

Community Partners in Evaluation and Change

Reflections on a Quarter-Century Evaluation of an Intervention Project Addressing Racial Disparities in Health Outcomes

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Abstract

Over the past quarter-century, The Magnolia Project has served a section of “the Northwest Corridor” of Jacksonville, FL, providing reproductive and well-woman care and intensive case management to reduce infant mortality in the African American community. During this time, the primary focus for Magnolia has been to provide clinic-based well-woman care, prenatal care, support groups, and case management through a store-front site in the heart of the target area. As new opportunities for funding became available, Magnolia moved from its “traditional” focus of women who come to, or are referred to, the clinic site to a broad-based community-wide focus to address the underlying symptoms affecting the community’s health and the disparities this community faces. The authors have been involved in the discussion, design, and implementation of Magnolia throughout the past 25 years, literally “sitting around the table” working on the original program proposal. In this paper, we reflect on our role as evaluation partners for the Magnolia Project and discuss how program representatives and staff, other evaluation partners, and community partners joined forces over the past 25 years to implement the Magnolia Project and how they made a difference in their community. The lessons learned from this process are

informative to other programs seeking to expand their community impact through partnering with university-based researchers.

Keywords: birth outcomes, community-based research, infant mortality, interconception, preconception

1. Program Background

Infant mortality is defined by the death of an infant prior to their first birthday. The infant mortality rate, the number of infant deaths per 1,000 live births, offers insight into the maternal and infant health of a population and is a key health indicator (Centers for Disease Control and Prevention 2022). The United States has the highest infant mortality rate among high-income countries despite spending the most money on health care (Gunja et al. 2023). With that in mind, reducing the rate of infant deaths has been a major objective for Healthy People since its inception in 1980 (U.S. Department of Health and Human Services 1980). Historically, Jacksonville/Duval County in Northeast Florida has experienced higher infant mortality rates than the nation and state averages (Northeast Florida Healthy Start Coalition, Inc. 2018). These poor rates have been driven primarily by the wide racial disparities between Black and white birth outcomes (Northeast Florida Healthy Start Coalition, Inc. 1998, 2018). For example, the three-year rolling infant mortality rate for Black Duval County residents was more than double that of their white counterparts: 15.1 Black infant deaths per 1,000, compared to 7.3 infant deaths per 1,000 live births for whites from 1991 to 1993 (Florida Department of Health n.d.).

In 1991, Florida statute established 32 community-based non-profit organizations, including The Northeast Florida Healthy Start Coalition, Inc. (Coalition), to combat infant mortality and promote child development (Brady & Johnson 2014). The Coalition received state and other funding to provide comprehensive services for at-risk pregnant women and infants including care coordination, education and support, and risk reduction (Brady & Johnson 2014). Despite the additional funding and efforts, Duval County did not experience the same gains in birth outcomes during the mid-90s as other Florida urban areas (Brady & Johnson 2014; Northeast Florida Healthy Start

Coalition, Inc. 1998). The Coalition reviewed findings from its Fetal and Infant Mortality Review (FIMR) project and examined community data using the Perinatal Periods of Risk (PPOR) to better understand the needs of the community in terms of preventing infant mortality (see Table 1). The analyses found the highest infant mortality rates for Black women in Duval County to be among infants with very low birthweight (less than 1,500 grams), highlighting the impact of maternal health on local birth outcomes (Brady & Johnson 2014; Northeast Florida Healthy Start Coalition, Inc. 1998, 2018). While it was found that there were sufficient prenatal services available to at-risk Black women, few services were available during pre- and interconception to address poor birth outcome risks (Northeast Florida Healthy Start Coalition, Inc. 2018). As a result, the Coalition sought and was granted federal Healthy Start funding to fill this gap in services and decrease racial disparities in birth outcomes with the Magnolia Project, a pre- and interconceptional initiative (Brady & Johnson 2014; Northeast Florida Healthy Start Coalition, Inc. 1998, 2018).

Table 1: Fetal and Infant Death by Period of Risk

	Late Fetal Deaths (>27 Weeks Gestation)	Early Neonatal Deaths (<7 Days)	Late Neonatal Deaths (7-28 Days)	Postneonatal Deaths (28-364 Days)
Very Low Birthweight <1,500g	MATERNAL HEALTH			
Low Birthweight 1,500g-2,499g	MATERNAL CARE	NEWBORN CARE	INFANT	
Normal Birthweight 2,500g+			CARE	

Source: Dr. Brian McCarthy, U.S. Centers for Disease Control, U.S. Department of Health and Human Services in Northeast Florida Healthy Start Coalition, Inc., 1998.

2. Program Model

Program Models of Intervention

While federal Healthy Start programs had been focused on prenatal services and programs, the Coalition proposed a pre- and interconception model. As a result of their award, the Magnolia Project became the first federally funded Healthy Start program to use such a model, which is now incorporated in all Healthy Start programs (U.S. Department of Health and Human Services 2018). The original Magnolia Project implemented five Healthy Start Models of Intervention at the individual and community level: 1) consortium; 2) care coordination and case management; 3) enhanced clinical services; 4) outreach and client recruitment; and 5) risk prevention and reduction (Northeast Florida Healthy Start Coalition, Inc. 1998). While there have been some changes along the way, these models of intervention have remained integral components of the Magnolia Project for nearly 25 years.

The models of intervention offered a comprehensive approach with complementary goals to the overall project mission. The goal of the consortium was to increase neighborhood awareness of and involvement in improving maternal health and reducing infant mortality within existing infrastructures which would support the success and sustainability of the project (Northeast Florida Healthy Start Coalition, Inc. 1998). The Coalition established the consortium which included two groups of individuals: the Coalition and a Community Council. The Coalition consisted of volunteers from the area representing various sectors such as health care, housing, government, and business and provided governance and decision-making for the consortium (Will et al. 2005). Many of these organizations represented were partners, formal and informal, with the Magnolia Project. The Community Council was composed of neighborhood residents, some of whom had been Magnolia participants, and community leaders. The Council served an advisory role, providing assistance and input for program services, and bridging the project to the target area residents (Northeast Florida Healthy Start Coalition, Inc. 2014; Will et al. 2005). The consortium

has transformed over the years and is not identified by name in the current model, but community involvement, capacity and collective impact surrounding infant mortality reduction remain a focus of the Magnolia Project.

The second model of intervention, care coordination and case management, aimed to increase the availability of such services to at-risk women pre- and interconceptionally who were not eligible elsewhere because they were not pregnant (Northeast Florida Healthy Start Coalition, Inc. 1998). Case management services were implemented within the context of risk reduction (Northeast Florida Healthy Start Coalition, Inc. 1998). Magnolia Project staff conducted assessments to identify risks for poor birth outcomes and develop a care and goal plan in collaboration with the client to address and resolve their risks (Biermann et al. 2006). Clients received education and services, directly and through community agency referrals, as well as follow-up and support (Northeast Florida Healthy Start Coalition, Inc. 2018; Will et al. 2005). These services were delivered face-to-face in a variety of locations including the Magnolia clinic, participants' homes, and other community sites. The duration of these services was individualized based on the needs of the participant (Northeast Florida Healthy Start Coalition, Inc. 2018) with a goal to maintain the services for one year or until risks were resolved (Northeast Florida Healthy Start Coalition, Inc. n.d. -b).

Intensive case management with a higher number of touch points was provided to women who have more than one of the following factors putting them at increased risk of poor birth outcome or infant death: (a) a previous fetal or infant loss or low birthweight baby, (b) pregnancy before 15 years old, (c) no access to health care, (d) substance abuse, (e) psychosocial problems (abused as a child, partner violence, depression), (f) repeated STDs, and (g) referred by health or social service agencies (Biermann et al. 2006; Northeast Florida Healthy Start Coalition, Inc. n.d. -b; Will et al. 2005).

Enhanced clinical services, another model of intervention used by the Magnolia Project, aimed to increase the accessibility and availability of well-woman and prenatal health care to the at-risk population who face barriers to such services (Northeast Florida

Healthy Start Coalition, Inc. 1998). The primary strategy deployed by the program was a community storefront clinic where participants received well-woman care, family planning services, prenatal care, and health education (Northeast Florida Healthy Start Coalition, Inc. 2018; Will et al. 2005). Other strategies for enhancing clinical services included outreach screenings and “mini-health clinics” at community sites (such as community centers, churches, and public housing complexes) and limited in-home services (Northeast Florida Healthy Start Coalition, Inc. 1998). Approaches to enhance clinic services were also aimed so that women were more likely to use them. Strategies included extending clinic hours to evenings and/or weekends, designing clinics to be more user-friendly, and improving cultural sensitivity and customer satisfaction (Northeast Florida Healthy Start Coalition, Inc. n.d. -a).

The Coalition recognized early on the need to incorporate outreach and clinic recruitment, another model of intervention for the Magnolia Project, to identify women in the area in need of their services and engage the community in their efforts to reduce infant mortality (Northeast Florida Healthy Start Coalition, Inc. 1998). They understood the targeted women would be a challenge to reach and would require special outreach strategies rather than relying solely upon community health care and social support programs for referrals (Northeast Florida Healthy Start Coalition, Inc. 1998). The Coalition also believed it was important that Magnolia outreach staff mirrored the racial characteristics and cultural mores of the project area (Northeast Florida Healthy Start Coalition, Inc. 1998).

Outreach and recruitment took place in three primary ways. Individuals were identified at community health fairs and events, through community health and social service provider referrals, and through community awareness outreach (Northeast Florida Healthy Start Coalition, Inc. n.d. -b, 1998, 2004). Outreach staff visited and shared information about the Magnolia Project at a variety of community locations frequented by the target population, including housing complexes, laundromats, churches, grocery stores, beauty and nail salons, bus stations, nightclubs, and other gathering places (Northeast Florida Healthy Start Coalition, Inc. n.d. -b, 1998, 2004).

Promotional materials such as coupons for free or low-cost health exams, point of sales displays, key chains, magnets, and pencils were distributed as part of the outreach efforts. The outreach team also coordinated community health fairs where free pregnancy tests and health screenings were offered (Northeast Florida Healthy Start Coalition, Inc. n.d. -b). Free pregnancy tests were offered on a walk-in basis at the clinic and community sites, making it one of the most successful approaches for the Magnolia Project (Northeast Florida Healthy Start Coalition, Inc. n.d. -b). In the early years of the program, an outreach campaign was implemented at local nightclubs which included posters displayed in bathroom stalls, coasters, and other promotional items (Northeast Florida Healthy Start Coalition, Inc. n.d. -b). A survey of Magnolia participants from the first grant cycle (1999-2001) found that more than one-third heard about the program through outreach or advertisement (Northeast Florida Healthy Start Coalition, Inc. n.d. -b). While outreach remained important for recruitment, most participants were learning about the program through word of mouth from other clients once the program was established within the community (Northeast Florida Healthy Start Coalition, Inc. 2005).

Magnolia services were provided within the context of risk prevention and reduction, the final original model of intervention (Northeast Florida Healthy Start Coalition, Inc. 1998). These risk reduction services were focused on the prevention, reduction, or elimination of preconceptional stressors or behaviors that impact birth outcomes (Northeast Florida Healthy Start Coalition, Inc. n.d. -a, 1998). Some of the project area's risk factors identified through FIMR and other community data include STDs and other infections, birth spacing, substance use, douching, and healthy lifestyle factors such as poor nutrition and unsafe sex practices (Northeast Florida Healthy Start Coalition, Inc. 2005). Risk reduction strategies were delivered within care coordination and case management through education and services provided directly or through a community partner referral (Northeast Florida Healthy Start Coalition, Inc. 2018). Risk reduction is another model that is no longer identified by name in the current Magnolia Project but is still implemented.

Target Population

With a pre- and interconceptional focus aimed at decreasing racial disparities, the primary target population (and the population ultimately served) for the Magnolia Project included Black women of childbearing ages 15 to 44 who were not pregnant but were likely to become pregnant and at risk for poor birth outcomes (Biermann et al. 2006; Northeast Florida Healthy Start Coalition, Inc. 1998). The Magnolia Project also served a relatively small number of prenatal women and additional neighborhood subpopulations (such as men and children) through the grant cycles, which are discussed later. Overall, Magnolia met the primary program targets.

The Coalition identified a five-zip code area of the city to provide the Magnolia Project services. At the time, this project area accounted for over half of the Black infant mortalities in the city (Northeast Florida Healthy Start Coalition, Inc. 1998). During 1993–1995, the annual average infant mortality rate for the project area was 16.7 deaths per 1,000 live births (Northeast Florida Healthy Start Coalition, Inc. 1998). Women in the childbearing age range were at risk because the area was characterized by social and economic problems such as:

- High crime rates – violent crime was four times the city average
- Low income – with an average of 59% of Black children below the poverty level
- Low educational attainment – 36.5% had less than a high school degree (Northeast Florida Healthy Start Coalition, Inc. 1998)

High rates of drug and tobacco use, HIV/AIDS, and STDs also indicated the women were at an elevated risk of poor birth outcomes (Northeast Florida Healthy Start Coalition, Inc. 1998). While the statistics have fluctuated slightly over the years, the Magnolia Project area remains well behind the rest of the city.

The five zip codes remained part of the primary target area until the most recent grant cycle beginning in 2019 (a zip code was added in 2014). The application for 2019–2024 funding proposed keeping only two of the original zip codes and targeting two additional zip codes in another area of town. Since the five zip codes were a primary

targeted area for much of the program to date, this paper uses the five zip codes as the project area when examining infant mortality rates discussed later.

Unique Program Characteristics

The Magnolia Project has been a forerunner in the field of maternal health over the past two decades and unique in a number of ways. Foremost, Magnolia chose to focus on preconceptional care and services to address poor birth outcomes and infant mortality at a time when other programs primarily provided prenatal interventions. After Magnolia's inception, national Healthy Start programs began to incorporate preconceptional services in their programs. Magnolia has also stood out from other national Healthy Start programs by including a clinic within its model, which was not a typical component of national Healthy Start programs.

Another unique approach adopted by the Magnolia Project was the engagement of resident leaders and community-based organizations who assisted with community awareness and education (Biermann et al. 2006). The Coalition acknowledged the vital importance of including the community in the formation and implementation of the project from the beginning. The Magnolia Project was built with the belief that individuals and organizations within a community can collaborate, design, and execute services tailored for their families. This community-based model empowered the community to produce comprehensive services that were culturally sensitive and family-centered (Northeast Florida Healthy Start Coalition, Inc. n.d. -a). These initial acknowledgements and attempts to include the community and existing organizations laid a foundation for the project to become a longstanding institution within the community.

Residents and leaders within the target neighborhood have been invited to participate in a variety of ways over the past quarter-century. As discussed, the Community Council included residents who planned program activities and served an advisory role. The Community Council has changed names and roles over the years, but residents and participants continue to have a place at the table providing their perspective and expertise. In more recent years,

the Magnolia Project has developed a Community Action Network (CAN). The CAN is composed of project participants, community members, community-based organizations, service providers, and others (Northeast Florida Healthy Start Coalition, Inc. 2018). The CAN collaborates to develop and implement a community action plan that will impact the community and reduce infant mortality (Northeast Florida Healthy Start Coalition, Inc. 2018). The CAN performs a significant role in community education, awareness, and health promotion activities of the project (Northeast Florida Healthy Start Coalition, Inc. 2018).

Another current avenue for residents to become more involved is through the Make a Difference! Leadership Academy. Developed by the Magnolia Project, the Leadership Academy aims to strengthen the self-advocacy skills of Magnolia Project participants and support their community involvement to address factors that affect the health and quality of life of their neighborhood (Northeast Florida Healthy Start Coalition, Inc. 2014). Graduates of the Academy are recruited to become members of the CAN, continuing their engagement (Northeast Florida Healthy Start Coalition, Inc. 2018).

In addition to Magnolia's unique emphasis on pre- and interconceptional care and the inclusion of residential leaders and agencies, the project has been a leader in infant mortality intervention due to their advanced attention to community factors and social determinants of health. In addition to health behaviors, the Magnolia Project incorporated education at the individual and community level pertaining to the impacts of social determinants of health (Brady & Johnson 2014), including poverty, racism, educational attainment, and unplanned pregnancies (Northeast Florida Healthy Start Coalition, Inc. 2018). The Magnolia Project addressed social determinants of health at a time when CDC "Recommendations to Improve Pre-conception Health and Health Care" were limited to indicators associated with public health behaviors and experiences such as tobacco and alcohol use, and health conditions including diabetes and asthma (p. 387). According to Livingood et al. (2010), the focus on social determinants of health differentiated Magnolia case management from other Health Start programming. As a result

of their work confronting social determinants of health impacting birth outcomes and the health and well-being of their community, the Magnolia Project and Coalition became recognized leaders among their colleagues working in the maternal health field (Northeast Florida Healthy Start Coalition, Inc. 2018).

Program Changes Over the Years

The Magnolia Project has maintained its primary goal of decreasing Black infant mortality and its core interventions for nearly a quarter of a century, however, there have been changes over the years. Some changes have been in response to grant requirements, while others were due to lessons learned and made to better serve the neighborhood.

Like the vast majority of non-profit programs, the Magnolia Project's funding sources have dictated the required aspects of the program. The project's primary funding source has been federal Healthy Start funding and it has operated under multiple cycles spanning almost 25 years. Each new funding cycle brought about changes to the program.

An overall pattern that emerged over the years was the degree to which the local program developed its program goals and collected data. What originally was only a local evaluation transformed into a hybrid system where universal data elements (benchmarks) were created and implemented through standardized Healthy Start screening tools (U.S. Department of Health and Human Services 2018). During the initial grant periods, the program had greater autonomy in determining its program goals and objectives and the local evaluation data was collected and stored on-site. As the years progressed, the federal Healthy Start program eventually standardized most program goals and the data required to be collected across grantees. Rather than storing data on-site, benchmark data was uploaded onto Healthy Start servers.

Some examples of changes towards standardized program goals implemented by the federal Healthy Start include the addition of targeted populations. In 2014, programs were required to serve 1,900 prenatal women over the five-year grant cycle (Northeast

Florida Healthy Start Coalition, Inc. 2014). Although focused on pre- and interconceptional women, the Magnolia Project has always served a small number of pregnant women over the years. The new requisite meant the project had to shift some focus to meet the required number of prenatal women. The 2014 grant also required programs to support and collect information on any children (up to 24 months) of participants (U.S. Department of Health and Human Services 2014). For example, projects had to collect data related to the number of children breastfed and receiving well-child visits. The next grant funding cycle brought an additional population to Healthy Start programs – men or male partners. Like the mandate of serving prenatal women, Magnolia had always served or included men to some degree, but the new grant cycle necessitated a goal of 100 men served (U.S. Department of Health and Human Services 2018). Other changes to improve the program included enhanced screenings and targeted curriculum. Depression screening as a separate component became mandatory in 2014 and counseling services were provided as part of a full-time staff's duties.

Not all program changes were mandated by the grant funders. Some modifications were made as lessons were learned and to improve the program and better serve the neighborhood. One particular example is the focus on outreach. The project spent a relatively large amount of time, energy, and resources, including full-time staff positions, on outreach during the initial years of the program. As the Magnolia Project gained traction and trust in the community, less attention was required by staff and word-of-mouth became a reliable source for recruitment. Outreach staff were then able to conduct pre-screenings and become more integrated into case management.

3. Participants Served and Satisfaction

Over the past nearly 25 years, the Magnolia Project has served and reached tens of thousands of neighborhood residents, sometimes across multiple family generations. As seen in Table 2, the Magnolia clinic has served approximately 13,000 women, an average of over 2,000 per grant cycle. Case management was delivered to

approximately 7,000 women over the years. From 2001 to 2014, the project averaged about 400 case management participants per grant cycle. The noticeable increase in the number of case management clients beginning in 2014 to 2019 reflects the required numbers to be served implemented by the federal Healthy Start funding previously discussed. The Magnolia Project has held over 4,000 outreach events and reached more than 40,000 residents over the six grant periods. The program numbers reported are per grant cycle and may have some duplication across grant years; therefore, totals are only estimates.

Table 2: Magnolia Project Clients Served and Outreach Efforts

	Clinic	Case Management	Outreach Events	Outreach Contacts
1999-2001	644	218	65	403
2001-2005	3252	388	900	7240
2005-2009	2247	393	834	10559
2009-2014	2723	432	1393	13265
2014-2019	2316	3179	1107	9749
2019-2024 ¹	1925	2473		
Total ²	13107	7083		

Source: Magnolia Database

Over the years, Magnolia Project participants have overwhelmingly reported high levels of satisfaction with clinic and case management services through anonymous surveys. Participants have also indicated that they have found clinic staff to be friendly and helpful and they would recommend the clinic to others.

Participant surveys of both the clinic and case management were conducted each year as part of the evaluation process to assess their views and experiences at the Magnolia Project. The clinic surveys focused on the physical building and process, health care decisions made with the provider, and health education effectiveness. The case management surveys attempted to understand the role the

1 Numbers as of June 2023.

2 Numbers served and contacts may have some duplicates across grant years.

case manager played in improving the participants' situation. Both touched on why or why not Magnolia was good for the community and if they would recommend it to other community members.

The results of surveys were extremely consistent across grant periods. For the clinic, most participants (over 90%) overwhelmingly agreed that the workers were both friendly and helpful and the health education they received was useful. Further, they trusted the provider, felt comfortable asking questions, and that the providers helped them make good decisions about their health care. When it came to evaluating the case managers, the participants again expressed overwhelming agreement about the care they received. The participants felt the case managers understood their needs, taught them how to handle problems, and actively sought solutions the participants could achieve. There was near universal agreement in recommending the Magnolia Project to other women in the community.

4. Infant Mortality Trends

A primary goal of the Magnolia Project has always been to decrease infant mortality rates among Black infants, and to bring the rate closer to that of white babies. To obtain a consistent picture of the infant mortality trends occurring since the implementation of the Magnolia Project, we examined rates for the original five zip codes that have remained a part of the primary target area until the most recent grant cycle beginning in 2020. As seen in Figure 1, the Black infant mortality rate for the primary area averaged around 20 per 1,000 live births from 1997 to 2006. While there was a temporary decrease in 2002, the downward trend took hold in 2006 and went as low as 7.4 per 1,000 in 2014. Although the rates rose after 2014, the overall trend for Black infants in the neighborhood between 1997 and 2021 has been a decline. The number of births impacts infant mortality rates; smaller numbers will have more variability than larger numbers of births. This can be seen in the primary project area rates in Figure 1. Due to the small number of whites residing in the primary area, county infant mortality rates for whites were used to compare to the project area. The overall trend among whites in Duval

County between 1997 and 2021 has also been downward, beginning at 7.8 per 1,000 and ending at just 3.1 per 1,000. Comparing the two trend lines, one can see that Black infant mortality rates in the project area decreased more so than whites at the county level, closing the gap between white and Black birth outcomes.

Primary Area, Black and Duval County, White

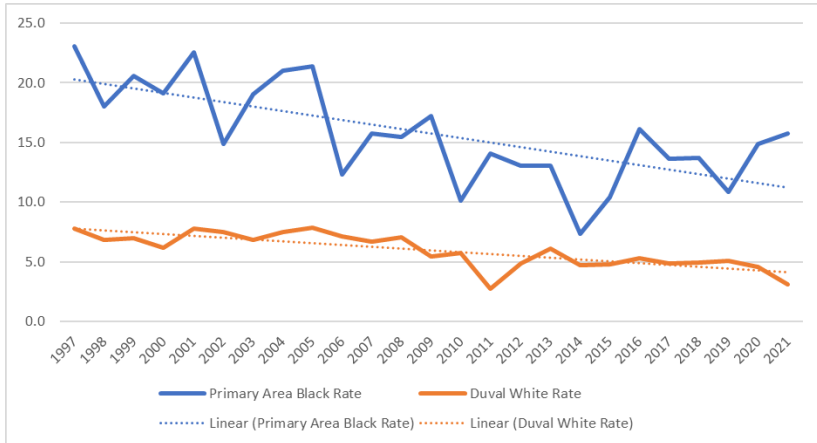


Fig. 1: Infant Mortality Rates, 1997–2021

Source: Florida Department of Health (n.d.)

5. Lessons Learned

The Magnolia Project executive staff and the evaluation team have identified a number of lessons learned over the years. Many of these were in regard to partnerships with other organizations, program identity, staff, program participants, and the evaluation. The Magnolia Project staff recognized early on the significant work required to sustain a successful collaboration after the initial excitement wears off among the partners (Northeast Florida Healthy Start Coalition, Inc. n.d. –b). Oftentimes, there were good intentions between organizations when partnerships were formed. However, it is in the best interests of all involved to have clearly defined roles and responsibilities and to ensure these expectations are met (Northeast Florida Healthy Start Coalition, Inc. n.d. –d). Executive

staff also acknowledged that a close working relationship between the federal, state, and local Healthy Start programs was beneficial and strengthened the efforts in the state (Northeast Florida Healthy Start Coalition, Inc. 2005).

Project staff believed that program identity contributed significantly to the success of the early years of the program (Northeast Florida Healthy Start Coalition, Inc. n.d. -b). Establishing a single site fostered project identification, as well as shared goals and dedication among the staff (Northeast Florida Healthy Start Coalition, Inc. n.d. -b). Magnolia executive staff affirmed that participants' insights should be regarded from the beginning of all projects and productive community involvement necessitates support and resources (Northeast Florida Healthy Start Coalition, Inc. n.d. -b, n.d. -d). Word of mouth became a powerful outreach tool as Magnolia became established in the community (Northeast Florida Healthy Start Coalition, Inc. n.d. -b).

The executive staff and evaluation team learned some valuable lessons regarding the program evaluation and their relationship over the years as well. In the planning phase, it became apparent that the involvement of the evaluation team was beneficial in assisting with creating the program objectives and designing data collection instruments. This ensured that the objectives were measurable and collected appropriately. On the other hand, the planning team initially had a "might as well collect this information" perspective when developing the data instruments and ended up with multiple lengthy forms. These instruments caused an unnecessary burden on participants as well as staff and were consequently shortened to accurately reflect the program objectives and benchmarks. Program staff who were responsible for data collection were an essential aspect of the evaluation. Program staff must take ownership and be committed to the program evaluation to ensure complete and accurate data is gathered (Northeast Florida Healthy Start Coalition, Inc. n.d. -b).

The evaluation team must also be included and act as an integral part of the project to ensure data quality and proactively report and correct data-related issues (Northeast Florida Healthy Start Coalition,

Inc. 2005). Finally, the Magnolia Project has operated over multiple funding cycles spanning nearly a quarter of a century. Each new funding cycle brought about changes to the program and evaluation, requiring the evaluation team to be flexible and adapt to the changes and shifting responsibilities.

6. Summary

The Magnolia Project has been in operation for nearly a quarter of a century and has served and reached tens of thousands of neighborhood residents, sometimes across multiple family generations. While the model components have had various names and been realigned differently, The Magnolia Project has always been a comprehensive pre- and interconceptional program aimed at reducing infant mortality rates, particularly among Black babies. The Project has always provided the core services of education, well-woman care, case management, and community development/capacity building aimed at both the individual and community level. A variety of program characteristics, including the focus on pre- and interconceptional and social determinants of health factors and the inclusion of neighborhood leaders and residents, distinguished it from other infant mortality reduction programs.

The Magnolia Project has been identified as a promising pre-conceptional care program positively impacting birth outcomes and related factors of the target population. In particular, the Magnolia Project was successful in resolving/managing a number of risk factors through case management, including the number of births of low birthweight, reduced infant mortality, longer interconception periods, and lower STD rates (Biermann et al. 2006; Livingood et al. 2010; Will et al. 2005)

The long-term outcome of lowering infant mortality rates among Black babies is a lofty goal and one that is a challenge to measure for multiple reasons. Foremost, a rigorous longitudinal impact evaluation would be required to make a direct correlation between the program and infant mortality rates. Such evaluations are relatively resource-intensive and time-consuming. Furthermore, infant mortality rate is a challenging outcome to impact, particularly for Magnolia. While

researchers have reported positive program outcomes for Magnolia participants, they concede that affecting infant mortality rates would be difficult to measure due to the relatively small reach (Biermann et al. 2006) and large cohort required to measure a statistically significant decline in infant mortality rates (Livingood et al. 2010). In addition, as Livingood et al. (2010) acknowledged, the conundrum for the Magnolia Project lies partly in that the program aims to delay pregnancies for better birth outcomes, reducing the actual population needed to capture statistical significance.

More longitudinal evaluations are needed to determine the impact of preconception intervention on pregnancy outcomes. Longitudinal evaluations are not easily incorporated into service delivery projects that rely on short-term outcomes for continued funding. (Biermann et al. 2006, p.27)

That said, area infant mortality rates have declined over the years for both Black and white babies since the implementation of the Magnolia Project. Even more promising, Black infant mortality rates in the project area decreased more so than whites at the county level, closing the gap between white and Black birth outcomes. While data is not available to link these decreases directly to the efforts of the Magnolia Project, we can infer that the project has had a positive impact on the health of women at high risk for poor birth outcomes.

Part of the success of the Magnolia Project lies in the partnerships it built and sustained over the years, an essential component for the success of any program aimed at positively impacting a community. These partnerships began early in the development of the program involving community agencies and residents. Many project staff were from the community and wove the program into the community fabric through outreach and recruitment. As a result of the Coalition's work and long-term commitment, the Magnolia Project has become an established and trusted institution within the community as well as among colleagues in maternal health.

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