Project IMPACT is a fetal and infant mortality review (FIMR) project for Baker, Clay, Duval, Nassau and St. Johns counties. The initiative, which started in 1995, is carried out by the Northeast Florida Healthy Start Coalition with funding from the Florida Department of Health. The goal is to reduce infant mortality by gathering and reviewing detailed information to gain a better understanding of fetal and infant deaths in Northeast Florida. The project examines cases with the worst outcomes to identify gaps in maternal and infant services and to promote future improvements.

Each month, fetal/infant death cases are selected for the project based on specific criteria. In 2017-18, 28 cases were reviewed through this process. Utilizing an approach developed by the American College of Obstetrics and Gynecology (ACOG), information is abstracted from birth, death, medical, hospital, Healthy Start, WIC and autopsy records. In some cases, law enforcement, medical examiner, EMS and child protective services records are included. Efforts are also made to interview the family. No information that identifies the family or medical providers is included on the abstraction form. Case summaries are developed and presented bimonthly to the Case Review Team (CRT). The CRT, a multidisciplinary group of community medical and social service professionals, examines each case to determine medical, social, financial and other issues that may have impacted the poor birth outcome.

A Community Action Group (CAG) works to implement the FIMR recommendations.

Infant mortality in Northeast Florida was relatively unchanged in 2017, dropping slightly from 7.4 to 7.3 deaths per 1000 live births. 137 babies died before their first birthday, the equivalent of eight classes of kindergarteners. The regional rate remains higher than the state (6.1 deaths) and nation (5.9 deaths).

Duval County, the population center of the region, continues to drive the region's infant mortality rate with 8 deaths per 1000 live births. Counties with smaller populations like Baker, Clay and St. Johns tend to fluctuate from year-to-year, as a few additional or less deaths impact the rate much more than more populated counties.

Black babies are still dying at more than twice the rate of white babies. Black moms are nearly 2.5 times as likely to experience an infant death as white moms (12.5 deaths per 1000 live births, compared to 5.2 deaths). This trend has been consistent over the past five years. National trends show that racial disparities persist despite education level or socioeconomic status.

The leading cause of death in 2017 was other perinatal conditions, which accounted for a third of all deaths. This includes infections like bacterial sepsis, premature rupture of membranes, incompetent cervix and placenta complications. Prematurity and Sudden Unexpected Infant Deaths (SUIDs) each accounted for 20 percent of infant deaths.
POSTNEONATAL DEATHS: SLEEP-RELATED DEATHS CONTINUE TREND AS LEADING CAUSE OF DEATH

One in five deaths in Northeast Florida was due to Sudden Unexpected Infants Deaths (SUIDs) in 2017, most of which were sleep-related. This has been a consistent and concerning trend for the last five years. SUIDs deaths are largely preventable.

One hundred forty-three deaths from 2012-2017 were reviewed. Despite safe sleep messages recommending babies sleep alone, on their back and in a crib, bassinet or pack-n-play, nearly 70 percent were bedsharing, in an unsafe position (not on the back) or had unsafe sleep surroundings (adult bed, couch or chair, soft items like bedding and stuffed animals.)

75% OF MOTHERS NOT MARRIED

PERCENTAGE OF DEATHS ATTRIBUTED TO SUIDS

NORTHEAST FLORIDA FETAL & INFANT DEATHS BY RACE, 2017

AVERAGE AGE

SLEEP SITUATION

LEVEL OF EDUCATION

PROJECT IMPACT
Safe Sleep Task Force

The Coalition launched the NEFL Safe Sleep Task Force in February 2018 to bring together community organizations, hospitals, medical providers and more to address the locally high number and rate of sleep-related deaths.

The Task Force is led by co-chairs Dr. Jason Largen, St. Vincent’s Family Medicine Center and Alison Hill, Florida Department of Children & Families. Task Force members participate in subcommittees focused on key areas, including health care provider outreach, marketing materials, media outreach and community education. The subcommittees are developing strategies like developing public services announcements, streamlining education materials and training medical offices.

HIGH RATES OF SUBSTANCE-EXPOSED NEWBORNS

There has been a substantial growth in the number of substance-exposed newborns born in Northeast Florida. The nationwide opioid epidemic in particular has led to a large increase in the number of babies born with Neonatal Abstinence Syndrome (NAS), a group of conditions caused when a baby withdraws from exposure to opioids in the womb.

NAS is associated with numerous central nervous system, gastrointestinal, as well as metabolic, vasomotor and respiratory signs and symptoms, including high-pitched crying, seizures, sleep problems, poor feeding, diarrhea, poor weight gain, fever, nasal stuffiness and rapid breathing.

In 2016, more than 700 infants experiencing NAS were born at area hospitals, according to discharge data from the Florida Agency for Health Care Administration (AHCA). This represented a 1,306 percent increase in the number of NAS infants born in the region from 2005. While this data identifies the county the infants were born in, not county of residence, it indicates a growing issue in the state and region.

Substance use other than tobacco was a contributing factor in 36 percent of the FIMR cases reviewed in 2017-18, and is often a contributing factor to sleep-related deaths.
A woman’s health prior to pregnancy continues to have the largest impact on birth outcomes. Many women in Northeast Florida enter into pregnancy with high BMIs, too soon after their last pregnancy, smoking or with STDs. These risk factors are leading causes of prematurity, which is one of the top causes of infant death.

Half of women who give birth in Northeast Florida are overweight (24%) or obese (26%) at the time they get pregnant. Being overweight or obese during pregnancy can lead to high blood pressure, preeclampsia, blood clotting problems and other issues. Babies born to overweight or obese mothers are more likely to be premature, have birth defects and be large for gestational age.

More than a third of women have an inter-pregnancy interval of less than 18 months, the optimal interval for mom and baby’s health. Thirty-nine percent of women in Northeast Florida had an interval of less than 18 months from 2015 to 2017, compared to 34.6 percent statewide. Duval (40.1%) and St. Johns (41.7%) counties had the highest percentages. Women with short intervals are more likely to deliver pre-
term and low birth weight babies, even if they had a prior term baby.

Exposure to repeated toxic stress leads to weathering – a weakening of the body due to constant wear and tear – that has a direct impact on preconception health and poor birth outcomes. A mother’s level of stress before or during pregnancy can increase her baby’s risk of premature birth, low birth weight and other complications. Toxic stress builds across the life course and puts people at a higher risk for poor health outcomes like asthma, depression, hypertension, diabetes and more. It is closely tied to adverse childhood experiences, racism and neighborhoods that experience economic, health and social disparities.

The Healthy Start program at UF Health Jacksonville has implemented an initiative to assist diabetic mothers. A Registered Dietitian on staff assists women with their unique nutritional needs and hosts a support group that provides education and peer support.

The pregnancy-related mortality ratio is a estimate of the number of pregnancy-related deaths for every 100,000 live births. In 2017, Northeast Florida’s ratio of 26.8 was significantly higher than the state ratio of 16.5.

The American College of Obstetricians and Gynecologists (ACOG) has recognized that the postpartum period is a critical juncture for a mother’s health -- especially due to the rising maternal death rates -- and now recommends postpartum care be an ongoing process starting as early as three weeks after birth.
**Centering**

The Coalition received funding to expand the evidence-based Centering group care model in Northeast Florida to improve the health of women, children and families in the community. A grant from the Chartrand Family Fund at the Community Foundation for Northeast Florida was utilized to launch CenteringParenting classes at the Magnolia Project and host a training for medical providers to expand the community’s capacity to offer all types of Centering classes.

CenteringPregnancy prenatal care and CenteringParenting well-child care systems have been implemented across the nation to ensure babies have healthy birth outcomes and families have access to quality care and support. CenteringPregnancy has been utilized at the Magnolia Project for several years. New areas of Centering Healthcare include helping people manage diabetes and chronic disease.

Fifteen medical professionals attended from four health care agencies were trained in August 2018: Agape Community Health Center, Florida Department of Health Duval, UF Health Jacksonville and Sulzbacher.

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**ACCESS TO CARE IMPACTS PREGNANCY, BIRTH OUTCOMES**

While early and regular prenatal care is important for a healthy pregnancy, a woman’s ability to access care can impact whether her baby is born healthy.

Prenatal care is important because it allows a medical professional to monitor the mother and baby; identify and address any issues; and provide important health education. In 2017, almost 1,700 women in the region received late (3rd trimester) or no prenatal care, 9 percent of all pregnant women. This is significantly higher than the state rate of 6.2 percent. The rate has doubled since 2011 and although the state rate has also increased, there is a widening gap between the region and state. Half of the Fetal & Infant Mortality Review cases reviewed in 2017-18 had late prenatal care (after the 13th week of pregnancy).

Health insurance coverage for women of childbearing age impacts their access to health care services. While Florida offers Medicaid for Pregnancy for pregnant women under 185 percent of the federal poverty level, these women often lack insurance during the critical pre- and interconception periods. During pregnancy, many women experience delays in applying for coverage or approval. Late prenatal care is more common among Medicaid clients – 70 percent of women with late or no prenatal care used Medicaid to cover their delivery.

Access to health care facilities varies greatly in the region. While the more urban Duval County has the highest rate of obstetricians and pediatricians, more rural counties have fewer (like Nassau County) or none (like Baker County). Even within Duval County, offices and clinics tend to cluster around hospitals, leaving OB deserts – particularly in zip codes 32210 and 32218, which lead the county in infant deaths.
There is also a disparity in access to hospital care, including labor and delivery, intensive care and specialty care. Baker, Nassau and St. Johns counties each have one hospital. There are no delivering facilities in Baker County.

**Early or No Prenatal Care by Delivery Payment Source, 2017**

<table>
<thead>
<tr>
<th>Payment Source</th>
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<tbody>
<tr>
<td>Medicaid</td>
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<td>Private Insurance</td>
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**Source:** Florida CHARTS

**Healthy Start Screen Now Serves as Gateway to an Array of Home-Visiting Services**

The Healthy Start screen has always been a gateway to important home-visiting services through the Healthy Start and Healthy Families programs, but a new statewide Coordinated Intake & Referral process that went into effect in 2018 now allows the screen to connect families with an array of services to ensure babies are healthy. However, lower screening rates may impact a family’s ability to access to not only Healthy Start, but a myriad of home-visiting programs that can impact family outcomes in the region.

Florida state statute requires the universal Healthy Start risk assessment screen to be offered to all pregnant women at their first prenatal care visit and all infants at delivery. The screen assesses a family’s risk of a poor birth outcome or infant death. It is also used as a referral into Healthy Start, and more recently, as a conduit into all home-visiting programs in a county.

The implementation of Coordinated Intake has increased the importance of screening, but regionally, screening has not been consistent and misses many families. The regional prenatal screening rates dropped significantly in 2017-18 – from 73 percent the previous year to 59 percent. Thirty percent of pregnant women in the region did not have either a declined or completed screen – meaning they were not offered the chance to complete the screen. Of the women who were offered, 83 percent completed the risk assessment screen. Eighty-seven percent of infants were screened after delivery, compared to 95 percent statewide.

Staff from the Coalition and Healthy Start subcontractors regularly provide outreach and education to both prenatal care providers and delivering facilities.

**Coalition Approves New Service Delivery Plan**

The Coalition completed a new five-year Service Delivery Plan in June that aligns with our three main areas of focus – saving babies, strengthening families and building communities – and integrates a life course framework, with a heavy focus on health equity and the social determinants of health. The Coalition membership approved the plan, which has been submitted to the Florida Department of Health for final approval. The plan includes goals and strategies to reduce infant mortality, prematurity, prenatal smoking, lack of prenatal care and health disparities.
Slavery marked the start of inequality between blacks and whites in America since 1619. In 1814, Zephaniah Kingsley brought slaves to pick Sea Island cotton, boil sugar cane, plant indigo and more on a 32,000-acre plantation in Jacksonville. Each Make a Difference! Leadership Academy class visits the plantation to identify the link between discrimination and historically poor health outcomes like high infant mortality rates in black communities.

The Leadership Academy is a 16-week course on grassroots leadership instructing individuals in the community to advocate for necessary changes that contribute to socioeconomic status, health disparities and birth outcomes. The Coalition launched the initiative in 2012 to change the trajectory of a community through the individuals trained and assisted in the development of a Community Action Plan.

In the leadership classes taught to the group, they learn about the social determinants of health and discuss weathering—the cumulative socioeconomic disadvantages of black women attributing to physical deterioration of the body which results in poor birth outcomes. Since 2013, the class added a field trip to the Kingsley Plantation as a historical presentation of how and why these disadvantages exist.

When the Leadership Academy enters the plantation visitor center, they receive a half-hour history lesson on the difficult farming conditions the laborers endured in the hot sun, carrying heavy burlap sacks of crops. Then the group does a tour of the plantation – the kitchen, the owner’s house, the garden and the slave quarters, which slaves made by mixing cooked oyster shells mixed with sand and water to make a cement paste called tabby.

Demetria Drayton, a Leadership Academy participant, believes that the plantation was left in place so that the journey the slaves took can be examined by future generations. “Looking in the past will soothe your troubled mind from all the unanswered questions,” Demetria expressed. “Even when everything seems to fail, look at your ancestors who suffered and believe that we are blessed only through the sweat and blood they shed to get us where we are today!”

Employment Initiative

Employment and income play a large role in a family’s ability to be self-sufficient, access resources and be healthy. Several Coalition initiatives have incorporated employment training to prepare moms and dads for the workforce.

Participants from the Magnolia Project and Fatherhood PRIDE programs took part in the Generation USA Jax Retail Career Advancement program in Spring 2018. Graduates in the Retail Career Advancement program completed an intensive six-week program that integrates technical training along with behavioral and mindset skills. After completing the program successfully, students often seek job interviews for management positions.

The Healthy Families Jacksonville launched the Pathway to Your Career pilot program in August 2018, allowing women to learn professional skills that guide them on the path to providing for their families. The initiative allows women to receive one-on-one career coaching, an Individual Career Plan and a 10-week customer service and soft skills training program that incorporates preparation to earn industry-recognized certifications. Pathway to Your Career is in partnership with LDW Group, LLC.

Social Determinants of Health Play Significant Role in Birth Outcomes

While a mother’s preconception and prenatal health is critical to ensuring every baby has a healthy start in life, addressing the social determinants of health across the life course plays a large role in impacting fetal/infant deaths and disparities in birth outcomes.

According to Healthy People 2020, the social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning and quality-of-life outcomes and risks. Examples include housing, poverty, unemployment, crime and racism. Healthy People 2020 offers a “place-based” organizing framework, for addressing five key areas of the social determinants, including: economic stability, education, social and community context, health and health care, and neighborhood and built environment.

Medical care alone will not reduce fetal and infant mortality. There must be an effort to eliminate underlying societal and structural root causes of poor birth outcomes to achieve health equity and ensure all babies live to celebrate their first birthday.
CONTRIBUTING FACTORS

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STRENGTHS

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SOCIAL DETERMINANTS OF HEALTH

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<td>Emotional stressors</td>
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Source: July 2017-June 2018 FIMR Case Reviews. N= 28
*Multiple factors may be present in individual cases

CASE REVIEW TEAM RECOMMENDATIONS 2018-19:

1. The Case Review Team chose to capitalize on a strength in order to address an opportunity. One-third of the cases had less than a high school education, but 100 percent identified a support system. It is likely that many of the cases reviewed looked to their support system for advice on pregnancy and parenting. Considering the data, it is recommended to develop an “organic impact” program that educates peers and other lay people in the community to share education regarding pregnancy and parenting, especially safe sleep practices. NEF HSC previously had a similar program (Make a Noise, Make a Difference), we will should examine the program for appropriateness and update with current information. Sources for peers/lay persons include: childcare centers, barber shops/hair salons, sororities/fraternities, masons, shriners and college alumni organizations.

2. In the cases reviewed, less than half of the pregnant woman received prenatal care in the first trimester, despite being insured. A recurring theme in the cases is the difficulty many have establishing timely Medicaid, obtaining referrals from their MCOs and accessing Medicaid transportation. A key theme is “self-advocacy” and the team suggests a program to teach self-advocacy. A program is available through the Healthy Start Coalition, however most case management/home-visiting agencies are unfamiliar with it. The team asks that home visitation agencies receive education regarding referral into the Make a Difference! Leadership Academy to help foster self-advocacy.

3. The team recommends more social media outreach regarding safe sleep especially geared to young women and male partners, through Facebook, Twitter, Instagram and Snap Chat. This is a low cost, high impact intervention. In addition, it is recommended that flyers be added to mailers such as those in the electric bill, which would reach populations who receive their bills in the mail, possibly the older, grandparent, demographic.

2017-18 CASE REVIEW TEAM

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