



General Assembly Perinatal Report
Illinois Department of Healthcare and Family Services
Division of Medical Programs
Bruce Rauner, Governor
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Table of Contents

A LETTER FROM THE DIRECTOR	2
INTRODUCTION.....	3
Legislative Mandate.....	3
Report Summary.....	4
Technical Notes.....	5
DEMOGRAPHICS.....	8
Birth	8
Delivery.....	10
Birth Outcomes.....	10
Birth Costs.....	18
Prenatal and Postpartum Care	22
RECOMMENDATIONS AND INITIATIVES	26
Managed Care.....	26
Planned Pregnancy	26
Mental Health	26
Oral Health	27
Smoking Cessation.....	27
Perinatal Addiction.....	28
Human Immunodeficiency Virus (HIV) Counseling.....	31
Nurse Midwifery	31
Lactation Counseling.....	31
Labor Support during the Prenatal Period	31
Case Management and Home Visiting	31
Data Analysis.....	31
Collaborative Improvement and Innovation Network (CoIIN).....	31
Children’s Health Insurance Program Reauthorization Act (CHIPRA) Child Health Quality Demonstration Grant	32
Family Planning	32
SMART ACT.....	37
Birthing Centers.....	37
Sexually Transmitted Diseases	39

A LETTER FROM THE DIRECTOR

December 2017

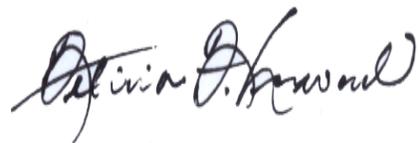
Governor Rauner and Honorable Members of the General Assembly:

I am pleased to present the 2018 Perinatal Report required by [305 ILCS 5/5-5.24](#). This is the seventh report presented by the Illinois Department of Healthcare and Family Services (HFS). All reports, including this one, are available on [HFS' website](#).

This report summarizes Medicaid prenatal and perinatal demographics and provides updates on various initiatives HFS has undertaken with its partners.

Since its first report in 2004, HFS has used the perinatal reports as a guide for improving birth outcomes in Illinois. Although the total number of Illinois and teen deliveries covered by Medicaid is declining, much remains to be done. HFS looks forward to continuing its efforts and collaborations with its partners to reduce poor birth outcomes.

Sincerely,



Felicia F. Norwood, Director



Bruce Rauner, Governor



Felicia F. Norwood, Director

INTRODUCTION

Legislative Mandate

This report is required by [305 ILCS 5/5-5.24](#). This statute was enacted with the goal of improving birth outcomes for the over 80,000 births covered annually in the Medicaid program administered by the Illinois Department of Healthcare and Family Services (HFS).

To achieve this goal, the statute authorizes HFS to reimburse for prenatal and perinatal health care services that prevent low birth weight infants, reduce the need for neonatal intensive care hospital services, and promote perinatal health.

Services that qualify for reimbursement include:

- Comprehensive risk assessments for pregnant women, women with infants, and infants
- Lactation counseling
- Nutrition counseling
- Childbirth support
- Psychosocial counseling
- Treatment and prevention of periodontal disease
- Other support services that have been proven to improve birth outcomes

Pursuant to 305 ILCS 5/5-5.24, HFS must report to the General Assembly on the “effectiveness of prenatal and perinatal health care services reimbursed... in preventing low-birthweight infants and reducing the need for neonatal intensive care hospital services. Each report shall include an evaluation of how the ratio of expenditures for treating low-birthweight infants compared with the investment in promoting healthy births and infants in local community areas throughout Illinois relates to healthy infant development in those areas.”

This report and previous reports are available on the [HFS website](#).

Report Summary

This report summarizes Medicaid prenatal and perinatal demographics and provides updates on various initiatives HFS has undertaken with its partners to improve birth outcomes and reduce the personal, medical, and social costs associated with poor birth outcomes (e.g. prematurity and infant mortality). Much work remains to be done. Given that HFS covers over 50% of all Illinois births and over 90% of Illinois teen births, the imperative for action and the State's interests are not debatable. HFS anticipates that through current endeavors and the prioritization of improving birth outcomes and ongoing partnerships, it will see a positive effect on the lives of women, children, and Illinois families. Some of HFS' ongoing initiatives are:

- Transforming Illinois' health care delivery system (by enrolling approximately 80% (increased from 60% in calendar year (CY) 2017) of Medicaid clients in a managed care health plan beginning January 1, 2018
- Collaboration with federal agencies on innovations in healthcare policy (e.g. Long-Acting Reversible Contraceptives (LARC))
- Utilization of quality improvement science to evaluate data, implement evidence-based practices, and drive policy and program initiatives to improve quality and healthcare delivery
- Collaboration with sister state agencies to coordinate, not duplicate, care delivery to women at risk for a poor birth outcome and providing cross agency data exchanges for evaluating program outcomes
- Early identification of high-risk populations to address urgent care needs
- Providing data to MCOs via the Care Coordination Claims Data (CCCD) files to identify high-risk pregnant women and to risk stratify their general covered population
- Continuing robust efforts to improve contraceptive uptake and enhance contraceptive policy development to improve inter-pregnancy spacing, improve poor birth outcomes, and decrease unintended pregnancy

Technical Notes

Results - Previous [perinatal reports](#) are not comparable to the current report due to methodology changes in the data analysis strategy and measure programming updates conducted to conform to revised measure specifications, e.g. Healthcare Effectiveness Data and Information Set (HEDIS®). Comparison among perinatal reports is not appropriate since each report reflects the data at the time of publication.

Data Charts - Unless otherwise noted, the data charts are based on data from the Illinois Department of Healthcare and Family Services' (HFS) Enterprise Data Warehouse (EDW 2017) derived from HFS' paid claims and encounter data. This data is matched with shared data from Illinois Department of Human Services' (DHS) Cornerstone System and Illinois Department of Public Health's (DPH) Vital Records for CY2013 through CY2015 (see below summary for Vital Records). The period reported varies by measure and typically covers a three-year trend period. Unless otherwise noted, covered deliveries are those where the recipient had full benefits on the date of delivery. The charts and graphs show what is currently known about HFS births, including demographics, health care utilization, and outcomes.

Births/Babies - Selects those with full eligibility with a birth date in the specified calendar year. Additionally, births are identified using selected diagnosis related group (DRG) codes and diagnosis codes occurring within the specified calendar year.

Birth Outcome - Selects birth weight and death year date fields from Vital Records. Vital Records matched birth/death data to identify infant mortality (IM) are not available for CY2013, but are available for CYs2014 through 2015. The classification hierarchy describes how attributes are analyzed, regardless of whether those attributes are populated with data. Using the available information Low Birth Weight (LBW), Very Low Birth Weight (VLBW), IM, Other Non-Normal DRG, and Normal DRG are categorized into mutually exclusive groups using the following hierarchy:

- If there is a death date, then Birth Outcome is set to IM (no further analysis conducted, e.g. checking birth weight)
- If birth weight is between 0-1,500 grams, then Birth Outcome is set to VLBW
- If birth weight is between 1,501-2,500 grams, then Birth Outcome is set to LBW
- If none of the above and if there is a claim with a non-normal DRG (i.e. established hierarchically by DRGs 985, 385, 986, 386, 987, 387, 388, 989, 389, or 390) within first year of life, then Birth Outcome is set to Other Non-normal DRG
- If there is a claim with a normal DRG, then Birth Outcome is set to Normal
- If Birth Outcome is set to Unknown

Using the above Birth Outcome hierarchy, LBW and VLBW rates are not comparable to LBW and VLBW rates reported as independent data points since the latter uses only known birth weights to define the numerator and denominator.

Costs - HFS is transforming its delivery system so that approximately 80% of the Medicaid population will be enrolled in an MCO. In an MCO model, the capitation payment made to the MCO represents HFS' monthly payment for the Medicaid client. HFS retains a withhold percentage of total capitation rates (Withhold) each month to ensure effective healthcare delivery. MCOs may earn a percentage of the Withhold based on performance as measured by HEDIS® quality metrics. Due to a new contract starting January 2018, there will not be a Withhold in 2018. HFS' [managed care contract](#) is available on its website.

HFS Covered Births - Deliveries where the recipient had full benefits on date of delivery.

Deliveries - Identified using All Patients Refined Diagnosis Related Groups (APR-DRG) codes (540-542, 560), diagnosis codes and procedures codes associated with the mother. Diagnosis codes are from HEDIS® specifications defining deliveries. Beginning July 2014, APR-DRGs were used as a part of hospital rate reform. Deliveries are identified using APR-DRG codes 540-542 and 560. In claims data, deliveries span multiple days. Therefore, "Event Begin" and "Event End" dates are identified for each delivery corresponding to first admission date and last discharge date, respectively. Deliveries include those with full benefits on date of delivery.

Family Planning - Previously, services were selected by specific diagnosis codes when they occur at any time in the year after delivery date. This report includes contraception measures based on U.S. Centers for Disease Control and Prevention specifications included in the [Maternal and Infant Health \(MIH\) Initiative Contraceptive Care Measures](#).

Level III Deliveries - Deliveries occurring at a hospital identified with Provider Specialty Code 015.

Level III Prenatal Services - Identified when "Prenatal Services" occur at a Level III facility.

Low Birth Weight (LBW) - Identified when birth weight is between one and 2,500 grams. The exception is that LBW is between 1,501 and 2,500 grams when included in charts depicting birth outcomes to assure that each birth outcome group is mutually exclusive. See also the "Birth Outcome" note.

Medicaid - As used in data chart titles, this term is broadly inclusive of all those receiving medical services and reimbursed by HFS and is not indicative of a specific coverage category (e.g., Title XIX). "HFS" is sometimes used in data chart keys as a shorter moniker for "Medicaid".

Mom/Baby Match - Matching of moms and babies was done via a set of iterations. The majority matched in the first iteration that links those with the same Medicaid case ID, whose birth (baby) and delivery (mother) were at the same hospital and within 15 days of each other. The match is a hierarchy of iterations that become

less strict with each pass through the data. DPH's Vital Records data also were used to link moms and babies via birth certificate identifiers using an HFS matching algorithm based on various fields such as first name, last name, date of birth, and social security number.

Postpartum Services - Identified using diagnosis, procedure, and revenue codes defined in HEDIS® specifications of postpartum care and that occur between 21 and 56 days after the delivery date, per HEDIS® specifications.

Prenatal Services - Identified using diagnosis, procedure and revenue codes defined in HEDIS® specifications of prenatal care and that occur between the identified delivery date and 280 days prior to the delivery date.

Unknown - A grouping variable of instances that cannot be included in any other identified category of interest. For this report, "Unknown" often is removed from denominator counts and not depicted in the charts. This assures that rates for known categories are not reduced by including "Unknown" in the denominator.

Very Low Birth Weight (VLBW) - Identified when birth weight is between one and 1,500 grams. See also the "Birth Outcome" note.

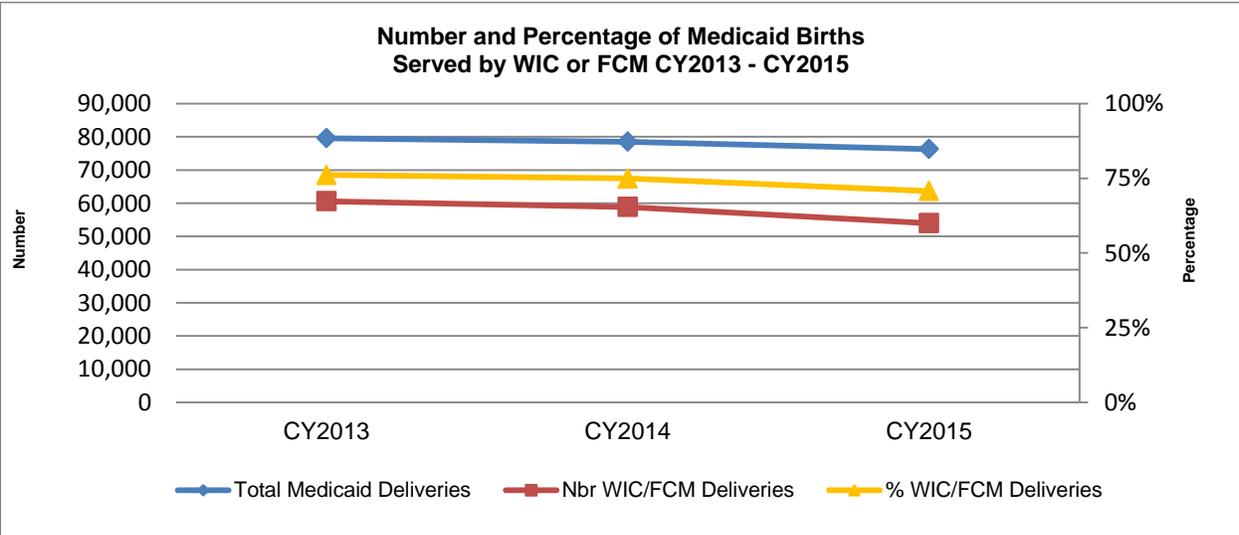
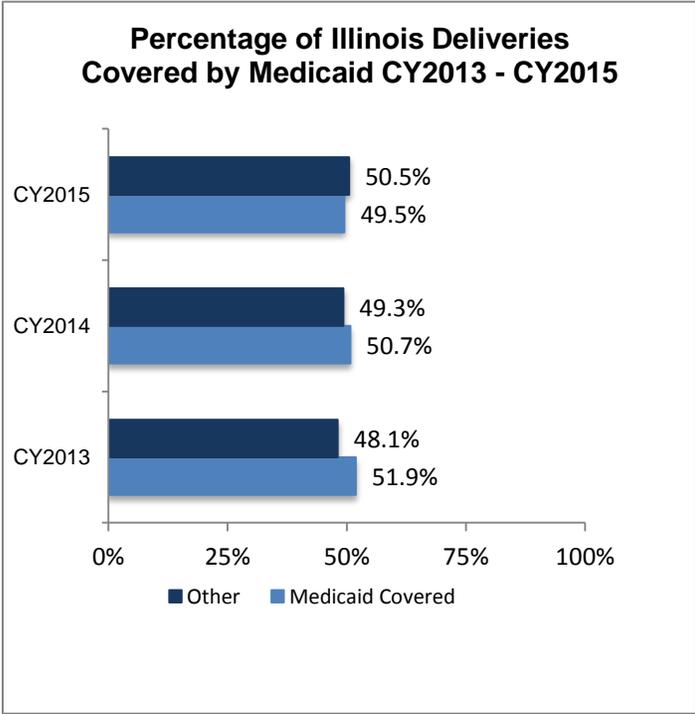
Vital Records - Birth and Death File data collected by DPH. The data is matched to HFS claims data using a deterministic and probabilistic matching algorithm based on various fields such as first name, last name, date of birth and social security number. Data for CY2013-CY2015 are certified by DPH. Matched Vital Records birth/death files to identify infant mortality are not available for CY2013, but are available for CYs 2014-2015.

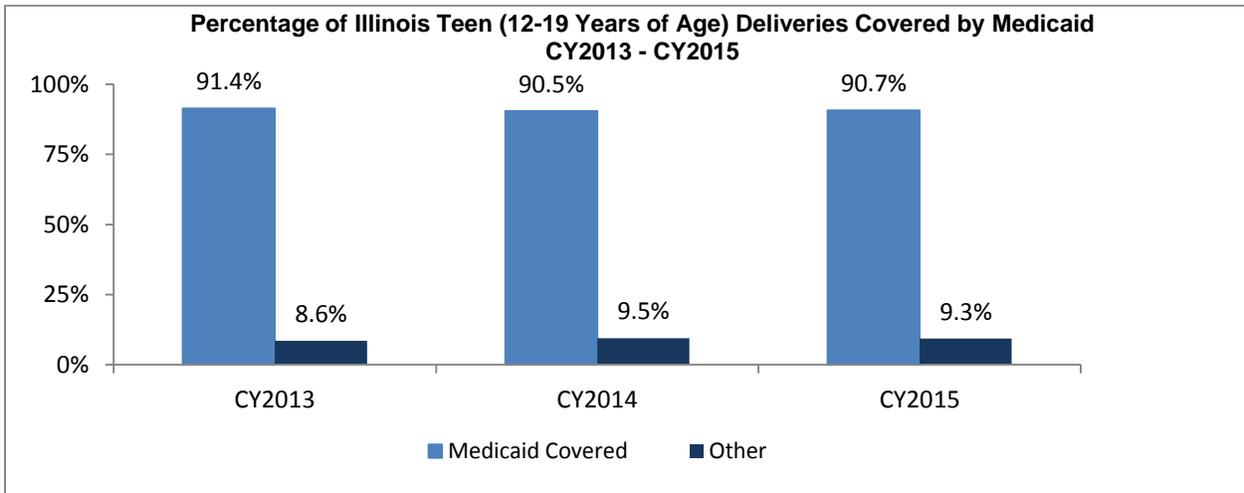
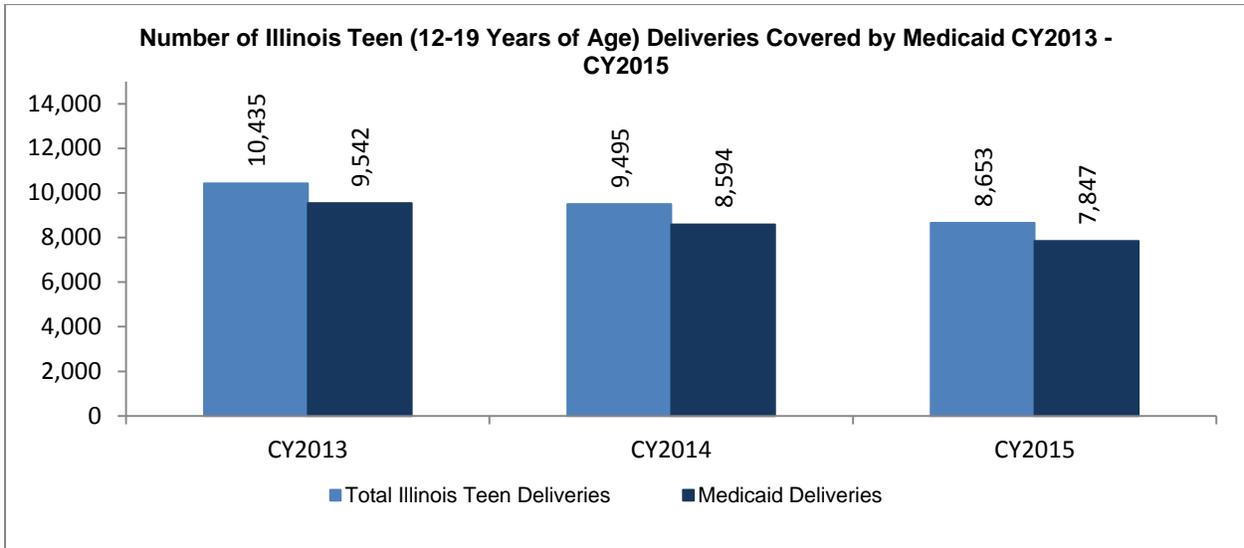


DEMOGRAPHICS

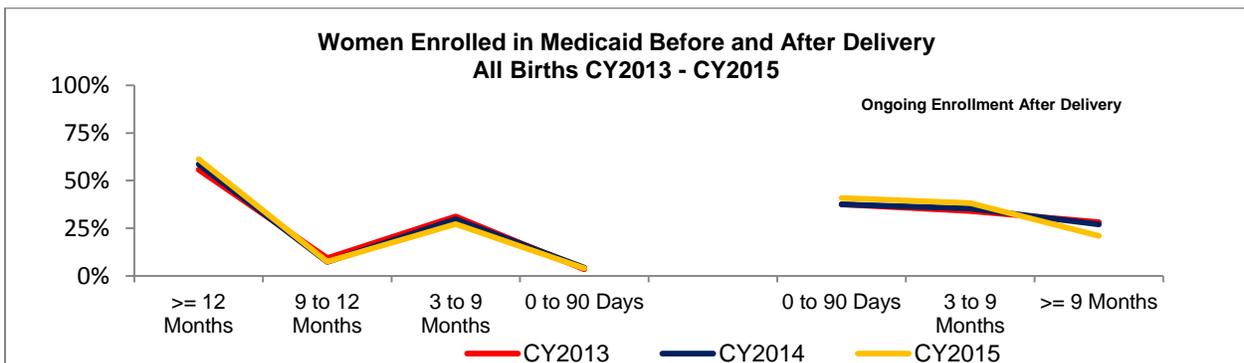
Birth

Between Calendar Year (CY) 2013 and 2015, the total Illinois deliveries covered by Medicaid declined, but remains near 50%. The number of Illinois deliveries in DHS' Family Case Management Program and the Special Supplemental Nutrition Program for Women, Infants, and Children Program (WIC) declined, but remains above 50% (note number of WIC/FCM participants decrease as number of births decrease), and the number of Illinois teen deliveries covered by Medicaid is declining but remains above 90%.



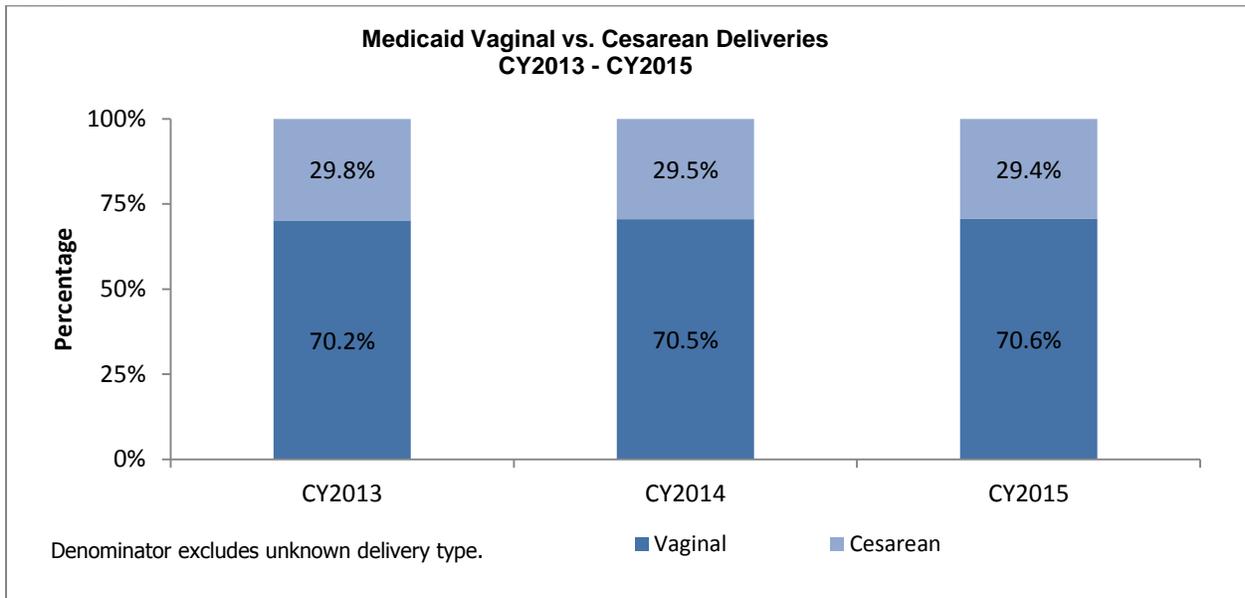


From CY2013 through CY2015, among HFS-enrolled women who gave birth, data shows an increase in the percent enrolled ≥ 12 months prior to delivery. Conversely, there is a decrease in the percent enrolled 3-9 months and 9-12 months prior to delivery. Post-delivery, there are less women eligible for ≥ 9 months and more who are enrolled from 0 to 9 months.

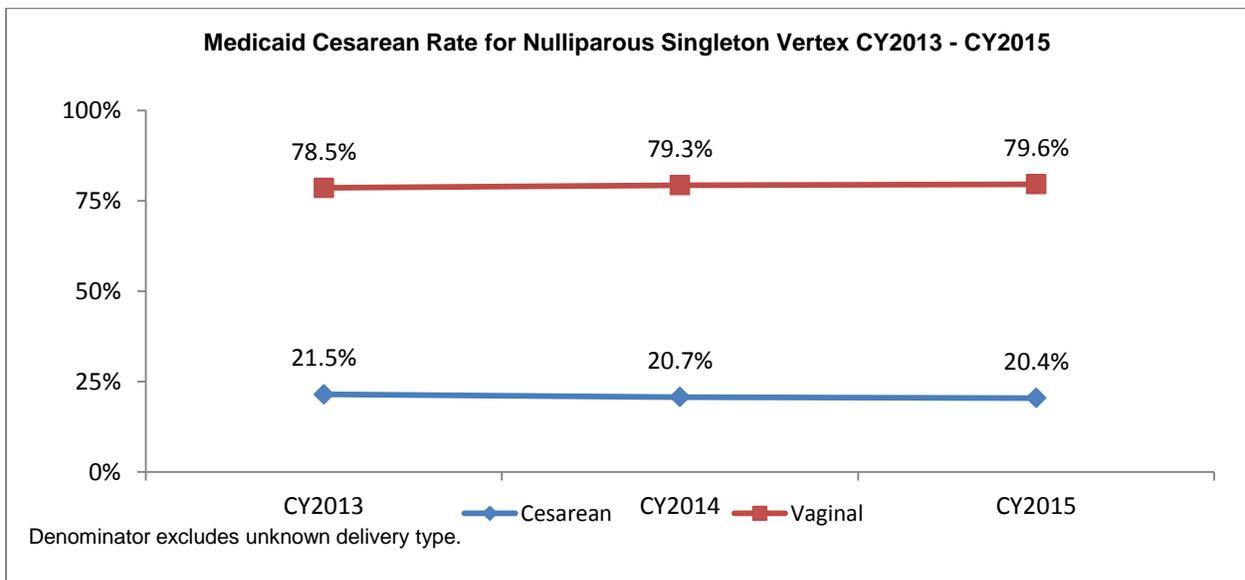


Delivery

Vaginal deliveries for women enrolled in Medicaid increased from 70.2% in CY2013 to 70.6% in CY2015. Cesarean Deliveries decreased from 29.8% in CY2013 to 29.4% in CY2015.



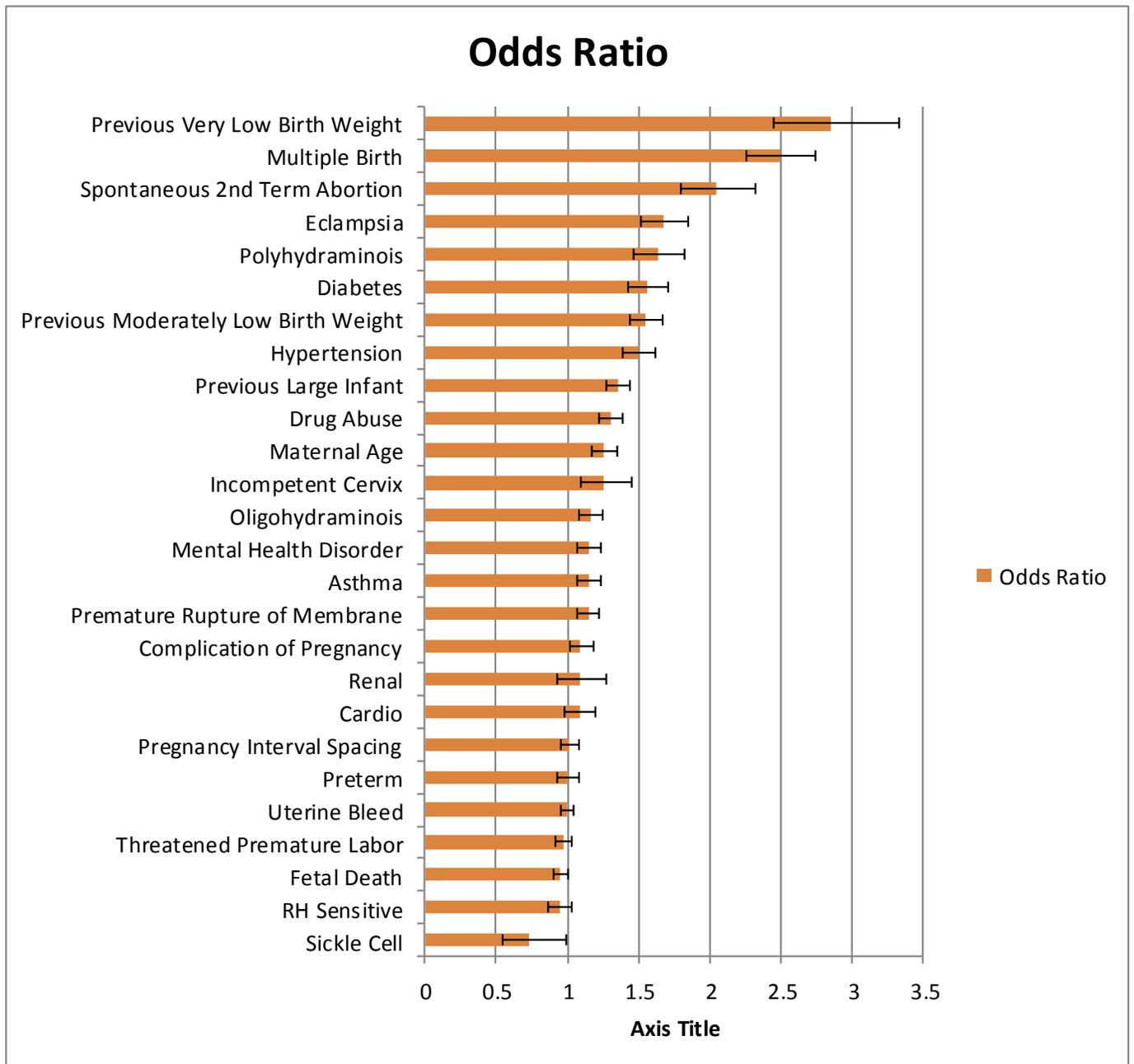
From CY2013 through CY2015, the cesarean section rate among women experiencing a first birth of a single fetus in vertex position had a decrease from 21.5% to 20.4%.



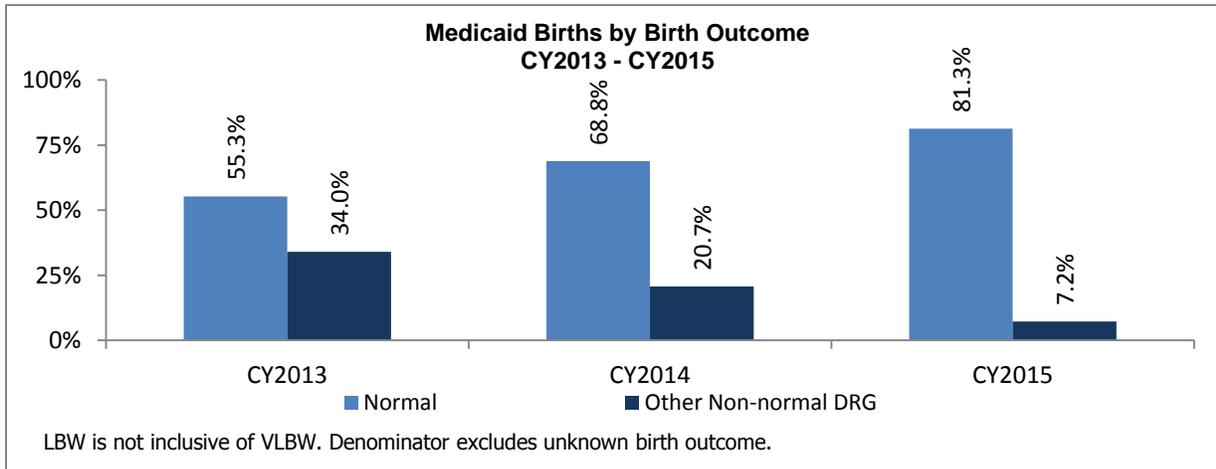
Birth Outcomes

HFS conducted an odds ratio analysis to determine conditions associated with an adverse birth outcome. The results are in the table below. Only women who had a previous birth covered by Medicaid were included in the analysis. Women may be

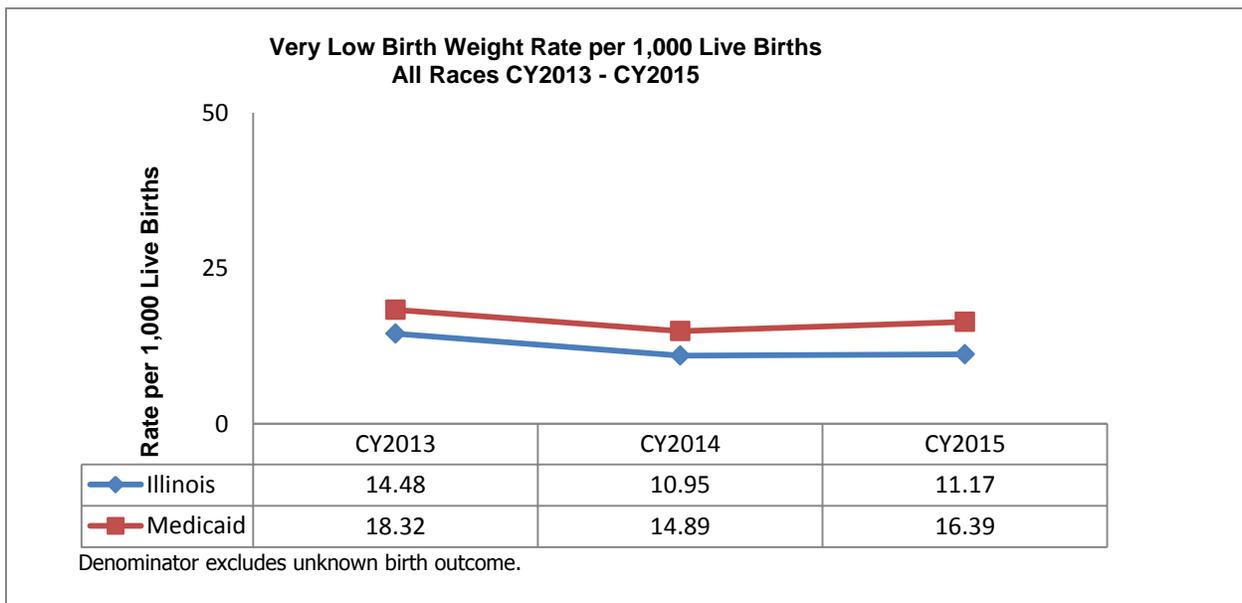
included in more than one pre-existing condition. An odds ratio of greater than one indicates a higher probability of an adverse birth outcome. If the confidence interval crossed 1.0, the odds ratio was considered non-significant. HFS continues to consider both the odds ratio and the confidence interval to determine whether the risk factor is one that would be appropriate to target with a population-based intervention. This information provides an opportunity for HFS to target women with these health conditions for more intensive interventions designed to improve subsequent birth outcomes.



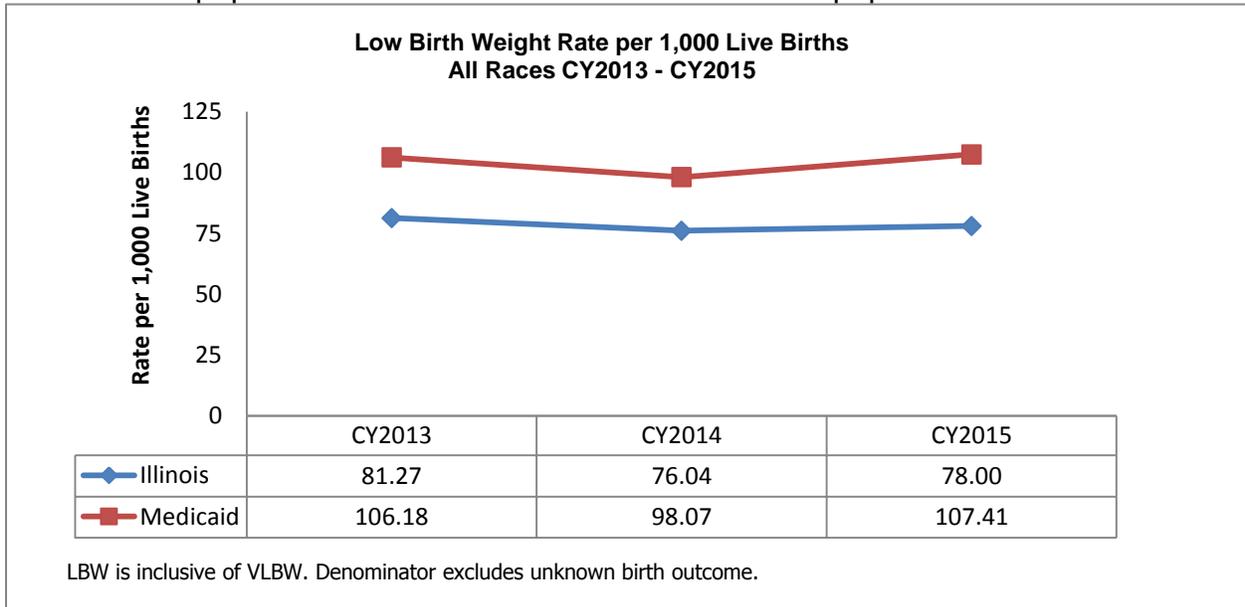
Based on vital records data indicated in the charts below, between CY2013 and CY2015 normal births increased significantly from 55.3% to 81.3%. The other non-normal births decreased during the same time period from 34% to 7.2%.



From CY2013 through CY2015, the VLBW per 1,000 live births decreased for both the Medicaid and non-Medicaid population.



From CY2013 through CY2015, the LBW ($\leq 2,500$ grams) rate per 1,000 live births for the Medicaid population increased while the non-Medicaid population decreased.

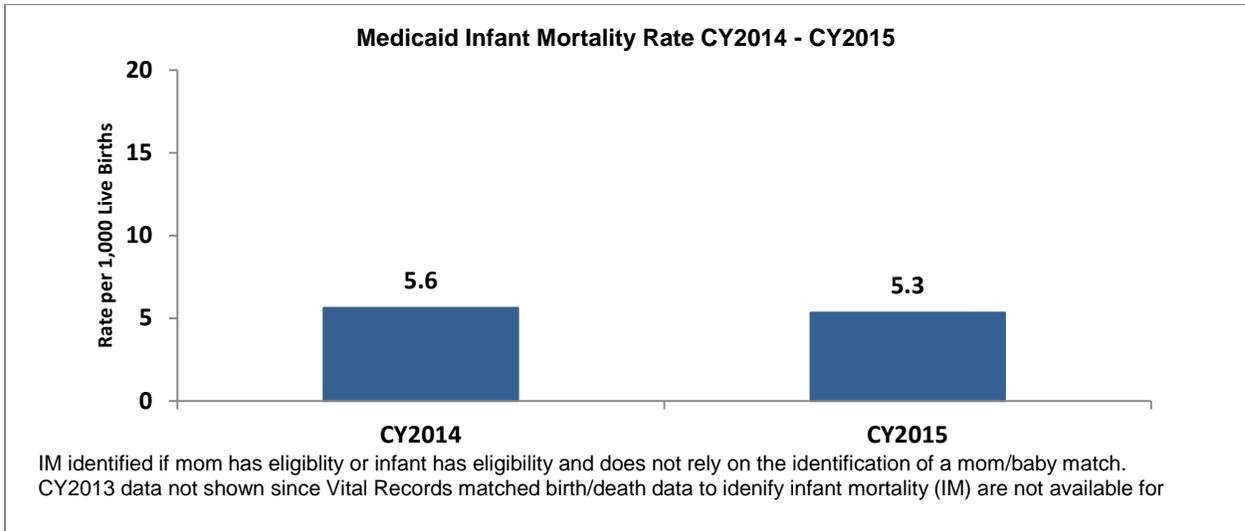


The Illinois infant mortality rate per 1,000 live births decreased from 10.7% in 1990 to 6.6% in 2014. Although the infant mortality rate for African Americans also decreased, the racial disparity continues to be dramatic, with the African American rate over 2x higher than the White rate.

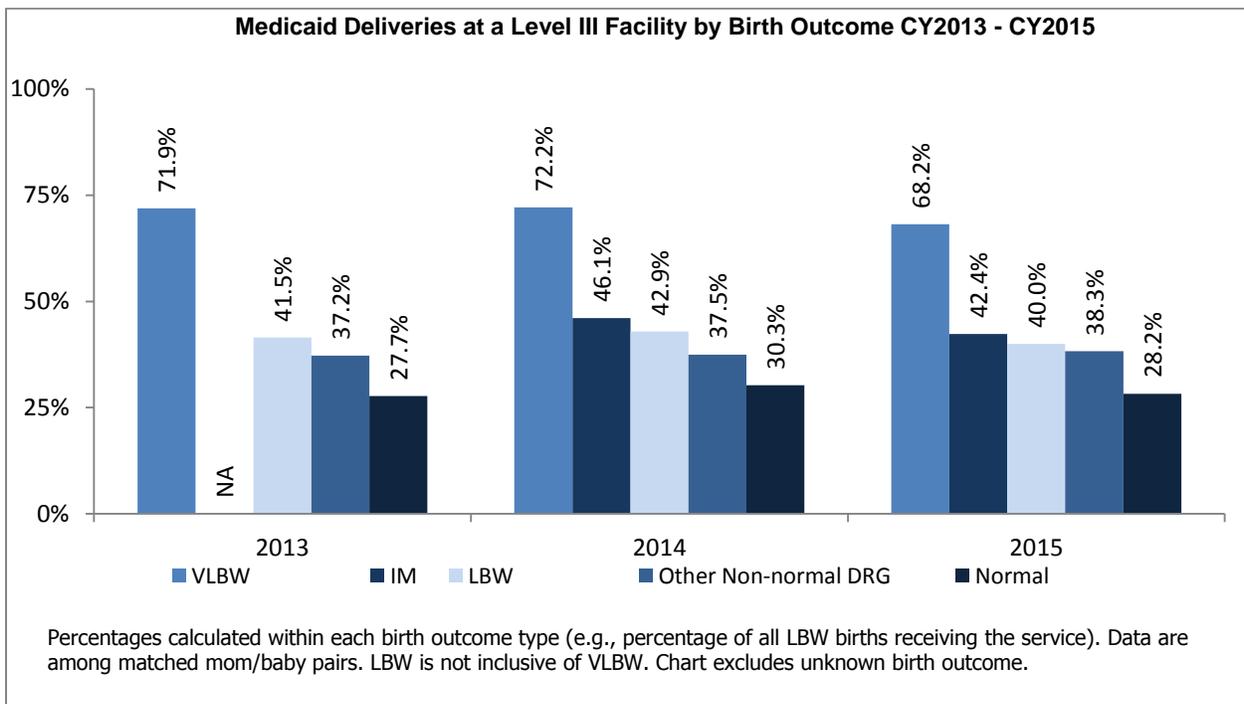
Illinois Infant Mortality Rate by Race, CY1990 - CY2014			
Year	White	African American Rate	Overall
2014	5.5	12.6	6.6
2013	4.5	13.2	6.0
2012	5.1	13.2	6.5
2011	5.2	13.6	6.6
2010	5.3	13.6	6.8
2009	5.4	14.0	6.9
2008	5.8	13.9	7.2
2007	5.3	13.5	6.6
2006	6.1	14.4	7.4
2005	5.7	15.4	7.2
2004	5.9	14.8	7.3
2003	6.1	15.6	7.6
2002	5.5*	15.7	7.2
2001	5.9	14.9	7.5
2000	6.5	16.3	8.3
1999	6.2	17.4	8.3
1998	6.3	16.8	8.2
1997	6.2	16.5	8.2
1996	6.3	17.1	8.4
1995	7.2	18.2	9.3
1994	6.7	17.9	9.0
1993	7.1	18.8	9.6
1992	7.4	19.5	10.0
1991	7.9	21.1	10.7
1990	7.6	22.1	10.7
Rates are per 1,000 live births			
* Corrected rate			

Illinois Center for Health Statistics, Illinois Department of Public Health, Vital Statistics, [Illinois Infant Mortality Rates by Race](#), 1980-2014.

The Medicaid infant mortality rate decreased between CY2014 and CY2015 from 5.6% to 5.3%.

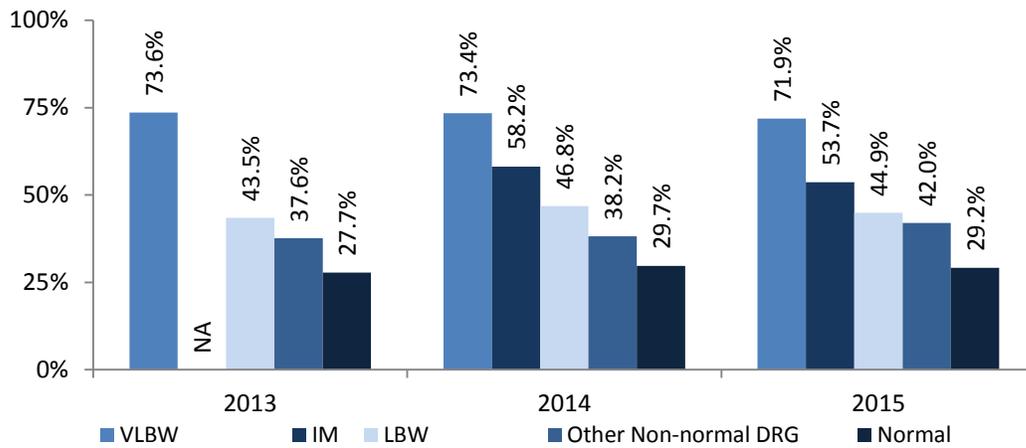


Among Medicaid covered deliveries, over two-thirds of all VLBW births were delivered at a Perinatal Level III facility, followed by 40% of LBW births and over one-third of other non-normal DRG deliveries compared to 28.2% of normal births. This data shows that more high-risk infants continue to be delivered at a Perinatal Level III facility.



Among Medicaid covered deliveries at a Perinatal Level III facility, approximately 71% of VLBW births, 44% of LBW births, 42% of other non-normal DRG births, and over 25% of normal births were delivered by cesarean section at a Perinatal Level III facility.

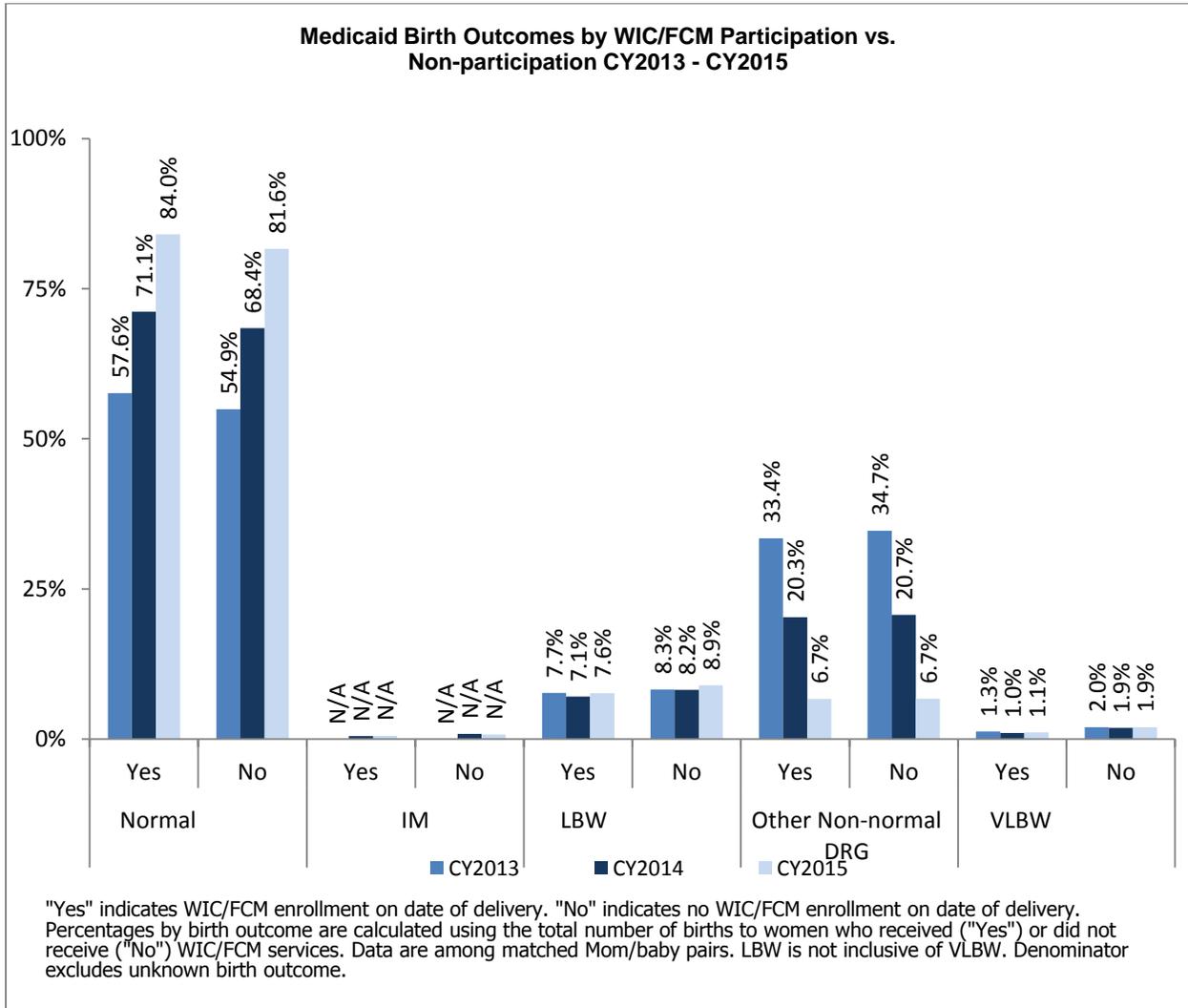
Medicaid Cesarean Deliveries at a Level III Facility by Birth Outcome CY2013 - CY2015



Percentages calculated within each birth outcome type (e.g., percentage of all LBW births receiving the service). Data are among matched Mom/baby pairs. LBW is not inclusive of VLBW. Chart excludes unknown birth outcome.

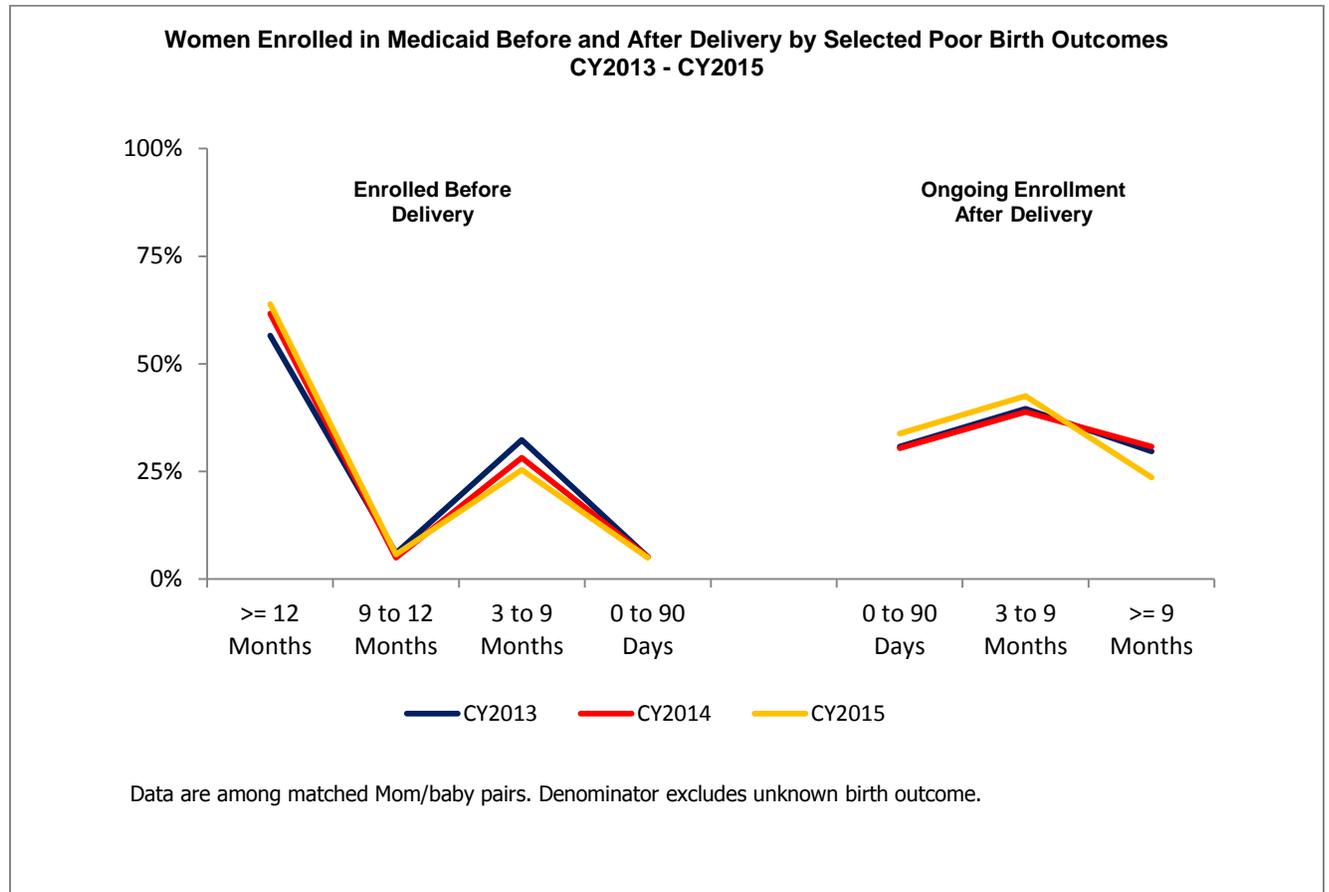


Among women enrolled in Medicaid who participated in WIC/FCM, statistics show more births with better outcomes than those who did not participate.

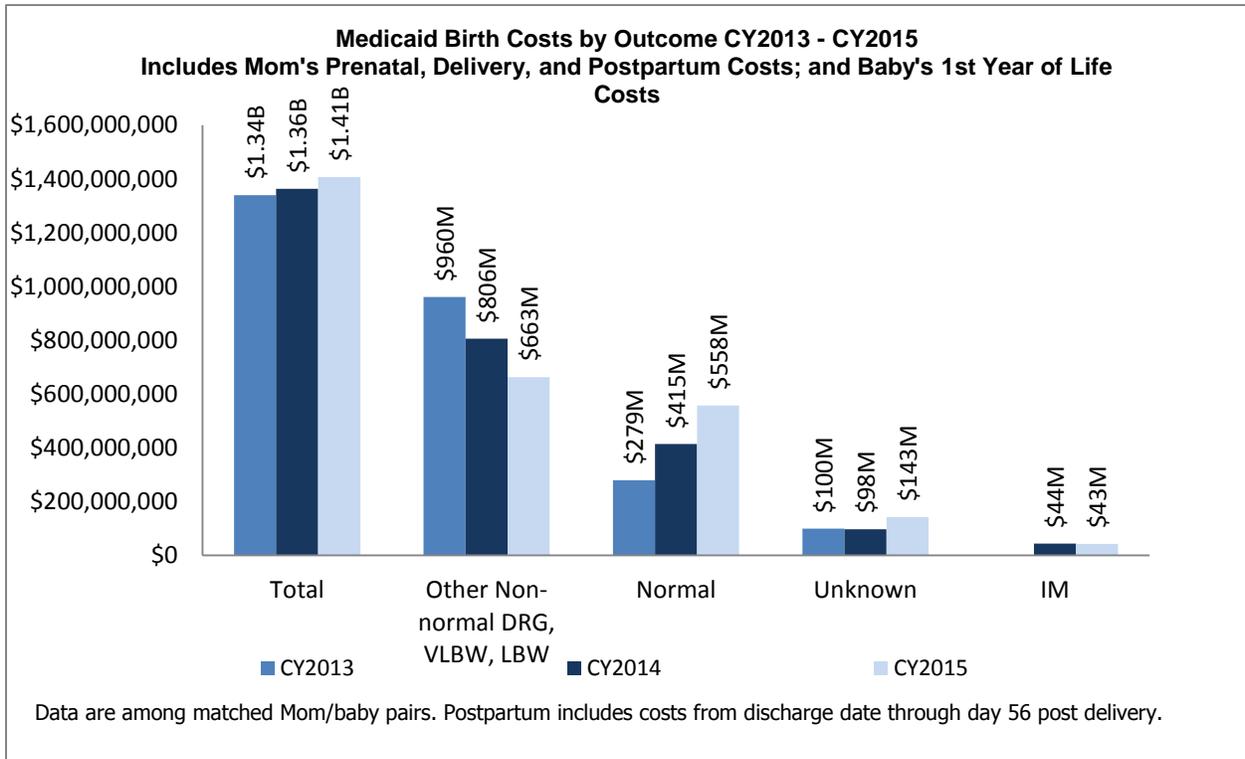


Birth Costs

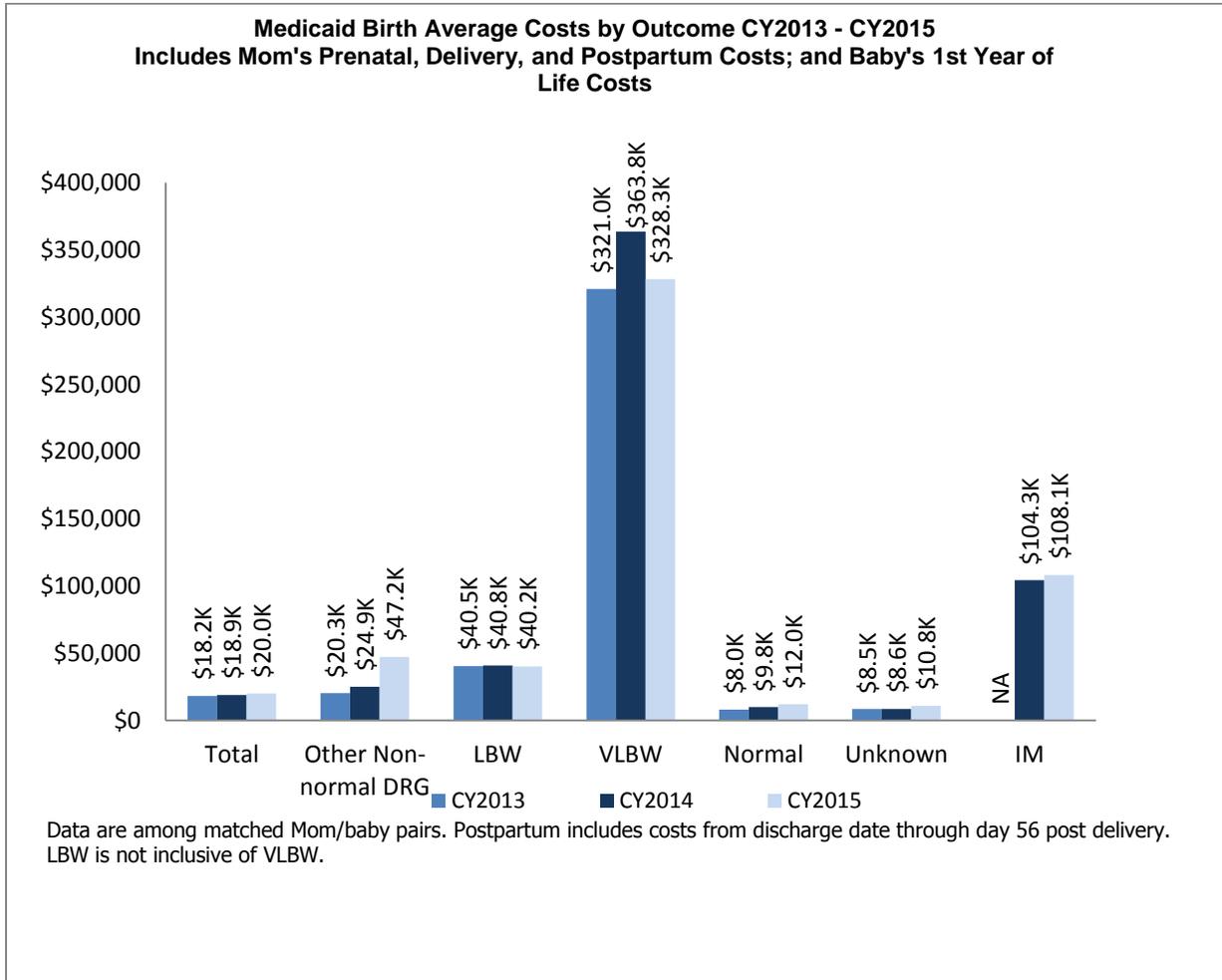
Of HFS-enrolled women who experienced a poor birth outcome, the data shows that over 50 percent were eligible ≥ 12 months prior to delivery and fewer were eligible less than 12 months prior to delivery. Regarding enrollment duration following delivery of a birth with poor outcome, there was an increase in the percent of women enrolled 0 to 6 months and a decrease of women enrolled ≥ 9 months.



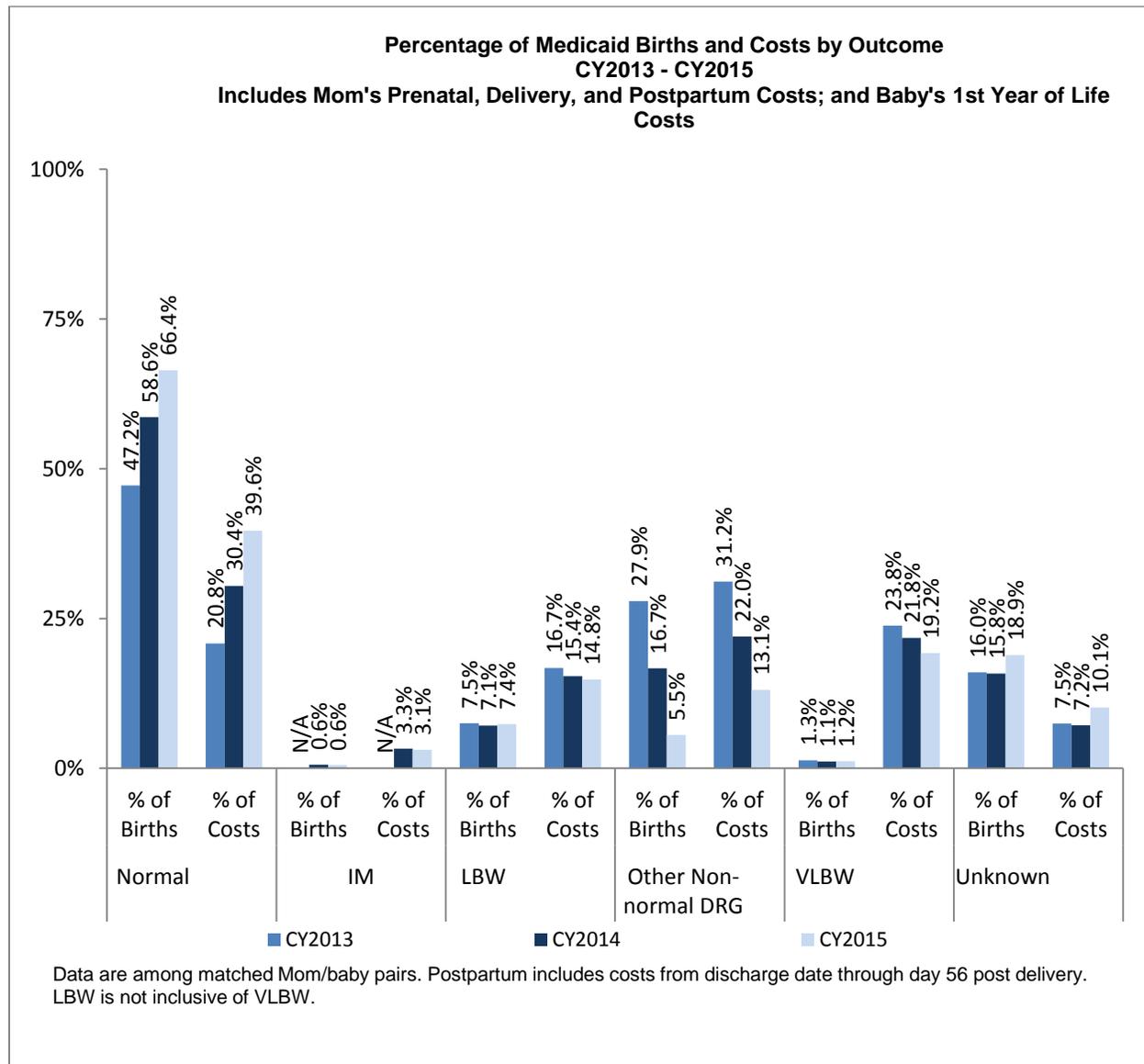
The majority of HFS birth costs are for births with poor outcomes. Costs for Medicaid covered births are increasing annually while the number of covered births is decreasing for the same period.



The lowest average cost is for a normal birth at approximately \$12,000 per birth (prenatal care, delivery, postpartum, and infant's first year of life) in CY2015 while the VLBW average cost is the highest at over \$328,000.

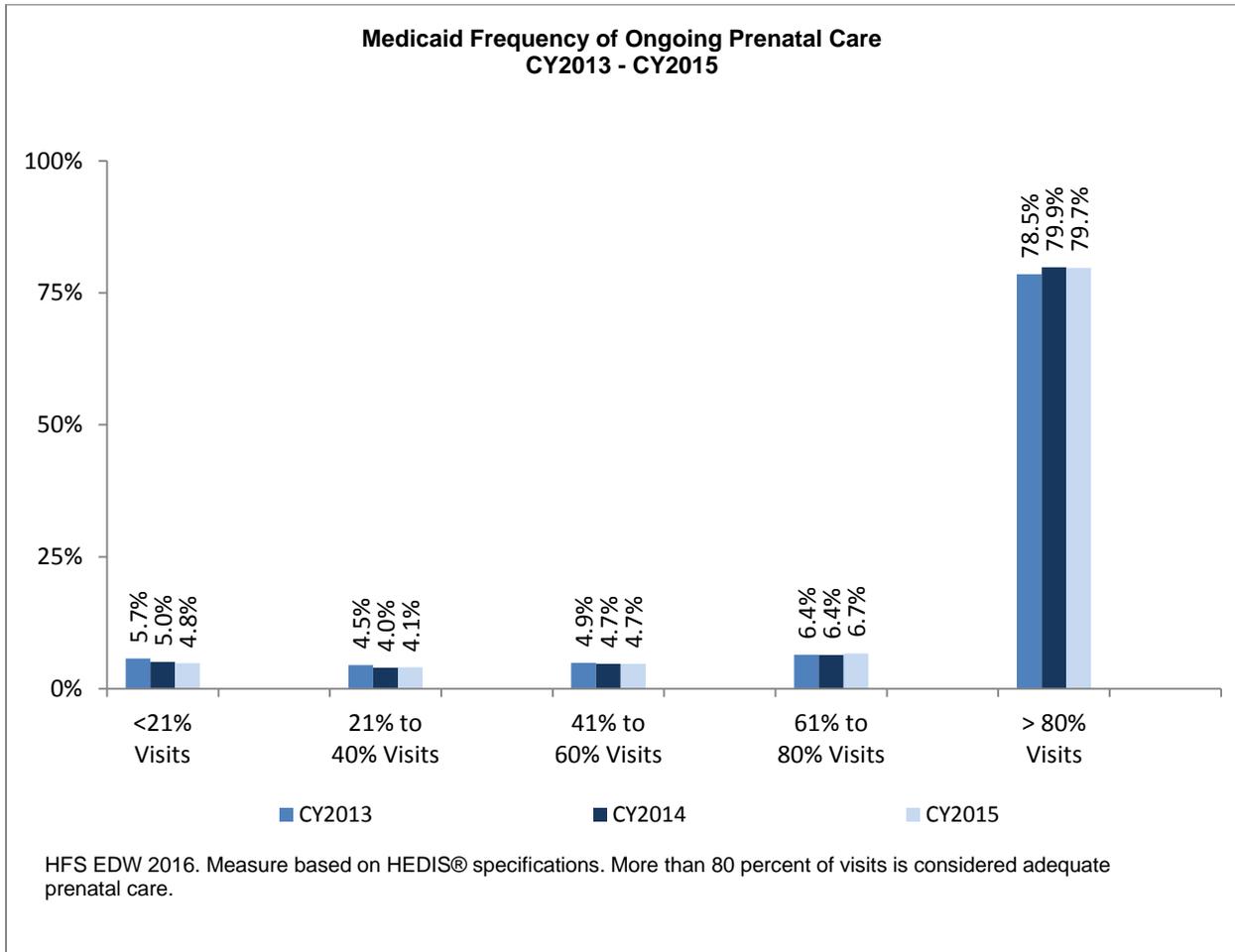


LBW, other non-normal DRG and VLBW births account for a lower percentage of total births, but a higher percentage of total costs. VLBW births represent the lowest percentage of total births, at nearly 1.2 %, but they account for nearly 19% of total birth costs (prenatal care, delivery, postpartum, and infant's first year of life). Conversely, approximately 2/3 of all births are normal outcome and account for only approximately 40% of total costs.

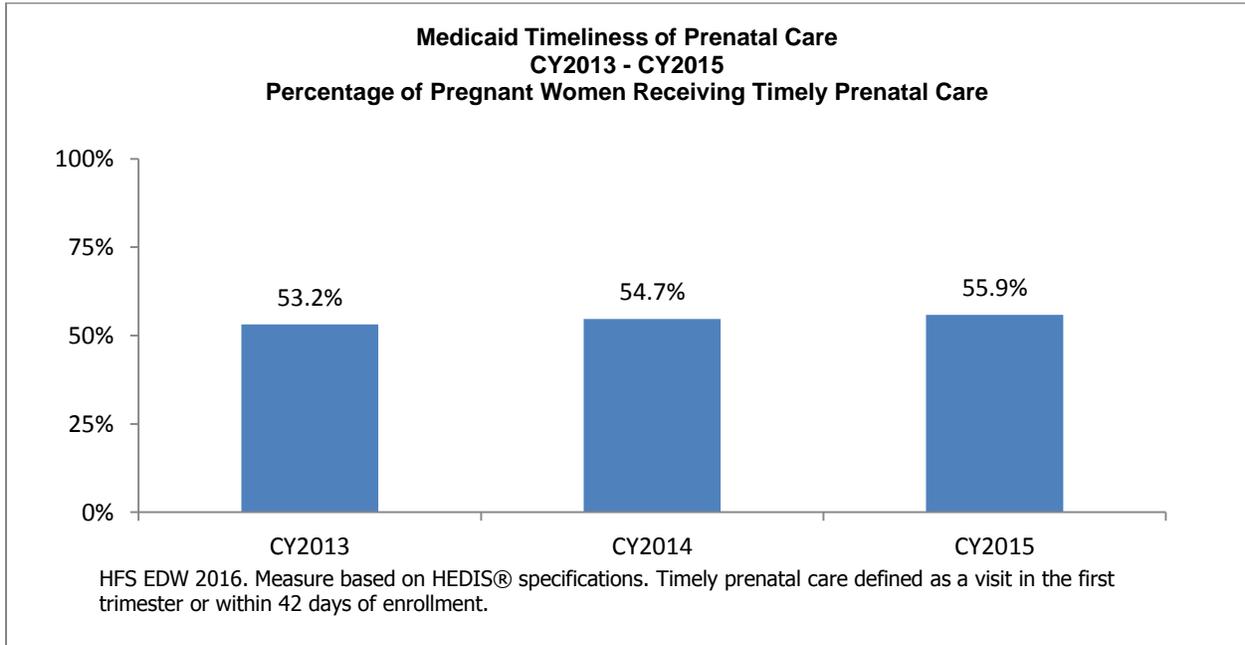


Prenatal and Postpartum Care

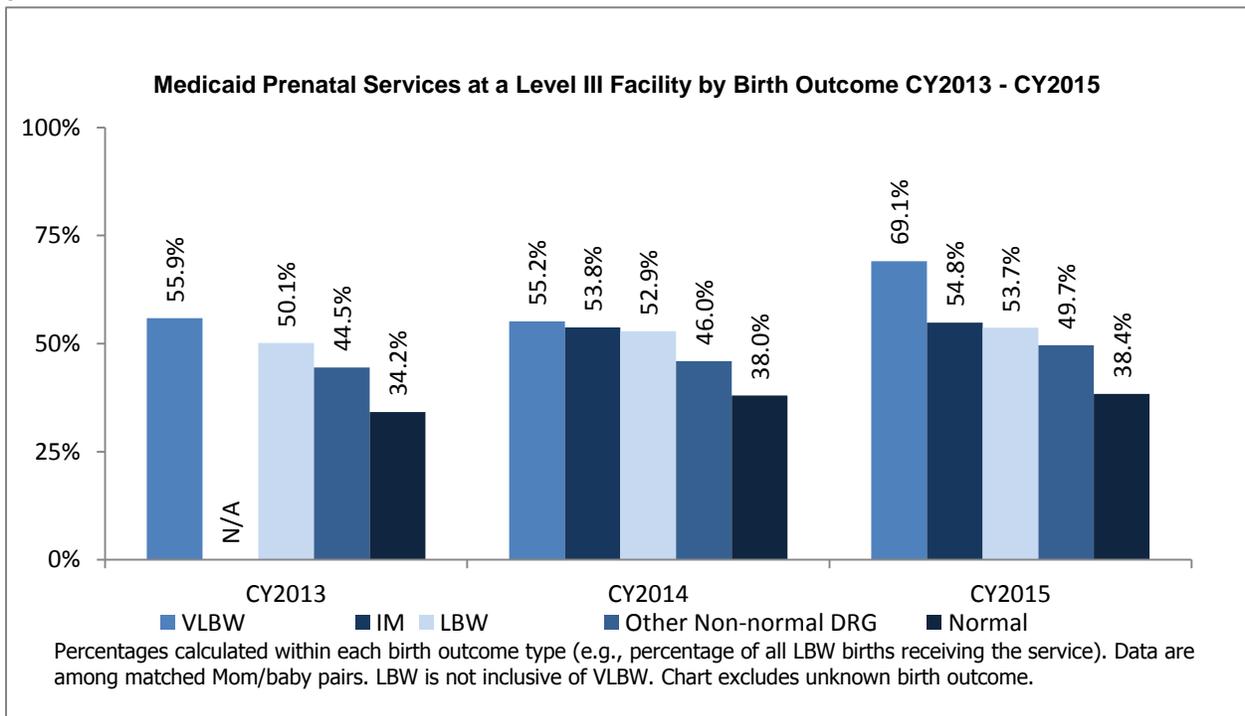
The percentage of pregnant women covered by HFS receiving less than 21% of recommended prenatal care visits is less than 5%. From CY2012 through CY2015, the rate of women receiving less than 21% of recommended visits decreased. The percentage of pregnant women covered by HFS receiving more than 80% of recommended prenatal care visits stayed about the same.



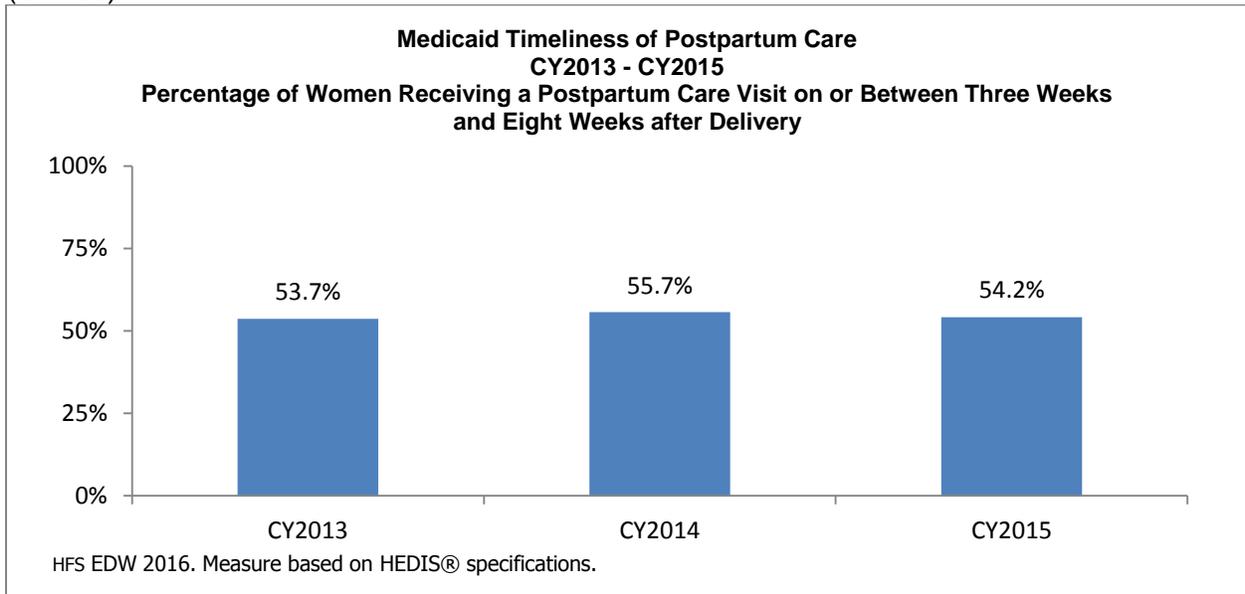
The percentage of pregnant women covered by HFS who received timely prenatal care visits is slightly above 50%, showing a need for improvement.



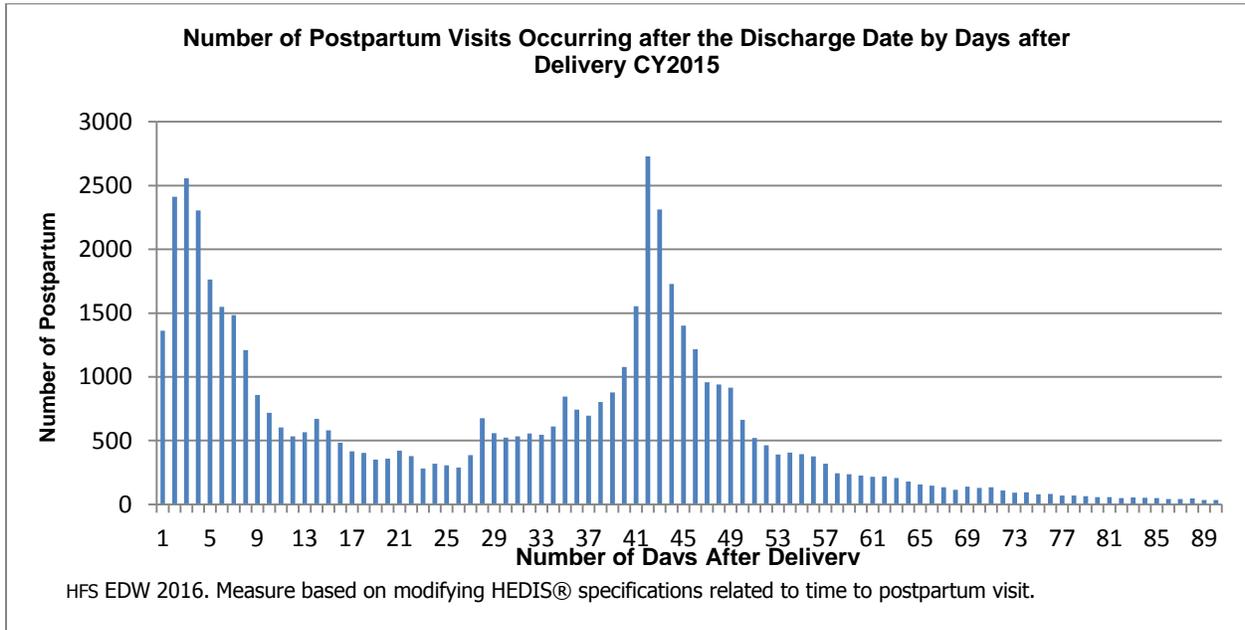
Higher rates of women delivering VLBW, LBW and other non-normal DRG babies received prenatal care at a Perinatal Level III hospital compared to women who had normal birth outcomes.



The percentage of women covered by HFS who received postpartum care on or between three to eight weeks after delivery increased from CY2013 (53.7%) to CY2015 (54.2%).



The number of postpartum visits in CY2015 peaks at about the 43rd day after delivery.



RECOMMENDATIONS AND INITIATIVES

To further the objectives set forth in [305 ILCS 5/5-5.24](#), the Department of Healthcare and Family Services (HFS) has made several recommendations and implemented various initiatives. This report contains recommendations and initiatives for which there is new information since the last perinatal report (January 1, 2016). Refer to past [perinatal reports](#) for historical information.

Managed Care

Beginning January 1, 2018, HFS will enroll approximately 80% of its clients into a managed care plan (MCO). This transformation will affect women of child-bearing age who are the focus of this report. MCOs will improve care through care coordination (e.g. care transition and follow-up), provision of evidence-based practices, promotion of timely care and access to prenatal care, behavioral health services, substance use services, contraceptive services, and other specialty care. The MCOs are being held accountable to nationwide Healthcare Effectiveness Data and Information Set (HEDIS®) measures to track MCO timeliness and performance in delivering prenatal and postpartum care.

Planned Pregnancy

No updates to report.

Mental Health

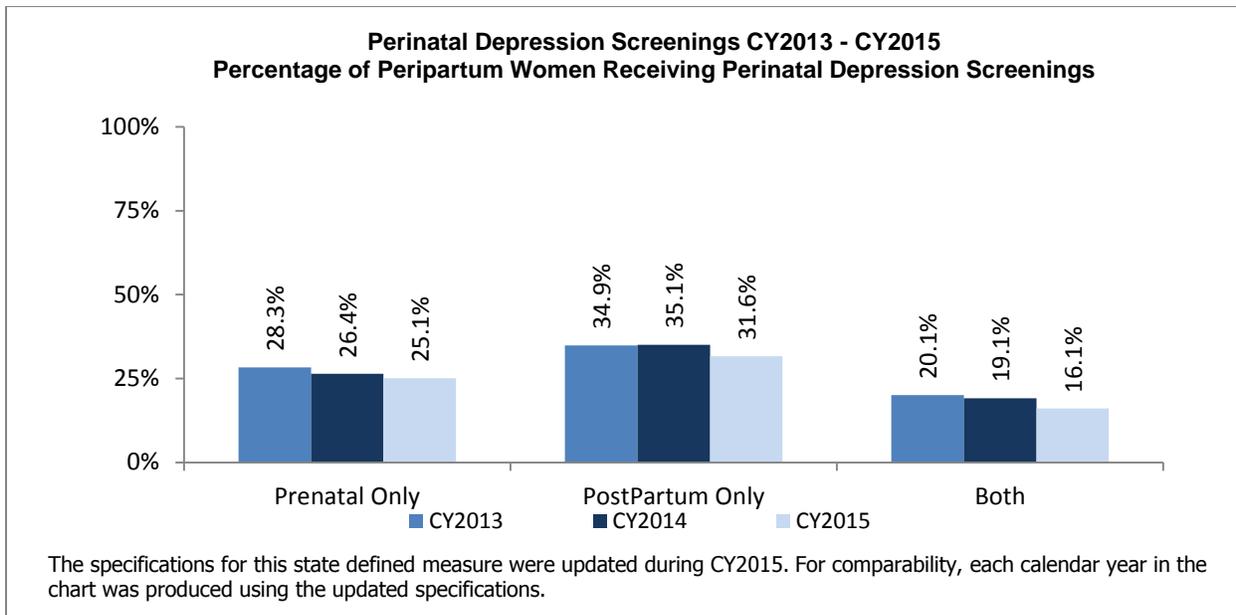
Women enrolled in Medicaid reported being diagnosed with postpartum depression at a higher rate than other women.

Postpartum Depression Diagnosis: Illinois PRAMS CY2014

Women with a postpartum depression diagnosis	Percentage	CI
Illinois	6.9%	5.6-8.5%
Medicaid Enrolled Women	7.9%	6.0 -10.2%
Non-Medicaid Enrolled Women	5.9%	4.3-8.1%

Illinois Department of Public Health, Illinois Center for Health Statistics and the U.S. Centers for Disease Control and Prevention, 2014 Pregnancy Risk Assessment Monitoring System (PRAMS). CI = Confidence Interval

From CY2013 through CY2015, there was a decrease in the rate of women receiving perinatal depression screening. A prior year recommendation was to make information and training available to providers on how to use the depression screening tool. HFS has educated providers on the screening tool and partnered with other organizations to provide training on depression screening. HFS has seen an increased trend in non-mental health specialty healthcare providers requesting information on treatment options.



Oral Health

No updates to report.

Smoking Cessation

HFS covered women are more likely to smoke than other women before and during pregnancy. More than 25% of HFS women smoked in the three months before pregnancy and 11.90% smoked during the last three months of pregnancy compared to 10.10% of non-Medicaid women who smoked before pregnancy and 3.2% who smoked during pregnancy. Smoking by women before and during pregnancy is a contributing factor to low birth weight. Various initiatives have been implemented to decrease smoking among HFS women. These initiatives are detailed in previous reports and include provider assessment of smoking status, referrals to smoking cessation services (separately reimbursed by HFS), and encouraging patients to quit by such methods as motivational and self-help booklets.

Prevalence of Smoking Before and During Pregnancy: Illinois PRAMS CY2014

Women who smoked 3 months before pregnancy	Percentage	CI
Illinois	17.90%	15.8-20.2%
Medicaid Enrolled Women	25.20%	21.9-28.9%
Non-Medicaid Enrolled Women	10.10%	8.0-12.8%
Women who smoked during last 3 months of pregnancy		
Illinois	7.70%	6.3-9.3%
Medicaid Enrolled Women	11.90%	9.6-14.8%
Non-Medicaid Enrolled Women	3.20%	2.0-4.8%

Illinois Department of Public Health, Illinois Center for Health Statistics and the U.S. Centers for Disease Control and Prevention, 2014 Pregnancy Risk Assessment Monitoring System (PRAMS). CI = Confidence Interval

Perinatal Addiction

Women covered by HFS reported higher rates of partner abuse before and during pregnancy when compared to other women.

Physical Abuse: Illinois PRAMS CY2014

Abuse by Husband/Partner Before Pregnancy	Percentage	CI
Illinois	1.90%	1.2-2.8%
Medicaid Enrolled Women	2.70%	1.6-4.5%
Non-Medicaid Enrolled Women	1.00%	0.4-2.1%
Abuse by Husband/Partner During Pregnancy		
Illinois	1.50%	1.0-2.5%
Medicaid Enrolled Women	2.10%	1.2-3.8%
Non-Medicaid Enrolled Women	1.00%	0.4-2.2%

Illinois Department of Public Health, Illinois Center for Health Statistics and the U.S. Centers for Disease Control and Prevention, 2014 Pregnancy Risk Assessment Monitoring System (PRAMS). CI = Confidence Interval

HFS covered women are less likely to use alcohol in the three months before pregnancy and during pregnancy than other women.

Prevalence of Drinking Before and During Pregnancy: Illinois PRAMS CY2014

Women who drank 3 months before pregnancy	Percentage	CI
Illinois	55.2%	52.3-58.0%
Medicaid Enrolled Women	40.4%	36.5-44.4%
Non-Medicaid Enrolled Women	70.8%	67.1-74.3%
Women who drank during last 3 months of pregnancy	Percentage	CI
Illinois	9.2%	7.7-10.9%
Medicaid Enrolled Women	4.2%	2.8-6.1%
Non-Medicaid Enrolled Women	14.6%	12.0-17.6%

Illinois Department of Public Health, Illinois Center for Health Statistics and the U.S. Centers for Disease Control and Prevention, 2014 Pregnancy Risk Assessment Monitoring System (PRAMS). CI = Confidence Interval

The Illinois Advisory Council on Alcoholism and Other Drug Dependency's Women's Committee (Women's Committee) released the Women's Plan and Practitioner's Toolkit 2017-2019 (Toolkit) in December 2016. The Toolkit is divided into the following topic areas:

- Opioid Use
- Trauma-Informed Care
- Co-Occurring Disorders
- Criminal Justice Involved Women
- Family Centered Services
- Harm Reduction
- LGBTQ+ specific Needs
- Utilizing Evidence-Based Practices from Mental Health
- Interdisciplinary Cooperation/Integrated Care

These nine sections are further broken down into subcategories with recommendations to facilitate assessment and modification of practice in the following areas:

- Agency Level Changes
- Recommendations for Workforce and Program Development
- Screening and Assessment
- Policy Changes
- Resources

Specific recommendations HFS made which are aligned with the Toolkit are:

- Provide access to substance abuse treatment specialists
- Identify existing resources needed to establish a Maternal Child Health (MCH) team with a substance abuse treatment specialist
- Include a substance abuse specialist in the Targeted Intensive Prenatal Case Management (TIPCM) and Healthy Start programs

- Promote interdisciplinary cooperation and integrated health promotion to expand access to health and wellness education and care for women served by each state agency
- Establish a formal network for consultation, as needed, by primary care providers
- Build collaborative teams between child welfare, public health, substance use disorder and mental health community providers and medical professionals to address policy and practice to address the needs of pregnant women. The teams should be comprised of professionals from various disciplines, agencies and organizational bodies, including agencies involved in the continuum of healthcare services such as the Illinois Department of Public Health (DPH) and HFS
- Provide training for physicians on the signs, symptoms and screenings for addictions
- Women who have adverse childhood experiences are at increased risk of health problems and substance use issues later in life. The primary care provider is often the first and sometimes only point of contact in the healthcare system for women with substance use disorders (SUDs). Some women with SUDs do not receive adequate preventative care and education, resulting in higher rates of preventable chronic illnesses, in addition to health outcomes more directly associated with substance use. It is therefore vital not only that primary healthcare providers be effectively trained in screening and providing resources related to substance use recovery, but also that providers of substance use and mental health services provide increased access to primary healthcare for the women they serve.

The Toolkit recommends:

- Increase training for opioid use disorders best practices, including safe opioid prescribing and the use of medication assisted treatment (MAT) and overdose prevention, including naloxone distribution
- Promote building collaborative teams between child welfare, public health, substance use disorder and mental health community providers and medical professionals to address policy and practice to address the needs of pregnant women with opioid use disorders
- Screen each woman for a history of opioid use and overdose risk factors, including women without opioid use disorder (OUD)
- Implement universal screening such as those addressing Neonatal Abstinence Syndrome (NAS) and Fetal Alcohol Syndrome (FAS)

Substance Abuse Prevention has been moved back into the Division of Alcoholism and Substance Abuse (DASA). This includes the oversight of the following tobacco programs: Synar, the Tobacco Enforcement Program, and the FDA Compliance and Enforcement Tobacco Retail Inspection Program. Funding for a smoking cessation specialist position in DASA was recommended. It is envisioned that this smoking cessation specialist would review and recommend smoking cessation programs and provide smoking cessation training.

Human Immunodeficiency Virus (HIV) Counseling

No updates to report.

Nurse Midwifery

No updates to report.

Lactation Counseling

No updates to report.

Labor Support during the Prenatal Period

No updates to report.

Case Management and Home Visiting

No updates to report.

Data Analysis

Data analysis means analyzing birth outcomes data utilizing predictive analytics to better understand factors affecting the health of births.

Beginning June 2017, the MCOs received an additional indicator in the CCCD files flagging women who are enrolled in the Illinois Department of Human Services (DHS) Better Birth Outcomes (BBO) program. This permits coordination between the MCOs and DHS for women who receive medical services through HFS and who are enrolled in DHS' BBO program. In areas where the DHS BBO program does not operate, the HFS MCOs have primary responsibility to provide early intensive prenatal care to high-risk pregnant women.

Collaborative Improvement and Innovation Network (CoIIN)

CoIIN is a multi-year, national initiative supported by the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA) in the federal Department of Health and Human Services (DHHS). Illinois will continue to implement its four key strategies to decrease disparities in infant mortality: increasing safe sleep practices; enhancing pre- and interconception care, assuring that very pre-term babies are born in hospitals with the appropriate capacity to meet their complex health needs, and addressing the social determinants of health.

Children's Health Insurance Program Reauthorization Act (CHIPRA) Child Health Quality Demonstration Grant

The CHIPRA Quality Demonstration Grant in Illinois concluded in February 2016. Activities completed under the CHIPRA grant were:

- The Perinatal Care Quality Tool (PCQT) was developed to assist providers in providing evidence-based prenatal care and making appropriate high-risk referrals based on American College of Obstetricians and Gynecologists/American Academy of Family Physicians (ACOG/AAFP) guidelines and the Illinois Perinatal Act. The tool was intended to be incorporated into electronic health records. The PCQT was pilot tested by two obstetric practices in the final year of the CHIPRA grant.
- The Prenatal Minimum Electronic Data Set (PMEDS) is a tool that electronically provides prenatal providers and hospitals a minimum set of available prenatal data when the prenatal health record is not available. The data set is based on ACOG/AAFP guidelines. The tool provides basic information to enable practitioners to make treatment decisions and to avoid duplication of services, thereby improving outcomes and efficiency. The PMEDS tool was pilot tested in two federally qualified health centers (FQHCs) and affiliated hospitals in the final year of the CHIPRA grant.

The final reports for the PCQT and PMEDS tools are in Health Management Associates' CHIPRA library at www.healthmanagement.com/what-we-do/government-programs-uninsured/chip/chipra/library. The reports provide positive feedback on the relevance and need for these tools, but also states that competing priority projects within the pilot practices did not allow for full use of the tools.

CHIPRA developed an electronic Perinatal Education Toolkit for clinical and non-clinical providers to increase awareness of the benefit of preconception, prenatal, postpartum, and interconception care. The toolkit contains images/tag lines to promote preconception, prenatal, postpartum and interconception care, prenatal and postpartum checklist brochures, and resources and links to educational materials. The toolkit was made available to HFS providers on September 30, 2015. The toolkit is housed and maintained by EverThrive Illinois and is available to any interested clinical or non-clinical provider on [EverThrive's](#) web site.

Family Planning

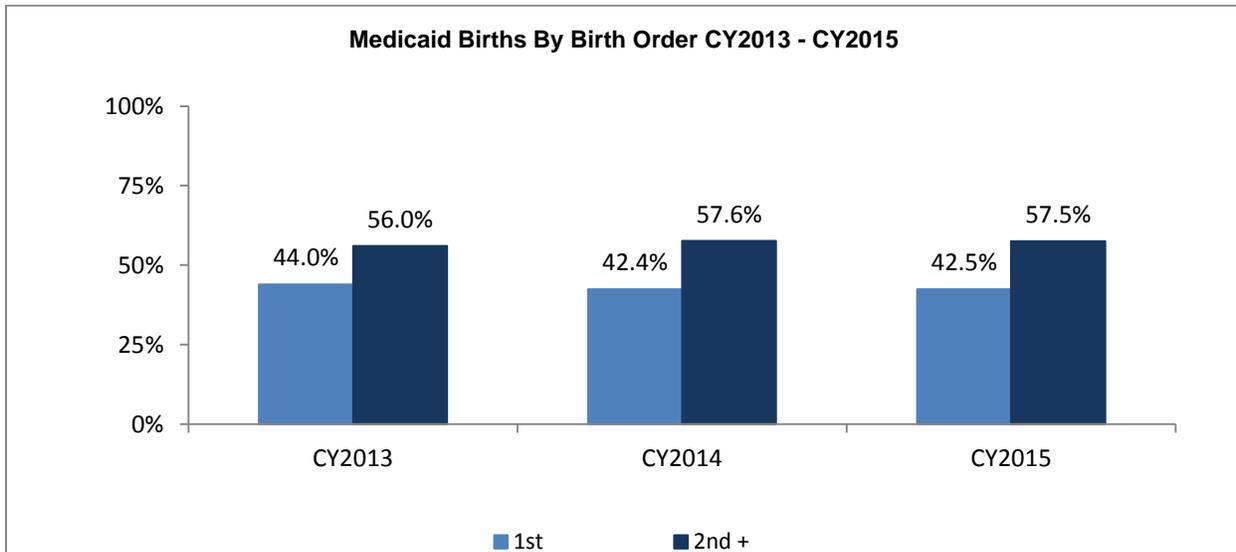
HFS continues its robust efforts to improve contraceptive uptake, enhance contraceptive policy development to improve inter-pregnancy spacing, improve birth outcomes, and decrease unintended pregnancy rates. One of HFS' enhancements to improve inter-pregnancy spacing was the LARC initiative. In a [provider notice](#) dated July 1, 2015, HFS described a new policy permitting hospitals separate reimbursement for the LARC device when provided immediately postpartum in the inpatient hospital setting. As stated in the notice, "LARCs, specifically the intrauterine devices (IUDs) and the contraceptive implant, are the most effective reversible forms of female contraception...with high rates of continuation and client satisfaction. The immediate

postpartum period is a perfect opportunity to offer the use of LARCs among women for whom a rapid repeat and unplanned pregnancy carries serious ramifications. Supporting immediate postpartum LARC insertion contributes to optimal pregnancy spacing, thereby improving maternal and infant health and averting potentially substantial financial and social risks.”

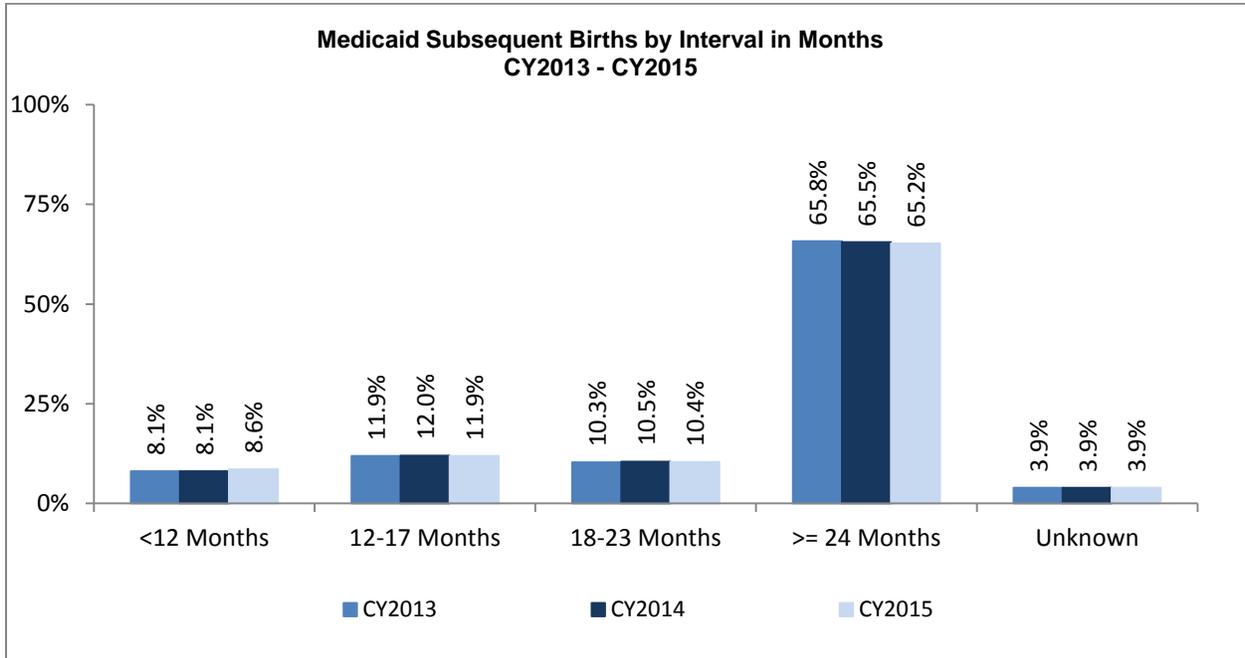
In the managed care realm, HFS’ efforts are detailed in previous reports and HFS continues to ensure that each MCO has family planning protocols which include a comprehensive list of FDA-approved contraceptives on its formulary.

The following charts show some Medicaid birth data.

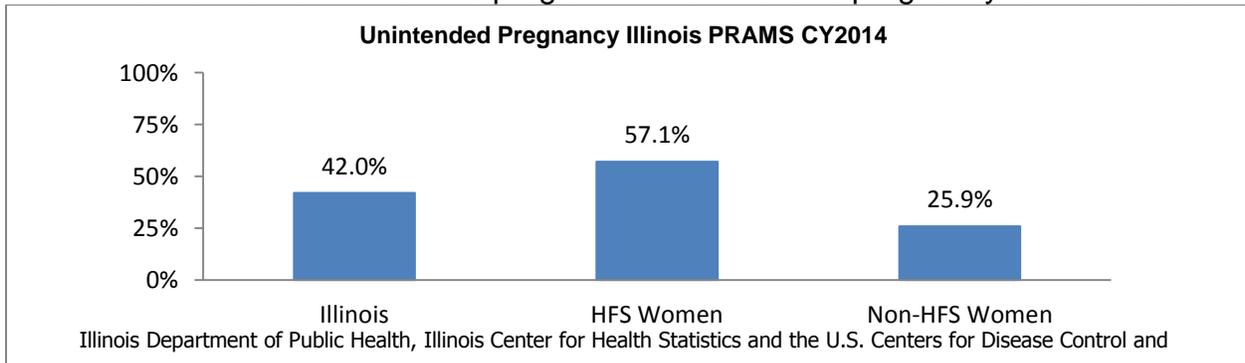
The percentage of women enrolled in Medicaid experiencing a first-time birth is slightly decreasing, while those experiencing a subsequent birth (2nd or higher) appears to be slightly increasing.



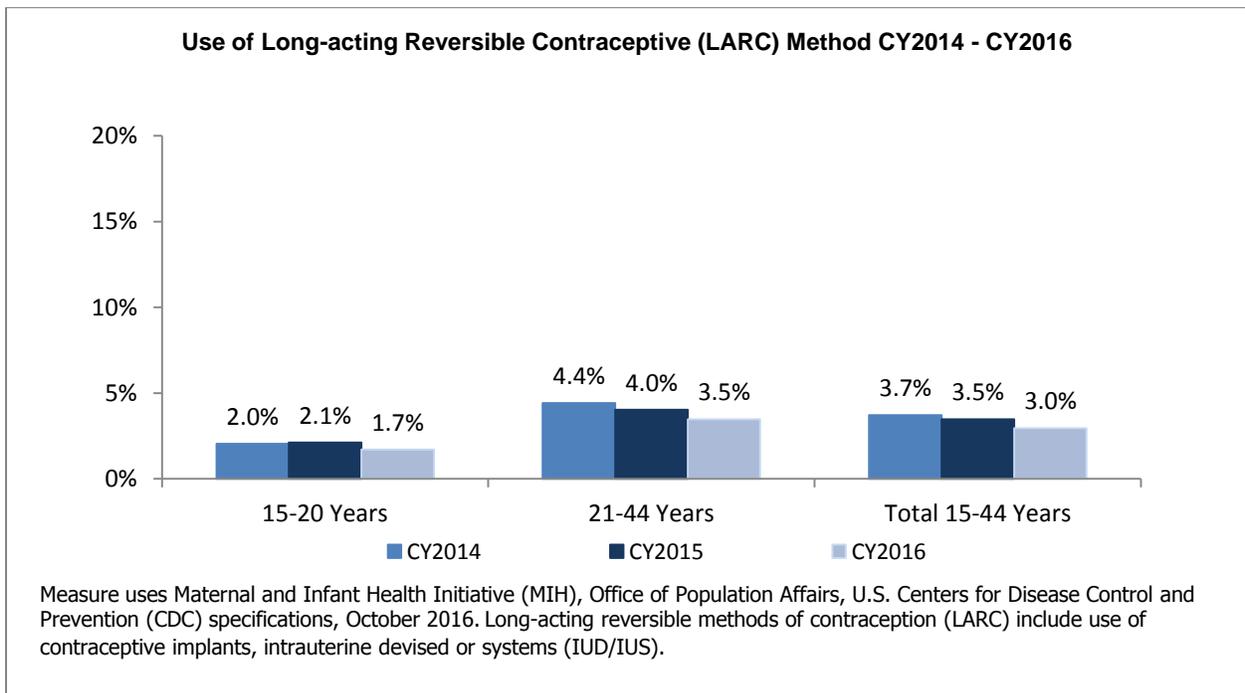
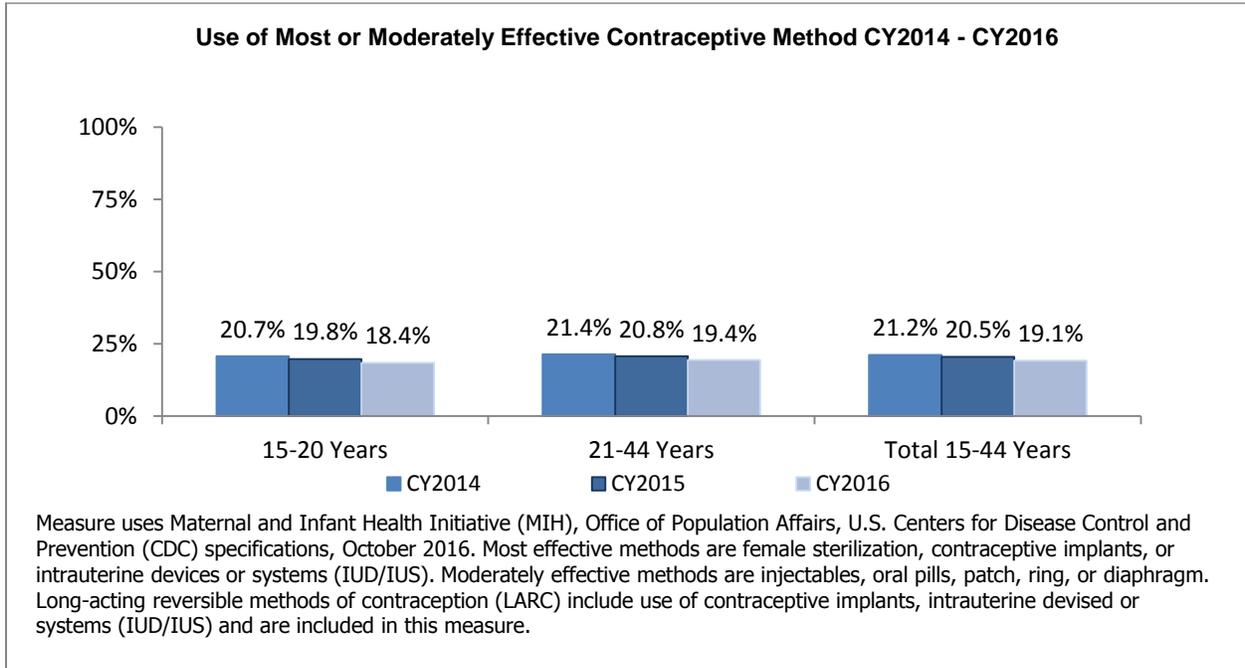
Of women experiencing a subsequent birth, there appears to be an increase in the percentage of births with a less than 12 month interval but slight variations in the percentage of births with a 12+ month or greater interval.



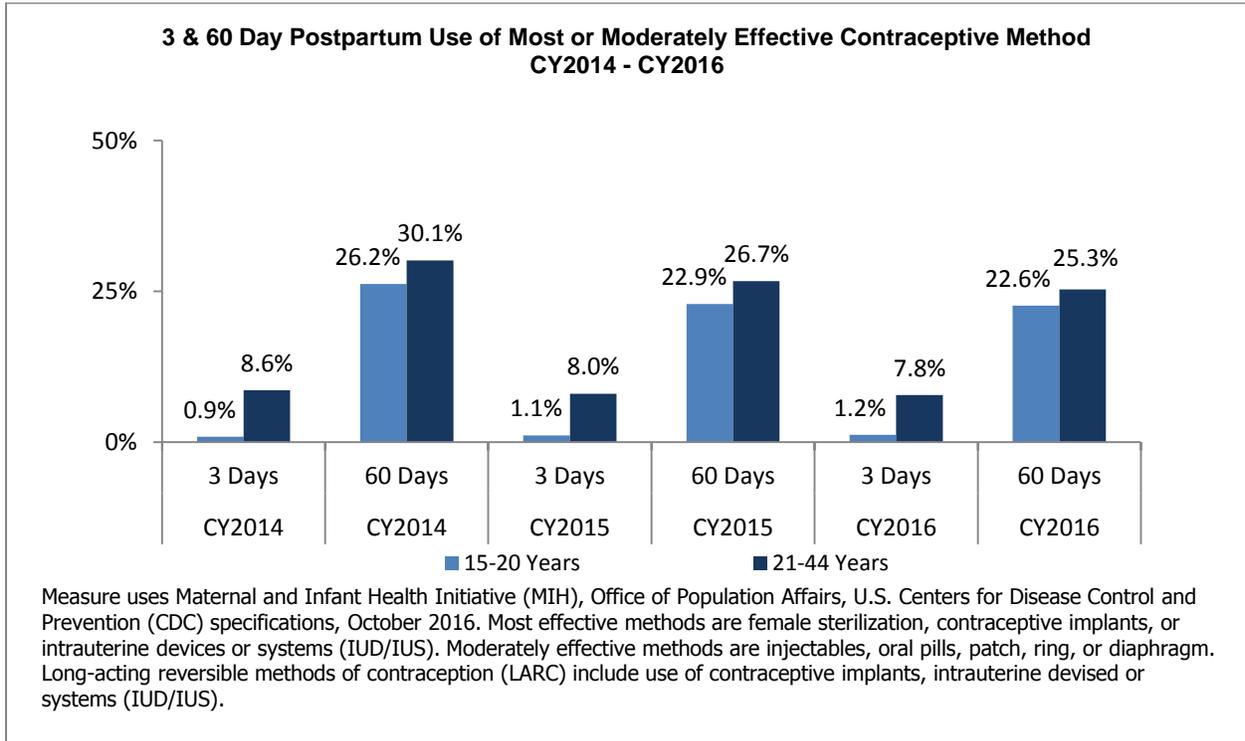
The number of women in the HFS program with unintended pregnancy is about 57%.



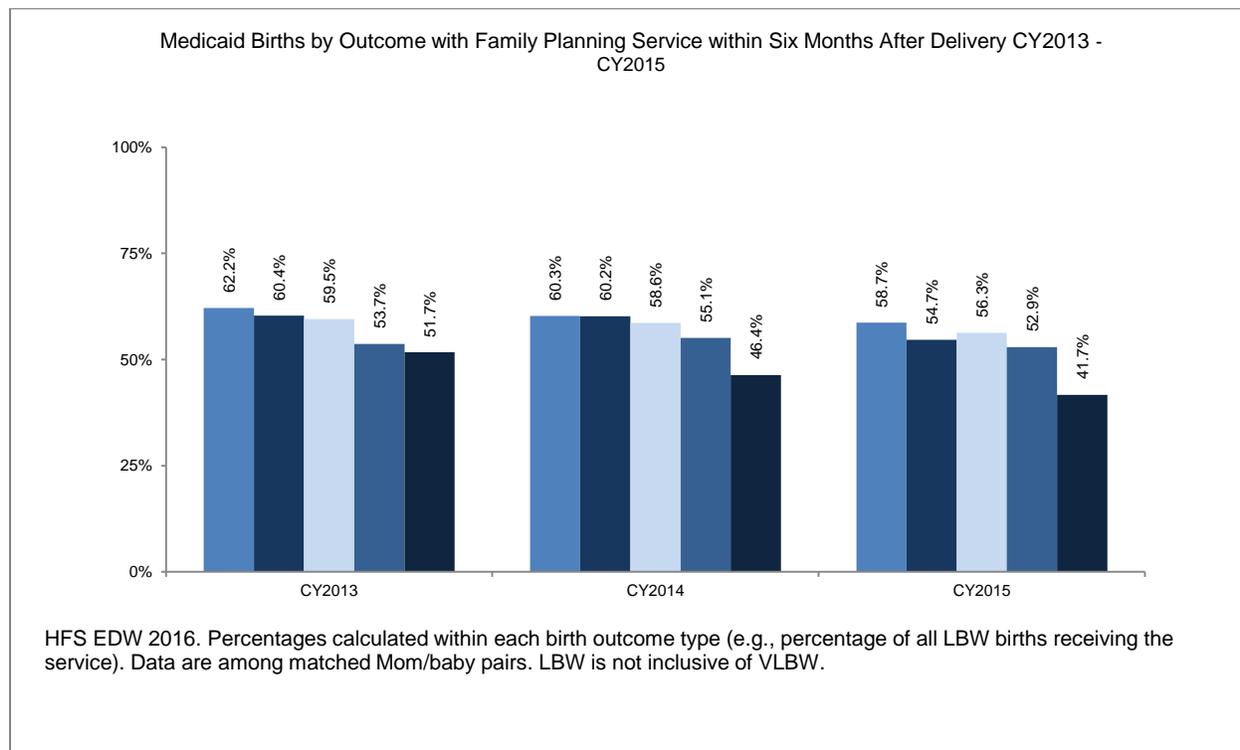
The use of most or moderately effective contraceptives, including long-acting reversible methods of contraceptives, decreased among women aged 15 to 44 years from CY2014 to CY2016.



The use of most or moderately effective contraceptive methods 3 and 60 days postpartum varied from CY2014 through CY2016 as per the chart below.



The percentage of women who deliver under Medicaid and receive family planning at six months post-delivery vary by birth outcome. Family planning services are important postpartum especially in non-normal births because of high correlations of outcomes in subsequent pregnancies, e.g. VLBW births are highly correlated with a subsequent VLBW birth. Through provision of family planning services postpartum, subsequent unplanned pregnancies can be avoided and birth outcomes can be improved through contraception utilization which allows for greater birth intervals between pregnancies. HFS continues to promote access to contraceptive services.



SMART ACT

Under the SMART Act, the BBO Program intensive prenatal case management program for high-risk pregnant women was expanded. HFS partners with DHS in the BBO Program. The BBO Program is of tremendous value in reducing poor birth outcomes and the associated costs through data sharing, early identification, expedited interagency referrals, aggressive outreach and better care management.

In 2015 there were 23 BBO providers; that number decreased slightly to 22 BBO providers in state fiscal year (SFY) 2017 because one provider in Chicago no longer provides these services. BBO providers are defined in geographic areas of the state where data indicates higher than average Medicaid costs associated with poor birth outcomes is higher than average number of women with premature infants.

Birthing Centers

Birthing centers as alternatives to hospitals are encouraged as a way to cut healthcare costs. Birthing centers are licensed by the DPH. Women at low risk for complications may prefer the low-tech environment provided by birthing centers, which employ

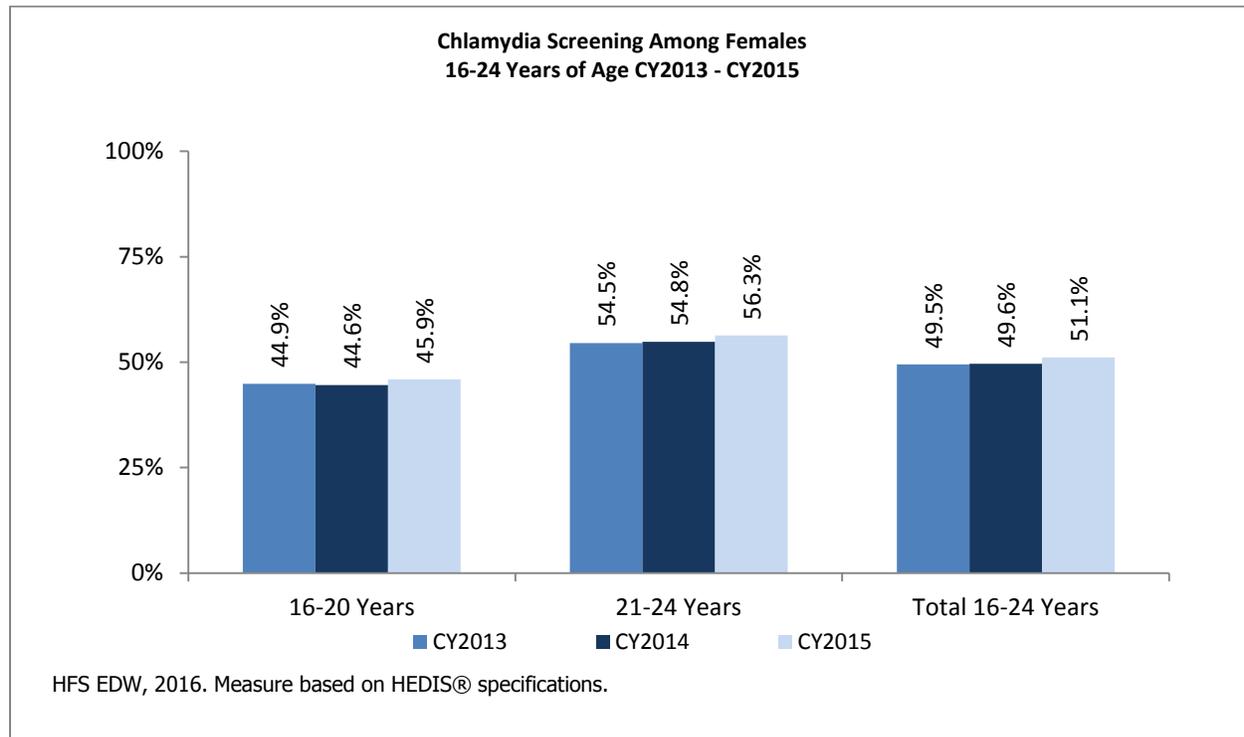
licensed professionals (usually a midwife and a nurse) with a backup hospital nearby and a doctor on call in case of an emergency.

In SFY 2017 there were two licensed birthing centers, one located in Berwyn (Cook County) which opened in the Spring of 2014, and one located in Bloomington-Normal (McLean County) which opened in the Fall of 2016. At present, there is insufficient data available to assess the effectiveness of birthing centers in reducing the incidents of low birthweight and neonatal intensive care.



Sexually Transmitted Diseases

Chlamydia screening rates among 16-24 year old women on Medicaid have shown an increase. In women, Chlamydia can be asymptomatic. If the infection is left untreated, it may lead to infertility. The infection also present certain other risks for mom and baby should pregnancy occur.



The Human Papillomavirus (HPV) vaccine is important because it protects against cancers caused by HPV infection. HPV is a very common virus; nearly 80 million people – about one in four – are currently infected in the U.S. About 14 million people, including teens, become infected with HPV each year. Most people with HPV never develop symptoms or health problems. Most HPV infections (9 out of 10) go away by themselves within two years. However, some HPV infections last longer and can cause cancers and other diseases: cancers of the cervix, vagina, and vulva in women; cancers of the penis in men; and cancers of the anus and back of the throat in both men and women. Source: <https://www.cdc.gov/hpv/parents/vaccine.html>.

From CY2013 to CY2015, there has been an increase in the rate of the HPV vaccination among 13 year old females (14.3% to 22%). While the trend shows a positive increase, the rate of vaccination remains low with approximately 1 of 5 female adolescents receiving the vaccine.

