

# Journal of Applied Research on Children: Informing Policy for Children at Risk

Volume 5

Issue 1 *Family Well-Being and Social Environments*

Article 18

2014

## Impacting Maternal and Prenatal Care Together: A Collaborative Effort to Improve Birth Outcomes

Jamie Freeny

*Harris Health System, jamie.freeny@harrishealth.org*

Angela Cummings

*The University of Texas School of Public Health, angielloyd2727@gmail.com*

Margo Hillard Alford

*Harris Health System, margo.hilliardalford@harrishealth.org*

June Hanke

*Harris Health System, june.hanke@harrishealth.org*

Linda Lloyd

*University of Texas School of Public Health, linda.e.lloyd@uth.tmc.edu*

*See next page for additional authors*

Follow this and additional works at: <http://digitalcommons.library.tmc.edu/childrenatrisk>

### Recommended Citation

Freeny, Jamie; Cummings, Angela; Hillard Alford, Margo; Hanke, June; Lloyd, Linda; and Boswell, Deborah (2014) "Impacting Maternal and Prenatal Care Together: A Collaborative Effort to Improve Birth Outcomes," *Journal of Applied Research on Children: Informing Policy for Children at Risk*: Vol. 5: Iss. 1, Article 18.

Available at: <http://digitalcommons.library.tmc.edu/childrenatrisk/vol5/iss1/18>

The *Journal of Applied Research on Children* is brought to you for free and open access by CHILDREN AT RISK at DigitalCommons@The Texas Medical Center. It has a "cc by-nc-nd" Creative Commons license" (Attribution Non-Commercial No Derivatives) For more information, please contact [digitalcommons@exch.library.tmc.edu](mailto:digitalcommons@exch.library.tmc.edu)

---

# Impacting Maternal and Prenatal Care Together: A Collaborative Effort to Improve Birth Outcomes

## **Authors**

Jamie Freeny, Angela Cummings, Margo Hillard Alford, June Hanke, Linda Lloyd, and Deborah Boswell

## Introduction

A collaborative approach is being utilized in Harris County, Texas to improve birth outcomes by mobilizing community partnerships to address these issues on multiple levels. The Impacting Maternal and Prenatal Care Together (IMPACT) Collaborative of Harris County is an example of a community-based partnership with members from many organizations working together to improve birth outcomes through better maternal health and access to prenatal care. “A collaborative partnership [collaborative] is an alliance among people and organizations from multiple sectors, such as schools and businesses, working together to achieve a common purpose.”<sup>1,2(p369)</sup> Collaborative partnerships are “one of the most promising approaches in public health”<sup>1</sup> as organizations are able to combine efforts and leverage resources to improve population health.<sup>6,7</sup>

Regardless of the cause around which the collaboration was formed, “the distinguishing feature of collaborative partnerships for community health is broad community engagement in creating and sustaining conditions that promote and maintain behaviors associated with widespread health and well-being.”<sup>8(pp369-370)</sup>

## **Birth Outcomes in Harris County, Texas**

Birth outcome data in Harris County, TX, have driven a collaborative partnership to address the issues to preterm birth, infant mortality, and pregnancy related mortality. There are approximately 71,000 births to Harris County residents each year. Despite millions of dollars spent on maternal and child health services in Harris County,<sup>9</sup> maternal/infant health statistics have not improved, and have actually worsened. Preterm births increased from 9.4% to 13.5% (2000-2007), infant mortality rates ranged from 5.4 to 6.8 per 1,000 live births (2001-2007),<sup>10</sup> pregnancy related mortality ratios based on aggregate data doubled from 11.2 (1999-2001) to 23.5/100,000 births (2005-2007), and only 52.4% of Harris County births received prenatal care in the first trimester of pregnancy.<sup>11</sup> The statistics are worse in low income communities. The factors contributing to poor birth outcomes are complex and the costs to families and the community are burdensome, such that one agency or organization alone cannot address all of the issues. The IMPACT Collaborative allows organizations to combine forces and leverage resources<sup>6,7</sup> to tackle issues no individual organization can handle alone.

## **Impacting Maternal and Prenatal Care Together Collaborative**

The Impacting Maternal and Prenatal Care Together (IMPACT) Collaborative represents an alliance among approximately 40 organizations working to better maternal health and prenatal care to improve birth outcomes. Spearheaded by the Harris Health System, the IMPACT Collaborative came into existence in June 2010. During initial meetings, Collaborative members met “to learn about the status of maternal and infant health, share ideas, and achieve a unified commitment to improve maternity care, interconception care, and birth outcomes in Harris County” (Harris Health System Community Outreach Services, Healthy Texas Babies grant application, 2011). The IMPACT Collaborative is governed by the Steering Committee and the leaders of four action groups.

The purpose of this article is to describe the process of the formation and efforts of the first three years of the IMPACT Collaborative. IMPACT members are working at multiple levels, from education and counseling to promoting legislative policy<sup>12</sup> to improve birth outcomes in Harris County, Texas.

## **Methods**

### **Communicating the Message**

Initial efforts by executive leadership of the community services division of a local healthcare system aimed to increase awareness of the health status of mothers and infants and elevate these issues to a public health priority at the county level. The statistics alone were staggering, however graphs showing only state and city data were not garnering enough attention. To generate more responsiveness, geographic information system (GIS) mapping was used.<sup>13</sup> The GIS maps were used to show how infant mortality rates and preterm birth rates varied among Harris County communities at the zip code level. Using the zip code maps, presentations were made to community-based resource groups, including local health coalitions, local health systems, and local nurses associations to increase awareness about the prevalence of adverse birth outcomes at the community level.

### **Initial Planning Meeting**

In May 2010, a collaborative stakeholder meeting was called by a small workgroup. Attendees brainstormed the barriers, system challenges, and other underlying issues that were leading to poor birth outcomes. During this meeting four priority areas were identified as critical to creating

sustainable solutions: Quality of Care/Service Delivery, Public Awareness, Resource Enrollment, and Legislative Advocacy. A SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats)<sup>14</sup> was completed for each priority area. Experts in each area gathered evidence supporting the identified problems and potential solutions to present at the collaborative stakeholder meeting and additional stakeholders were identified and invited to the first collaborative meeting.

### **Impacting Maternal and Prenatal Care Together Collaborative Formed**

The first IMPACT Collaborative meeting was held in June 2010. It began with an overview of the prevalence of infant mortality, preterm births, prenatal care, and maternal mortality in Harris County. The presentations highlighted problems/concerns in each of the four priority areas identified in the planning meeting. Attendees completed action cards that compiled their contact information, interest in serving on the steering committee, their priority area of interest, and their feedback.

### **Steering Committee**

The Steering Committee (SC) was formed at the planning meeting. It became the central/governing body of the IMPACT Collaborative. The

purpose of the SC is to discuss maternal and child health disparities research and issues, identify best practice interventions and measures, explore funding opportunities, share resources, promote ongoing communication among members, plan full IMPACT Collaborative meetings, and continue to generate interest and obtain stakeholder commitment. This collaborative structure has allowed for the continued involvement and participation of multiple organizations and individuals, from executives to students. The action groups have continued their efforts and the collaborative was able to obtain grant funding for the implementation of community-based intervention.

### **Results**

The June 2010 IMPACT Collaborative meeting had 124 attendees representing 53 organizations in 7 major sectors. Table 1 displays the 53 organizations according to sector.

**Table 1.** Attendance by Sector at First IMPACT Meeting

Sector	# of Organizations Represented
Healthcare Systems	11
Health Plans	6
Community Health Centers	7
Non Profit Agencies/Programs	14
Government	9
Academia	3
Faith Based Organizations	3



Attendees completed action cards indicating their willingness and/or interest in joining the Steering Committee and/or working on one of the four identified priority areas. Over 80 action cards were received, resulting in the formation of the four action groups. Table 2 displays the number of action cards received for each priority area.

**Table 2.** Action Card Responses from June 2012 IMPACT Collaborative Meeting Attendees

Areas of Interest	# of Responses
Steering Committee	28
Quality of Care/Service Delivery	26
Public Awareness	43
Resource Enrollment	19
Legislative Advocacy	27

Since June 2010, the IMPACT Collaborative has held six meetings with an average attendance of 50 people. These meetings provide updates on action groups, activities, and collaborative efforts. Presenters provide information on local and national maternal and child health initiatives and programs, updates on legislative efforts, discuss evidence based programs and best practice protocols, and share opportunities and requests for partnership.

## **Steering Committee**

The SC is made up of approximately 20 organizational peers and is a combination of administrative staff, service providers, and community liaisons that have a professional or personal interest in at least one of the four action groups. Since May 2010, the SC has met on a monthly basis to review, monitor, and prioritize programs and provide guidance on the overall strategic direction of the Collaborative.

## **Action Groups**

The four priority action groups meet independently as needed to work on the strategies identified for that area. The leaders of each action group provide updates to the SC and receive logistical assistance and program planning support.

**Service Delivery/Quality of Care** The Service Delivery / Quality of Care group works to develop methods to identify pregnant women with high-risk conditions and facilitate their access to services, including prenatal, interconception, and post-partum care. The group is partnering with the March of Dimes on the *Healthy Babies Are Worth the Wait*<sup>15</sup> and *Go Before You Show* campaigns.

**Public Awareness** Public Awareness is hosting stakeholder meetings in targeted zip code areas to engage leaders and residents in dialogue about what is needed to eliminate health disparities, and to gain support and direction as to how to best reach women of child bearing age in that zip code. The education forums also provide an opportunity to raise awareness about the IMPACT Collaborative and share resources provided by Collaborative members.

**Resource Enrollment** Resource Enrollment identified barriers that women face when enrolling in Medicaid to receive prenatal care. The group developed an outreach program, *IMPACT Families*, that partners with local organizations to bring resources to women in communities at risk for adverse birth outcomes. The goals of this program are to provide on-site application assistance, health education, screenings, and referral for obstetric prenatal care visits to pregnant women in need of a medical home. To date, these reoccurring events have served over 300 women in our target zip codes.

**Legislative Advocacy** The Legislative Advocacy action group worked to advocate and subsequently successfully champion the passage of Senate Bill 495 by the Texas 83rd Legislature for creation of a Maternal Mortality and Morbidity Task Force to study and recommend how to reduce pregnancy related deaths and maternal morbidity in Texas. The

Legislative Advocacy group also partnered with Amnesty International and The Motherhood Center to host A Mother's Day Panel Discussion and Poetry Reading in support of the federal bill, the Maternal Health Accountability Act of 2011.

### **Women with Impact**

With funding from the Texas Department of State Health Services (DSHS) Healthy Texas Babies initiative, the Collaborative implemented a modified version of an evidence-based program, Strong Healthy Women (SHW),<sup>16-18</sup> renamed, Women With IMPACT (WWI). WWI aims to reduce preterm birth and infant mortality rates by improving the physical and psychological health of non-pregnant, African American women 18–35 in high risk communities in Harris County through preconception and interconception health education and referrals to care.

### **Discussion**

The Centers for Disease Control and Prevention (CDC) and the Prevention Institute both promote the utilization of coalitions in community health efforts.<sup>3-5</sup> IMPACT is an example of a collaborative using data, key informants, and community input to drive its actions. The IMPACT Collaborative strives to implement evidence-based practices to improve

birth outcomes. In terms of its success as a collaborative, IMPACT's efforts to date are aligned with the eight steps for successful collaboration outlined by the Prevention Institute.<sup>5</sup> To *discuss and analyze the group's objectives and determine coalition need(s)* [step 1],<sup>5</sup> strategic planning tools are utilized to determine SMART (Specific, Measurable, Attainable, Realistic, Timely) goals, objectives, activities, resources, measures of success, short and long-term outcomes, and projected completion dates. IMPACT *recruits the right people* [step 2]<sup>5</sup> by ensuring that there are representatives from the community, healthcare providers, governmental and non-governmental organizations, health departments, local universities, and others who have an interest in improving birth outcomes in Harris County. IMPACT illustrated its ability to *adopt more detailed activities and objectives suiting the needs, interests, strengths and diversity of the membership* [step 3]<sup>5</sup> through its iterative formation process, creation of workgroups, and community-based activities. *Collaborative members convene* [step 4]<sup>5</sup> on a regular basis with monthly Steering Committee meetings workgroup meetings as-needed, and (bi)annual full-collaborative meetings. *A budget was developed and agency resources and needs were mapped* [step 5]<sup>5</sup> (or identified) for the Healthy Texas Babies grant application – different agencies are contributing to the program, based on their area of expertise, i.e.

marketing materials, program evaluation skills, identification of community sites, etc. Early in the process, IMPACT's *structure was devised* [step 6]<sup>5</sup> through the creation of the Steering Committee and workgroups. Current efforts for *planning and ensuring the collaborative's vitality* [step 7]<sup>5</sup> include seeking grant funding to continue WWI after the initial funding period is over, and utilizing the Health Impact Pyramid Framework<sup>12</sup> to assess current efforts and identify gaps in programs/services/policies related to improving birth outcomes. Though it will take time to measure improvements in birth outcomes in Harris County, the IMPACT Collaborative is currently evaluating the WWI program and the collaborative itself to *drive improvements as necessary* [step 8].<sup>5</sup>

### **Conclusion**

Multi-sector community-based organizations, community leaders, and lay community members recognize that a community is only as healthy as its mothers and babies. The developmental process of the IMPACT Collaborative demonstrates a way to mobilize these community stakeholders in efforts to address adverse birth outcomes and build sustainable solutions.

## References

1. Varda D, Shoup JA, Miller S. A systematic review of collaboration and network research in the public affairs literature: Implications for public health practice and research. *Am J Public Health*. 2012;102(3):564-71.
2. Harrell JA, Baker EL. The essential services of public health. *Leadership in Public Health*. 1994;3(3):27-30.
3. Butterfoss F. Evaluating partnerships to prevent and manage chronic disease. *Prev Chronic Dis*. 2009;6(2):A64.
4. Centers for Disease Control and Prevention. Best practices for comprehensive tobacco control programs: User guide: Coalitions. [ftp://ftp.cdc.gov/pub/fda/fda/user\\_guide.pdf](ftp://ftp.cdc.gov/pub/fda/fda/user_guide.pdf). Accessed October 15, 2012.
5. Cohen L, Baer N, Satterwhite P. Developing effective coalitions: An eight step guide. In: Wurzbach ME, ed. *Community health education and promotion: A guide to program design and evaluation*. Second ed. Gaithersburg, MD: Aspen Publishers, Inc.; 2002:144-161. <http://thrive.preventioninstitute.org/pdf/eightstep.pdf>. Accessed October 5, 2012.
6. Butterfoss FD, Goodman RM, Wandersman A. Community coalitions for prevention and health promotion. *Health Educ Res*. 1993;8(3):315-330.

7. Granner ML, Sharpe PA. Evaluating community coalition characteristics and functioning: A summary of measurement tools. *Health Educ Res.* 2004;19(5):514-532.
8. Roussos ST, Fawcett SB. A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health.* 2000;21(1):369-402.
9. Research Team, Strategic Decision Support, Health and Human Services Commission. Medicaid FFS/PCCM & HMO cost for Harris County deliveries by DRG code for CY2006-CY2009. 2010. Data source: AHQP Claims Universe, TMHP; Client Universe, TMHP. Filename: Newborn cost by birth type for CY2006-CY2009.xls.
10. Texas Department of State Health Services (DSHS). Texas infant mortality rates. Texas Department of State Health Services, Vital Statistics, Texas Infant Mortality Rates Web site. <http://soupfin.tdh.state.tx.us/imr.htm>. Updated 2012. Accessed November 1, 2012.
11. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying causes of death 1999-2010. CDC Wonder Web site. <http://wonder.cdc.gov/ucd-icd10.html>. Updated 2012. Accessed November 1, 2012.



12. Association of Maternal and Child Health Programs. Forging a comprehensive initiative to improve birth outcomes and reduce infant mortality: Policy and program options for state planning.

<http://www.amchp.org/programsandtopics/womens-health/Focus%20Areas/improvingbirthoutcomes/infant-mortality/Documents/AMCHP%20Birth%20Outcomes%20Compendium%202012.pdf> Published July 2012. Accessed August 3, 2012.

13. Environmental Systems Research Institute, Inc. What is GIS? Geographic information systems. ESRI Understanding Our World Web site. <http://www.esri.com/what-is-gis>. Accessed October 1, 2012.

14. Renault V. SWOT analysis: Strengths, weaknesses, opportunities, and threats. The Community Toolbox Web site. [http://ctb.ku.edu/en/tablecontents/sub\\_section\\_main\\_1049.aspx](http://ctb.ku.edu/en/tablecontents/sub_section_main_1049.aspx). Updated 2012. Accessed April 30, 2010.

15. March of Dimes. Healthy babies are worth the wait. March of Dimes - Professionals - Medical Resources Web site. [http://www.marchofdimes.com/professionals/medicalresources\\_hbww.html](http://www.marchofdimes.com/professionals/medicalresources_hbww.html). Updated 2012. Accessed October 1, 2012.

16. Downs DS, Feinberg M, Hillemeier MM, et al. Design of the central Pennsylvania women's health study (CePAWHS) strong healthy women

intervention: Improving preconceptional health. *Matern Child Health J.* 2009;13(1):18-28.

17. Hillemeier MM, Downs DS, Feinberg ME, et al. Improving women's preconceptional health: Findings from a randomized trial of the Strong Healthy Women intervention in the central Pennsylvania women's health study. *Womens Health Issues.* 2008;18(6 Suppl):S87-96.

18. Weisman CS, Hillemeier MM, Downs DS, et al. Improving women's preconceptional health: Long-term effects of the Strong Healthy Women behavior change intervention in the central Pennsylvania women's health study. *Womens Health Issues.* 2011;21(4):265-271.