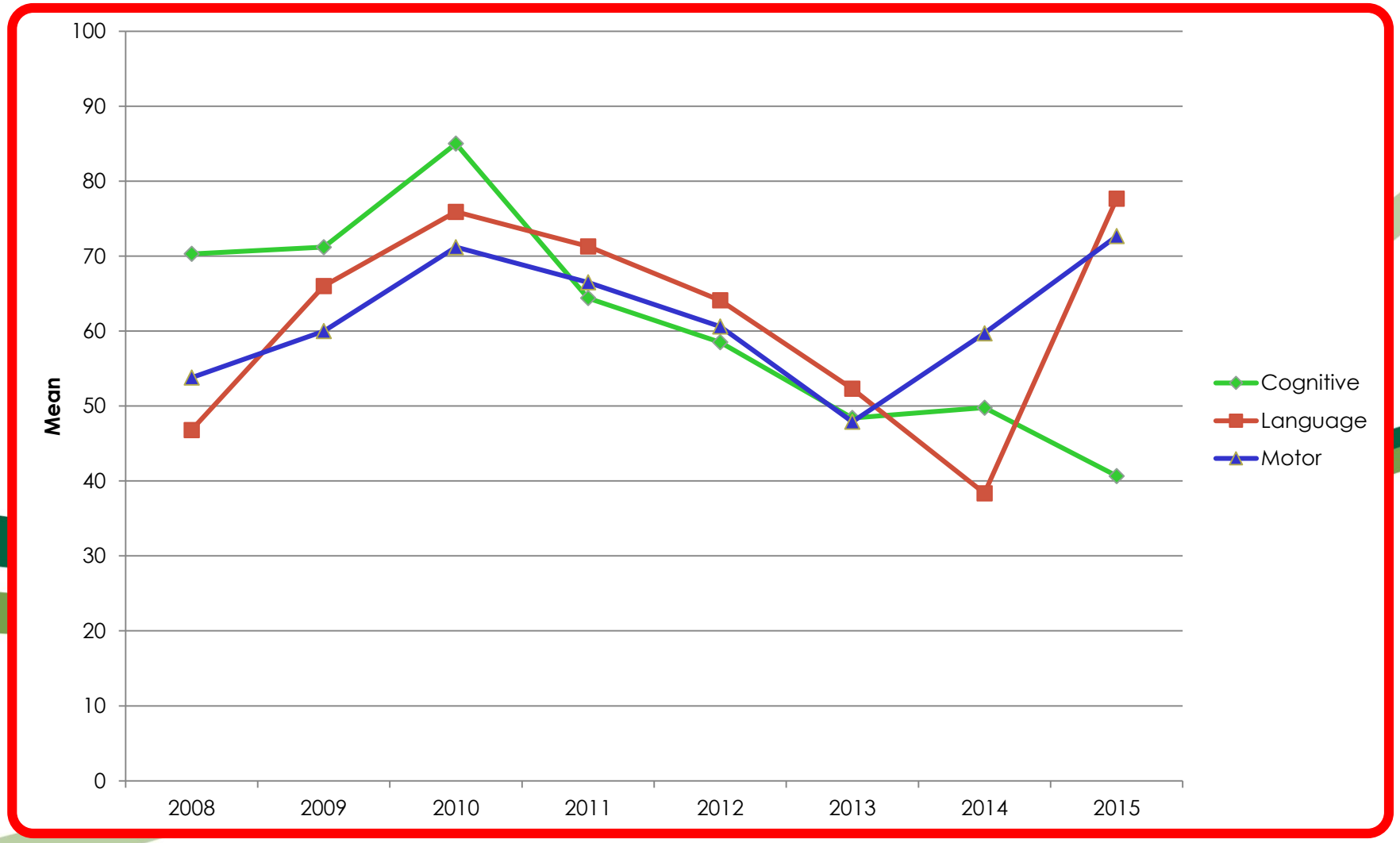
UVM Children's Hospital

% Discharged with one or both parents: newborns born at UVM to women on MAT



UVM Children's Hospital

Bayley III: mean percentile rank (n=277) 7-14 months of age



CARA (Comprehensive Addiction and Recovery Act) 2016
Amends CAPTA (Child Abuse Prevention and Treatment Act)

- Addresses the needs of infants
  born with and identified as being **affected by substance abuse, withdrawal or Fetal Alcohol Spectrum Disorder**
  Not *just illegal substance abuse as was the requirement prior to CARA*
- *Requires health care providers involved in the delivery or care of such infants to "notify" child protective services of such infants; states are instructed to set up their own definitions and systems*
- **Plan of safe care for affected infants**
- Requires states to report on:
  - **# of such infants**
  - **# of** infants with **plan of safe care**
  - **# of** infants for whom a **referral was made** for **appropriate** services

Implementation in Vermont: Considerations

- What is the difference between a notification and a report to DCF?
- Which substances and under which conditions?
- How do we handle use of marijuana during pregnancy?
- Who is responsible for developing the “Plan of Safe Care”?
- What information should be in the “Plan of Safe Care”?
- Who should have it and where should it reside?
- How can we continue to attract pregnant opioid-dependent women into treatment while following CARA/CAPTA?

DCF Report versus DCF Notification

DCF Report	DCF Notification
Child safety concerns	No child safety concerns
Call DCF centralized intake with identifying information	Transmit de-identified data set to DCF
DCF develops Plan of Safe Care with family and relevant providers	Hospital staff develops Plan of Safe Care with family and transmits to PCP

Which substances and under what conditions?

- Use of illegal substances during pregnancy → DCF report
- Use of non-prescribed opioids or benzodiazepines → DCF report
- Use of marijuana during pregnancy
  - Vermont's approach with upcoming DCF policy change: If there are no other child safety concerns, marijuana use during pregnancy will lead to a DCF notification at birth and a plan of safe care
- MAT during pregnancy → DCF notification
- Prescribed opioids for pain during pregnancy → DCF notification
- Prescribed benzodiazepines during pregnancy → DCF notification

Plan of Safe Care

- Required for all DCF notifications
- Hospital staff in conjunction with parent(s) will be responsible for developing plan of safe care after delivery and before newborn discharge
- Plan of safe care will be sent to the infant's primary care provider and reside with them
- Families may choose to share the plan of safe care with other providers involved in their care

Plan of Safe Care and Notification

Vermont Plan of Safe Care for Notifications (8/25/17)

Name of infant: DOB: Admission date: Discharge date:
Infant's PCP:

Household members:

Name	Age	Relationship to infant	Name	Age	Relationship to infant

Identified supports:

Check box(es) next to applicable criteria:

Methadone		Nicotine/tobacco	
Buprenorphine		Marijuana	
Prescribed opioids for pain		Other (specify):	
Prescribed benzodiazepines		Other (specify):	

Comments:

Check box(es) for all applicable services and new referrals for infant and mother/caregivers:

	Discussed	Current	New Referral	Organization	Contact person (if applicable)
Medication Assisted Treatment					
Mental Health Counseling					
Substance Abuse Counseling					
12 Step Group					
Recovery Supports					
Smoking Cessation					
Parenting Groups					
Home visiting					
WIC					
Children's Integrated Services					
Housing Assistance					
Financial Assistance					
Childcare					
Safe Sleep Plan					
Other					

Post-discharge Family Strengths and Goals (Eg: breastfeeding, housing, smoking cessation, parenting, recovery)

Comments:

Signature of parent /caregiver: _____ Signature of staff: _____

Vermont CAPTA Notification (8/25/17)

Please do not include patient identifiers

Please check the box next to the following criteria, if applicable:

- ☐ Mother is engaged in medication-assisted treatment with methadone or buprenorphine
- ☐ Mother was treated with opioids for chronic pain by a provider during her pregnancy
- ☐ Mother was treated with benzodiazepines by a provider during her pregnancy
- ☐ Mother used marijuana during pregnancy
- ☐ Newborn was treated pharmacologically for withdrawal symptoms

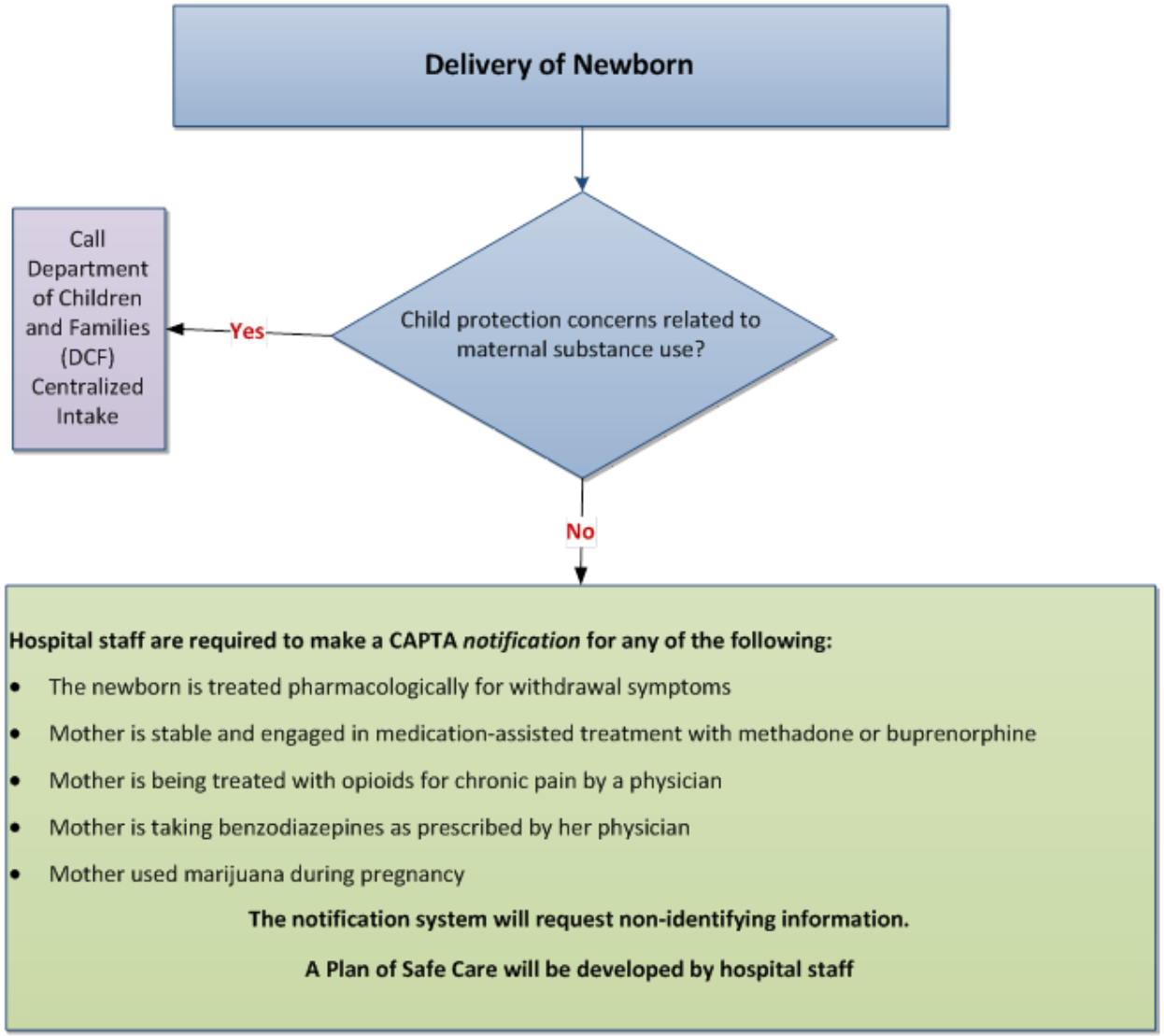
Please check if any of the following are applicable:

- ☐ Plan of Safe Care was completed and will be provided to infant's PCP for ongoing monitoring
- ☐ Mother was engaged in services prior to delivery (ex: counseling, treatment, parenting classes)
- ☐ Additional referrals were made for services at the time of delivery for the infant and/or mother/caregivers

Unique hospital identifier: XXXXXXXX

Fax Number: (XXX) XXX-XXXX

Vermont's Approach to New CAPTA Requirements



Vermont's Approach to New CAPTA Requirements

DCF's newborn report acceptance criteria:

- A newborn has a positive toxicology screen for illegal substances or prescription medication not prescribed to the patient or administered by a physician; or
- A newborn has been deemed by a medical professional to have Neonatal Abstinence Syndrome through NAS scoring as the result of maternal use of illegal substances, non-prescribed prescription medication or misuse of prescribed medication, a newborn is being treated pharmacologically due to an undetermined exposure; or
- A newborn has been deemed by a medical professional to have Fetal Alcohol Spectrum Disorder.

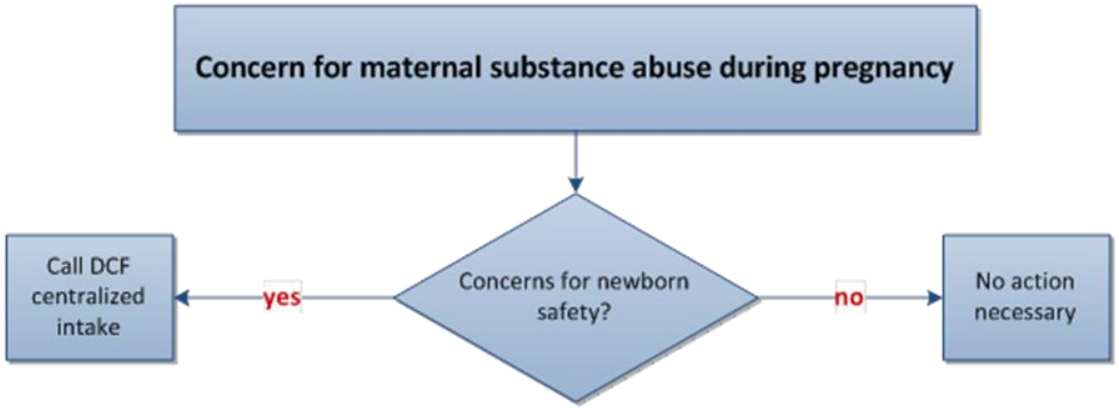
- DCF Family Services does not intervene in situations in which the sole concern is around the mother's use of marijuana

DCF will assess child safety and engage mother/parents in the development of a Plan of Safe Care.

Making a DCF report during pregnancy

- Vermont is unique in it’s ability to accept a DCF report and open an assessment during pregnancy
- The assessment may begin 1 month prior to the expected date of delivery

Vermont's Approach to Substance Use During Pregnancy



DCF's Prenatal report acceptance criteria:

- A physician certifies or the mother admits to use of *illegal* substances use of *non-prescribed* prescription medication, or *non-medical* use or misuse of prescription medication during the last trimester of her pregnancy.
- When there is an allegation that there is likely to be a serious threat to a child's health or safety due to the mother's substance abuse during pregnancy, intervention before a child's birth may assist the family to remediate the issues and avoid the need for DCF custody after the birth.
- DCF Family Services does not intervene in situations in which the sole concern is around the mother's use of marijuana

Assessments may begin approximately one month before the due date or sooner if medical findings indicate that the mother may deliver early.

DCF will assess child safety and engage mother/parents in the development of a Plan of Safe Care.

Next Steps

- Sep – Oct 2017: feedback from providers
- Nov 2017: DCF policy change re: marijuana
- Nov 2017: Implementation at UVM Children's Hospital
- Dec 2017 – Feb 2018: Implementation at Vermont community hospitals

Babyleavase.com

The health of the baby depends upon the mother’s health, the family’s health

Flu Vaccine & Miscarriage

Presented by Marjorie Meyer, M.D., Associate Professor

UVMMC Obstetrics & Gynecology, Maternal Fetal Medicine

THE University of Vermont MEDICAL CENTER

Flu Vaccine & Miscarriage

Case-Control study 2010-2011 season and 2011-2012 season
(same group did identical study 2006 before H1N1)

n=485 cases of SAB in a health care network
Matched controls

Of those women that experienced SAB (cases: 5-20 weeks) were they more likely to have received H1N1 containing vaccine?

Post hoc question (not part of primary study): Were they more likely to have received vaccine 2 years in a row?

Vaccine 35 (2017) 5314–5322

Contents lists available at ScienceDirect

Vaccine

journal homepage: www.elsevier.com/locate/vaccine

Association of spontaneous abortion with receipt of inactivated influenza vaccine containing H1N1pdm09 in 2010–11 and 2011–12

James G. Donahue [a,*], Burney A. Kieke [a], Jennifer P. King [a], Frank DeStefano [b], Maria A. Mascola [c], Stephanie A. Irving [d], T. Craig Cheetham [e], Jason M. Glanz [f], Lisa A. Jackson [g], Nicola P. Klein [h], Allison L. Naleway [d], Eric Weintraub [b], Edward A. Belongia [a]

[a] Marshfield Clinic Research Institute, 1000 N. Oak Ave, Marshfield, WI 54449, United States
[b] Centers for Disease Control and Prevention, Immunization Safety Office, 1600 Clifton Road NE, MS-D26 Atlanta, GA 30333, United States
[c] Marshfield Clinic, Department of Obstetrics and Gynecology, 1000 N. Oak Ave, Marshfield, WI 54449, United States
[d] Kaiser Permanente Northwest, 3800 N. Interstate Ave, Portland, OR 97227, United States
[e] Kaiser Permanente Southern California, 100 S. Los Robles Ave., 2nd Floor, Pasadena, CA 91101, United States
[f] Kaiser Permanente Colorado, 10065 E. Harvard, Suite 300, Denver, CO 80231, United States
[g] Group Health Research Institute, 1730 Minor Avenue, Suite 1600, Seattle, WA 98101, United States
[h] Kaiser Permanente Northern California, 1 Kaiser Plaza, 16th Floor, Oakland, CA 94612, United States

- Median age SAB: 7 weeks

- 2010-2011 3.7 (1.4-9.4) odds of vaccine exposure with SAB compared to controls
- 2011-2012 1.4 (0.6-3.3) odds of vaccine exposure with SAB compared to controls
- Overall 2.0 (1.1-3.6) odds of vaccine exposure with SAB compared to controls

- These findings ONLY in women who had vaccine in the PRIOR year as well (post hoc)

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journal homepage: www.elsevier.com/locate/vaccine

Association of spontaneous abortion with receipt of inactivated influenza vaccine containing H1N1pdm09 in 2010–11 and 2011–12

Table 2
Odds of influenza vaccination in SAB cases compared to controls by timing of vaccination during the 2010–11 and 2011–12 influenza seasons and both seasons combined.[a]

Influenza season	2010–11			2011–12			Both seasons combined		
	Discordant pairs[b]	Adj. OR[c]	P	Discordant pairs[b]	Adj. OR[c]	P	Discordant pairs[b]	Adj. OR[c]	P
Time from vaccination to reference date									
1–28 days	25	3.7 (1.4–9.4)	0.007	23	1.4 (0.6–3.3)	0.47	48	2.0 (1.1–3.6)	0.03
29–56 days	14	1.7 (0.6–4.8)	0.31	6	0.1 (0.0–0.9)	0.04	20	0.9 (0.4–2.1)	0.85
>56 days	51	1.0 (0.5–1.8)	0.99	46	0.9 (0.4–1.7)	0.72	97	0.9 (0.6–1.4)	0.67

[a] The referent exposure group in all odds ratio calculations was comprised of women unvaccinated as of the reference date.
[b] Number of matched pairs where the case was vaccinated in the relevant exposure window (1–28, 29–56, >56 days before the reference date) and the control was unvaccinated as of the reference date or vice versa.
[c] Adj. OR' represents the odds ratio adjusted for maternal age (spline), BMI (spline), smoking during pregnancy, maternal diabetes, concomitant Tdap vaccination, and health care utilization in prior 12 months (spline). Numbers in parentheses represent 95% confidence intervals.

Flu Vaccine & Miscarriage

Maternal and Infant Outcomes Among Severely Ill Pregnant and Postpartum Women with 2009 Pandemic Influenza A (H1N1) — United States, April 2009–August 2010

MMWR / September 9, 2011 / Vol. 60 / No. 35

- From April 15, 2009, to August 10, 2010,
- a total of 347 severely ill pregnant women, including 272 who were admitted to the ICU and survived and 75 pregnant women who died from 2009 H1N1
- Fifteen severely ill postpartum women, including nine who died, also were reported

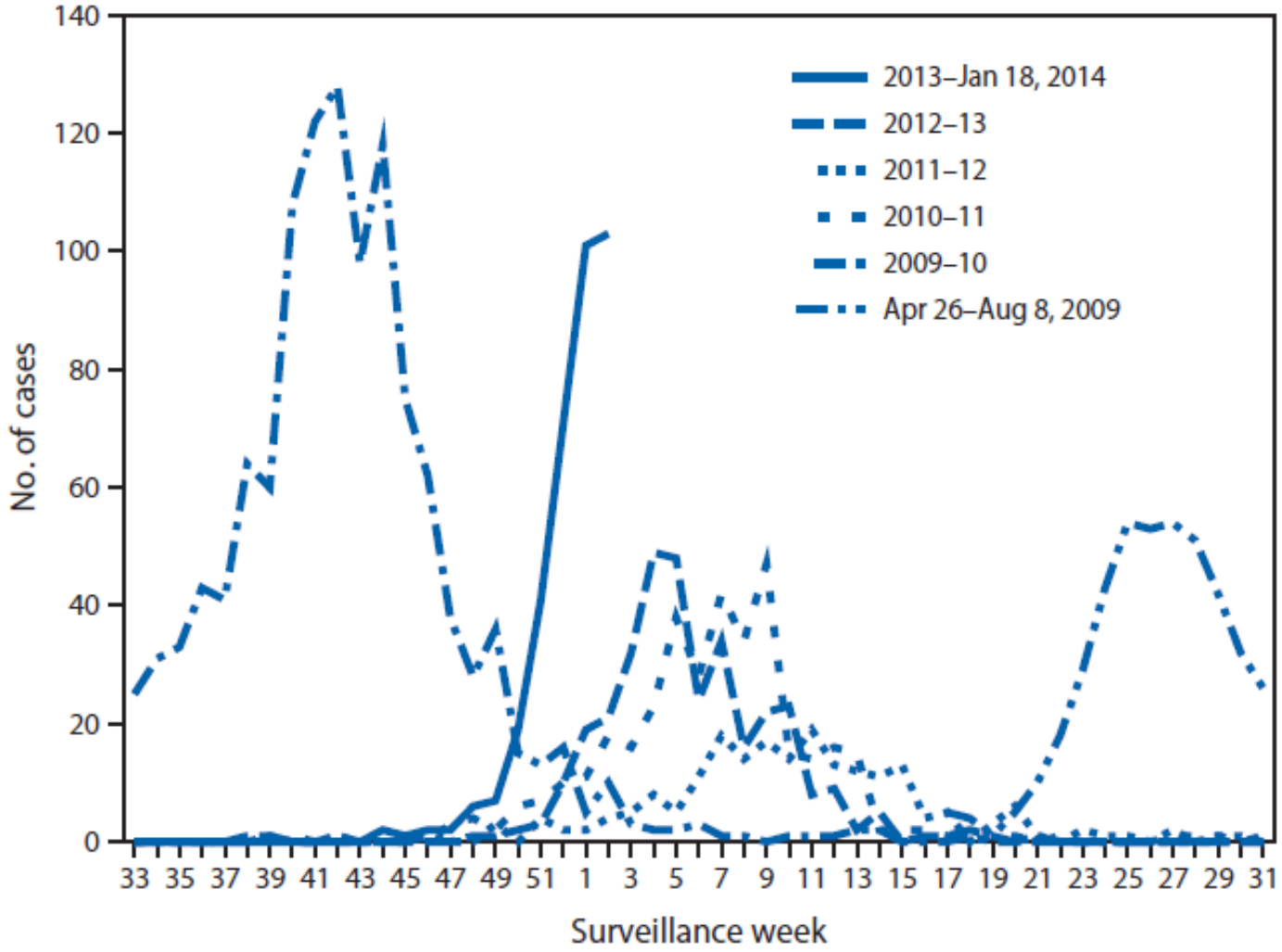
- Characteristics of pregnant women with severe or fatal H1N1 influenza reported to the CDC
- Worse in second and third trimester
- About half had no underlying health condition
- They got really sick despite receiving antivirals

Characteristic	Died (n = 75) No.	(%)	Admitted to ICU and survived (n = 272) No.	(%)	p value
Maternal age (yrs)					
Mean age at illness onset (range)	26.9 (18–43)	—	25.9 (16–43)	—	0.17*
Unknown/Missing	1	—	13	—	
Race/Ethnicity					0.89†
White, non-Hispanic	21	(35.6)	88	(36.8)	
Black, non-Hispanic	12	(20.3)	44	(18.4)	
Hispanic	20	(33.9)	88	(36.8)	
Other race	6	(10.2)	19	(8.0)	
Missing	16		33		
Trimester at symptom onset					0.23†
First trimester (0–13 wks)	5	(6.9)	16	(6.5)	
Second trimester (14–28 wks)	22	(30.6)	103	(41.7)	
Third trimester (≥29 wks)	45	(62.5)	128	(51.8)	
Unknown/Missing	3		25		
Underlying illness/condition					0.04†
None of the following underlying conditions	25	(38.5)	129	(53.3)	
Any of the following underlying conditions	40	(61.5)	113	(46.7)	
Asthma	22		55		
Obesity	19		39		
Diabetes (gestational or pregestational)	11		16		
Other medical conditions§	19		40		
Unknown/Missing	10		30		
Antiviral medication prescribed					0.02†
No neuraminidase antiviral treatment	10	(13.9)	13	(5.2)	
Any neuraminidase antiviral treatment¶	62	(86.1)	238	(94.8)	
Unknown/Missing	3		21		
Total	**75**	**100.0**	**272**	**100.0**	
Days from symptom onset until treatment**					<0.01†
≤2	4	(7.0)	76	(40.6)	
3–4	11	(19.3)	47	(25.1)	
>4	42	(73.7)	64	(34.2)	
Unknown/Missing	8		72		
Total	**65**	**100.0**	**259**	**100.0**	

Severe influenza 2009-2014: admissions to ICU (all patients)

As the H1N1 scare recedes, we might be seeing less interest in vaccination

FIGURE 1. Number of cases of severe influenza,* by week of symptom onset — California, April 26, 2009–January 11, 2014†



* Severe cases of influenza are defined as influenza infections resulting in intensive care unit (ICU) admission or death.

ACOG:

In response to this paper

Strongly recommends flu vaccine

It is Safe to Receive Flu Shot During Pregnancy

September 13, 2017

Washington, DC *– Haywood L. Brown, M.D., president of the American College of Obstetricians and Gynecologists (ACOG) released the following statement on the safety of the influenza vaccine during pregnancy:*

"ACOG continues to recommend that all women receive the influenza vaccine. This is particularly important during pregnancy. Influenza vaccination is an essential element of prenatal care because pregnant women are at an increased risk of serious illness and mortality due to influenza. In addition, maternal vaccination is the most effective strategy to protect newborns because the vaccine is not approved for use in infants younger than six months.

"The safety of vaccines used during pregnancy is of critical concern to ob–gyns. ACOG carefully tracks pregnancy–related vaccine safety information through its involvement in the National Vaccine Advisory Committee (NVAC) through the U.S. Department of Health & Human Services (HHS) and the Advisory Committee on Immunizations Practices (ACIP) through the Centers for Disease Control and Prevention (CDC). For many years, ACOG and the CDC have recommended that every pregnant woman receive a flu shot in any trimester. Multiple published studies, as well as clinical experience, have all supported the belief that the flu vaccine is safe and effective during pregnancy.

"A recent publication has reported a safety signal concerning influenza vaccination when given very early in the first trimester. In this study, influenza vaccination, when given in very early pregnancy, was associated with an increased risk of a pregnancy loss within the first 28 days following vaccination. Scientifically, it is unclear why this would occur. There was no association seen with a pregnancy loss more than 28 days after vaccination. In the same study, when vaccination was given either later in the first trimester or in the second or third trimester, there was no association seen with pregnancy loss or any other adverse pregnancy outcomes. Additional studies are needed to address the concern raised by this study.

"In evaluating all of the available scientific information, there is insufficient information to support changing the current recommendation which is to offer and encourage routine flu vaccinations during pregnancy regardless of the trimester of pregnancy."

What to tell pregnant women

- If did not receive vaccine last year: go ahead this year, no association with SAB
- If received vaccine last year, weak association but feel free to wait until second trimester
  - BUT GET THE FLU VACCINE
- Flu during pregnancy is worse than non-pregnant re: maternal serious illness and death
- These outcomes do not include serious pregnancy outcomes such as preterm birth in less ill pregnant patients

ACOG Pamphlets

The Flu Vaccine and Pregnancy

Everyone aged 6 months or older should get a yearly ***influenza*** (flu) shot—especially pregnant women. Seasonal flu is caused by a ***virus*** that spreads easily among people. It is most common between October and May. If you are pregnant, the flu can be serious or even life- threatening. Getting a vaccine is the best way to prevent the flu. It also helps protect your baby until he or she can be vaccinated at age 6 months.

This pamphlet explains

- what influenza is
- risks for pregnant women
- vaccination recommendations
- how the flu vaccine works
- safety of the flu vaccine
- what to do if you get the flu

Influenza

The flu is more than a bad cold. It usually comes on suddenly. Signs and symptoms may include fever, headache, fatigue, muscle aches, coughing, and sore throat. It can lead to ***complications***, such as ***pneumonia***. Some complications can be life-threatening.

Certain people have an increased risk of developing flu complications. These include the following groups:

- People aged 65 years and older
- Children younger than 5 years
- People who have illnesses or conditions like asthma, heart disease, or cancer
- Pregnant women

Immediate Post-Partum LARC

Presented by Marjorie Meyer, M.D., Associate Professor

UVMMC Obstetrics & Gynecology, Maternal Fetal Medicine

THE University of Vermont MEDICAL CENTER

Major Update

- Vermont Medicaid now will cover the cost of the device (up to $800) separate from the global delivery fee
  - Working with private insurers to see if they will cover as well
- Removed one of the last remaining barriers to immediate postpartum LARC!

Postpartum LARC Definitions

- Immediate Postpartum (before hospital discharge)
  - Postplacental insertion ("Delivery Room Insertion")
    - IUD inserted within 10 minutes after expulsion of the placenta following a vaginal delivery
    - IUD inserted at the time of cesarean delivery, before the uterine incision is closed
  - Delayed postpartum insertion
    - IUD/implant inserted after the postplacental period but within 48-72 hours of delivery
- Interval insertion
  - Insertion at ≥ 4 weeks postpartum

Rationale for Immediate Postpartum LARC

- 50% ovulate and 50% resume sex before 6 weeks postpartum
- Timely access to postpartum contraception
  - Can prevent rapid repeat pregnancy
  - Improve subsequent pregnancy outcomes
  - Prevent unintended pregnancy and abortion

Zhu, B-P, International Journal of Gynecology and Obstetrics 2005, Zhu B-P NEJM 1999, Speroff L, Mishell DR Jr Contraception 2008, Ogburn JA, Espey E Contraception 2005

Barriers to Postpartum Contraception

- Low show rate for postpartum visits
- Standard barriers to LARC
  - Not available
  - 2 visit protocols
  - Insurance changes

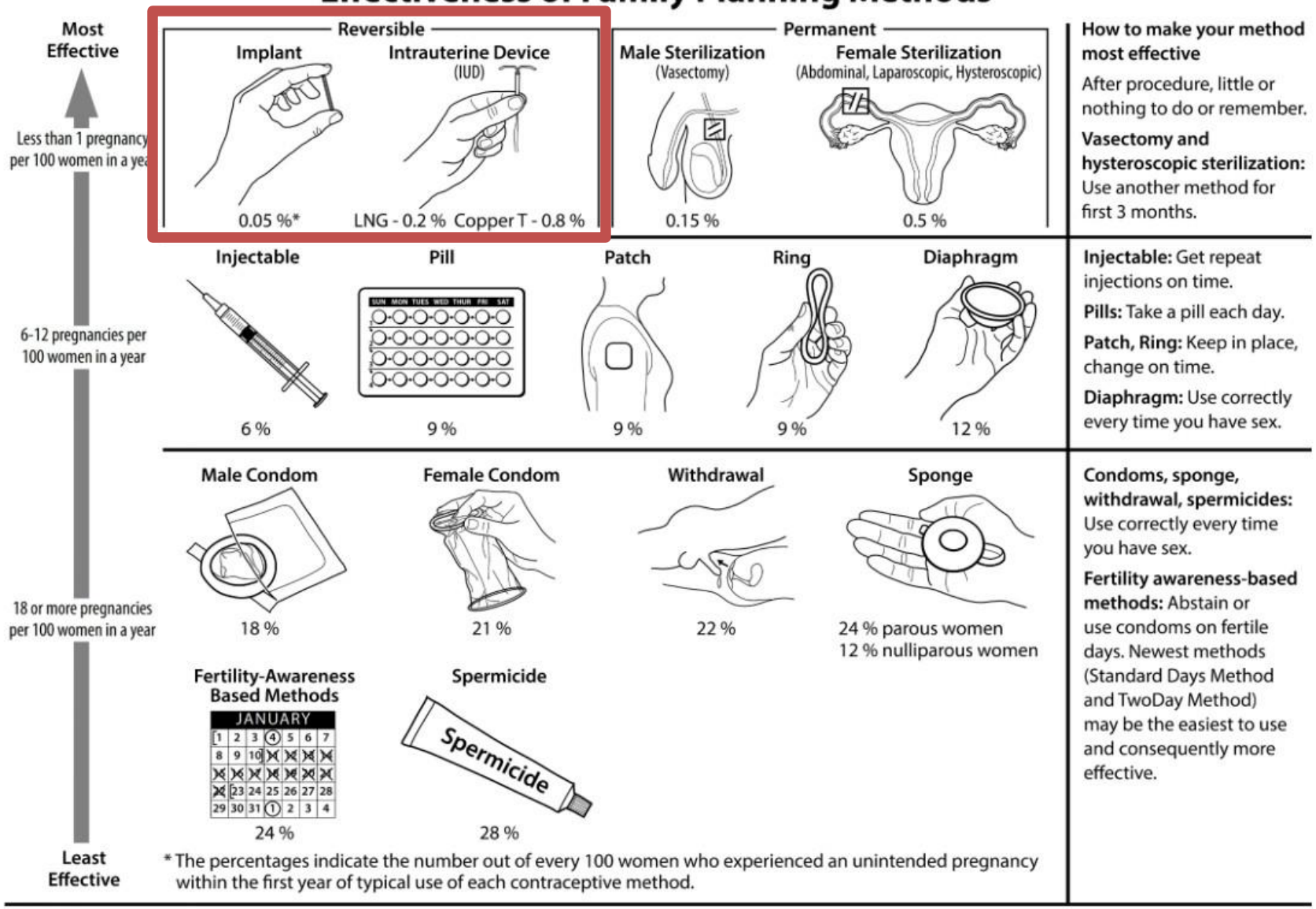
Zerden, *WHI* 2015, Bryant, *J Mat Child Health* 2006, Biggs, *Contraception* 2013, Zite, *Obstet Gynecol* 2005, Seibel-Seamon, *J Repro Med* 2009, Thurman, *Obstet Gynecol* 2010

Rapid Repeat Pregnancy

- Pregnancy that occurs within 18 months of previous birth
- 35% of ALL pregnancies are RRP
  - **75% are unintended**

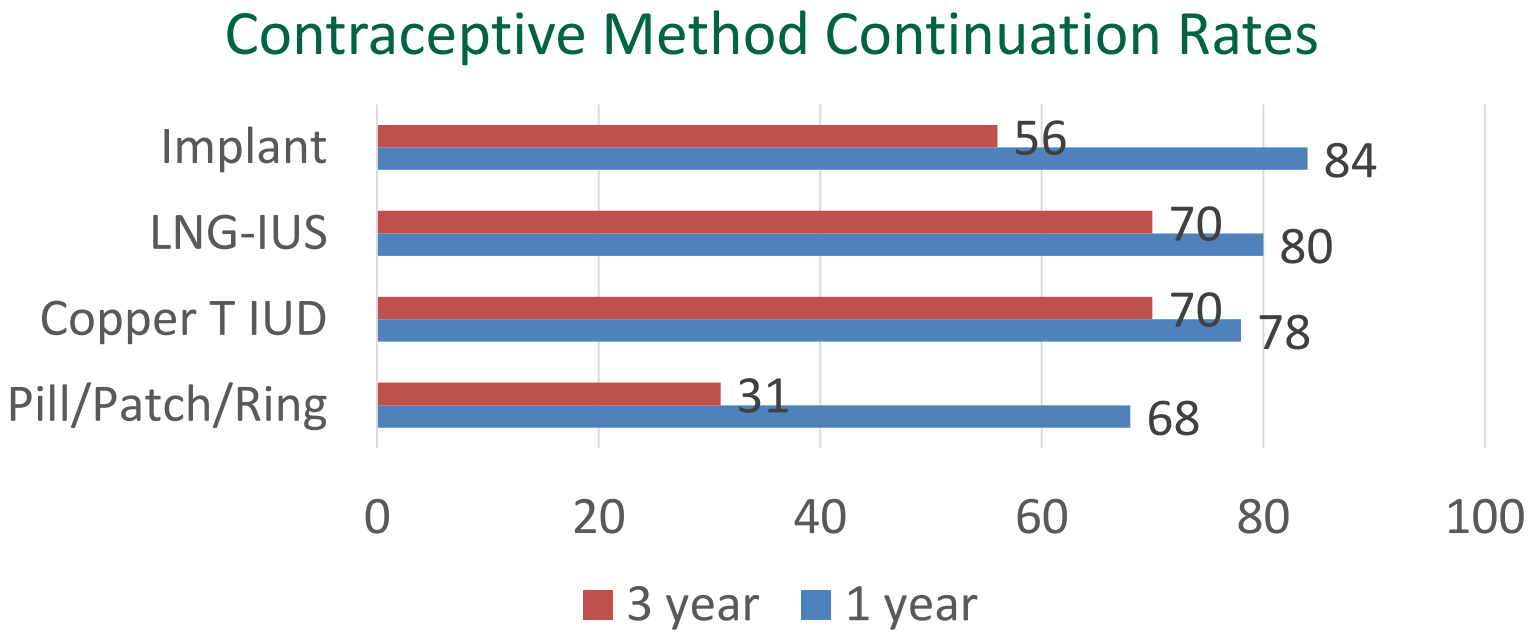
- Consequences of rapid repeat pregnancy
  - Maternal health risks – Preeclampsia, Preterm labor
  - Infant health risks - Severe prematurity, Low birth weight, Stillbirth
  - Adverse socioeconomic outcomes

Effectiveness of Family Planning Methods



Trussell J, et al. In: Hatcher RA, et al. *Contraceptive Technology,* 20th revised ed. 2011.

Benefits of LARC Methods



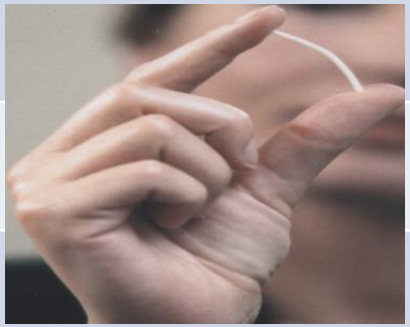
- Higher continuation rates (86% vs 55%)
- Higher satisfaction (82% vs 54%)
- Lower contraceptive failure rates (3y 0.9% vs 9.4%)

Contraceptive Technology. 2011; The Contraceptive Choice Project. 2013

LARC Methods

Etonogestrel Subdermal Implant (Nexplanon®)

Medication	68 mg Etonogestrel
Duration	3 years
Failure rate (1 year)	0.05%
Mechanism of Action	Inhibits LH surge, suppresses ovulation
	Thickens cervical mucus Atrophy of the endometrium



Trussell J. *Contraceptive Technology*. 2011.

Intrauterine Devices

	Non-Hormonal	Hormonal (Levonorgestrel)		
	Paragard	Mirena/ Liletta	Kyleena	Skyla
Medication	Copper	52 mg	19.5 mg	13.5 mg
Duration	12 years	3-7 years	5 years	3 years
Failure (1y)	0.8%	0.2%		
Mechanism of Action	Inhibits fertilization	Inhibits fertilization		
	Reduces sperm motility	Reduces sperm motility		
	Inhibits implantation	Inhibits implantation		
		Cervical mucous thickening		
		Atrophy of endometrium		

Advantages of Immediate Postpartum LARC

- Verification patient is not pregnant
- Convenient for provider and patient, patient highly motivated
- Does not require an additional visit
- Less discomfort
- Higher use at 6 and 12 months (even after accounting for IUD expulsions)
- No impact on lactation
- Cost-effective/saving

CO 670 ACOG 2016; Aiken Contraception 2014

Disadvantages to Immediate Postpartum IUD

- Higher expulsion rate
- Higher likelihood of needing to trim strings or missing strings at subsequent visit
- Routine IUD risks
  - Bleeding/Infection
  - Malposition
  - Perforation

IPP LARC Safety—CDC MEC

	CU-IUD	LNG IUD		Implant
<10 minutes after placental delivery	1	2	Breast feeding	2
10 min – 4 weeks	2	2	Non-breastfeeding	1
>4 weeks	1	1		
Puerperal sepsis	4	4		

1 No restriction for the use of the contraceptive method for a woman with that condition

2 Advantages of using the method generally outweigh the theoretical or proven risks

3 Theoretical or proven risks of the method usually outweigh the advantages

4 Unacceptable health risk if the contraceptive method is used

CDC. The United States Medical Eligibility Criteria for Contraceptive Use 2016

Contraindications to IPP IUD

IPP Contraindications

- Current or untreated STI
- Chorioamnionitis
- Prolonged rupture of membranes (>18hr)
- Unresolved post-partum hemorrhage

Routine Contraindications

- Uterine malformation
- Gynecological tumors
- Severe anemia or Wilson's disease (for the copper IUD)
- Breast cancer (for the levonorgestrel IUD)
- Pelvic tuberculosis

NOT Contraindications to IPP IUD

Delayed Infection

- Fever or signs of endometritis after placement → routine antibiotics if indicated
- The IUD should only be removed if she does not show clinical improvement after 48 hours of treatment

Delayed Hemorrhage

- Treat medically with uterotonics as indicated
- The IUD may have to be removed if D&C or Bakri balloon placement is indicated
- The IUD does not have to be removed for embolization

IUD Expulsion Rates Based on Timing

Time of Insertion		Definition	Expulsion Rate
Immediate Postpartum	Postplacental	<10 min after delivery of placenta	8-38%
	Delayed	>10 min to 48 hours post delivery	29-41%
Interval Postpartum		>4 weeks post delivery	2-4%
Non Postpartum		>1 year since pregnancy	Cu-IUD: 3-10% LNG-IUS: 3-6%

ACOG CO 670 2016 , Woo Contraception 2016, Cohen Contraception 2016, Chen Green Journal 2010, Sucak BMC Childbirth 2015, Blumenthal Eur J Repro Health Care 2016, Levi Green Journal 2015

IPP LARC and Breastfeeding

Implant

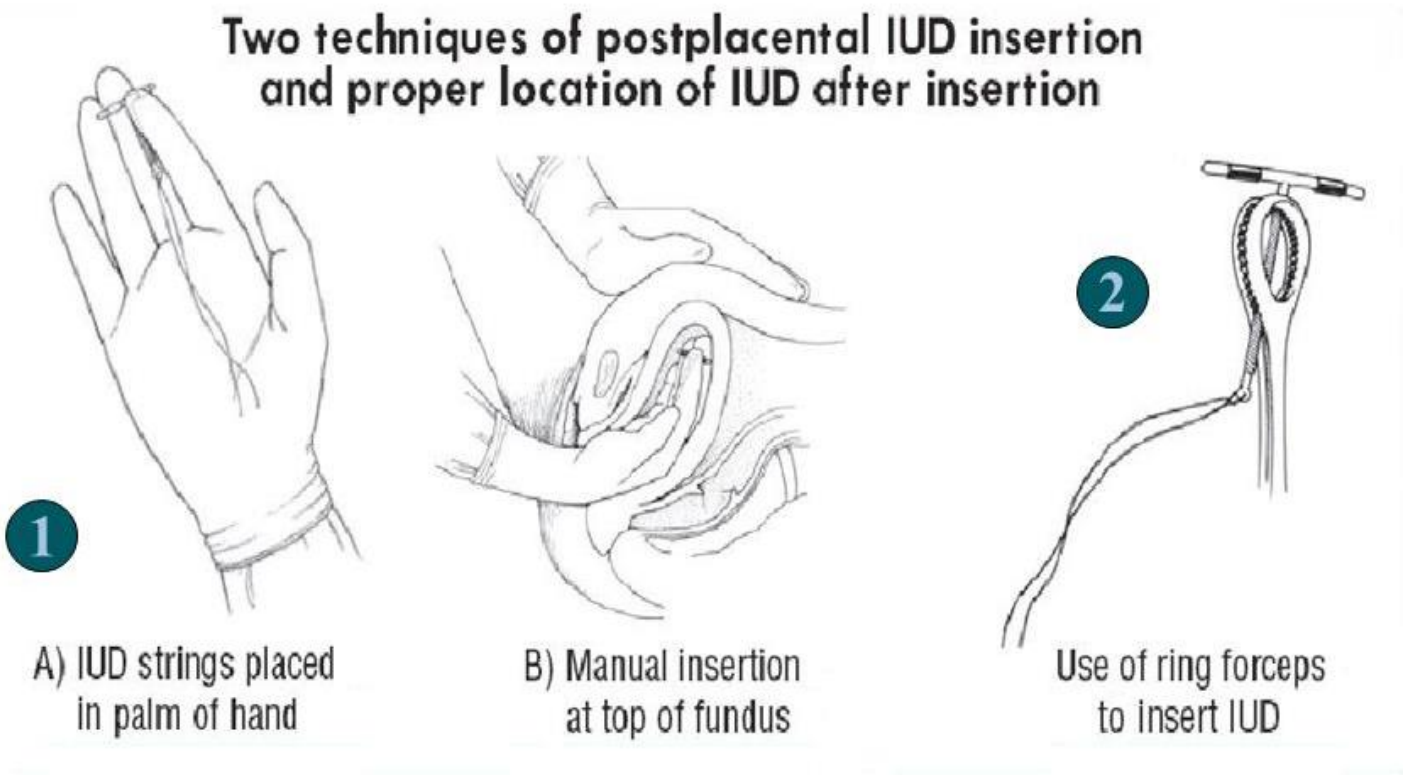
- No difference in lactogenesis, lactation failure, or infant growth
- Does not impact milk production or milk intake
- No difference in breastfeeding rates through 6 months postpartum

IUD

- No difference in lactogenesis, lactation failure, or infant growth
- 1 small study showed shorter duration of breast-feeding with IPP IUD

Phillips, Contraception 2015, Braga, Contraception 2015, Kapp, Contraception 2010, Gurtcheff, Obstet Gyncol 2011, Dunn, Contraception 2016, Turok FFP Mtg Abstract 2016, Chen Obstet Gynecol 2010

Postplacental IUD Techniques



String Management

- Vaginal Insertion
  - Trim to level of external os
  - Often do not need to trim Paragard strings
- Cesarean Insertion
  - Orient toward cervix, do not pass through cervix
  - Copper T380- do not trim strings
  - Levonorgestrel IUDs- may trim to applicator length *or* leave intact
  - Strings will typically descent during involution, 75-80% descend by 12 weeks postpartum

Postpartum Management

- Expulsion recognized by >75% of women
- Routine String Check @ 6 wk postpartum
  - If no string, US for placement
  - Backup method pending localization
- If expulsion occurs, provide immediate reinsertion if ≥ 4 weeks postpartum

Operations

Barrier	Strategies
IUD not immediately available on unit	1. Request addition to inpatient formulary 2. Locked storage unit on labor unit
Patient won't discuss during labor, staff concerned about coercion	1. Standardize counseling in third trimester antepartum care 2. Sign consent in advance
High cost of devices	1. Make pharmacy aware of $800 add-on payment. 2. Discuss patient-centered care and cost-effectiveness benefits
Staff concerns about risks, impact on breastfeeding, etc	1. Provide education and materials supporting effectiveness and safety of this practice

Questions?

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Passcode: November

OB/GYN Webinar Series 2017-2018
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Topics to be Discussed:

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Thank you!