State of Illinois
Department of Human Services

The Reduction of Infant Mortality in Illinois

Illinois Department of Human Services

2015 Annual Report

Bruce Rauner, *Governor*

Illinois Department of Human Services

James T. Dimas, *Secretary*

100 South Grand Avenue, East ● Springfield, Illinois 62762
401 South Clinton Street ● Chicago, Illinois 60607

Dear Governor Rauner and Members of the General Assembly:

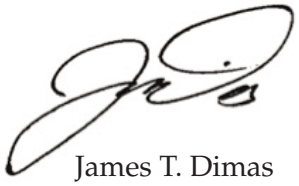
It is my pleasure to present The Reduction of Infant Mortality in Illinois Annual Report for Fiscal Year 2015. Illinois is unique in its effort to integrate the delivery of Family Case Management (FCM) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) for low-income women, infants, and children. The Department of Human Services has been able to blend the delivery, financing, monitoring, and evaluation of these programs through innovation and performance management.

The Department has maintained high rates of immunizations, breastfeeding, well-child care, and developmental screenings. As a result, the absolute rates of premature birth and very low birth weight among Medicaid-eligible pregnant women who participate in these programs are substantially better than those observed among similar women who did not participate in either program.

We continue to make progress, but we must also recognize the recurring racial disparity in infant mortality. An African American infant born in Illinois is still more than two and one half times as likely as a Caucasian infant to die before reaching one year of age. While we have made tremendous strides in our efforts to date, this disparity shows that we still have much work to do.

I look forward to working with each of you to continue improving the health of all Illinoisans.

Sincerely,



James T. Dimas
Secretary

Annual Report
Fiscal Year 2015

Table of Contents

EXECUTIVE SUMMARY

Illinois' infant mortality rate for calendar year 2012 was 6.5 deaths for every 1,000 live births. In calendar year 2013, the rate was 6.0 deaths for every 1,000 live births, the lowest rate ever for the state of Illinois. In calendar year 2012, the absolute number of infant deaths was 1,032. In calendar year 2013, it was 942, and, while the lowest recorded, is high in terms of personal loss and lives lost.

The Illinois Department of Human Services (IDHS) helps to reduce this loss through the integrated delivery of the Family Case Management (FCM) program and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). These programs combined served about 40 percent of all infants and 78 percent of Medicaid-eligible infants born in Illinois in calendar years 2011 and 2012. IDHS supplements these statewide programs with targeted services such as Better Birth Outcomes (BBO) for women whose chances of giving birth prematurely are greater than average and, as a result, their infants have a higher risk of dying before their first birthday.

Program Success - IDHS monitors the performance of the FCM and WIC programs on several short-term health status indicators. At the end of the State Fiscal Year 2015 (SFY2015), the performance on each indicator included the following: 1) FCM-eligible children up to age 13 months with health insurance was 89.5 percent; 2) fully-immunized one-year-olds in FCM was 82.7 percent; 3) Infants in WIC who were breastfed exclusively at 12 weeks was 10.3 percent; 4) children in FCM who received at least three well-child healthcare visits during the first year of life was 86.7 percent; 5) infants and children receiving developmental screening in FCM was 89.1 percent; and 6) women and infants active in both FCM and WIC was approximately 95 percent.

Racial Disparities in Infant Mortality – The overall infant mortality rate in Illinois has declined by 50% since 1986. Despite this, a significant and continued disparity in infant mortality rates persists between African American and Caucasian infants. IDHS and various organizations are creating interventions designed specifically to reduce racial disparities in healthcare and health outcomes. The interventions include an increased focus on care of highest-risk pregnant women through the Better Birth Outcomes (BBO) program; a campaign to reduce elective late preterm deliveries; and an improved Perinatal Health Care system, which include hospitals with the capacity to serve high-risk deliveries. Breastfeeding is a significant determinant of infant health. Illinois is in the forefront of promoting breastfeeding initiation and exclusivity via WIC's Peer Counselors who help women initiate and continue breastfeeding. Enhancement of services directed to preventing very low birth-weight such as Better Birth Outcomes holds significant potential for lowering the disparity between African American and Caucasian infant mortality rates and Illinois' overall infant mortality rate.

Improved Health Status – For the past 19 consecutive years [since calendar year (CY) 1997], infants born to Medicaid-eligible pregnant women who participated in both FCM and WIC are in better health than those born to Medicaid-eligible women who did not participate in either program. In CY2011, the rate of very low birth weight was 49 percent lower than that among non-participants, and the rate of premature birth was over 28 percent lower. In CY2012, the rate of very low birth weight was over 52 percent lower than that among non-participants and the rate of premature birth was about 28 percent lower. For both years, the very low birth weight rate was also significantly lower (i.e., 12 percent and 18 percent, respectively) than the general population who received no services.

Fiscal Savings - In addition to the significant health benefits afforded by FCM and WIC, Illinois' investment in these programs saved the state on average over $200 million each year in Medicaid expenditures. Those expenses for healthcare in the first year of life were about 15 percent lower among dual-program participants than among non-participants in CY2011 and in CY2012 expenses were 12 percent lower.

INTRODUCTION

Illinois' infant mortality rate for calendar years 2012 and 2013 was 6.5 deaths and 6.0 for every 1,000 live births, respectively. This represents marked improvement from the calendar year 2010 rate of 6.8 deaths per 1,000 live births and from the calendar year 2009 rate of 6.9. The 2013 rate is the lowest rate ever reported in Illinois. As reflected in Table 1, the actual number of infant deaths in 2013 was 942, also the lowest ever reported.

Many factors contribute to the state's infant mortality rate. Medical and pharmacological treatments are available for the conditions that used to take the lives of infants who were born prematurely. Illinois' success in maternal and child health services is due in part to the Illinois Department of Human Services' ongoing collaborative efforts with both the Illinois Department of Public Health (IDPH) and the Illinois Department of Healthcare and Family Services (IDHFS).

Illinois' infant mortality rate has declined by 50 percent since 1986, in part due to the provision of Family Case Management and WIC services to eligible clients.

Consecutive annual evaluations of infant mortality demonstrate that participation in both the Family Case Management (FCM) program and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during pregnancy substantially improves infant health. This improvement contributes an estimated annual savings of over $200 million in Medicaid expenditures for care required during the first year of life. Additional savings from avoided special education, disability and rehabilitation support service costs potentially accrue over a lifetime.

Table 1
Actual Number of Illinois Infant Deaths
(Calendar Years)

CY2010	CY2011	CY2012	CY2013
1,116	1,062	1,032	942

PROGRAM DESCRIPTIONS

IDHS administers a Maternal and Child Health (MCH) strategy for the reduction of infant mortality. The strategy integrates two large-scale programs, the Family Case Management (FCM) program and Special Supplemental Nutrition Program for Women, Infants, and Children, more commonly known as WIC. Another element of the MCH strategy is the Better Birth Outcomes (BBO) program that targets pregnant women with identified medical and socio-environmental risks who are amenable to interventions, which ultimately may decrease costs, improve health outcomes, and decrease morbidity and mortality in pregnant women and infants. BBO targets geographic areas of the state where data indicates higher rates of premature births in the Medicaid population.

The FCM program links families to health and other services. WIC provides nutrition assessment, education, counseling, referrals, and nutritious foods.

The integration of these programs is supported and enhanced by the shared use of Cornerstone, IDHS' Maternal and Child Health management information system. This system collects and reports all information necessary for the operation of the FCM, WIC, and Better Birth Outcomes programs. Cornerstone provides an integrated record of the services provided to each participant and a comprehensive care plan that identifies the services the family requires. Staff members within and among agencies have access to a comprehensive record of the services provided to participating families. This avoids the problem of duplicative data collection and recording. Cornerstone promotes integration and streamlines the delivery of MCH services.

Family Case Management is a statewide program that provides comprehensive Maternal and Child Health services. The IDHS funds 106 agencies, including local health departments, community-based entities, and Federally Qualified Health Centers (FQHCs) to conduct FCM activities. Assessments are conducted and care plans are developed to address a wide range of needs, including healthcare, mental health, educational, vocational, childcare, transportation, psychosocial, nutritional, environmental, developmental, and other services. Contacts with clients include home and office visits at a frequency determined by program-required minimum standards, case managers' clinical judgment, and expertise and knowledge of the clients' identified needs and situation. Beginning mid-year Fiscal Year 2013 (FY2013), IDHS shifted the program's focus to pregnant women. In addition, the timeframe for completion of a perinatal depression screening was changed to reflect current recommended guidelines for screening at or after 20 weeks gestation.

Better Birth Outcomes is a more intensive care coordination program directed exclusively to the needs of high-risk pregnant women. During January 2013, the Better Birth Outcomes program began in 22 communities throughout Illinois. Known as BBO, the program distinguishes high-risk women from those of lower-risk with the use of a standard risk screening tool and process. A Registered Nurse or Master's trained Social Worker provides each participant with standardized prenatal education, utilizing the March of Dimes' *Becoming a Mom* curriculum. Care coordination among medical and social service providers is the hallmark of the program. Communication mechanisms between prenatal care providers and BBO care coordinators are in place. Interfaces among the state's large information systems (i.e., Medicaid Claims, Vital Statistics, and Cornerstone) alert care coordinators of at-risk women, inform the care providers and coordinators of the services delivered, and report performance in terms of services delivered and pregnancy outcomes.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) seeks to improve the health of women, infants, and children; reduce the incidence of infant mortality, premature births, and low birth weight; promote breastfeeding; and aid in the growth and development of children. The program serves income-eligible pregnant, breastfeeding, and postpartum-women, infants, and children up to five years of age who have a nutritional risk factor.

Participants receive nutrition education, counseling, and referrals to healthcare and supplemental foods. The food "prescriptions" are based on nutritional needs and includes fruits and vegetables, whole grains, milk, cheese, eggs, adult and infant cereal and juice, peanut butter, beans, tuna, salmon, and infant formula. The tailored food prescriptions are printed on food instruments or checks on-site for eligible women at WIC clinics statewide. Participants obtain their WIC foods by redeeming the checks at program-approved grocery stores throughout the state and at WIC Food and Nutrition Centers in certain areas of Chicago. The IDHS authorizes funds to 98 local agencies to provide WIC services, including local health departments, not-for-profit healthcare agencies, and social service agencies. All WIC staff members are trained to support and promote breastfeeding. Over half of WIC agencies have additional funding for the WIC Breastfeeding Peer Counselor Program (BPCP). The use of Breastfeeding Peer Counselors adds a critical dimension to WIC's efforts to help women initiate and continue breastfeeding. WIC's Breastfeeding Peer Counselors provide a valuable service to their communities, addressing the barriers to breastfeeding by offering breastfeeding education, support, and role modeling. Peer Counselors are familiar with the resources available to WIC clients, have familiarity with the questions a new breastfeeding mother may ask, and recognize when to refer mothers to other resources during critical periods when mothers experience difficulties.

The Department supplements FCM and WIC with intensive services for high-risk women.

FINANCING

Illinois' integrated Maternal and Child Health program for the reduction of infant mortality is supported by a combination of state and federal resources. The State Fiscal Year 2012 (SFY2012) through SFY2015 budgets by program component are presented in Table 2.

Table 2
Budget for Integrated Infant Mortality Reduction Strategy by Program Component and State Fiscal Year
($000s)

Program	SFY2012	SFY2013	SFY2014	SFY2015
WIC (all sources)	$310,500.00	$310,000.00	$316,543.82	$292,350.00
FCM	$36,776.69	$38,470.68	$34,019.65	$32,493.33
BBO	n/a	$2,880.00	$4,463.00	$6,201.00
Total	**$347,276.69**	**$351,350.68**	**$355,026.47**	**$331,044.33**

Note: IDHS initiated Better Birth Outcomes (BBO) in 22 communities in January 2013. Funding for the program as presented in Table 2 for caledar year 2013 refletcs on half year's support.

The FCM program was supported by several funding sources that include General Revenue Fund, Title V - Maternal and Child Health Services Block Grant, and Title XX - Social Services Block Grant. Local health departments also add their own funds for the operation of the program. Further, as units of local government, local health departments may receive federal match for the local funds they expend in support of the FCM program. This increased the total amount of funds available for the FCM program by approximately $14 million per year without an increase in IDHS' appropriation for FCM.

WIC is funded by the U.S. Department of Agriculture (USDA) with both food funds and Nutrition Services Administration (NSA) dollars, which provide for WIC nutrition assessment, education, counseling, and referrals. NSA funds are granted to local WIC providers across the state based on an estimated caseload. Infant formula purchased from the contracted company (i.e., Mead-Johnson) supplement the WIC food funds. Rebates add an average of $80 million to the WIC program's food budget each fiscal year.

SERVICE DELIVERY SYSTEM

These services are delivered at the community level by grantees of IDHS. Most often, these are local health departments. Community health centers and social service agencies also play an integral role in the delivery of primary and preventive care to pregnant women, mothers, infants, children, and adolescents.

Local Health Departments. Local health departments have a unique responsibility to assess needs, develop policy to address community problems, and ensure service provision to address those problems. Local health departments also are accountable to the public for the health of the entire community. Local health departments provide Maternal and Child Health services in their jurisdictions.

Community Health Centers. There are 424 community health centers and Federally Qualified Health Centers (FQHCs) in Illinois. Community health centers provide a complete array of primary health care services in medically under-served communities. Several are IDHS grantees for these and other programs. Erie Family Health Center, Near North Health Services Corporation, Aunt Martha's Youth Services, Chicago Family Health Center and VNA Fox Valley have been partners in the Better Birth Outcomes program for the last few years.

Community-Based Organizations. Several prominent community-based organizations in Chicago and suburban Cook County have participated in the FCM program and its predecessors, as well as the WIC program, since the mid-1980s. These organizations bring an extensive knowledge of the communities they serve, are familiar with the cultural diversity of their communities, and employ staff who remain sensitive to community needs, beliefs, and cultures.

CASELOAD

The number of persons served by the FCM and WIC programs during SFY2015 is presented in Table 3. FCM does not keep a separate count of the number of participating postpartum or breastfeeding women. Under USDA guidelines, however, these women comprise a separate category of eligibility for the WIC program.

The caseload of FCM dropped for SFY2015. This is in part due to the continuing decrease in General Revenue funding only. Furthermore, several community-based organizations and downstate health departments declined to be providers of FCM in recent years. The primary reason for their withdrawal from the program involves the late and slow payment of General Revenue funding, which hindered the agencies' ability to remain fiscally viable. Although caseloads were reassigned to other FCM agencies, the disruption of service delivery is evident in the caseload figures presented in Table 4.

Table 3
Number of Persons Served in FCM and WIC Programs by Type of Client and Program - SFY2015

Type of Client	Program	
	FCM*	WIC
Pregnant Women	76,693	91,449
Postpartum and Breastfeeding Women	NA	49,558
Infants	121,717	153,212
Children	19,294	175,046
Total	222,098	469,265

Source: Cornerstone
*FCM does not have a category of postpartum or breastfeeding women.

Table 4
Total Number of Persons Served in FCM and WIC Programs by Program and State Fiscal Year

	State Fiscal Year							
Program	2008	2009	2010	2011	2012	2013	2014	2015
FCM	342,428	329,658	312,389	288,159	266,635	252,234	233,694	222,098
WIC	532,753	549,086	553,342	538,782	520,557	503,237	488,400	469,265

Source: Cornerstone

The WIC caseload has also declined in recent years. This decrease is attributable to a variety of factors including lower birth rates and increased participation in the state of Illinois' Supplemental Nutrition Assistance Program (SNAP).

FCM and WIC serve over 39 percent of all infants born in Illinois and over 78 percent of all Medicaid-eligible infants.

The FCM and WIC programs together reach over 39 percent of all infants and over 78 percent of Medicaid-eligible infants born in Illinois each year. Women who are at high-risk for giving birth prematurely or having a baby with other health problems are over represented in the caseload of the FCM and WIC programs.

Approximately three-fourths of African American, Hispanic, single, and teen-aged women who give birth in Illinois each year participate in the FCM or WIC programs. The programs are reaching their intended target population. Refer to Tables 5a and 5b for further details.

PERFORMANCE

Program performance is measured against several short-term health status indicators among women, infants, and children enrolled in FCM, WIC, or both programs, which include:

1. Enrollment in both FCM and WIC
2. Enrollment in FCM within first trimester
3. Achievement of breastfeeding exclusivity in the first 12 weeks in WIC
4. Achievement of continued breastfeeding at 6 months of age
5. Contact by a Breastfeeding Peer Counselor (BFPC) in the first week of life by BFPC-funded agencies
6. Completion of three or more well-child visits to FCM infants before age one
7. Determination of full immunization of infants in FCM
8. Verification of health insurance coverage of infants and children in FCM
9. Assessment of developmental screening status of infants and children in FCM

IDHS uses its MCH management information system, Cornerstone, to analyze and generate quarterly reports on these performance measures. Agency performance provides the basis for ongoing technical assistance. These reports can be found at http://www.dhs.state.il.us/page.aspx?item=31152 for provider and public access.

Table 5a
Number and Percent of All Live Births and Live Births to FCM or WIC Participants by Demographic Group
Illinois, Calendar Year 2011

	Live Births				
	All		FCM or WIC Participants		
Group	Number	Percent	Number	Percent	Percent of Group
Caucasian	122,421	75.9%	43,668	69.0%	35.7%
African American	27,642	17.1%	16,971	26.8%	61.4%
Asian American, Native American & all others	11,171	6.9%	2,685	4.2%	24.0%
All Live Births	161,234	100.0%	63,324	100.0%	39.3%
Hispanic/Latino	35,746	22.2%	22,419	35.4%	62.7%
Single	64,472	40.0%	43,122	68.1%	66.9%
Teenage	13,160	8.2%	9,778	15.4%	74.3%

Source: IDPH Vital Records and IDHS Cornerstone via the IDHFS Enterprise Data Warehouse (EDW)

Table 5b
Number and Percent of All Live Births and Live Births to FCM or WIC Participants by Demographic Group
Illinois, Calendar Year 2012

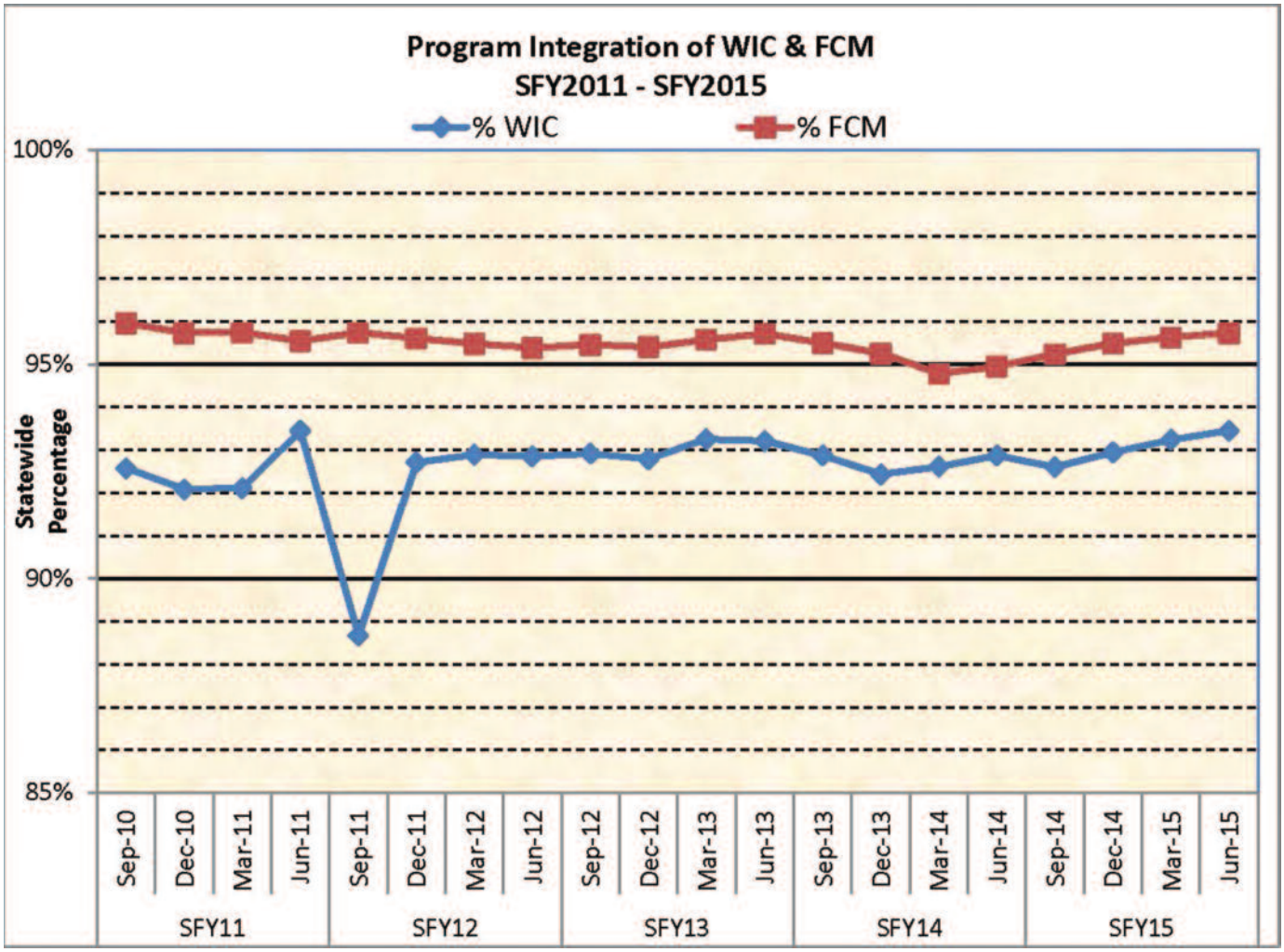
	Live Births				
	All		FCM or WIC Participants		
Group	Number	Percent	Number	Percent	Percent of Group
Caucasian	118,882	74.7%	41,645	67.1%	35.0%
African American	27,778	17.5%	16,980	27.3%	61.1%
Asian American, Native American & all others	12,492	7.9%	3,464	5.6%	27.7%
All Live Births	159,152	100.0%	62,089	100.0%	39.0%
Hispanic/Latino	34,758	21.8%	21,530	34.7%	61.9%
Single	64,260	40.4%	42,528	68.5%	66.2%
Teenage	12,248	7.7%	9,130	14.7%	74.5%

Source: IDPH Vital Records and IDHS Cornerstone via the IDHFS Enterprise Data Warehouse (EDW)

1. Enrollment in Both FCM and WIC

Since 1998, IDHS has promoted the integration of FCM and WIC services. Continuing evaluations have shown that Medicaid-eligible women, who participated in FCM and WIC during their pregnancies, have had substantially lower rates of premature birth and infant mortality.

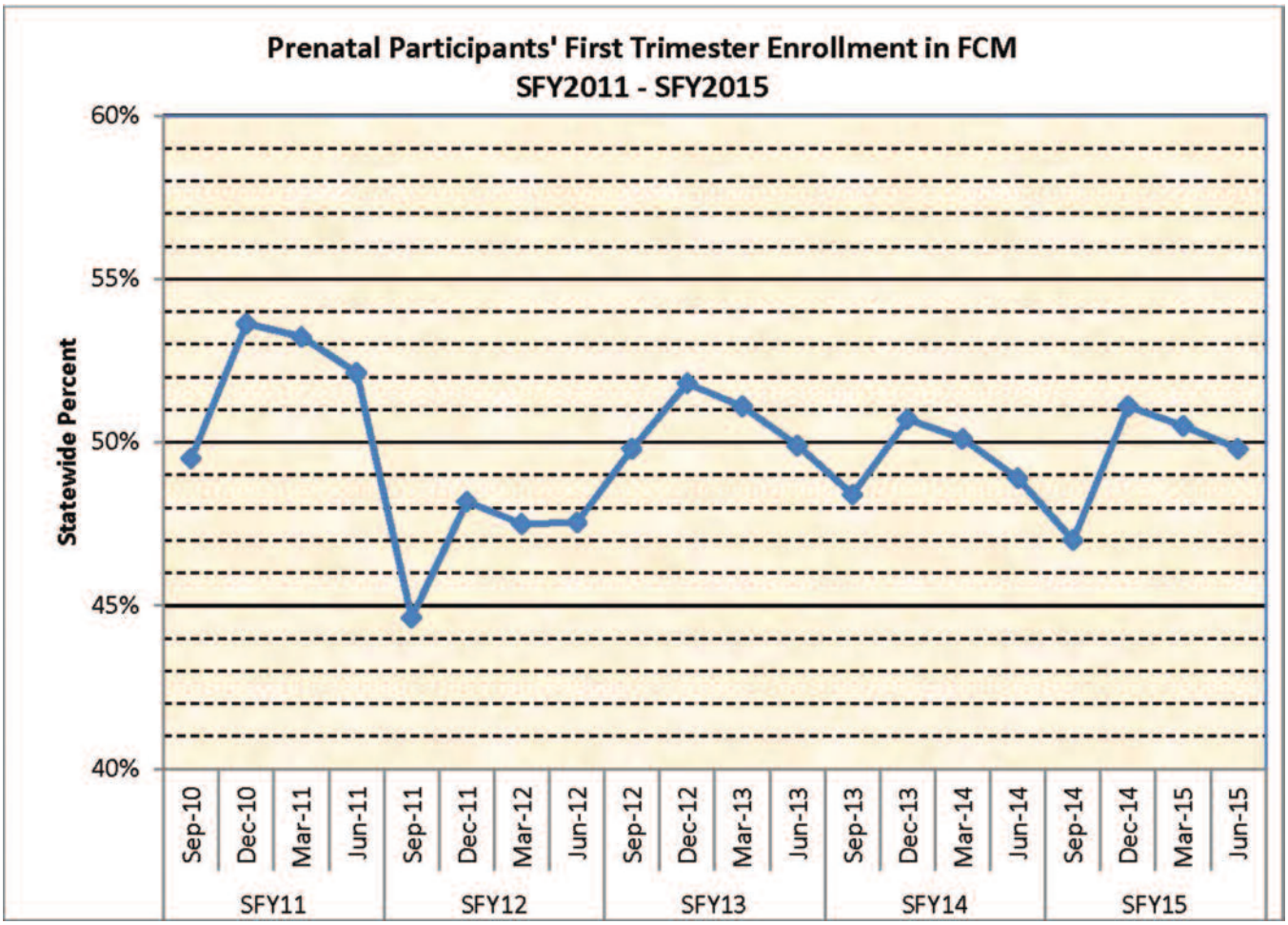
The following graph entitled, "Program Integration of WIC and FCM SFY2011 to SFY2015" displays the proportion of clients in one program that are also enrolled in the other program. For example, the line labeled 'WIC' shows the proportion of WIC clients that were also enrolled in FCM. At the end of Fiscal Year 2015, over 93 percent of WIC participants were receiving FCM services and almost 96 percent of FCM participants were receiving WIC services.



Source: Cornerstone

2. First Trimester Enrollment in FCM

Enrollment in FCM services during the first trimester of pregnancy is essential to ensure maximum impact on the health of the mother and newborn infant. The following graph entitled, "Prenatal Participants' First Trimester Enrollment in FCS SFY2011-2015" shows there has been a relatively steady rate over the last several years in the proportion of program participants who enrolled in the programs during the first trimester of pregnancy.



Source: Cornerstone

Local FCM agencies use a variety of strategies to reach low-income families in the communities they serve. The Better Birth Outcomes program places strong emphasis on first trimester enrollment in the program. BBO agencies are required to develop and implement formal outreach plans and maintain monthly logs of their outreach activities. These activities may include door-to-door canvassing, distribution of printed materials and use of mass media, as well as nontraditional methods that may be necessary to identify potential participants in hard-to-reach populations (e.g., persons who abuse drugs or engage in prostitution). BBO agencies are expected to have linkage agreements for referrals from all medical providers within their target services areas.

IDHS also takes advantage of its computer technology to increase the proportion of Medicaid-eligible pregnant women who enroll in FCM and improve the proportion of women who enroll in the first trimester of pregnancy. Local FCM service providers are linked indirectly to IDHS' Family Community Resource Centers (FCRCs) through an electronic data exchange. Each month, information about pregnant women who have enrolled in the Medicaid program is transferred from the Client Information System used by the Family Community Resource Centers to the Cornerstone system. The information is then distributed to local service providers and is ultimately used to conduct targeted outreach efforts

3. Breastfeeding Exclusivity in WIC

The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for the first 3 months (12 weeks) of life and continued breastfeeding with the introduction of complementary food for one year or longer as mutually desired by mother and infant. The Healthy People 2020 target for exclusive breastfeeding at 3 months (12 weeks) is 46.2%

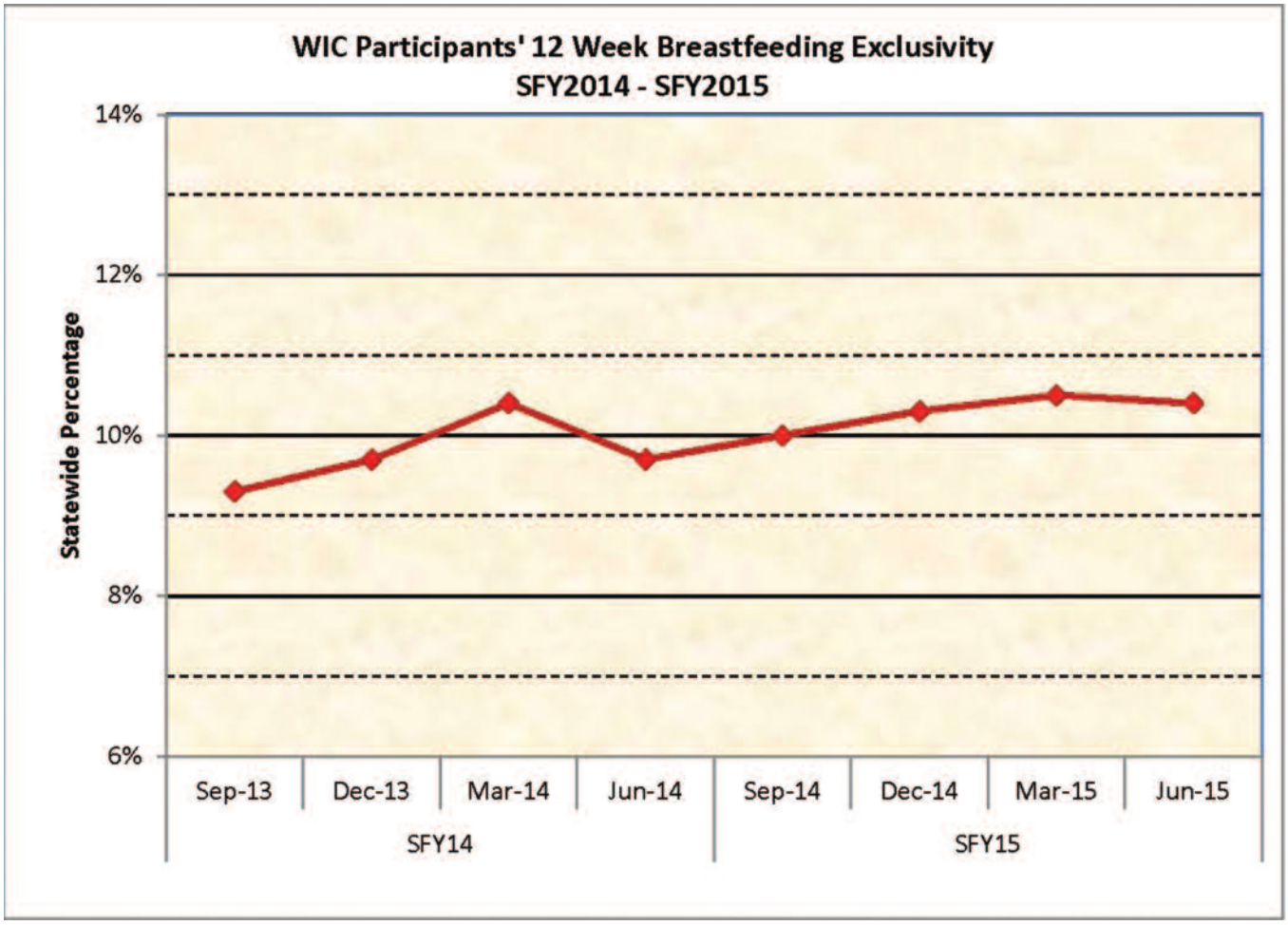
The following graph entitled, "WIC Participants' 12 Week Breastfeeding Exclusivity SFY2014 - SFY2015" displays the proportion of women who participated in the WIC program during pregnancy and exclusively breastfed their infants for 12 weeks after giving birth. The rate of breastfeeding exclusively among WIC participants improved in SFY2015 and was at or above 10 percent in each of the quarters, with the best rate in the third quarter at 10.5%.

Table 6
Rates of Exclusive Breastfeeding at 12 weeks of age by State among Children Born in CY 2009 through 2013

Year	Illinois	U.S.	U.S. receiving WIC
2009	34.0	35.9	27.9
2010	32.3	37.1	28.4
2011	38.1	40.7	31.7
2012	34.5	43.3	33.4
2013	39.3	44.4	34.3

Source: www.cdc.gov/breastfeeding/data/nis_data/index.htm

In 68 local WIC agencies, Breastfeeding Peer Counselors (BFPC) are part of the WIC team, promoting breastfeeding, educating women on the "how-to's" of breastfeeding, and supporting breastfeeding mothers when they deliver and begin breastfeeding. WIC BFPCs are women from the community who have successfully breastfed their own infants and received specialized training. Representing diverse cultural backgrounds, they offer encouragement, information, and support to other WIC mothers. Most women stop breastfeeding in the early weeks. To move the exclusivity of breastfeeding goal forward, BFPCs are responsible for making contact at least twice in the infant's first week of life to provide support and encouragement in this critical period. Tracking this measure began in SFY15 and will be represented in future reports.

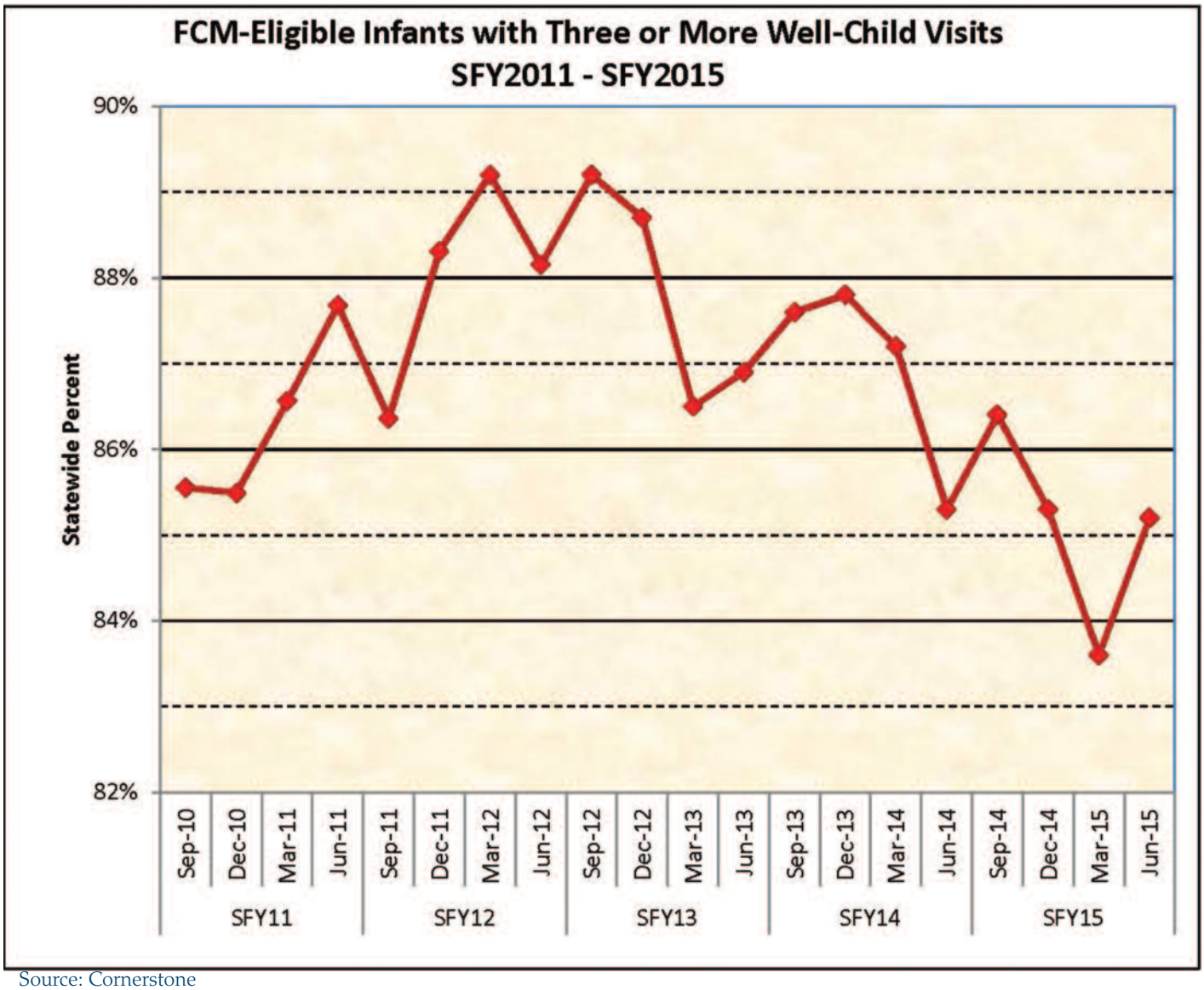


Source: Cornerstone

4. Three or more Well-Child Visits to FCM Infant before Age One

The American Academy of Pediatrics (AAP) recommends routine well-child visits. Providers monitor a child's growth and development, provide preventive healthcare services (i.e., immunizations), screen for potentially serious health problems (i.e., lead poisoning or problems with vision or hearing), and inform parents through anticipatory guidance. The AAP recommends six such visits during the first year of life, to occur at one month, two months, four months, six months, nine months, and twelve months of age.

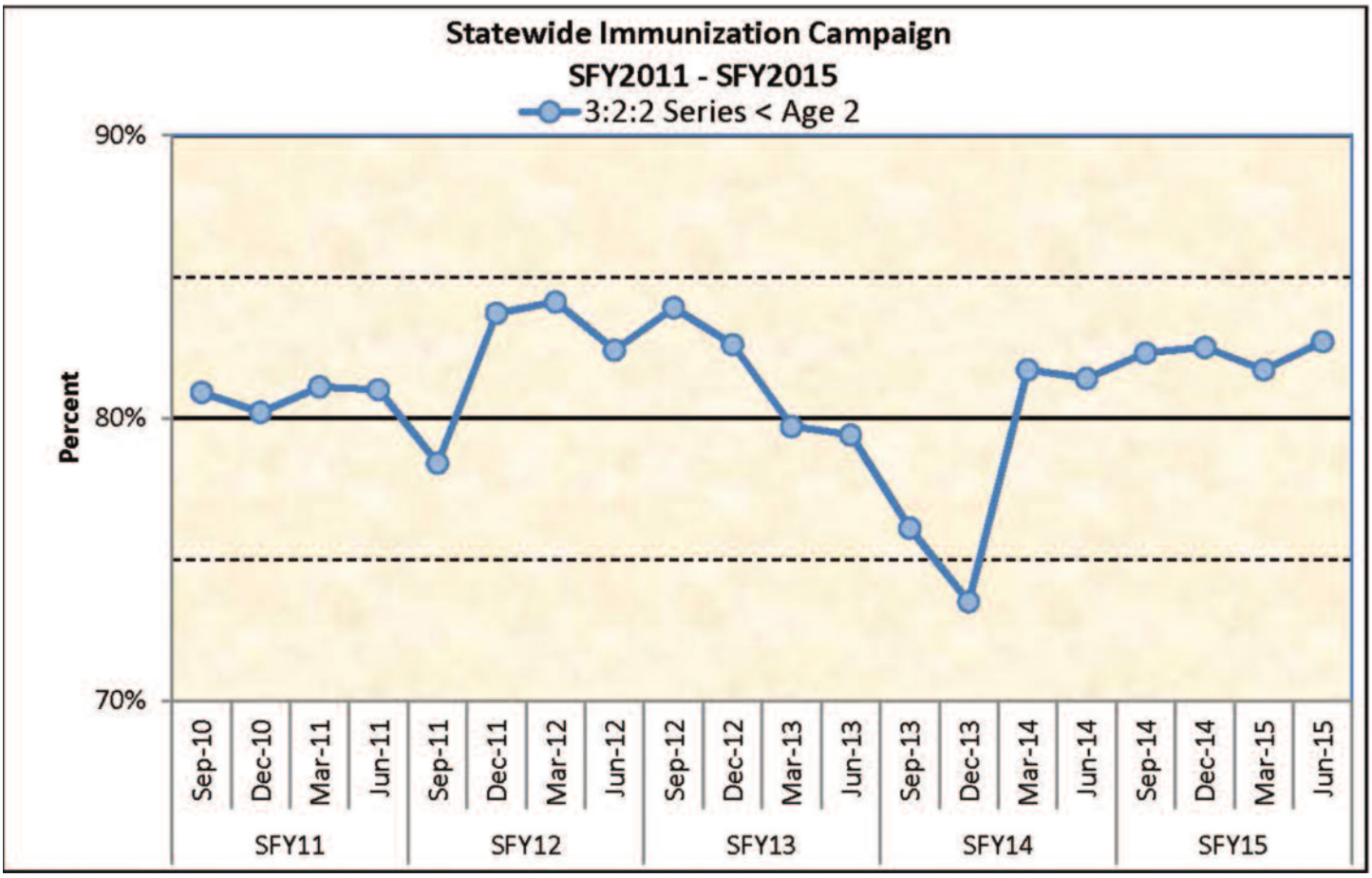
IDHS monitors FCM agencies to ensure that participating infants receive at least three well-child visits during the first year of life. The graph below displays the proportion of infants who met this standard.



Source: Cornerstone

5. Fully Immunized Infants in FCM

The following graph shows the proportion of children between 12 and 18 months of age who were active in FCM services and had received:

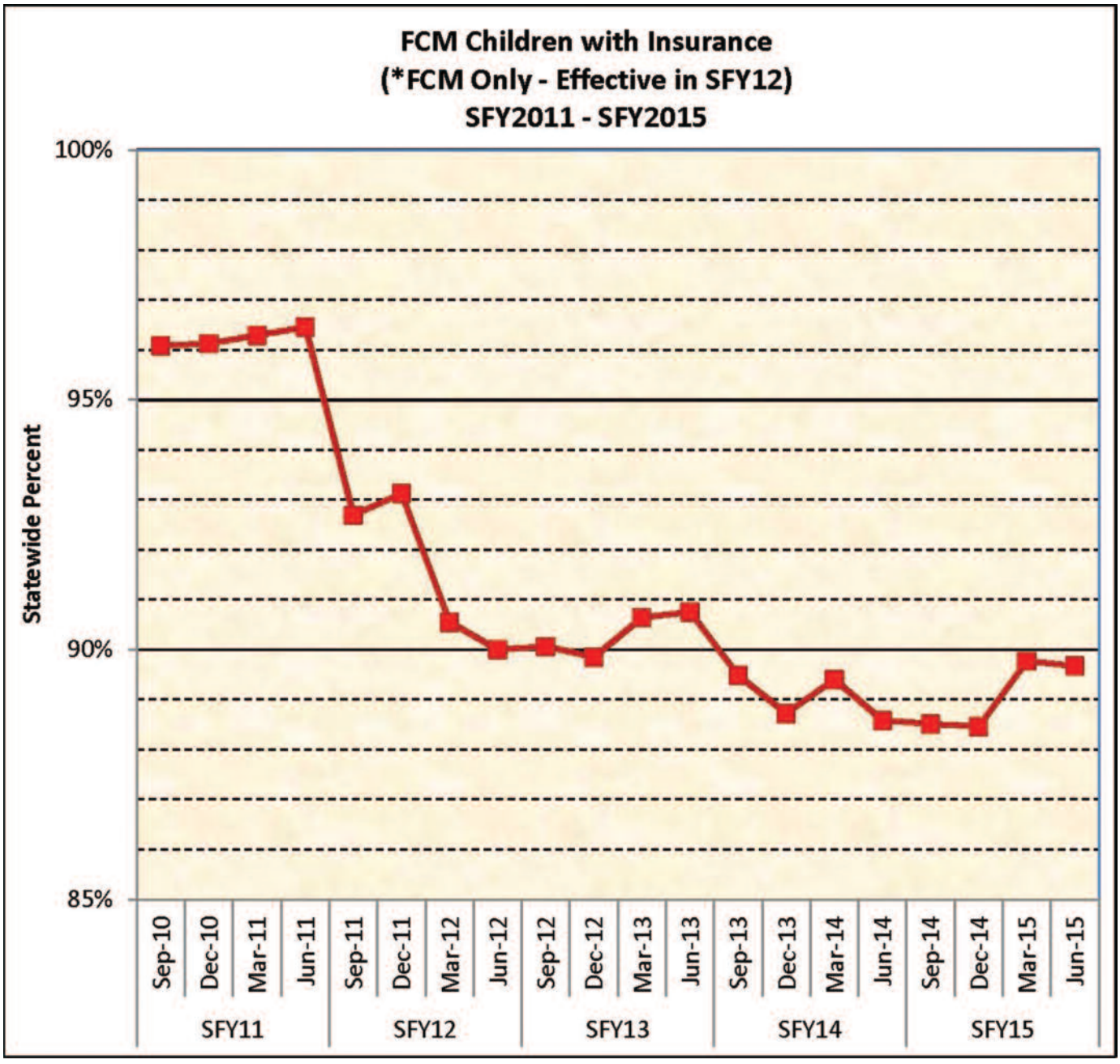


Source: Cornerstone

- 3 doses of diphtheria, pertussis, and tetanus vaccine;
- 2 doses of oral polio vaccine; and
- 2 doses of Haemophilus influenza type B vaccine.

6. Health Insurance Coverage of Infants and Children in FCM

Health insurance is essential for access to health care services. Virtually every child on FCM is, by definition, eligible for the state of Illinois' All Kids program. IDHS has been working with IDHFS to increase the proportion of FCM-eligible children who are also enrolled in All Kids if they are not covered by their parents' health insurance. Local FCM agencies have been trained and certified by the IDHFS as "All Kids Application Agents." Local FCM program staff persons assist eligible families in applying for coverage through All Kids.



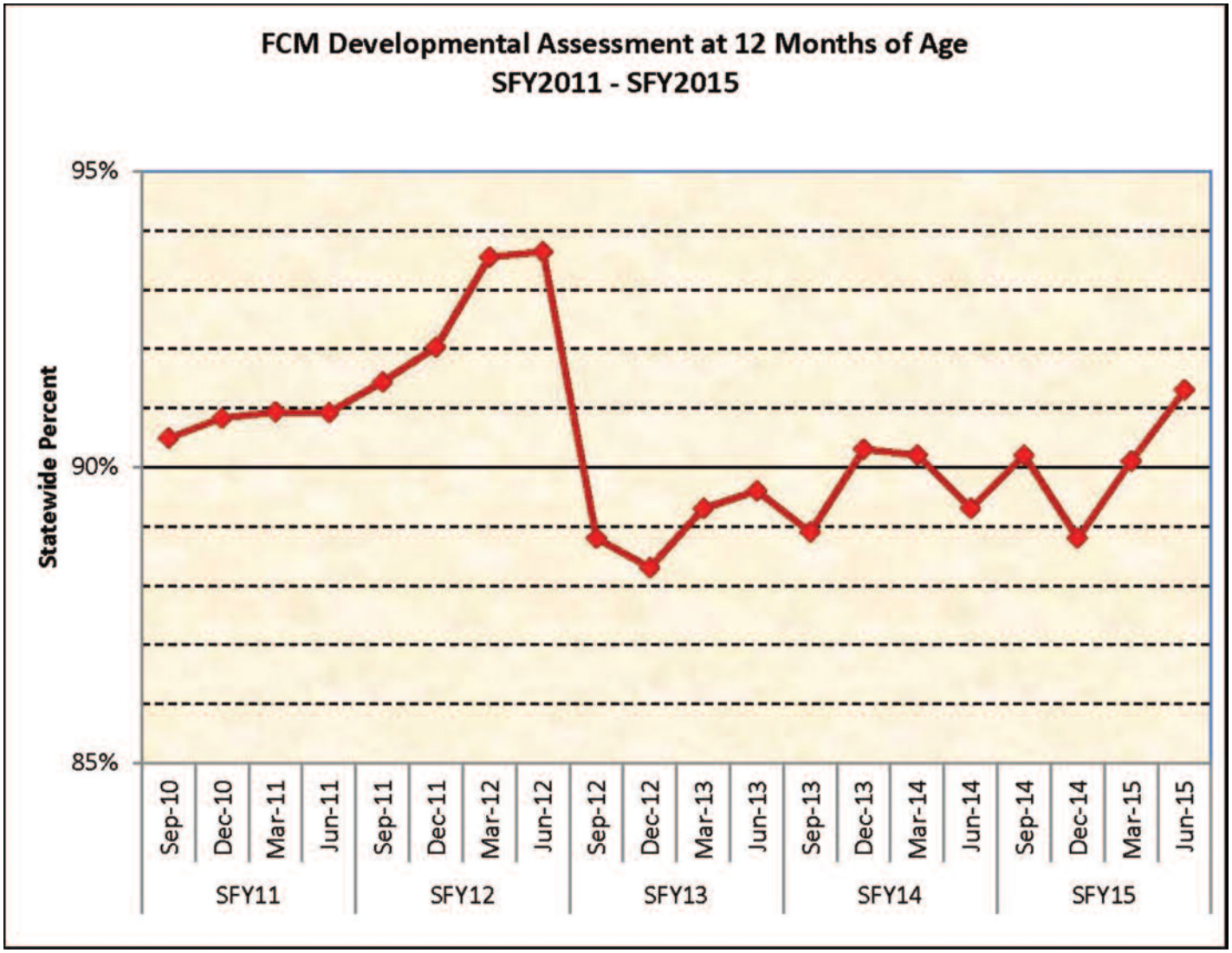
Source: Cornerstone

The graph above displays the proportion of children in the FCM program who were covered by public or private health insurance. Starting in SFY2012, only FCM program providers were evaluated on this measure. Prior to that, both WIC and FCM providers were evaluated.

7. Developmental Screening of Infants and Children in FCM

Infants and young children should be screened routinely for evidence of delays in cognitive, linguistic, motor, social, and emotional development. Through routine screenings developmental delays can be promptly identified and therapy initiated for the infant or child. IDHS monitors the proportion of infants in the FCM program who have been screened for issues associated with physical and/or cognitive developmental delays at least once a year.

The graph below displays the proportion of 12-month-old children in FCM who had been screened for developmental delays at least once in the prior 12 months.



Source: Cornerstone

OUTCOMES

Illinois' integrated strategy for improving maternal and child health focuses on four outcomes that reduce:

- Very low birth weight rate
- Premature birth rate
- Medicaid expenditures during the first year of life
- Infant mortality rate

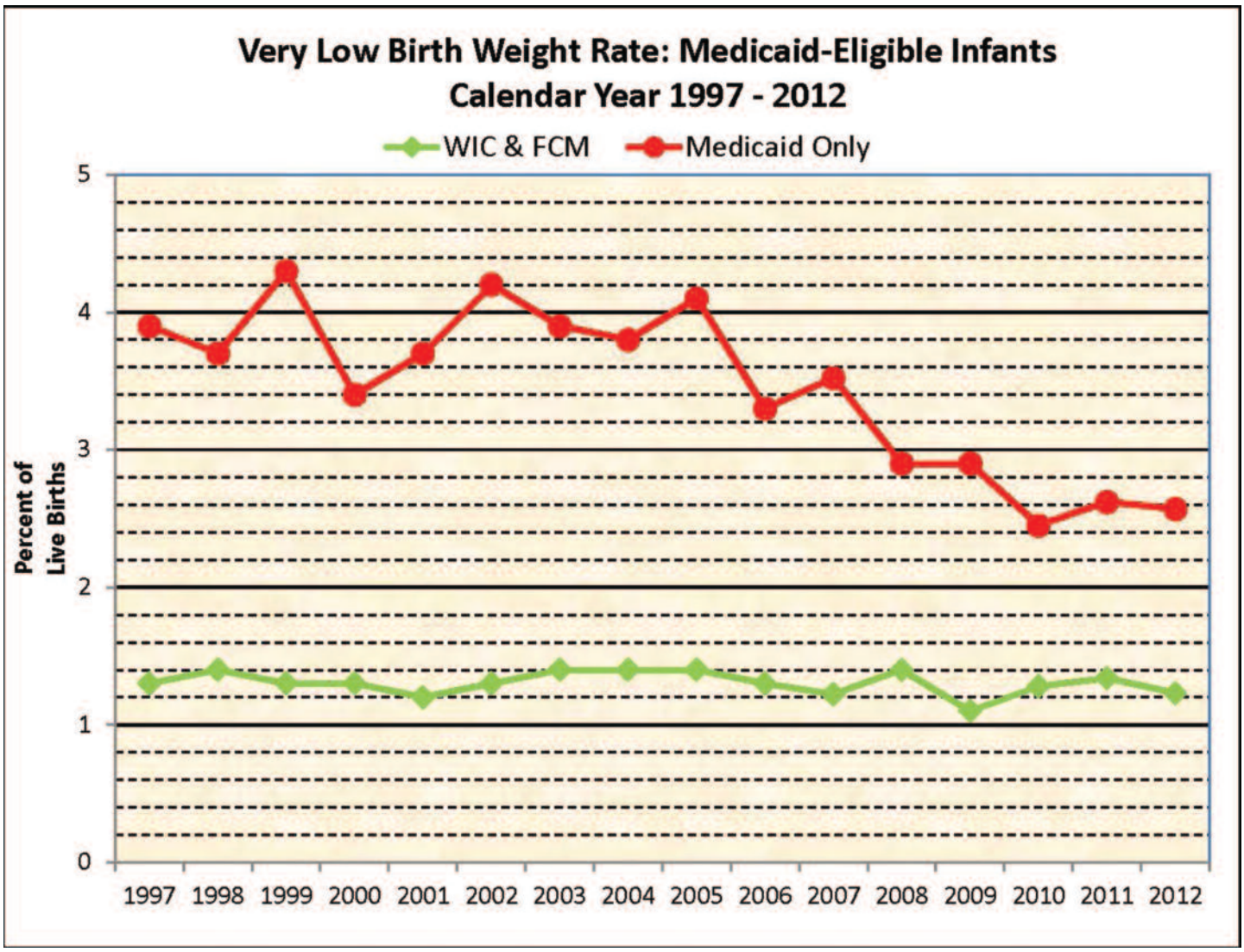
Very low birth weight infants (i.e., newborns who weigh less than 3 pounds 2 ounces) require intensive medical care. While these infants represent less than two percent of all live births, they also account for two-thirds of the infants who die in the first year of life. Interventions that reduce the very low birth weight rate will also reduce Medicaid expenditures during the first year of life and reduce the infant mortality rate.

The integrated delivery of FCM, which includes the Better Birth Outcomes services and WIC programs, affects the state's infant mortality rate and health care expenditures. The health status of infants born to Medicaid-eligible women who participated in both FCM and WIC has been substantially better than that of infants born to Medicaid-eligible women who did not participate in either program. In particular, as of the analysis performed on the CY2011 and CY2012 birth data, the rate of premature birth is almost 30 percent lower among participants in both programs. In addition, the rate of very low birth weight is about 50 percent lower and Medicaid health care expenditures during the first year of life are over 13 percent lower.

Very Low Birth Weight

The very low birth weight (VLBW) rate among women who participated in both FCM and WIC was 1.34 percent in CY2011, about one-half the rate observed among Medicaid-eligible women who did not participate in either program during pregnancy (2.62 percent). In CY2012, the VLBW rate for women who were in both FCM and WIC was 1.23 percent, more than one-half the rate of women who received only Medicaid services during pregnancy (2.57 percent).

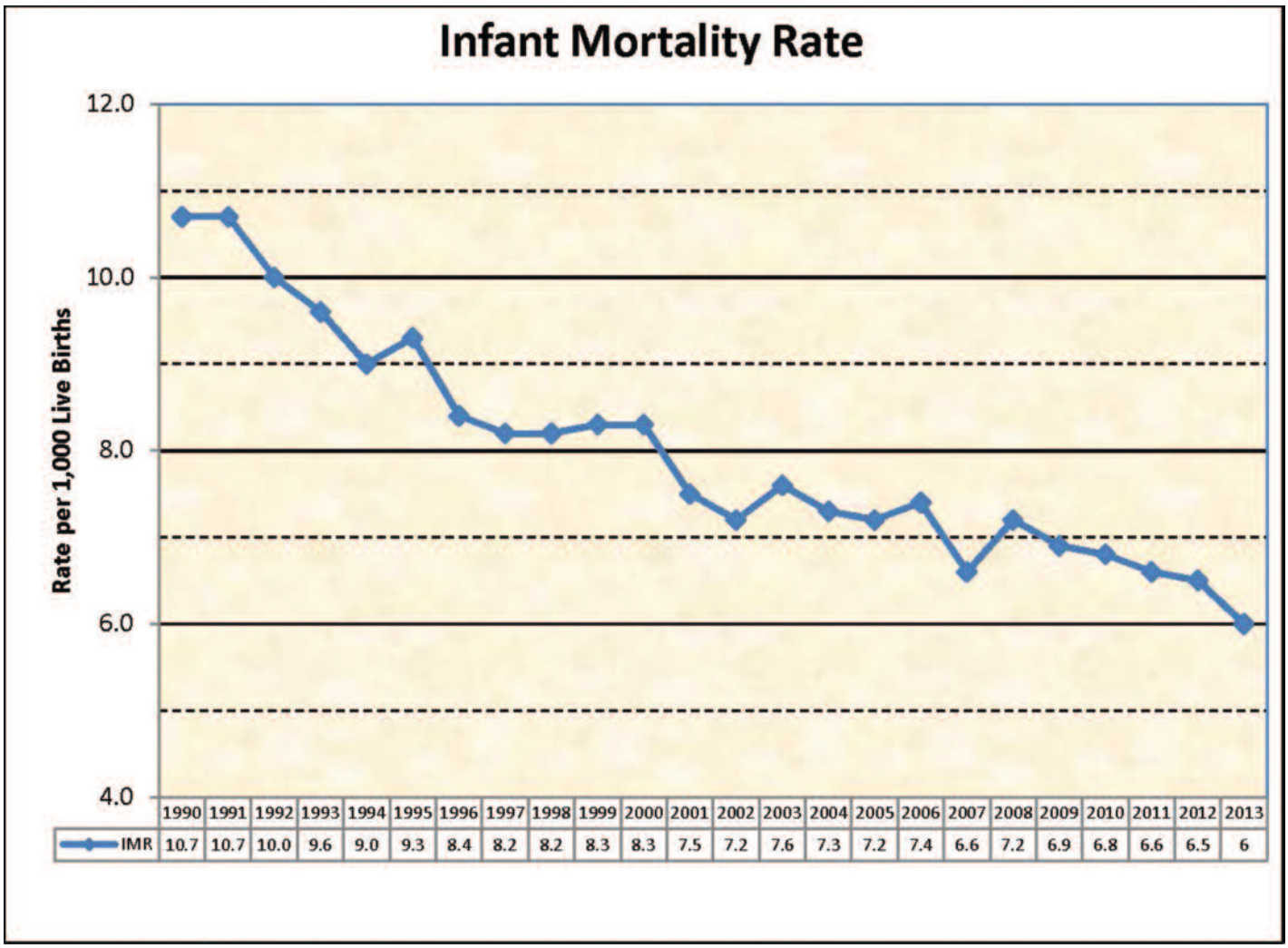
Even more remarkable is the fact that the VLBW rate for those women receiving Medicaid and on both FCM and WIC in CY2011 and CY2012 was more than 12 and 17 percent lower, respectively, than the rate for those women who received no benefits at all. The rate of VLBW for the general population, who received no services, was 1.52 percent in CY2011 and 1.49 percent in CY2012.



Source: IDPH Vital Records and IDPH Cornerstone via the IDHS EDW

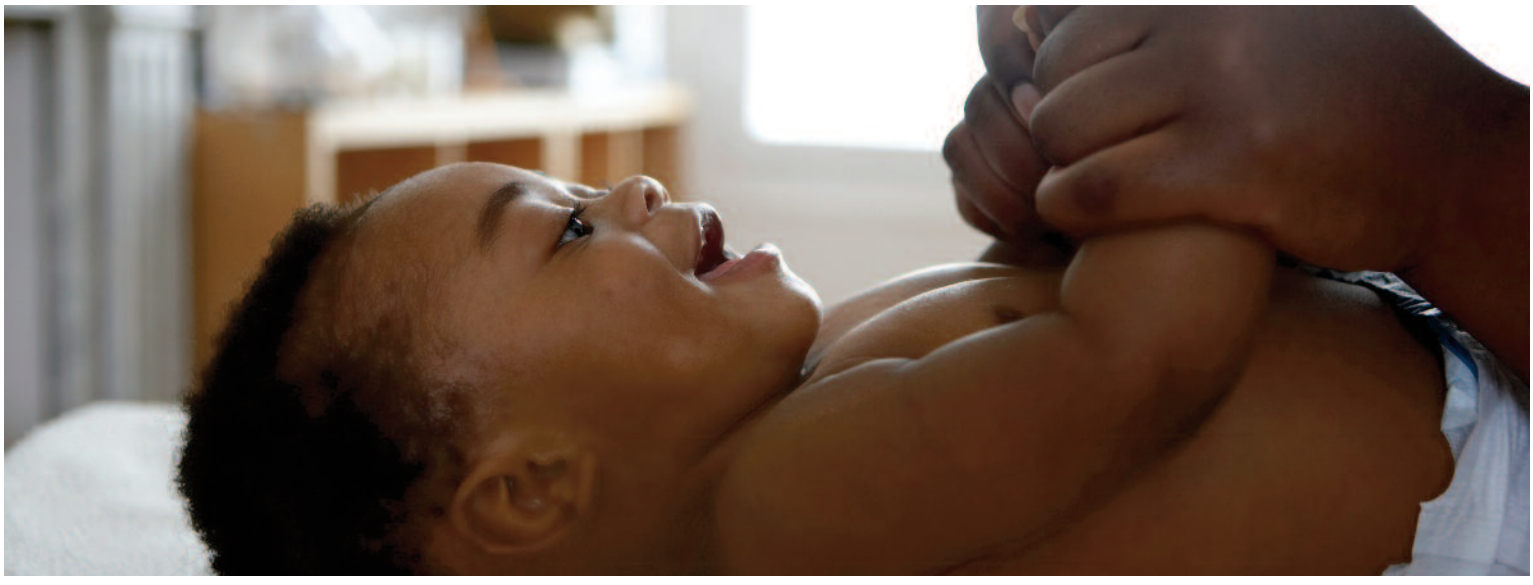
Infant Mortality

As reflected in the graph below, Illinois has made steady progress in reducing its infant mortality rate, in part, due to the improvement of birth outcomes of high-risk women participating in the FCM and WIC programs.



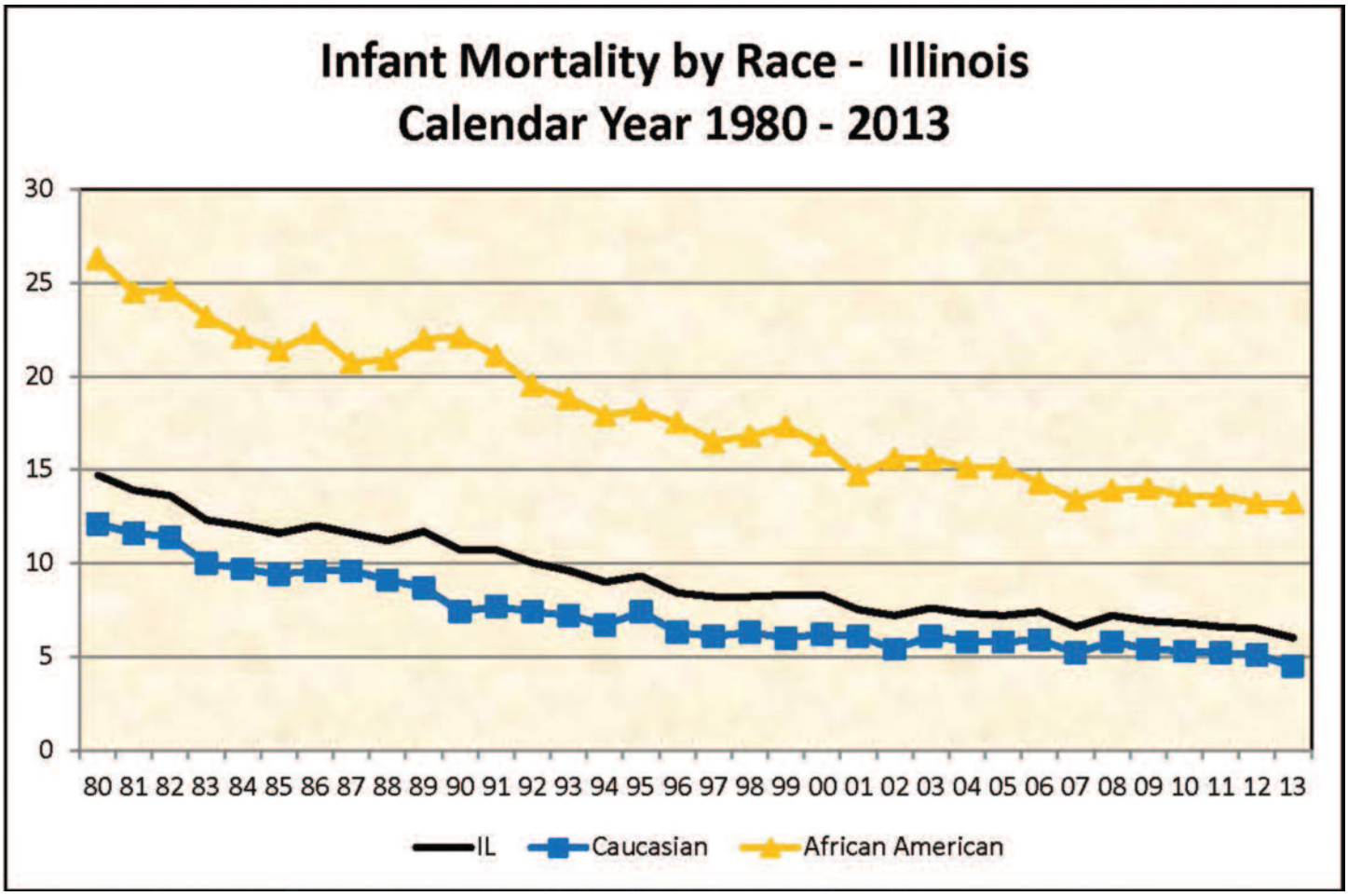
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
IMR	10.7	10.7	10.0	9.6	9.0	9.3	8.4	8.2	8.2	8.3	8.3	7.5	7.2	7.6	7.3	7.2	7.4	6.6	7.2	6.9	6.8	6.6	6.5	6

Source: www.dph.illinois.gov/data-statistics/vital-statistics/infant-mortality-statistics



Racial Disparities in Infant Mortality: The Persistent Challenge

The graph below presents the CY2013 infant mortality rates of African American, Caucasian, and Illinois' entire population. The rate among African Americans, while the lowest on record, is at an unacceptably high level of 13.2 deaths per 1,000 live births during CY2012 and CY2013.

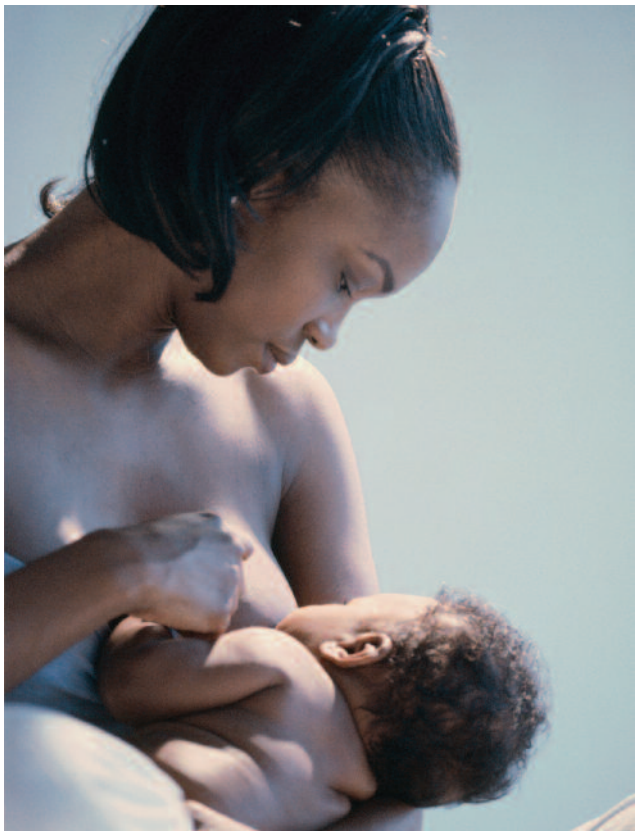


Source: www.dph.illinois.gov/data-statistics/vital-statistics/infant-mortality-statistics

The overall infant mortality rate in Illinois has declined by 50 percent since 1986. Despite this, a significant disparity in infant mortality rates persists between African American and Caucasian infants (See Table 7). An African American infant born in Illinois during calendar year 2013 was 2.9 times more likely to die before reaching his/her first birthday compared to a Caucasian infant. This disparity has persisted for many years and must no longer be accepted. To that end, IDHS continues to collaborate with other organizations committed to improving maternal and child health among all Illinoisans and creating interventions designed specifically to reduce racial disparities in healthcare and health outcomes. The strategies include: 1) participating in a statewide Prematurity Prevention Task Force with the goal of developing a set of recommendations that were presented to Illinois' legislators in October 2012; 2) increasing focus on care of high-risk pregnant women through Better Birth Outcomes; 3) partnering with March of Dimes on a campaign to reduce elective late preterm deliveries; 4) developing and implementing an Illinois Blueprint on Breastfeeding; 5) partnering with IDHFS on a number of Children's Health Insurance Program Reauthorization Act (CHIPRA) workgroups aimed at improving perinatal health; 6) joining the national Collaborative Improvement & Innovation Network (COIIN) initiative to improve perinatal outcomes, and most recently, 7) participating in the formation of a statewide Perinatal Collaborative.

Table 7
Ratio of African American and Caucasian Infant Mortality
Illinois: Calendar Year 1986 - 2013

Year	Ratio	Year	Ratio	Year	Ratio	Year	Ratio
1986	2.3 : 1	1993	2.7 : 1	2000	2.5 : 1	2007	2.6 : 1
1987	2.2 : 1	1994	2.7 : 1	2001	2.5 : 1	2008	2.4 : 1
1988	2.3 : 1	1995	2.5 : 1	2002	2.8 : 1	2009	2.6 : 1
1989	2.5 : 1	1996	2.8 : 1	2003	2.6 : 1	2010	2.6 : 1
1990	2.9 : 1	1997	2.7 : 1	2004	2.5 : 1	2011	2.6 : 1
1991	2.7 : 1	1998	2.7 : 1	2005	2.7 : 1	2012	2.6 : 1
1992	2.6 : 1	1999	2.8 : 1	2006	2.4 : 1	2013	2.9 : 1



Breastfeeding is a significant determinant of infant health. Illinois is in the forefront of promoting breastfeeding initiation, exclusivity, and duration. Effective January 2013, the Hospital Infant Feeding Act (HIFA) makes Illinois the first state in the nation to require that all birthing hospitals adopt a policy promoting breastfeeding. In the WIC program, Breastfeeding Peer Counselors help women initiate and continue breastfeeding. As noted above, the Peer Counselors are mothers who have personal experience with breastfeeding and are trained to provide basic breastfeeding information and encouragement to new mothers. Peer Counselors are familiar with the resources available to WIC clients, have familiarity with the questions a new breastfeeding mother may ask, and recognize when to refer mothers to other resources during critical periods when mothers may experience difficulty. Breastfeeding Peer Counselors are recruited and hired from WIC's target population of low-income women and undergo training to provide mother-to-mother support in group settings and one-to-one counseling through telephone calls or visits in the home, clinic, or hospital.

CONCLUSION

As reflected in this report, there is a wealth of data to indicate that Illinois' infant mortality reduction programming is working to improve outcomes. Mothers, infants, and children on Medicaid who participate in FCM and WIC present better birth outcomes than those receiving Medicaid only. Prevention programming aimed at both individuals and communities is not only saving lives but also conserving limited resources. Health service indicators such as immunization rates, well-child visits, and breastfeeding exclusivity are higher than in the recent past due to the concerted efforts of FCM and WIC service participants, providers, and administrators. Despite these improvements, however, Illinois will realize minimal gains in its infant mortality ranking until the ratio of African American to Caucasian infant deaths is improved. Enhancement of services directed to preventing very low birth weight such as BBO holds significant potential for lowering the disparity between African American and Caucasian infant mortality rates and Illinois' overall infant mortality rate.

401 South Clinton Street · Chicago, Illinois 60607
100 South Grand Avenue, East · Springfield, Illinois 62762
www.dhs.state.il.us

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