OHIO COMMISSION ON INFANT MORTALITY

Committee Report, Recommendations, and Data Inventory

March 2016

March 22, 2016

Dear Governor Kasich, President Faber, and Speaker Rosenberger:

As you know, Ohio is home to some of the greatest clinical health care in the world — the Cleveland Clinic, six free standing children's hospitals, award-winning regional hospital systems, and top health care research and training institutions like the University of Cincinnati, The Ohio State University, and Ohio University — just to name a few. Yet, despite these accolades to our clinical community, Ohio still suffers from an abysmal infant mortality rate, one of the worst in the nation. When plotted on a map, many of Ohio's infants are dying at extremely high rates in the very same zip codes where these world-renowned facilities are located. This fact alone illustrates the complexity of the issue and the need to challenge the system that is failing too many of Ohio's most vulnerable.

The infant mortality rate is more than just an indicator of the health of babies. Indeed it is a gauge of the overall health of entire communities as well as a measure of the effectiveness of our state's health system. So long as we focus our attention and resources on clinical care and ignore the social determinants of health – the conditions in which people are born, live, learn, work, and age – we will continue to see poor outcomes. Not only is clinical care costly, it impacts only 20 percent of one's health. Our system has not yet adapted to an increasingly multicultural patient base nor has it recognized that 80 percent of the factors that contribute to health are not clinical but rather social and economic.

This realization is the underpinning of the work of the Commission on Infant Mortality and served as the basis of discussion throughout the process. Enclosed is the report as required by state law which highlights many of the findings and recommendations of the Commission. In addition, the work can be viewed on its website at http://cim.legislature.ohio.gov/ complete with all testimonies and hand-outs from the hearings as well as data inventories created at the Commission's direction.

Thank you for your attention to this important issue. As always, we look forward to working together to improve the health and well-being of all of Ohio's moms and babies.

Sincerely,

Shannon Jones
Senator Shannon Jones, Co-chair

Stephanie Kunze
Representative Stephanie Kunze, Co-chair

Charleta B. Tavares
Senator Charleta B. Tavares

Hearcel F. Craig
Representative Hearcel F. Craig

cc: Members of the 131st General Assembly

Contents

I. Background

The truth is in the data, and it is shocking. The number of babies born in Ohio who die before their first birthday remains unacceptably high. Ohio ranks 45th in the nation for its overall infant mortality rate—and the rate for African American (black) babies is even worse.

Infant mortality is defined as the death of a live-born baby before his or her first birthday. It is calculated as the number of such deaths per 1,000 live births. *Healthy People 2020* is a national collaborative managed by the U.S. Department of Health and Human Services that provides science-based, national objectives for improving the health of Americans. Ohio's goal is to reach the *Healthy People 2020* objective of 6.0 or less per 1,000 live births in every race and ethnicity group by the year 2020.

The national infant mortality rate in 2013 was 5.96 deaths per 1,000 live births (already meeting the *Healthy People 2020* national goal); Ohio's rate was 7.33 infant deaths per 1,000 live births. Disappointingly, the mortality rate is nearly double for black babies with the national rate being 11.2 deaths per 1,000 births compared to Ohio's at 13.8 deaths per 1,000 live births in 2013. Sadly, Ohio has yet to even meet the *Healthy People 1990* national goal for black babies. If this path continues, it will be 2053 before Ohio's black babies even achieve the 2013 infant mortality rate of Ohio's white babies.

Since the launch of the Ohio Infant Mortality Task Force in 2009, the state has continued to develop and implement various policy initiatives to combat Ohio's high infant mortality rate. These initiatives, coupled with local community efforts, have helped to educate and initiate more robust and comprehensive reform efforts throughout the state. Ohio is beginning to see results. According to the most recent data issued by the Ohio Department of Health (ODH), Ohio saw a decline in its overall infant mortality rate from 7.33 in 2013 to 6.8 in 2014. While this modest improvement is positive, Ohio must remain cautious because it appears as if the racial disparity is actually increasing. **Ohio's infant mortality rate for black babies increased from 13.8 infant deaths in 2013 to 14.3 in 2014**, while for white babies it stands at 5.3 per 1,000 live births (down from 6.0/1,000 over the same time period).

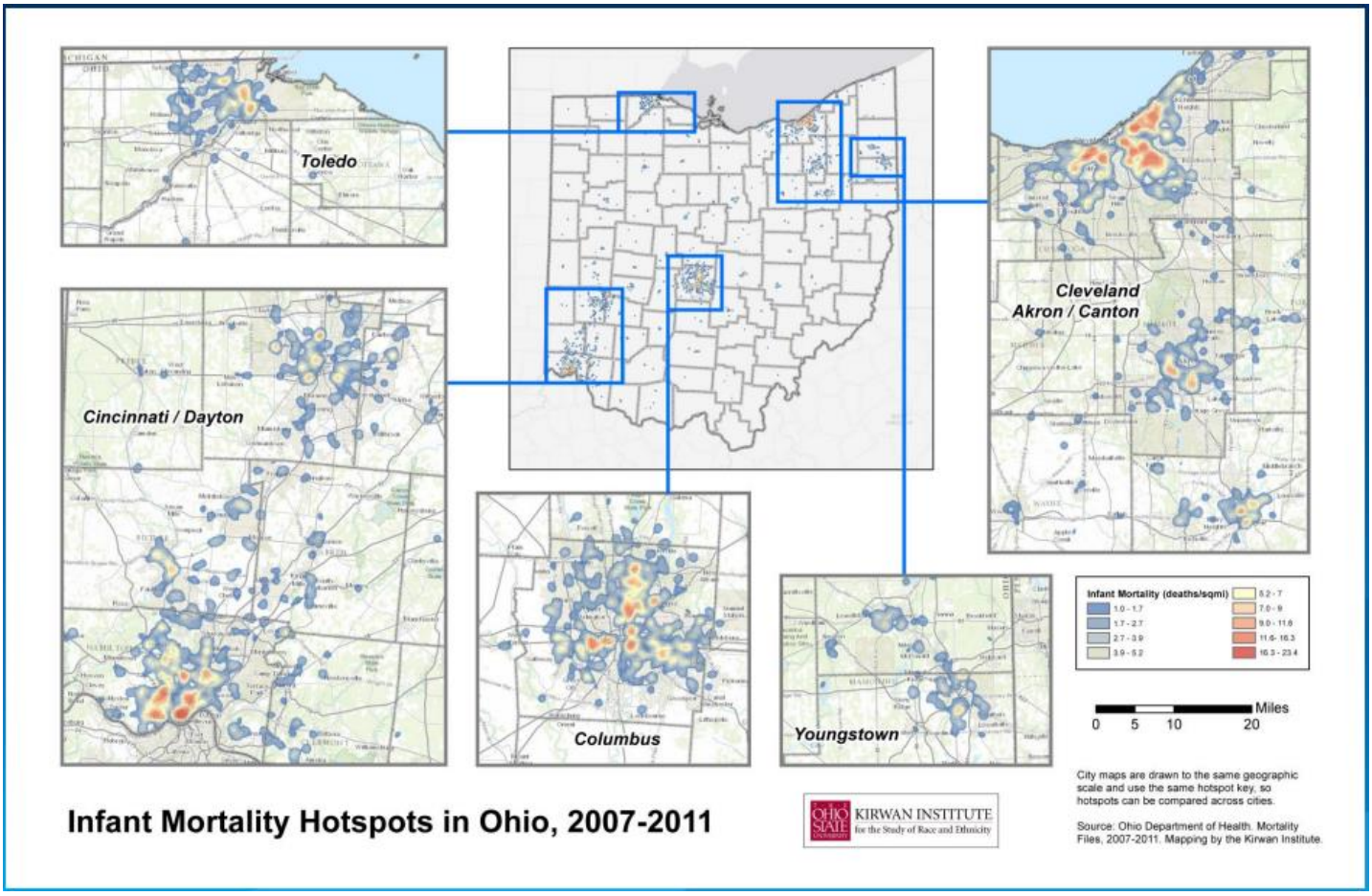
A 2013 traveling Senate hearing, led by Senator Shannon Jones (R-Springboro), Chair of the Senate Health and Human Services Committee, and Senator Charleta B. Tavares (D-Columbus), revealed the absence of a coordinated state plan in addressing infant mortality. In response to this finding, legislation was enacted to create the Commission on Infant Mortality (Am. Sub. Senate Bill 276 of the 130th General Assembly). The Commission was charged with conducting an inventory of all state programs that may impact infant mortality and their available funding streams, as well as to evaluate each program's performance in improving the infant mortality rate in this state.

The Commission considered a variety of approaches including developing better data practices, cultivating collaboration between state and local initiatives, conducting public awareness campaigns, developing screening tools to focus resources on areas with the most pressing need, and addressing the social determinants of health. Furthermore, the Commission was clear in all its discussions that successes in reducing the overall rate of infant mortality without also favorably impacting the disparity between white and black babies would be nothing more than a hollow victory**. A clear message from the Commission was that Ohio must be vigilant as efforts continue to ensure this inequity is addressed in all of its work.**

As part of this discussion, geospatial data, provided to the Commission by The Kirwan Institute[1] revealed that infant deaths are highly concentrated in neighborhoods with a greater social and economic burden as compared to the rest of the state. Nearly 1 in 4 of all infant deaths and nearly 1 in 3 of all non-white infant deaths occurred in one of these high risk neighborhoods (See Figure 1). Understanding the relationship between how population groups experience the impact of "place" on health is fundamental to the discussion.

[1] http://cim.legislature.ohio.gov/Assets/Files/david-norris-kirwan-institute-102915.pdf

Figure 1: INFANT MORTALITY HOTSPOT MAPS



Upon evaluation of the connection between place/geography and other social and economic factors, it became clear that it was both necessary and appropriate for the Commission to discuss the social determinants of health (e.g. race, income, housing, transportation) and its impact on infant mortality. Given that only 20% of the factors that influence one's health are clinical, and 80% are considered the social determinants of health (10% physical environment, 40% social and economic environment, and 30% health behaviors),[2] the Commission determined that all discussions must be viewed through this complex prism. Two things became immediately clear to the Commission: 1) this is a very big and complex task; and 2) while the Commission would not be able to tackle all of these issues at once, it was important that some work begin. Thus, a subcommittee was created to start that work, and it identified housing as the targeted domain for further study.

The remainder of this report highlights the recommendations that came out of Commission discussions. The recommendations recognize that changes are needed inside and outside the health care system and at the state and local levels to address and remove barriers that prevent too many of Ohio's children from celebrating their first birthdays.

[2] http://www.healthpolicyohio.org/wp-content/uploads/2015/09/PolicyBrief_BeyondMedicalCare_Final.pdf

II. Statutory Authority

The Commission on Infant Mortality (the "Commission") was created in statute by Amended Substitute Senate Bill 276 of the 130th General Assembly in an effort to address Ohio's abysmal infant mortality rate.

Pursuant to the Ohio Revised Code Section 3701.68, there is hereby created the Commission on Infant Mortality and their charge is as follows:

(A) As used in this section:

(1) "Academic medical center" means a medical school and its affiliated teaching hospitals.

(2) "State registrar" has the same meaning as in section 3705.01 of the Revised Code.

(B) There is hereby created the commission on infant mortality. The commission shall do all of the following:

(1) Conduct a complete inventory of services provided or administered by the state that are available to address the infant mortality rate in this state;

(2) For each service identified under division (B)(1) of this section, determine both of the following:

(a) The sources of the funds that are used to pay for the service;

(b) Whether the service and its funding sources have a connection with programs provided or administered by local or community-based public or private entities and, to the extent they do not, whether they should.

(3) With assistance from academic medical centers, track and analyze infant mortality rates by county for the purpose of determining the impact of state and local initiatives to reduce those rates.

(C) The commission shall consist of the following members:

(1) Two members of the senate, one from the majority party and one from the minority party, each appointed by the senate president;

(2) Two members of the house of representatives, one from the majority party and one from the minority party, each appointed by the speaker of the house of representatives;

(3) The executive director of the office of health transformation or the executive director's designee;

(4) The medicaid director or the director's designee;

(5) The director of health or the director's designee;

(6) The executive director of the commission on minority health or the executive director's designee;

(7) The attorney general or the attorney general's designee;

(8) A health commissioner of a city or general health district, appointed by the governor;

(9) A coroner, deputy coroner, or other person who conducts death scene investigations, appointed by the governor;

(10) An individual who represents the Ohio hospital association, appointed by the association's president;

(11) An individual who represents the Ohio children's hospital association, appointed by the association's president;

(12) Two individuals who represent community-based programs that serve pregnant women or new mothers whose infants tend to be at a higher risk for infant mortality, appointed by the governor.

(D) The commission members described in divisions (C)(1), (2), (8), (9), (10), (11), and (12) of this section shall be appointed not later than thirty days after the effective date of this section. An appointed member shall hold office until a successor is appointed. A vacancy shall be filled in the same manner as the original appointment.

From among the members, the president of the senate and speaker of the house of representatives shall appoint two to serve as co-chairpersons of the commission.

A member shall serve without compensation except to the extent that serving on the commission is considered part of the member's regular duties of employment.

(E) The commission may request assistance from the staff of the legislative service commission.

(F) For purposes of division (B)(3) of this section, the state registrar shall ensure that the commission and academic medical centers located in this state have access to any electronic system of vital records the state registrar or department of health maintains, including the Ohio public health information warehouse. Not later than six months after the effective date of this section, the commission on infant mortality shall prepare a written report of its findings and recommendations concerning the matters described in division (B) of this section. On completion, the commission shall submit the report to the governor and, in accordance with section 101.68 of the Revised Code, the general assembly.

(G) The president of the senate and speaker of the house of representatives shall determine the responsibilities of the commission following submission of the report under division (F) of this section.

(H) The commission is not subject to sections 101.82 to 101.87 of the Revised Code.

III. Commission Members

Commission Member	Appointing Authority
Shannon Jones, Co-*chair* *Ohio Senate*	Senate President
Stephanie Kunze, *Co-chair* *Ohio House of Representatives*	Speaker of the House of Representatives
Charleta B. Tavares *Ohio Senate*	Senate President
Hearcel Craig *Ohio House of Representatives*	Speaker of the House of Representatives
Monica Juenger *Director of Stakeholder Relations*	Office of Health Transformation
John McCarthy *State Medicaid Director*	Ohio Department of Medicaid
Dr. Mary DiOrio *Medical Director*	Ohio Department of Health
Angela Dawson *Executive Director*	Commission on Minority Health
Timothy Ingram *Commissioner, Hamilton County Public Health*	Governor's Appointment (Health Commissioner)
Dr. Robert Falcone *Vice President of Clinical Policy & Population Health, Ohio Hospital Association*	Ohio Hospital Association
Jessie Cannon *Director, Community Wellness Initiatives, Nationwide Children's Hospital*	Ohio Children's Hospital Association
Dr. Patricia Gabbe *Founder, Moms2B*	Governor's Appointment (Community Based)
Dr. Darren Adams *Coroner/ OBGYN, Scioto County*	Governor's Appointment (Coroner)
Teleange Thomas *Sisters of Charity Foundation of Cleveland*	Governor's Appointment (Community Based)
Dr. Arthur James *General OBGYN and associate clinical professor in the Department of Obstetrics and Gynecology at The Ohio State University Wexner Medical Center*	Commission on Infant Mortality
Susan Ackerman *Joint Medicaid Oversight Committee*	Commission on Infant Mortality
Michelle Gillcrist *Managing Attorney- Cleveland Office*	Ohio Attorney General

At the pleasure of the appointing authority, at times other designees participated in the Commission depending on the topic of a particular meeting of the Commission on Infant Mortality.

IV. Public Hearings

The Commission held eight public hearings. All agendas, testimony, data inventories, and additional information are available through the Commission's website at http://cim.legislature.ohio.gov/.

Date	Presenter	Topic
8.26.15	**John McCarthy** Ohio Department of Medicaid	Issues, state agencies and state programs pertaining to infant mortality
	Angela Dawson Commission on Minority Health	Infant mortality issues as they relate to minority populations & the social determinants of health
9.17.15	**Dr. Mary DiOrio** Ohio Department of Health	Role of Ohio Department of Health in the effort to reduce infant mortality, strategies to raise public awareness, collaboration between state agencies, local programs and communities, data collection efforts
10.1.15	**Tim Ingram**, Commissioner, Hamilton County Health District	Subcommittee on data, best practices of birth and death certificates and developing data recommendations
10.15.15	**Miranda Motter,** Ohio Association of Health Plans	Collaboration between the five Medicaid managed care plans
	Medicaid Managed Care Plans Panel Discussion	Representatives from the five Medicaid managed care plans discussed their infant mortality reduction strategies including the need for culturally competent providers to serve targeted populations
10.29.15	**David Norris**, Kirwan Institute	Kirwan's work on geomapping and social determinants
	Charles Noble III, Kirwan Institute	Aligning data with social determinants
	Dr. Kent Bishop, ProMedica	ProMedica's social determinant screening tool
	Carly Miller, Northwest Ohio Pathways HUB	ProMedica's social determinant screening tool
11.12.15	**Legislative Service Commission**	Data Inventory Progress
12.3.15	**Lisa Holloway**, March of Dimes	Prematurity Report Card
	Julie DiRossi King, Ohio Association of Community Health Centers **Dr. Ted Wymyslo**, Ohio Association of Community Health Centers **Ryan Everett**, Ohio Hospital Association **Rosalie Weakland**, Ohio Hospital Association **Melissa Federman**, Center for Community Solutions **Dr. Wayne Trout,** American Congress of Obstetricians and Gynecologist **Hetty Walker**, Ohio Perinatal Quality Collaborative **Dr. Jay Iams**, Ohio Perinatal Quality Collaborative	Long Acting Reversible Contraceptives (LARCs) and family planning best practices, Safe Sleep Best Practices, Progesterone Best Practices and Process Improvement Panel
12.12.15	**Dr. Patricia Gabbe** Moms2B	Moms2B presentation
	Dr. Arthur James	Overview of social determinants of health

V. Recommendations

The Commission acknowledges that Ohio has made improvement, albeit uneven, in the health of our youngest and most vulnerable Ohioans. Much work remains to be done at both the state and local levels to meet or exceed the birth outcomes seen in other states across all populations. Throughout the process, Commission members identified a number of recommendations including statutory changes, state administrative changes, and/or health and human services system changes. Recommendations follow four major themes – improvements in the collection and sharing of data, building on proven interventions, health system improvements, and addressing social determinants of health. The recommendations are listed on the following pages.

A. Good and Timely Data Is Needed to Target Strategies and Track Progress

Increasing the availability of timely state data, as well as improving the quality of data collected, was a topic that came up repeatedly during Commission meetings. The Commission's recommendations include collecting additional data, improving access to timely state data for local partners for the purpose of enhanced analysis, creating standardized scorecards to easily track progress, and adding additional reporting to better understand other system barriers identified by Commission members.

State Data Should Be Made Available to Entities to Inform Local Decision Making

Currently, local infant mortality collaborative organizations and the Ohio Department of Health (ODH) Child and Family Health Services grantees lack access to good, timely data to better target strategies and clinical interventions. Sharing Medicaid claims and birth and death information would help local entities better understand where pregnant women live, where they seek care, and what services they receive.

Recommendations

- ✓ The Ohio Department of Medicaid (ODM) should make Medicaid perinatal claims data available to local infant mortality collaborative organizations and to ODH Child and Family Health Services grant recipients at least annually.
- ✓ ODH should make Ohio preliminary birth and death data, as well as data from the Integrated Perinatal Health Information System (IPHIS), available to local infant mortality collaborative organizations and to ODH Child and Family Health Services grant recipients.
- ✓ ODH should standardize its data use agreements to include terms of use and access requirements, similar to those used by the Ohio Cancer Incidence Surveillance System.
- ✓ ODH should provide geocoded data, when available, to local entities.
- ✓ To improve the consistent and accurate use of data, ODH should provide end users with a data analysis tool kit that includes data dictionaries and sample analyses.
- ✓ ODH should provide ongoing training for leadership and staff at birthing hospitals and to funeral directors at least annually on meeting statutory responsibilities for vital statistics data, including correct coding and time limits to ensure accuracy and consistency of the data over time.

New Reports Will Help Track Progress and Identify Areas for Focus

Improving the infant mortality rate is a shared responsibility, and better collaboration is necessary to change the outcome. Scorecards, at both the state level and for the Medicaid program, provide a concise and easy-to-understand way to track progress and maintain momentum. In 2014, there were 14.3 deaths per 1,000 live births for black babies vs. 6.8 deaths per 1,000 live births overall in Ohio. Because the Medicaid program serves a disproportionate share of black infants (African Americans make up 12.6% of Ohio's population, but account for 29% of all Ohio Medicaid-paid births)[3] and because the black infant mortality rate is significantly higher than Ohio's overall rate, adding additional reporting measures to the Medicaid program's annual statutory report will help track implementation and outcomes from state-level initiatives.

Recommendations

- ✓ ODH should publish a statewide infant mortality scorecard on a quarterly basis (see sample in Appendix B). The scorecard should include:
    - Population health measures including infant mortality rate, sleep-related death rate, preterm birth rate (37 and 32 weeks), and low birth weight rate;

[3] http://medicaid.ohio.gov/Portals/0/Resources/Reports/PWIC/PWIC-Report-2014.pdf

- Outcome measures including the most up-to-date data on preconception health, reproductive health, prenatal care, labor and delivery, smoking, safe sleep, and breastfeeding;
- Information by race and ethnicity;
- A comparison to the national health goals set through the federal *Healthy People* initiative along with Ohio's national ranking; and
- Information on the data sources and methodology used for the report.

✓ Behavioral health, domestic violence, food security, and housing status are important measures to track to improve infant mortality. ODH should consider how to measure and track this information for the scorecard.

✓ ODM should publish a Medicaid infant mortality scorecard on a quarterly basis (see sample in Appendix C). The scorecard should include data specific to Medicaid enrollees including:

- Population health measures including: infant mortality rate, preterm birth rate, and low birth weight rate;
- Outcome and utilization measures using claims and vital statistics data for both fee for service and managed care enrollees;
- Information by race and ethnicity;
- Report data by census tract for high risk neighborhoods where Medicaid targeted initiatives are being implemented; and
- Include information on the data sources and methodology used for the report.

✓ Local infant mortality commissions should build their own scorecards with data by region, city, and/or census tracts to provide a meaningful measurement for community organizations working on infant mortality issues in these areas.

✓ ODH should calculate and publish up-to-date infant mortality rates and preterm birth rates for the state on a quarterly basis using a rolling average. All data should include information by race and ethnicity and the report should include information on the data sources and methodology used for the report.

✓ ODM should add additional information in its annual statutory Medicaid Report on Pregnant Women, Infants and Children. This report should also include:

- Information by race and ethnicity;
- A measure of continuous Medicaid enrollment and consistent health plan enrollment during the perinatal episode by county;
- Track the number of days between Medicaid application and date of enrollment and date of application to date of plan enrollment for pregnant women by county;
- A measure of tobacco use among Medicaid women of child bearing age as well as utilization of cessation services and/or medication;
- Perinatal performance data by plan, including similar measures for populations in the fee for service delivery system;
- SIM Perinatal episode performance data;
- A report on the amount spent and the uses of the $13.4 million per year allocated in FY 2016 and FY 2017 for initiatives in high risk neighborhoods; and
- Results of client responses to the Healthchek and Pregnancy Related Services questions asked as part of the eligibility process.

✓ ODM should evaluate the effectiveness of the targeted initiatives funded in FY 2016-2017 through the managed care plans in hot spot areas and submit a copy of the evaluation to the General Assembly and JMOC.

Additional Data Collection Is Needed

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a project run by the Centers for Disease Control and Prevention and state health departments. PRAMS collects state-specific, population-based data on maternal behaviors and experiences before, during, and shortly after pregnancy that is not available from other sources. Currently, 40 states participate in PRAMS. Citing concerns about the age of data by the time it is made available to the state, the Ohio Department of Health has elected to not participate in PRAMS beginning in 2016. This data is critical to identify health problems, monitor changes in health status over time, and measure progress towards goals to improve the health of mothers and infants. In addition, in order to successfully address the social determinants of health, more data around race, ethnicity and primary language is needed and should be shared with plans and providers so that adjustments can be made to practice.

Recommendations

- ✓ ODH should annually collect and report PRAMS-like data that is consistent with PRAMS reporting methods.
- ✓ To provide statistically valid data for localized analyses, ODH should annually oversample Cuyahoga, Franklin, and Hamilton counties and biennially oversample Ohio Equity Institute (OEI) counties.
- ✓ The Ohio Department of Job and Family Services (ODJFS) should track primary language in the new Ohio Benefits system. Currently, primary language is not tracked through the Ohio Benefits system. Race and ethnicity data is collected but, while this information is valuable, it is not currently shared with plans or providers.
- ✓ ODM should include race, ethnicity, and primary language information in data that is shared with plans. Health plans should, in turn, include this information with the other data that is shared with providers.
- ✓ To review and improve upon Claire's Law for Shaken Baby Syndrome Prevention. ODH should review the manner in which education material is distributed and evaluate the current education materials pertaining to Shaken Baby Syndrome to determine if updates or improvements should be made.

B. Building on Proven Interventions

Ohio has been implementing a series of proven interventions to reduce infant mortality. This section includes recommendations to strengthen existing initiatives around safe sleep, smoking, birth spacing, and preventing prematurity.

Safe Sleep

Ensuring that new families are aware of the ABC's of safe sleep (babies should always sleep Alone, on their Backs, in a Crib), and infants are sleeping in safe cribs will reduce the number of sleep-related infant deaths. Sleep-related deaths are the most common cause of death for infants from one month to one year of age. In 2013, 15% of all infant deaths were tied to sleep-related causes, including Sudden Infant Death Syndrome (SIDS), asphyxia, and undetermined causes. According to ODH's *Infant Safe Sleep Policy Fact Sheet:*

- Infant sleep-related deaths outnumber deaths of children of all ages (0-17 years) from vehicular crashes.
- Forty-two percent of infant deaths from one month to one year old are sleep related.
- Sixty percent of sleep-related deaths occurred in adult beds or on couches or chairs; 23 percent occurred in cribs or bassinets.
- Sixty-six percent of deaths occurred while infants were sharing a sleep surface with another person.

The Commission recognizes all of the great work that has been done around the state to improve safe sleep education. A note of caution: Brown's Law states that "...as a disease control program approaches the end point of eradication, it is the program, not the disease, which is more likely to be eradicated...due to the increase of the cost in skill, effort, and resources to trace the last remaining cases and treat them; and to the increase in the disinterest of society in bearing that cost." We cannot let the success of Ohio's safe sleep programs be justification for letting up on the gas pedal and falling into this trap. Our success is an indication that we need to double-down on safe sleep education and best practices, not the opposite.

Recommendations

- ✓ The Ohio General Assembly should ban the sale of crib bumpers in the state. The American Academy of Pediatrics strongly discourages the use of crib bumpers, as the risk of suffocation and strangulation far outweigh the perceived benefit of possibly preventing minor injury. Deaths attributed to bumper pads include: (1) suffocation against soft, pillow-like bumper pads; (2) entrapment between the mattress or crib and firm bumper pads; and (3) strangulation from bumper pad ties.[4] To date, Maryland and the City of Chicago have banned the sale of crib bumpers.
- ✓ ODH should provide annual training sessions for safe sleep educators serving women in hot spot areas including hospital staff, discharge planners, NICU staff, social workers, volunteers, home visitors, child care educators and staff, and local health departments. Training should provide continuing education credits at no cost to participants.
- ✓ Entities distributing cribs should ensure safe sleep education is provided, as well as instructions on crib set-up and use, with all crib distributions.
- ✓ ODH should assess who has received cribs, if the crib is being used, and consider adding the collection of this data as a contract deliverable for its grantees.

Smoking, Tobacco Use and Cessation

An infant whose mother uses tobacco products, particularly in the form of smoking cigarettes, throughout pregnancy has an increased risk of negative health outcomes including pregnancy complications, prematurity, low birth weight, and death. Changes in tobacco policies are needed to reduce the number of people who smoke as well as to prevent people from starting. HPIO 2014 Health Value Dashboard ranks Ohio at 44th in the nation in adult tobacco use.

[4] http://pediatrics.aappublications.org/content/pediatrics/early/2011/10/12/peds.2011-2284.full.pdf

Generally speaking, prevention efforts should be targeted toward young people, as the vast majority of smokers start before the age of 18. According to the Surgeon General, nearly 9 out of 10 smokers started smoking by age 18.[5] Currently, 90 percent of those who supply cigarettes to minors are themselves under the age of 21. Most tobacco products obtained by minors are purchased legally by young adults between the ages of 18-21, and by increasing the legal purchase age to 21, Ohio would dramatically decrease the availability of tobacco products to minors—thus, decreasing the chances they will become a habitual smoker in adulthood.[6]

This initiative is already being put into practice in a number of Ohio cities including Cleveland, Upper Arlington, and Grandview. In 2013, the smoking rate in New York City spiked to 16.1%, the highest they had seen since 2007. In response, New York City enacted legislation that raised the age to purchase tobacco products to 21, and increased the tobacco tax. In 2014, the smoking rate fell to their lowest smoking rate on record, 13.9%.[7] The result, while significant, was not surprising based on what we know of evidence-based practices.

While prevention efforts for all young people is critical, cessation efforts should be targeted to women under the age of 21, as they are more likely to smoke during pregnancy than women over the age of 21. Fortunately, there are successful evidence-based strategies to get women to quit smoking. According to ODH, Quit Line callers are five times more likely to succeed than those who try to quit on their own. According to the Campaign for Tobacco Free Kids, 72% of the callers to state quit lines were either Medicaid/Medicare enrollees or uninsured,[8] representing a large percentage of at risk mothers and children.

According to ODH's report on perinatal cigarette smoking, women covered by Medicaid are more than five times more likely to smoke in the last three months of pregnancy than those covered by something other than Medicaid. Among the women covered by Medicaid, almost half smoked prior to becoming pregnant and 1 in 3 women smoked throughout their pregnancy.[9]

The Campaign for Tobacco-Free Kids and the American Cancer Society Cancer Action Network project that a $1.00 per pack cigarette tax increase in Ohio will prevent 65,000 minors from becoming adult smokers, encourage 73,100 adults to quit, prevent 40,100 future smoking-caused deaths, and save the state $2.67 billion in future health care costs.[10] Ohio raised the cigarette tax by 35 cents per pack in the 2016-2017 biennial budget, but experts suggest that the increase was not significant enough to result in desired behavior change. Meaningful tobacco tax increases in other states have prompted smokers to seek help in quitting. One such example was in Wisconsin, which saw an increase to the number of calls to their quit line to 20,000 in the first two months – as compared to 9,000 per year previously – after implementing a $1.00 cigarette tax increase in 2008.

With 52% of Ohio births paid for by Medicaid, tobacco use is a costly proposition for families and taxpayers too. In Ohio, $5.64 billion is spent every year on health care costs directly tied to smoking, with $1.72 billion of which is covered by the Medicaid program.[11] Given the 2.9 million Ohio Medicaid enrollees,[12] that is equivalent to a direct payment of $593 for tobacco use alone per year for every man, woman, and child in the Medicaid program. Medicaid savings achieved by even a modest reduction in tobacco use could be used in scaling other evidence-based interventions that are proven to reduce infant mortality and improve other health outcomes.

[5] http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/factsheet.html
[6] http://cph.osu.edu/sites/default/files/T21whitepaper3.2.15.pdf
[7] http://www.capitalnewyork.com/article/city-hall/2015/09/8576947/nyc-smoking-rate-drops-lowest-record
[8] https://www.tobaccofreekids.org/research/factsheets/pdf/0326.pdf
[9] https://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/data%20statistics/maternal%20and%20child%20health/wih_perinatalsmoking.pdf
[10] http://tobacconomics.org/research/ohio2015/
[11] https://www.tobaccofreekids.org/facts_issues/toll_us/ohio
[12] http://medicaid.ohio.gov/Portals/0/Resources/Reports/Annual/ODM-Annual-Report-SFY15.pdf

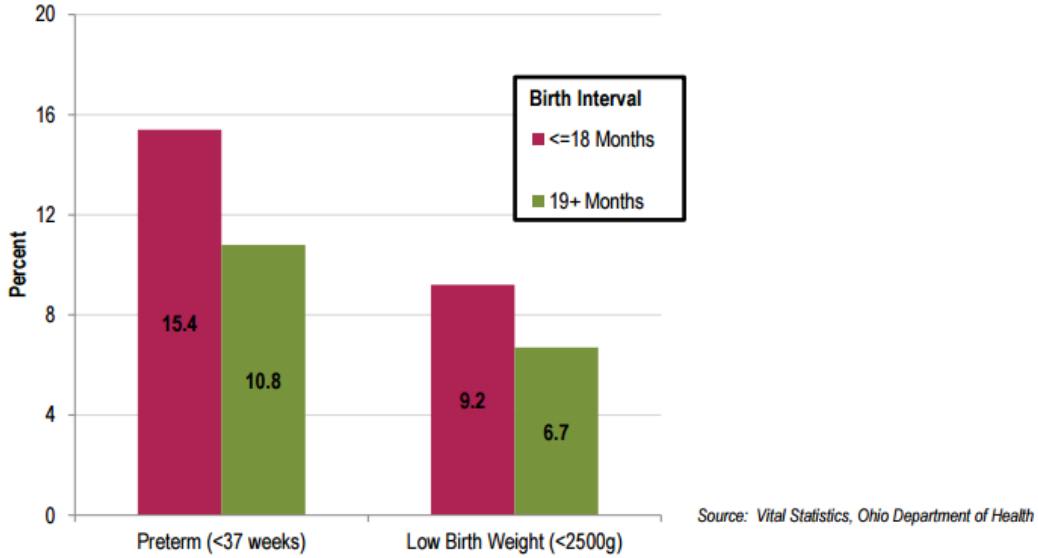
Recommendations

- ✓ The Ohio General Assembly should increase tobacco taxes and use the revenues to target other infant mortality reduction activities.
- ✓ The Ohio General Assembly should restrict the sale of nicotine and tobacco products to people under the age of 21.
- ✓ ODH should update the state's tobacco use and cessation plan to reflect the current health care environment. The plans should include strategies that reflect the increased use of electronic health records and increased health care coverage and payment for cessation services. The plan should set reasonable, yet aggressive, timelines for change. The plan should also contain strategies specific to Medicaid consumers.
- ✓ ODM should provide federal Medicaid reimbursement through an interagency agreement with ODH for the Tobacco Quit Line to reduce barriers for Medicaid recipients seeking assistance with smoking cessation.
- ✓ ODH should build capacity in high risk neighborhoods with community organizations to help them succeed in securing grants for Moms Quit for Two and other smoking cessations programs.

Safe Spacing

According to the World Health Organization, women who have at least 18 months between pregnancies are at significantly lower risk for a preterm birth. In 2011, women with 18 months or fewer since their last live birth had a higher percentage of preterm birth and low birth weight infants (See Figure 2).

Figure 2: Preterm and Low Birth Weight, By Birth Interval, Ohio, 2011



The Affordable Care Act has effectively expanded coverage of birth control, including long acting reversible contraception (LARC), making it more affordable for consumers. However, more work is needed to educate women on all options and their effectiveness to delay pregnancy, train providers on LARC strategies/protocols, and to help providers retool their operations to increase access to LARCs, particularly same day access, including financing upfront stock. In 2010, 68.7% of all publicly funded births in Ohio were unplanned.[13] Given that over 50% of the total births in Ohio are being paid for by Medicaid,[14] more must be done to streamline processes to help high risk women to obtain LARCs when they chose this option. Evidence suggests that when educated about choices, women choose LARC 75% of the time.[15]

[13] http://www.guttmacher.org/pubs/public-costs-of-UP-2010.pdf
[14] http://www.medicaid.ohio.gov/Portals/0/Resources/Reports/PWIC/PWIC-Report-2014.pdf
[15] http://www.larcfirst.com/choiceresults.html

Recommendations

- ✓ Medicaid payments related to maternity care received in an inpatient setting were increased in the FY 2014-2015 budget. While ODM believes that the inpatient payment is sufficient to cover the cost of all services required by a women at delivery, hospitals have not made the system changes needed to increase the placement of LARC devices post-delivery, citing cost as the main obstacle. As an example, there were 9,800 Medicaid-paid deliveries at Franklin County hospitals in FY 2014, yet only 31 women had LARCs inserted prior to discharge. ODM should allow inpatient hospitals to bill for separately from the Medicaid inpatient payment for LARC devices placed post-delivery and prior to hospital discharge. Hospitals should rapidly change their operational processes to ensure women have the option to have a LARC placed after delivery and before discharge.
- ✓ Using Children's Health Care Quality Measurement and Improvement Activities (CHIPRA) or unspent ODH GRF funds, ODM and ODH should provide one time grants for technical assistance and upfront stock of LARC to high volume practices including federally qualified health centers (FQHCs) that serve women living in high risk neighborhoods and who seek to become a LARC First practice.
- ✓ Ohio's medical schools and residency programs should include LARC education and efficacy-based contraception counseling in their academic and residency programs.
- ✓ The Ohio General Assembly should permit pharmacists to administer Depo-Provera (HB 421).
- ✓ The Office of Health Transformation (OHT) should add preconception care and family planning to its PCMH requirements.

Preventing Prematurity

About 12% of all births in Ohio are preterm. Preterm birth, or a birth before 37 weeks gestation, is the largest single factor affecting infant mortality in Ohio, causing 47% of infant deaths. Progesterone supplementation (17P) has proven to be an important strategy, and one of the few effective strategies, in reducing preterm birth among some women. For example, 17P has been shown to reduce the recurrence of preterm birth by 33%.[16] Despite the proven benefits of this intervention and the work of the Ohio Perinatal Quality Collaborative (OPQC), members of the Commission found that some women still face barriers to access for progesterone. Even OPQC is troubled by the fact that systemic challenges continue to persist.

Recommendations

- ✓ ODM should require its Medicaid managed care plans to use a single uniform form for providers seeking progesterone administration for their patients.
- ✓ Using CHIPRA or unspent ODH GRF funds, ODM and ODH should provide funding to stock progesterone in high volume practices serving women living in high risk neighborhoods.
- ✓ The Ohio General Assembly should permit pharmacists to administer progesterone (HB 421).

[16] http://www.astho.org/Maternal-and-Child-Health/ASTHO-17P-Issue-Brief/

C. Moving Systems Toward Better Outcomes for All

During the process, the Commission heard that there are a number of ways our systems fail the families who need help the most. Health systems are currently being restructured to focus on outcomes. We should expect—and demand— the same health outcomes for all. Systems must be responsible for recognizing the differences in consumers and the obstacles they face to ensure positive health outcomes are achieved.

Recommendations

- ✓ To expedite access to care for pregnant women, ODM should expand the qualified entities that can perform presumptive eligibility for Medicaid.
- ✓ ODH and ODM should promote the increased use of Text4baby among Ohio's pregnant women to increase awareness of safe sleep, smoking cessation, and safe spacing by adding this as a requirement to contracts with WIC clinics, home visiting programs, and Medicaid managed care plans. Text4baby is a national phone app that provides free, personalized text messages about maternal and child health and safety topics to pregnant women and mothers of infants.
- ✓ While ODM has focused performance improvement on the Healthcare Effectiveness Data and Information Set (HEDIS)[17] measures for adolescent wellness and postpartum visits, improvements in these measures do not necessarily equate to better outcomes because these measures do not account for care received by women not enrolled in managed care, women who have had breaks in Medicaid coverage, and the inconsistent implementation of best practices at the provider level. ODM should work with plans, practices, and provider associations to ensure that family planning options, strategies for risk reduction, and health promotion activities are consistently included in visits for all Medicaid recipients.
- ✓ OHT should set aspirational goals for continuous quality improvement within the perinatal episode through the State Innovation Model (SIM). The goal of the SIM project is to reduce excess variation in price and quality in care. In the first round, the quality measures that providers must meet have been set very low. Over time, as the program matures, it is expected that variation between providers will be reduced and overall quality will increase. Specifying longer term quality goals will help providers focus their efforts.

Cultural Competency for Providers

The healthcare system has not yet adapted to meet the needs of an increasingly multicultural patient base. At the October 15, 2015 Commission meeting, both the Medicaid managed care plans and ODM reinforced this belief when they identified recommendations gathered from multiple community meetings held in the infant mortality hotspots. In their testimony, the Medicaid managed care plans reported that provider education on cultural competency and health disparities was identified as a critical need by residents living in these communities. Healthcare providers and legislators alike have been reluctant to address this issue. However, this recommendation came up repeatedly throughout the Commission's work, providing overwhelming evidence that this issue must be addressed head-on in Ohio.

While provider associations have opposed efforts to tackle this issue, many providers recognize their own inherent bias. In a recent Medscape survey,[18] over 15,000 physicians were asked whether they believed that they had biases toward specific types or groups of patients. Although most said it did not affect treatment, 47% of family physicians and OB/GYNs admitted that *they themselves* held some form of bias.

Data also tells us that biases lead to different outcomes. For instance, due to different treatment experiences, African Americans, Hispanics, and Asian Americans are more likely to report miscommunications or misunderstandings than

[17] HEDIS is a widely used set of performance measures in the managed care industry. It is developed and maintained by the National Committee for Quality Assurance (NCQA).

[18] http://www.medscape.com/features/slideshow/lifestyle/2016/womens-health#page=6

Caucasians. When miscommunications occur and are not identified by the provider, the results can be fatal. Consequently, the cancer death rate among African Americans is 35% higher than whites. In fact, according to the Centers for Disease Control and Prevention, only 69% of black women start breast cancer treatment within 30 days--compared to 83% of white women. Moreover, fewer black women receive the surgery, radiation, and hormone treatments they need.[19]

Increasing cultural competency training is critical to achieve health equity, close the health disparity gap, and enable systems, agencies, and groups of professionals to better understand those in need of health care or information. In order to be effective, cultural competency training and education is needed at multiple points throughout the provider's training and career.

Recommendations

- ✓ The Ohio General Assembly should improve cultural competency of health care providers by requiring continuing education credit on this issue.
- ✓ OHT should engage health care provider associations to increase provider awareness of the importance of cultural competency throughout their practices as a way to improve positive health outcomes and reduce health disparities.
- ✓ Ohio's medical schools and residency programs should establish appropriate cultural competency training across the curriculum for its medical students and residents.

[19] http://www.cdc.gov/vitalsigns/pdf/2012-11-vitalsigns.pdf

D. Addressing the Social Determinants of Health

Healthy People 2020 defines social determinants of health as conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health and quality-of-life outcomes and risks. Ohio's infant mortality problem disproportionately affects low income black families living in urban neighborhoods that have largely been left behind as the economy has grown. Birth outcomes cannot be improved without addressing the adverse conditions and underlying inequities found in the places where these families live. In essence, place matters, and public policies at all levels of government need to reflect this fact. The World Health Organization informs us that 70% of the disparities in health occur as a consequence of the social determinants of health, such as place. To address these inequities and social determinants of health, state and local programs must improve how they work together. Many of these programs currently operate with limited interaction and awareness of each other. Commission members identified housing as a good area to start this work, but recognized that additional work in other areas is needed to achieve meaningful change.

Screening for Social Determinants at the Practice Level

Screening for social risk factors helps providers identify women who are most at risk for a poor birth outcome and infant death as early as possible. ProMedica has developed an easy-to-use screening tool for social determinants for their practices and has made the tool broadly available. To view the survey, see Appendix D.

Recommendations

- ✓ Local infant mortality commissions should promote and track the use of the ProMedica Pregnancy Lifestyle Assessment, or other similar risk assessment, among practices treating pregnant women in high risk neighborhoods, to assess social risk factors.
- ✓ The State should consider building additional capacity – such as through certified community pathway HUBs – to achieve a wider use of this tool and to connect patients to the services needed to address social risk factors.

Meeting the Social Needs of Pregnant Women

When a woman is identified via a screening tool as having risk factors requiring a referral to community resources, providers need a way of ensuring that she is connected to the appropriate resource.

The Pathways Community HUBs and the use of certified community health workers is a best practice in parts of Ohio and should be expanded. The HUB Model is an evidence-based community care coordination approach focused on reaching those at greatest risk, comprehensively evaluating their risk factors and accountably reducing them. The HUB Model has worked so well in Mansfield that Community Health Access Project participants deliver low birth weight babies at less than half the rate of women at similar risk who don't participate. Researchers estimate that each dollar invested returns more than $3 in short-term healthcare costs and $5 in long-term costs by reducing lengthy neonatal intensive care unit stays and emergency room visits. This is a proven strategy that is consistent with Ohio's interest in pay-for-performance models, has been replicated in Ohio, and should be aggressively expanded.

Services provided through the HUB Models are paid based on measurable objectives including: 1) enrolling pregnant women with multiple risk factors for poor birth outcomes; 2) receipt of each prenatal care visit and face-to-face educational visit; 3) successful connection to needed social services, such as a safe crib for the baby; 3) the delivery of a viable normal birth weight infant weighing at least 2500 grams (or 5.5 pounds); 4) receipt of post-partum visit; and 5) baby connected to a medical home.

Recommendations

- ✓ ODM should require the use of certified community health worker services for women enrolled in Medicaid who are pregnant or at risk for pregnancy.
- ✓ ODM should amend its provider agreement to require Medicaid managed care plans to contract with Pathways Community HUBs who fully or substantially meet the certification standards developed by the Rockville Institute as well as home visiting programs for clinical outcomes.
- ✓ In areas where HUBs are not available, ODH should use Maternal Child Block Grant funds to work with the Commission on Minority Health and communities to develop new HUBs and help them become certified. As part of the grant requirement, each HUB must participate in quarterly meetings with all of the HUBs for the purpose of sharing best practices and lessons learned led by the state's technical assistance consultant. Each HUB must submit performance data quarterly to the technical assistance consultant and the technical assistance coordinator must analyze the data and use the results as the basis for discussion at quarterly meetings.
- ✓ The Ohio General Assembly should include geography and other social determinants of health risk factors, including women with a positive screen for depression, in the prioritization of home visiting services.

Home Visiting

Ohio has a long history of providing quality, evidence-based home visiting services through programs such as Every Child Succeeds and other *Help Me Grow* prevention programs. As of September 2012, there were 4,661 families with an eligible child or a pregnant woman receiving home visiting services through *Help Me Grow*. Despite the successes in *Help Me Grow* over the last 15 years, the program continues to miss families, particularly in our high risk neighborhoods. Traditional home visiting programs require a significant investment of time and a high level of commitment from self-referring, participating moms, which is simply not realistic for many moms in crisis. Improving on this successful intervention is vital to ensuring that those who need the home visits most are receiving them.

Recommendations

- ✓ ODH should transition home visiting programs to payment for outcomes rather than processes.
- ✓ ODH should create a central intake and referral for *all* home visiting programs by county and/or region to allow for better triage of families in need of home visiting services.
- ✓ ODH should allocate funding for a central intake and referral system for home visiting through a competitive grant process. This process should be open to public and non-profit entities, including community organizations, to promote better local collaboration.
- ✓ ODH should allocate funding for innovative pilot projects that build on the learning of traditional home visiting programs but can be targeted to some of the most challenging families to serve. New interventions are needed for families unable to be successful in traditional programs.
- ✓ ODH should engage ODM and other stakeholders about moving home visiting to Medicaid in order to leverage resources to ensure interventions reach more of those families most in need.

Stable Housing Is Critical for Moms and Babies

Among the various social determinants of health, the Commission identified housing as one of the most critical risk factors contributing to infant mortality, and one of the most difficult for those working on the ground to solve. Chronic stress from homelessness, the risk of homelessness, and repeated moving increases the likelihood of preterm birth. Also, failing to address this basic need often diminishes the impact of all other interventions. As a part of this work, the Commission charged the Legislative Service Commission with the task of developing an inventory of state housing resources and programs to use as a tool in developing recommendations. To view the housing inventory, visit the Commission's website at http://cim.legislature.ohio.gov/Assets/Files/housing-program-inventory.pdf.

Recommendations

- ✓ The Ohio Housing Finance Authority (OHFA) should include pregnancy as a priority in its housing tax credit and emergency shelter programs.
- ✓ Local homeless shelter grantees should track and report the number of pregnant women and ages of children seeking assistance.
- ✓ Local homeless shelter grantees should place pregnant women in family shelters rather than single adult shelters.
- ✓ OHFA should investigate rebalancing investment in state-funded programs that support middle and low-income home buyers in hot spot neighborhoods.

Continued Work Is Needed on Social Determinants of Health

The Commission recognized that improving the social determinants of health is critical to improving birth outcomes but did not have enough time to delve into these multisystem issues. As such, the Commission is recommending further work in this area.

Recommendations

- ✓ The Ohio General Assembly should contract with an outside entity to lead a stakeholder group to review state policies and programs that affect infants and women of childbearing age, identify opportunities within these programs to improve the social determinants of health, review emerging and best practices in other states, and develop a set of recommendations to be delivered to the General Assembly and the Commission on Infant Mortality. The workgroup should focus its initial review on the areas of education, income, and transportation (in addition to the housing work already begun). The stakeholder group should include state agency leaders, legislators, and other interested parties with expertise in these areas.
- ✓ The Commission on Infant Mortality should continue to meet during this process.

VI. State Inventory: Infant Mortality Programs

Under Revised Code § 3701.68(B), the Commission on Infant Mortality was charged with the task of conducting a complete inventory of services provided or administered by the state that are available to address Ohio's infant mortality rate. The Commission asked the Legislative Service Commission (LSC) to collect information from various state agencies for the purpose of fulfilling this responsibility. To assist with this effort, LSC created a survey, which was administered to the state agencies that had programs directly addressing infant mortality. The results of the survey were then compiled into four tables based on whether they were: 1) programs that are clinical or systemic initiatives; 2) programs that are targeted initiatives or are population- or region-specific; 3) programs that are for surveillance/review purposes; or 4) programs that enhance access to care. For program details, and to view the completed inventory, visit http://cim.legislature.ohio.gov/inventory.

Infant Mortality Reduction State Programs/Initiatives

Clinical/ Systemic	Targeted Initiatives	Surveillance/ Review	Access to Care
First Steps for Healthy Baby	Cribs for Kids and S.B. 276 Safe Sleep Education Program	Fetal Infant Mortality Review	Help Me Grow
Gestational Diabetes Collaborative	Text4baby	Pregnancy Associated Mortality Review	Reproductive Health and Wellness Program
Progesterone Project	Child and Family Health Services Program	Ohio Child Fatality Review	WIC Special Supplemental Nutrition Program
Improve NICU Discharge Planning	Centering Pregnancy Demonstration Project	Ohio Connections for Children with Special Needs	Medicaid Coverage
Treatment for Neonatal Abstinence Syndrome	Ohio Partners for Smoke Free Families Program	Ohio Pregnancy Risk Assessment Monitoring System	Expand Medicaid Presumptive Eligibility for Pregnant Women
Catheter Care Maintenance Bundle	Genetics Services Program		EPSDT Program
Promote Human Milk	Ohio's Maternal, Infant, and Early Childhood Home Visiting Program		Newborn Screening
Reduce Scheduled Deliveries Prior to 39 Weeks	Ohio Buckles Buckeyes		
Vital Statistics to ID at-risk Women	Choose Life		
Provide Antenatal Corticosteroids	HUB Model Grants		
Encourage Progesterone for At-risk Mothers	Demonstration Grant Program		
Fetal Alcohol Spectrum Disorder Steering Committee	Engage Leaders in High-risk areas to Connect Women to Health Care		
Maternal Opiate Medical Support	Enhanced Maternal Care Management		
Safe Sleep Initiatives	State Innovation Model-Episode-based Payments for Prenatal Care		
Safe Sleep Public Awareness Campaign and Safe Sleep Practices Campaign	Boot Camp for New Dads		
	Maternal Mental Health Program		
	Not a Single Drop		
	Community Based Prevention Services		
	Commission on Fatherhood		
	Home Visiting		

VII. Appendix

Appendix A: Recommendations Tables

The following tables take all of the report's recommendations and catalog them by department, or agency responsible, and organize them by the area of focus in order to provide a comprehensive snapshot. The recommendations have been divided into four domains including data, proven interventions, bettering systems, and social determinants. This table may not contain all details of a given recommendation. For recommendation details, please refer to the report's text.

Recommendations For Ohio General Assembly			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
NONE	1) Ban the sale of crib bumpers 2) Increase tobacco taxes/ utilize savings to target other infant mortality reduction activities. 3) Restrict sale of nicotine & tobacco products to those under 21. 4) Permit pharmacists to administer Depo-Provera. 5) Permit pharmacists to administer progesterone.	1) Should improve cultural competency by requiring continuing education credit on this issue.	1) Include geography and other social determinants of health risk factors, including women with a positive screen for depression, in the prioritization of home visiting services. 2) Contract with an outside entity to lead a stakeholder group to review state policies and programs that affect infants and women of childbearing age, ID opportunities within these programs to improve social determinants of health, review emerging and best practices in other states, and develop recommendations to be delivered to the GA and the Commission on Infant Mortality.

Recommendations For Ohio Department of Health			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
1) Make preliminary birth and death data/data from IPHIS, available to local infant mortality collaborative organizations and ODH Child and Family Health Services grant recipients. 2) Standardize data use agreements. 3) Provide geocoded data to local entities. 4) Provide end users w/ data analysis tool kit. 5) Provide ongoing training at birthing hospitals/ funeral directors annually on meeting statutory responsibilities. 6) Publish a statewide infant mortality scorecard on quarterly basis. 7) Consider how to measure/ track social determinants of health for the scorecard. 8) Calculate/ publish up-to-date IM rates & preterm birth rates on quarterly basis using rolling average. 9) Continue to annually collect PRAMS or PRAMS-like data. 10) Oversample Cuyahoga, Franklin, Hamilton, & OEI counties. 11) To review and improve upon Claire's Law for Shaken Baby Syndrome Prevention.	1) Provide annual training sessions for safe sleep educators serving in hot-spot areas. 2) Entities distributing cribs should ensure safe sleep education/ assembly instructions are provided. ODH should assess who has received free cribs and if the crib is being used. 3) Update state's tobacco use and cessation plan to reflect current health care environment. 4) Build capacity in high risk neighborhoods w/ community organizations to help succeed in securing grants for smoking cessation programs. 5) Using CHIPRA or unspent ODH GRF funds, provide one time grants for technical assistance & upfront stock of LARC to high volume practices including FQHCs. 6) Using CHIPRA or unspent ODH GRF funds, provide funding to stock progesterone in high volume practices serving women in high risk neighborhoods.	1) Promote increased use of Text4Baby	1) Should use Maternal Child Block Grant funds to work w/ CMH to develop new HUBs and help them become certified. Each HUB must participate in quarterly meetings with all of the HUBs to share best practices/ lessons learned. 2) Transition home visiting programs to payment for outcomes rather than processes. 3) Create a central intake and referral for all home visiting programs by county and/or region to allow for better triage of families in need of services. 3) Allocate funding for a central intake and referral system for home visiting through a competitive grant process. 4) Allocate funding for innovative pilot projects that build on the learning of traditional home visiting programs, but targeted most challenging families to serve. 5) Engage ODM and other stake holders about moving home visiting to Medicaid.

Recommendations For Ohio Department of Medicaid			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
1) Make Medicaid perinatal claims data available annually to local infant mortality collaborative organizations and ODH Child and Family Health Services grant recipients. 2) Publish a Medicaid infant mortality scorecard on quarterly basis. 3) Add add'l info in Report on Pregnant Women, Infants, and Children. 4) Include race, ethnicity, and primary language info in data that is shared with plans. 5) Evaluate the effectiveness of targeted initiatives funded in FY 2016-17 through managed care plans & submit to GA and JMOC.	1) Provide federal Medicaid reimbursement through interagency agreement w/ ODH for the Tobacco Quit Line to reduce barriers for Medicaid recipients. 2) Allow inpatient hospitals to bill for LARC devices separately from DRG for devices placed post-delivery, prior to discharge. 3) Require Medicaid managed care plans to use a single, uniform form for providers seeking progesterone administration for patients.	1) Expand qualified entities that can perform presumptive eligibility 2) Promote increased use of Text4Baby. 3) Work with plans, practices, and provider associations to ensure family planning options, strategies for risk reduction, and health promotion activities are included in HEDIS measures.	1) Require use of certified community health worker services for women enrolled in Medicaid who are pregnant or at risk for pregnancy. 2) Require Medicaid managed care plans to contract with Pathways Community HUBs who meet certification standards developed by Rockville Institute as well as home visiting programs for clinical outcomes.

Recommendations For Ohio Department of Health Transformation			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
NONE	1) Add preconception care and family planning to PCMH requirements.	1) Set aspirational goals for continuous quality improvement within the perinatal episode through the State Innovation Model. 2) Engage health care provider associations to increase provider awareness of the importance of cultural competency throughout their practices as a way to improve positive health outcomes and reduce health disparities.	NONE
Recommendations For Ohio Department of Job and Family Services			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
1) Track primary language in the new Ohio Benefits system.	NONE	NONE	NONE
Recommendations For Local Infant Mortality Commissions			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
1) Build scorecards with data by region, city, and/or census tracts.	NONE	NONE	1) Promote and track the use of the ProMedica Pregnancy Lifestyle Assessment, or other similar risk assessment among practices treating pregnant women in high risk neighborhoods, to assess social risk factors.

Recommendations For Developmental Services Agency/ Ohio Housing Finance Authority			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
NONE	NONE	NONE	1) Include pregnancy as a priority in its housing tax credit and emergency shelter programs. 2) Local homeless shelter grantees should track and report the number of pregnant women and ages of children seeking assistance. 3) Local homeless shelter grantees should place pregnant women in family shelters rather than single adult shelters. 4) Investigate rebalancing investment in state-funded programs that support middle and low-income home buyers in hot spot neighborhoods.
Local Homeless Shelter Grantees			
Data	**Proven Interventions**	**Bettering Systems**	**Social Determinants**
NONE	NONE	NONE	1) Track/ report number of pregnant women and children seeking assistance. 2) Place pregnant women in family shelters rather than single adult shelters.

Appendix B: Sample State Scorecard

Outcomes and Key Drivers					
			Baseline	**HP 2020 Goal**	**Current**
Infant Mortality Rate (# infant deaths/1,000 live births)	Total			6.0	
	White				
	Black				
Sleep-Related Infant Deaths (# infant deaths/1,000 live births)	Total			0.84	
	White				
	Black				
Prematurity	Preterm Birth (% babies born <37 weeks gestation)	Total		11.4	
		White			
		Black			
	Low Birthweight (% of babies born <2,500 grams)	Total		7.8	
		White			
		Black			
Strategy Implementation					
			Baseline	**HP 2020 Goal**	**Current**
Preconception Health	% of women 18-44 years with health insurance			100%	
	% of adolescents with preventive health visit				
Reproductive Health	% of births "safely spaced" (≥ 18 months from previous)			29.8	
	Birth rate among teens (15-17 years) (# births per 1,000 females)			36.2	
	Birth rate among women over age 35 (# births per 1,000 females)				
Prenatal Care	% of Medicaid women with first trimester entry into prenatal care			77.9	
Labor and Delivery	% of eligible women receiving recommended course of progesterone				
	% of elective deliveries before 39 weeks				
Smoking	% of smokers not smoking during pregnancy			30	
	% of smokers not smoking postpartum			-	
Safe Sleep	% of babies placed to sleep on their backs			75.9	
Breastfeeding	Breastfeeding rate at hospital discharge			34.1	

Appendix C: Sample Medicaid Scorecard

Population Health Measure				State Baseline	Quarter					
		Total #	**Rate/1000**		State Average	Region SW	Region SE	Region Central	Region NW	Region NE
Infant Mortality	Total									
	Black									
Prematurity	Total									
	Black									

Strategy Implementation	State Baseline	Quarter					
		State Average	Region SW	Region SE	Region Central	Region NW	Region NE
% of women age 15 to 44 enrolled in Medicaid							
Adolescent wellness visit							
Timeliness of prenatal care							
Progesterone initiation rate							
Tobacco use at delivery							
Low birth rate							
LARC utilization							
Postpartum visits							
ED visits							

northwest ohio pathways HUB

Toledo-Lucas County Getting to 1

Appendix D: Initial Pregnancy Lifestyle Assessment

Patient:
Date of Birth:
Provider:
EDD:

1. Current Insurance Status:
   - ☐ No Insurance
   - ☐ Pending Medicaid
   - ☐ Medicaid
   - ☐ Medicare
   - ☐ Private Insurer
   - ☐ CareNet

2. How do you feel about becoming pregnant?
   - ☐ I wanted to be pregnant sooner
   - ☐ I wanted to be pregnant later
   - ☐ I wanted to be pregnant now
   - ☐ I did not want to be pregnant now or at any time in the future

3. Do you have difficulty, or need assistance, getting any of the following:
   - ☐ Housing
   - ☐ Transportation
   - ☐ Childcare
   - ☐ Food
   - ☐ Medications
   - ☐ Other: _____
   - ☐ No

Regarding your safety and emotional health…

4. Which of the following statements best describes your tobacco use?
   - ☐ I have never used any form of tobacco, or I have used tobacco products fewer than 100 times in my life
   - ☐ I stopped using tobacco products before I found out I was pregnant, and I am not using them now
   - ☐ I stopped using tobacco after I found out I was pregnant, and I am not using now
   - ☐ I use some now, but I cut down on the number of tobacco products I use since I found out I was pregnant
   - ☐ I use them regularly now, about the same as before I found out I was pregnant

   If currently using, type of tobacco: _____

7. Since becoming pregnant, how many times have you consumed alcoholic beverages?
   Number of times: _____ Amount consumed: ____

8. In the past 6 months, have you used any illegal substances? Y N
   If yes, what: _____ How often? _____

9. In the past 6 months, have you used any medications that were either not prescribed for you, or you took more than was prescribed to feel good or high? Y N If yes, what: _____ How often? _____

10. During the past 12 months, did your husband, partner or other family member push, hit, slap, kick, choke, or physically, verbally or emotionally hurt you in any way? Y N

11. Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than Half the Days	Nearly Every Day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3

Regarding your current pregnancy…

12. Are you currently being treated by a physician for any of the following:

- ☐ Asthma
- ☐ Mental Health Condition: Diagnosis: _____
- ☐ Substance Abuse
- ☐ Diabetes
- ☐ Developmental Disability
- ☐ Sexually Transmitted Infection
- ☐ Other: _____

If yes, who are you being treated by? _____

13. Are you taking folic acid daily?	Y	N
14. Did you take folic acid prior to becoming pregnant?	Y	N
15. Did you know that taking folic acid lowers your chance for a low birth weight infant?	Y	N
16. Do you plan to breast feed?	Y	N
17. Do you understand the ABCs of Safe Sleep? All infants should sleep Alone, on their Back, and in a Crib.	Y	N
18. Do you have a crib, Pack n Play, bassinette, or other safe place at home for your baby to sleep?	Y	N
19. Would you like to hear more about birth control options?	Y	N

Regarding prior pregnancy (if this is your first pregnancy, you do not need to complete questions 20-22)…

20. Have you:

☐ Delivered a baby in the last 18 months?	Y	N
☐ Ever had a baby delivered before 37 weeks gestation?	Y	N
☐ Ever had a baby weighing less than 5lbs. 8 oz. at birth?	Y	N

21. Were you ever told by a healthcare provider that you (check all that apply):

- ☐ Were a high risk pregnancy
- ☐ Were in preterm labor
- ☐ Had a short cervix
- ☐ Had gestational diabetes
- ☐ Had pre-eclampsia/eclampsia (high blood pressure)

22. If you have had a baby prior to 35 weeks, did you know progesterone can help decrease your chance for preterm delivery? Y N

For office use only

Followup:

Education Provided:

☐ Family Planning/LARC	☐ Safe Sleep	☐ Other: _____
☐ Tobacco Use	☐ Progesterone	
☐ Folic Acid	☐ Breastfeeding	

Referrals Recommended:

☐ Insurance	☐ Food	☐ DV
☐ Housing	☐ Medication Assistance	☐ Mental Health
☐ Transportation	☐ Tobacco Cessation	☐ Lactation Consultant
☐ Childcare	☐ Substance Use	☐ Other: _____

Provider Notes:

_____

_____

EDD:_____Next Office Appointment: _____ **Gravida/Para:** _: ____

Information Obtained from: ☐ Patient ☐ Other _____Date_____Time_____Relationship_____

Form Completed by: _____Date_____ Time_____

Pregnancy Lifestyle Assessment – Preparing for Baby

Patient:
Date of Birth:
Provider:
EDD:

1. Current Insurance Status:
   - ☐ No Insurance
   - ☐ Pending Medicaid
   - ☐ Medicaid
   - ☐ Medicare
   - ☐ Private Insurer
   - ☐ CareNet

2. Do you have difficulty, or need assistance, getting any of the following:
   - ☐ Housing
   - ☐ Transportation
   - ☐ Childcare
   - ☐ Food
   - ☐ Medications
   - ☐ Other: _____
   - ☐ No

Regarding your safety and emotional health…

3. Which of the following statements best describes your tobacco use?
   - ☐ I have never used any form of tobacco, or I have used tobacco products fewer than 100 times in my life
   - ☐ I stopped using tobacco products before I found out I was pregnant, and I am not using them now
   - ☐ I stopped using tobacco after I found out I was pregnant, and I am not using now
   - ☐ I use some now, but I cut down on the number of tobacco products I use since I found out I was pregnant
   - ☐ I use them regularly now, about the same as before I found out I was pregnant

   If currently using, type of tobacco: _____

7. In the past 30 days, how many times have you consumed alcoholic beverages?
   Number of times: _____ Amount consumed: _____

8. In the past 30 days, have you used any illegal substances? Y N
   If yes, what: _____ How often? _____

9. In the past 6 months, have you used any medications that were either not prescribed for you, or you took more than was prescribed to feel good or high? Y N If yes, what: _____ How often? _____

10. During the past 12 months, did your husband, partner or other family member push, hit, slap, kick, choke, or physically, verbally or emotionally hurt you in any way? Y N

11. Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than Half the Days	Nearly Every Day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3

Preparing for your baby…

12. Do you plan to breast feed? Y N
13. Do you understand the ABCs of Safe Sleep? All infants should sleep Alone, on their Back, and in a Crib. Y N
14. Do you have a crib, Pack n Play, bassinette, or other safe place at home for your baby to sleep? Y N
15. Have you selected a pediatrician for your baby? Y N
16. Are you aware of long acting reversible birth control? Y N
17. Would you like to hear more about birth control options? Y N

Information Obtained from: ☐ Patient ☐ Other _____Date_____Time_____Relationship_____

Form Completed by: _____Date_____ Time_____

For office use only

Follow up:

Education Provided:

☐ Family Planning/LARC ☐ Safe Sleep ☐ Other: _____
☐ Tobacco Use ☐ Progesterone
☐ Folic Acid ☐ Breastfeeding

Referrals Recommended:

☐ Insurance ☐ Food ☐ DV
☐ Housing ☐ Medication Assistance ☐ Mental Health
☐ Transportation ☐ Tobacco Cessation ☐ Lactation Consultant
☐ Childcare ☐ Substance Use ☐ Other: _____

Provider Notes:

_____
_____

Pregnancy Lifestyle Assessment- Postpartum

Patient:
Date of Birth:
Provider:
EDD:

1. Current Insurance Status:
   - ☐ No Insurance
   - ☐ Pending Medicaid
   - ☐ Medicaid
   - ☐ Medicare
   - ☐ Private Insurer
   - ☐ CareNet

2. Do you have difficulty, or need assistance, getting any of the following:
   - ☐ Housing
   - ☐ Transportation
   - ☐ Childcare
   - ☐ Food
   - ☐ Medications
   - ☐ Other: _____
   - ☐ No

Regarding your safety and emotional health…

3. Which of the following statements best describes your tobacco use?
   - ☐ I have never used any form of tobacco, or I have used tobacco products fewer than 100 times in my life
   - ☐ I stopped using tobacco products before I found out I was pregnant, and I am not using them now
   - ☐ I stopped using tobacco after I found out I was pregnant, and I am not using now
   - ☐ I use some now, but I cut down on the number of tobacco products I use since I found out I was pregnant
   - ☐ I use them regularly now, about the same as before I found out I was pregnant

   If currently using, type of tobacco: _____

7. In the past 30 days, how many times have you consumed alcoholic beverages?
   Number of times: _____ Amount consumed: _____

8. In the past 30 days, have you used any illegal substances? Y N
   If yes, what: _____ How often? _____

9. In the past 30 days, have you used any medications that were either not prescribed for you, or you took more than was prescribed to feel good or high? Y N If yes, what: _____ How often? _____

10. During the past 12 months, did your husband, partner or other family member push, hit, slap, kick, choke, or physically, verbally or emotionally hurt you in any way? Y N

11. Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than Half the Days	Nearly Every Day
Little interest or pleasure in doing things	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3

Infant Health…

12. Are you currently breastfeeding your baby? Y N
13. Where is your baby sleeping? (Please check all that apply.)
    - ☐ Crib/Basinette/Pack 'n' Play ☐ Car seat ☐ In bed with you or another person
    - ☐ Couch or chair ☐ Floor ☐ Other
14. How is your baby put to sleep? (Please check all that apply.)
    - ☐ On his or her side ☐ On his or her back ☐ On his or her stomach
15. Has your baby been to a pediatrician for a 1 month checkup? Y N
16. Are you planning on having a baby in the next year? Y N
17. Did you know that taking folic acid prior to pregnancy helps reduce birth defects? Y N

Information Obtained from: ☐ Patient ☐ Other _____Date_____Time_____Relationship_____

Form Completed by: _____Date_____ Time_____

For Office Use Only/Follow up:

Education Provided:

- ☐ Family Planning/LARC ☐ Safe Sleep ☐ Other: _____
- ☐ Tobacco Use ☐ Progesterone
- ☐ Folic Acid ☐ Breastfeeding

Referrals Recommended:

- ☐ Insurance ☐ Food ☐ DV
- ☐ Housing ☐ Medication Assistance ☐ Mental Health
- ☐ Transportation ☐ Tobacco Cessation ☐ Lactation Consultant
- ☐ Childcare ☐ Substance Use ☐ Other: _____

Provider Notes:_____