

Children's Mercy Kansas City

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### Increasing the Rate of Infants Rooming in with their Mothers with Low-Acuity Congenital Heart Disease

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# Increasing the Rate of Infants Rooming in with their Mothers with Low-Acuity Congenital Heart Disease

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## Background

Nearly all infants born in Children's Mercy Fetal Health Center (FHC) are admitted to the CMH NICU, as there are not well-established guidelines for allowing infants to stay with their mothers if they have been prenatally diagnosed with low-risk congenital heart disease. Maternal/Infant Dyad bonding is important for continued infant development. NICU admissions have been associated with significant caregiver trauma. Preserving the maternal/infant dyad may encourage early bonding, foster breastfeeding and reduce trauma.

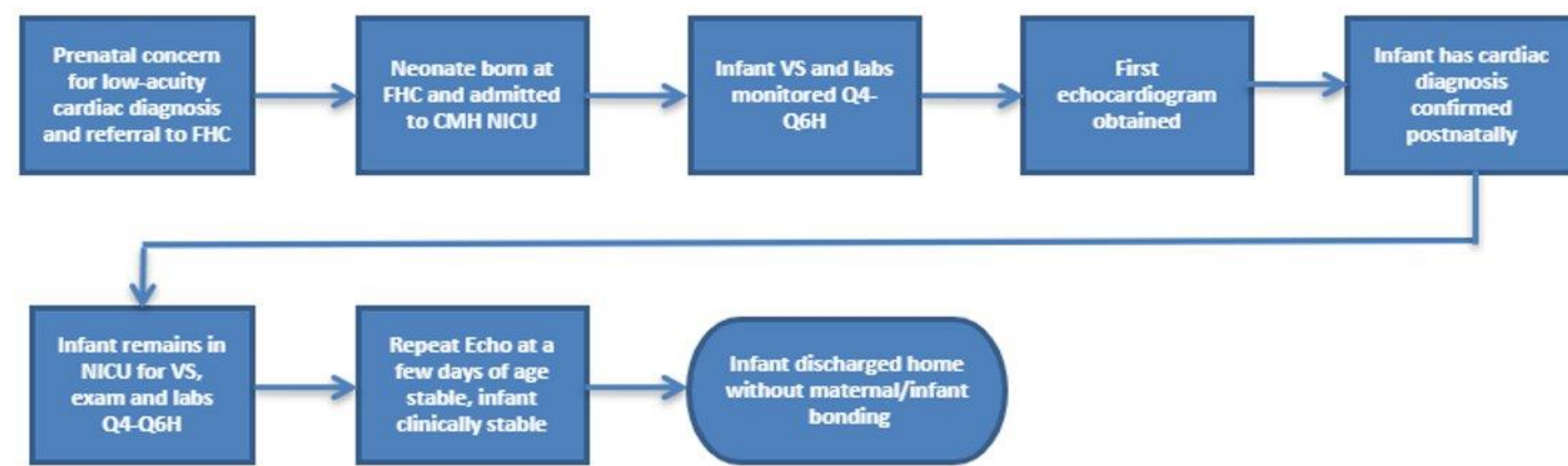


Figure 1. Process Flow Map

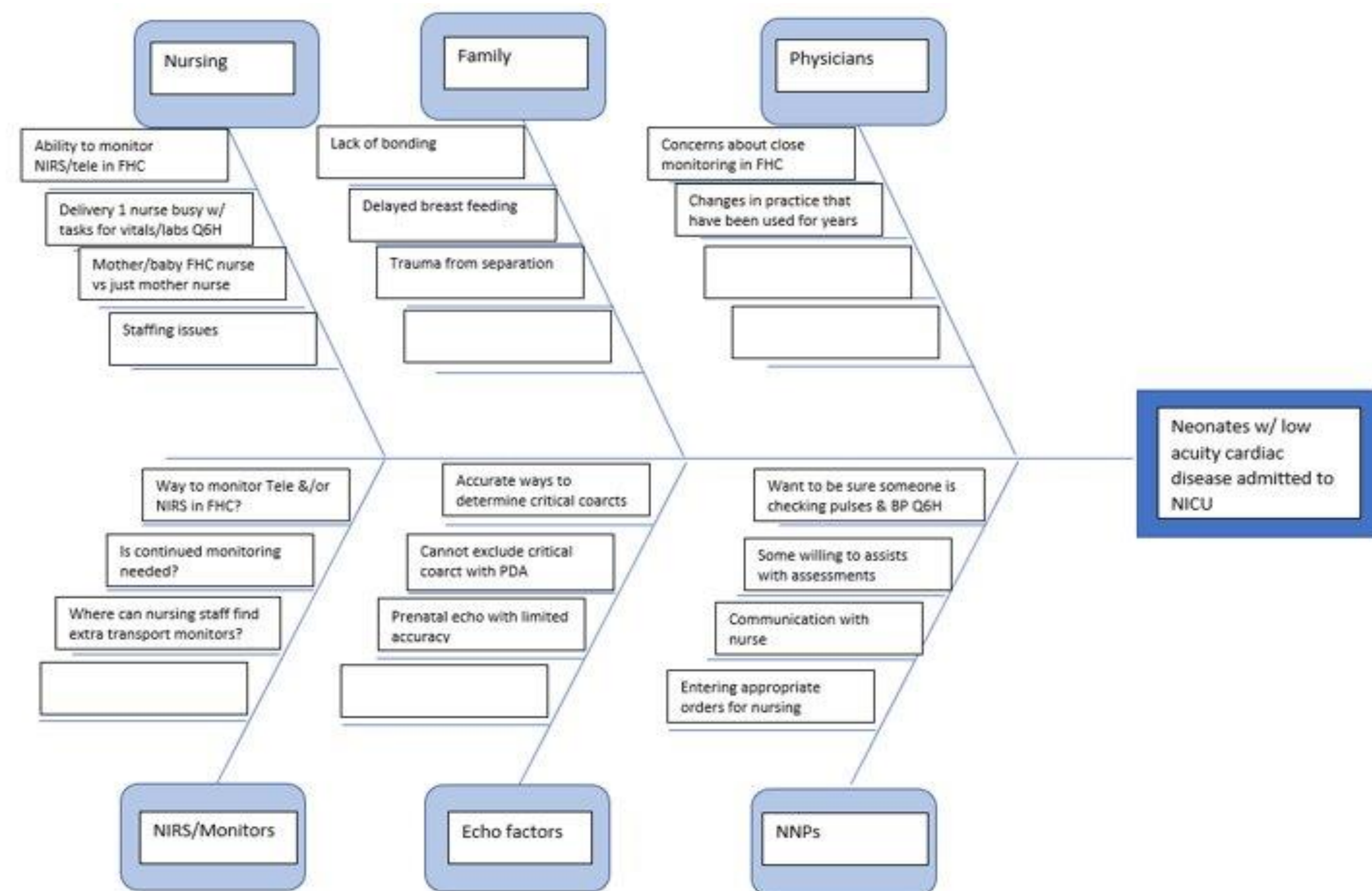


Figure 2. Fishbone Diagram

## Setting

The Fetal Health Center is a high-risk delivery center located adjacent to the Children's Mercy Level IV NICU. It delivers approximately 200 infants a year.

Difficulty/Ease of Implementation	Reliability Level	
	Low	High
Hard	<b>Kick-Out</b>	<b>Challenge</b>
	<ul style="list-style-type: none"> <li>Fetal Cardiologists to implement a severity score (low, medium, high) for all coarct watches</li> <li>Fetal Cardiologists to implement improved documentation on cardiac severity based upon diagnosis</li> </ul>	<ul style="list-style-type: none"> <li>Member of QI team to be present at all Coarct FHC deliveries</li> </ul>
Easy	<b>Possible</b>	<b>Implement</b>
	<ul style="list-style-type: none"> <li>FHC Delivery Nurses education via e-mail</li> <li>Send targeted e-mails to FHC providers, fetal cardiologists and Pink Team Neos</li> </ul>	<ul style="list-style-type: none"> <li>Follow a standardized protocol in FHC to keep patients with their mothers</li> <li>Present protocol at weekly FHC patient meetings to bring awareness to FHC Neos</li> <li>Department QI education 1/17/23</li> <li>FHC Delivery Nurses education at their March monthly meeting</li> </ul>

Figure 3. PICK Chart

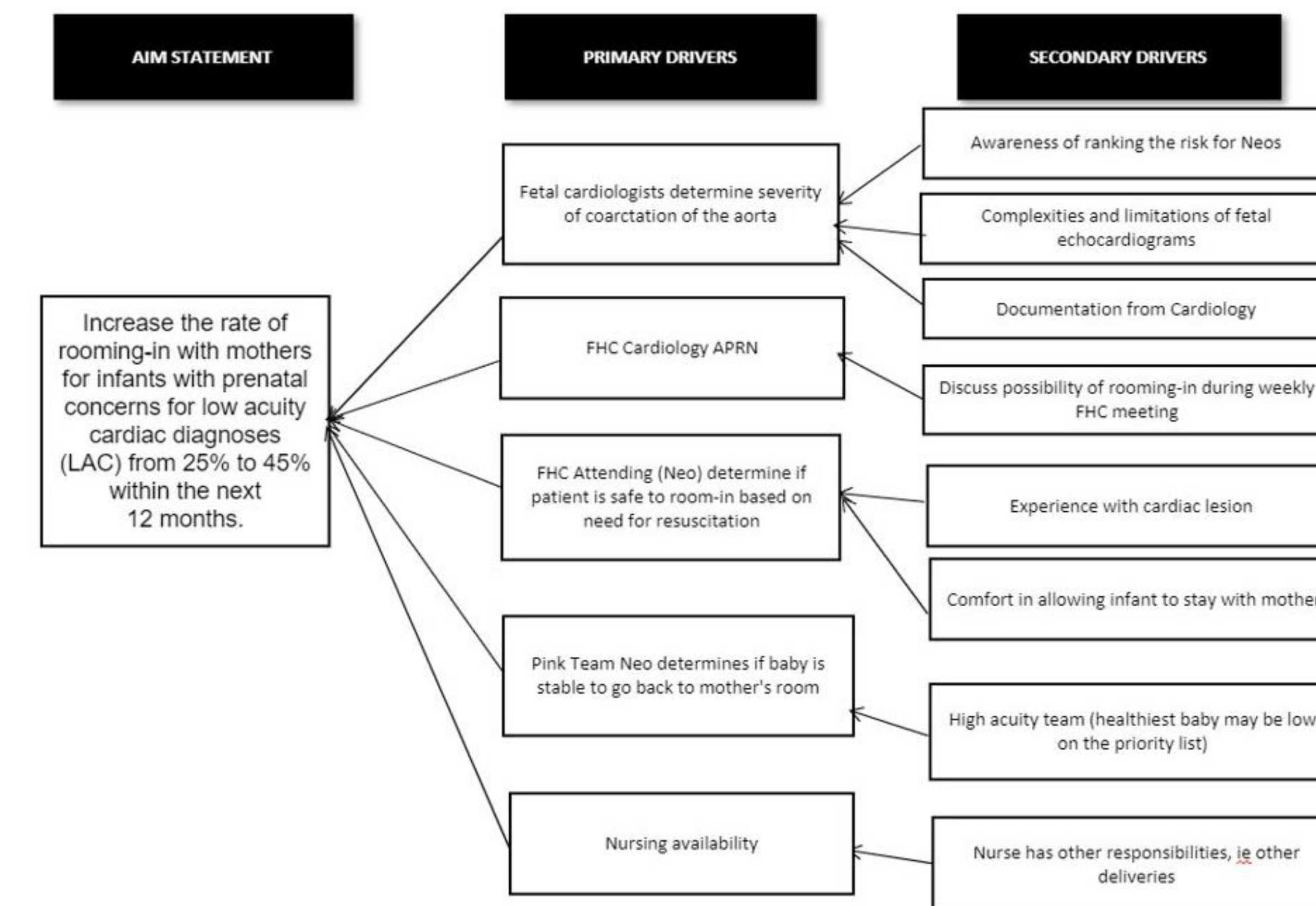


Figure 4. Driver Diagram

## Discussion

We were able to increase the number of infants with low-acuity congenital heart disease that roomed-in with their mothers in the CMH FHC without any rapid responses. Two infants that originally roomed in with their mothers did return to the NICU; one for poor feeding and another for hypoglycemia. Next steps: Continue to evaluate patients to be candidates for rooming in, surveys to nurses, providers and mothers, work with fetal cardiologist to implement severity score in prenatal notes.

## Aim

We aim to increase the rate of infants born with low acuity congenital heart disease that room-in with their mothers in the FHC from 27% to 47% by December 2023.

## Methods

Standard QI methodology was utilized to clarify the problem and monitor progress.

**PDSA 1:** Implemented a protocol to help providers identify which infants could room in and provided education.  
**PDSA 2:** The Fetal Cardiac APRN team discusses patient eligibility at weekly FHC meetings.

**Process Measures:** % of infant rooming-in with their mothers  
**Outcome Measures:** Surveys to nurses and providers  
**Balancing Measures:** Early re-admissions to NICU, Rapid Response Frequency

## Increased Rate of Infants Rooming In

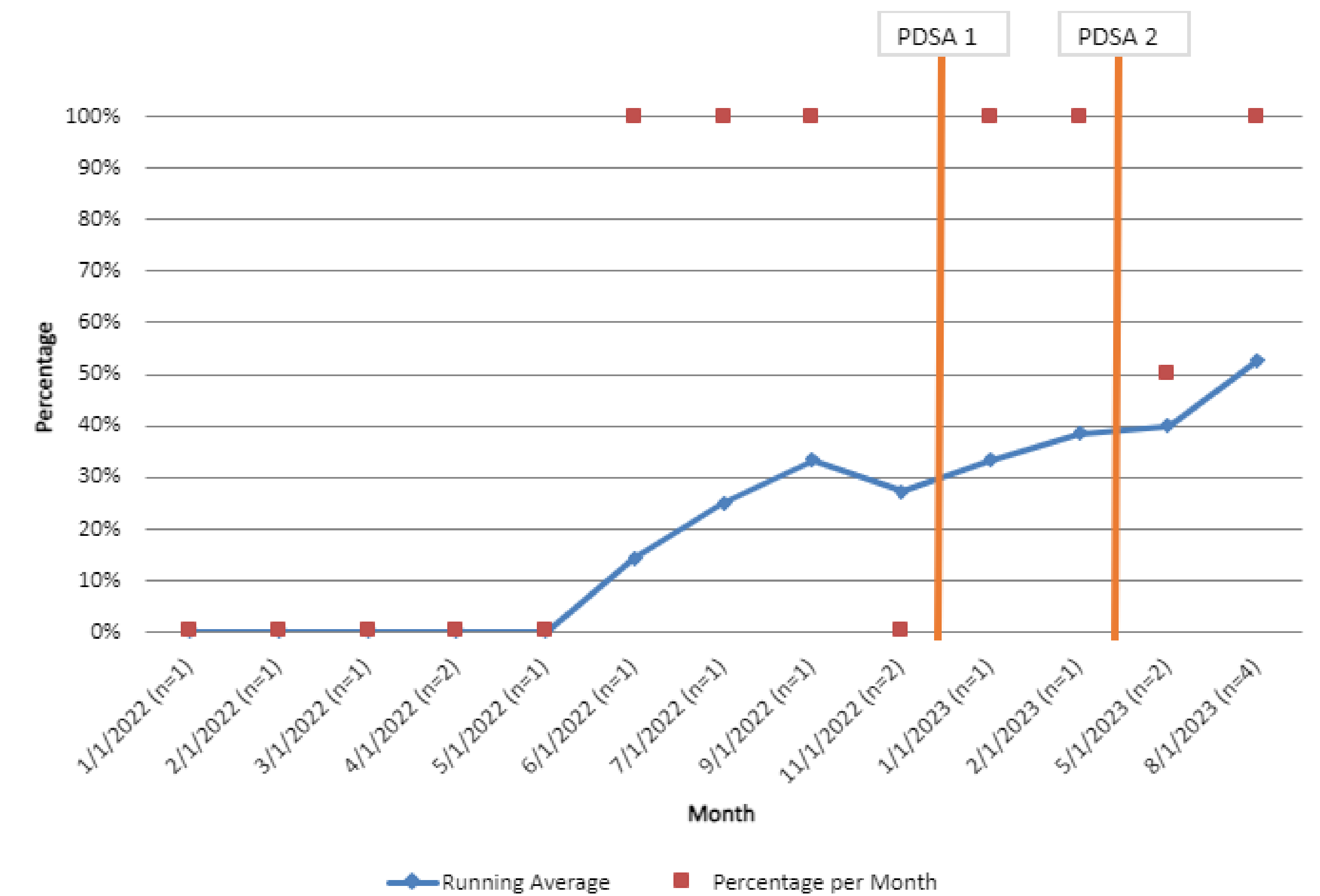


Figure 5. Run Chart