Designing a Biopsychosocial Care Model for High-Risk Maternity Patients

Signature Medical Group's Approach

**Domain:** Patient Centeredness  
**Category:** Whole Person Orientation  
**Competency:** PC.4.1 Provide continuity of care in a way that organizes services around the individual’s physical, emotional, & social needs

### BACKGROUND

When CMMI announced a funding opportunity to test the effectiveness of enhanced prenatal care approaches for high-risk Medicaid beneficiaries in 2012, Signature Medical Group (SMG) saw value in participation for its nearly 40 OB/GYN physicians and a population in need. After receiving the award for the 4-year “Strong Start for Mothers and Newborns Initiative,” SMG met with its physicians to strategize the new model’s design. While confident in their ability to provide high-quality medical care, SMG identified a general lack of social supports available to expecting mothers. To address this, SMG decided to build a full biopsychosocial maternity care home model using a trauma-informed approach to address influencers and stressors negatively impacting healthy outcomes during and post-pregnancy.

### APPROACH

To build this biopsychosocial care model, SMG recognized the need to further develop its ability to address the psychological and social aspects of care and better understand the public health resources available in the market. To do this, SMG hired MSWs with experience treating mental health, substance abuse, and social issues within low income populations. After developing Strong Start’s internal team, SMG focused on building relationships with community partners, understanding that in order to successfully address social issues, they would have to leverage the expertise of existing organizations. SMG also noted that the list of resources given to new mothers at hospital discharge was often not vetted or regularly updated. To develop a reliable roster, Strong Start social workers went into the community and met with every not-for-profit organization related to the patient population (organizations including diaper and baby supply, farmers’ markets, FQHCs, and free furniture and laptop repairs). In these meetings, Strong Start staff introduced SMG and its new maternity care model, building relationships regardless of an immediate opportunity to collaborate. As part of this community outreach effort, Strong Start’s program director began attending the Maternal Child and Family Healthcare Coalition meetings (a local convener of community partners), even becoming the group’s secretary. Because of these early grassroots efforts, SMG’s community partners grew from 5 to nearly 300.

After gaining the expertise of new staff and community partners, SMG began implementing the model. Rather than deploying across all 40 of the group’s OB/GYNs, SMG started small with the goal to meet physicians where they were. SMG engaged practices in Strong Start through a variety of channels, including billing departments that referred uninsured patients for Medicaid enrollment support or front office staff with questions about community resources. In the beginning, SMG looked for physicians who were eager to utilize the Strong Start program. Then, as the experiences and success of early participants spread, more physicians began utilizing Strong Start’s resources. Eventually, all of Signature’s OB/GYN offices began participating in the program.

Strong Start began by testing a multi-tiered approach to care management, looking at three models–Telephonic, Home/Community Visits, and Embedded Management–each model facilitating a deeper level of trust with the patient. SMG deployed each of these models in selected areas to compare their effectiveness before scaling across the entire system. Under the Telephonic model, patients receive access to the nurse navigator outside of regular office hours to address medical questions and triage. The Home/Community Visit model is both convenient for patients and allows the MSW care coordinator to better understand a patient’s situation and needs. The Embedded model allows an immediate and seamless handoff between physician and care coordinator. After the physician’s visit, the coordinator spends the next 30-40 minutes with the patient, reviewing the doctor’s instructions, answering questions, and discussing next steps.

Now, Strong Start leverages all three models, which can be deployed individually or in combination. To determine the best approach, social workers conduct telephonic risk assessments of patients enrolled in the program via EMR, scheduling process or community referral. The assessment includes questions from the PMAD test and the Edinburgh Scale for Depression (cont’d on back) Screening. SMG has found that, while the assessment questions are important, more crucial is the interviewer’s training and perspective. SMG then stratifies patients by psychosocial risk factors to determine which care management model(s) is best. Regardless of the model, at Strong Start’s core is a strong interdisciplinary care team made up of a nurse navigator, four MSW care coordinators, and the OB/GYN physicians, who work closely to identify root causes and connect patients with reliable support services.
**RESULTS TO DATE**

The medical group’s unique footprint has allowed Signature to test the Strong Start program in urban, suburban, and rural areas, all with success. The program has enrolled more than 2,000 women with over 1,100 live births. The program has reduced C-section rates by 23%, pre-term birth rates by 20%, and NICU utilization by 25%, saving the state of Missouri an estimated $10-15 million per 1,000 patients. Strong Start engages patients in prenatal care 2 weeks earlier, and has improved HEDIS measures ≥9 Prenatal Visits by 87% and Postpartum Visits by 88%. With this great success, SMG is now negotiating with payers a value-based payment model that would reward the provider for the program's outcomes.

**TOOLS & VENDOR PARTNERS**

After finding its early HIT platforms ineffective, SMG hired its own software developers to build homegrown systems, leveraging those costs across all its value-based programs. SMG provides all its OB/GYN physicians with monthly reports, allowing them to compare their performance with their own historical record and the performance of their peers. SMG has found data transparency is key to engaging physicians in Strong Start and is also an important tool for physician champions to guide conversations with low performers. Data includes C-section and pre-term birth rates as well as NICU length of stay. Data is collected through the care management system, EMR, and claims. Additionally, SMG found the standardization of notes within the EMR to be important to the collection and analysis of data related to behavioral and social issues.

**CHALLENGES WITH IMPLEMENTATION**

Signature experienced many difficulties designing and implementing this biopsychosocial care model, a completely new effort for the group. Generally, SMG had to make significant cultural changes and overcome false perceptions about how to engage and treat Medicaid patients. There were certain aspects of the program that SMG expected to be easier to deploy. For example, engaging physicians without financial incentives, and developing community relationships. SMG encountered difficulties tailoring communication strategies to match the various physician offices. Some preferred office manager meetings, quarterly newsletters, or office resource boards. They also had to develop different ways to communicate with patients, understanding barriers of disability, literacy, and other factors.

**KEY LEARNINGS**

- **Hire strategically** – When looking to redesign care differently, it is crucial to hire people who think differently.
- **Invest in relationships** – Grassroots community outreach takes time but is worth the investment. Rather than trying to develop resources, find partners with existing expertise.
- **Technology is just a tool** – To select/build the right technologies, you may need to start your program before purchasing in order to really understand what tools are necessary.
- **Prioritize self-care for caregivers** – To mitigate burnout and compassion fatigue, develop a comprehensive self-care program for providers and staff.

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**Contributors**

**Gerald Rupp**  
PhD, Director of Research & Payment Innovation  
Signature Medical Group

**Jim Gera**  
SVP of Business Development  
Signature Medical Group

**Maribeth Hollinshead**  
Strong Start Program Director and Nurse Navigator  
Signature Medical Group  
mhollinshead@signaturehealth.net

**Jenni Oberkrom**  
Strong Start Clinical Program Coordinator  
Signature Medical Group

**Kate de Lisle**  
CSB Program Manager  
ACLC  
katelyn.delisle@leavittpartners.com

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