

Background

The Pitt County Health Department (PCHD) and ECU Obstetrics and Gynecology (ECU OB/GYN) collaborate to care for expectant mothers in rural eastern North Carolina. PCHD patient records are faxed at 36 weeks of gestation to hospital providers. This process hindered information sharing and increased the patient's risk for fragmented care in a patient population already at increased risk secondary to socioeconomic status. This presented a public health imperative.

AIM Statement

- **Primary Aim:** to implement a wallet-sized prenatal medical record for patients who receive prenatal care at PCHD and intend to deliver with ECU OB/GYN.
- **Secondary Aim:** to evaluate the tool and implementation strategy using quality improvement measures.

Methods

- Providers at PCHD and ECU OB/GYN completed an anonymous survey using a 5-point Likert Scale regarding perceptions of record transmission and their satisfaction with the current process.
- A root cause analysis was performed engaging a variety of stakeholders in both clinical settings.

Plan, Do, Study, Act (PDSA) cycles were conducted to:

1. Determine relevant clinical data to include on the prenatal record
2. Increase provider awareness and process buy-in
3. Secure protected health information according to the Health Information Portability and Accountability Act (HIPAA)

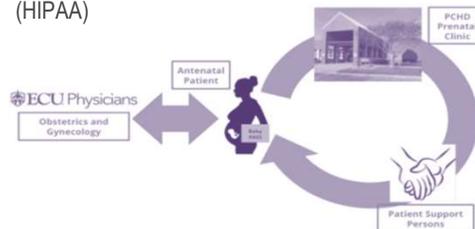


Figure 1: Points where lines of verbal medical information could be strengthened by patient use of BabyPASS.

Many thanks to the PCHD and ECU OB/GYN for their full participation; the Office of the Generalist Programs for their support with design and printing; and the Office of Student Affairs and Research Distinction Track for funding this opportunity.

Results

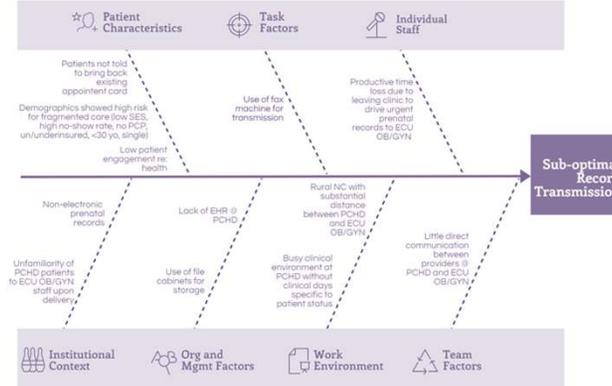


Figure 2: Root cause analysis via fishbone diagram.

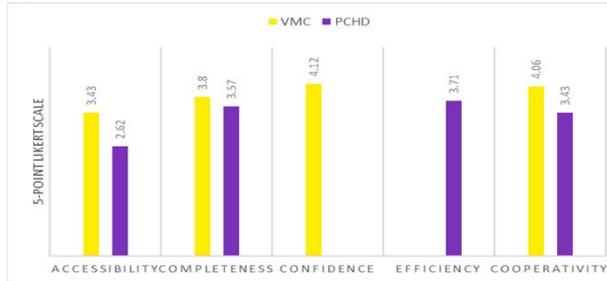


Figure 3: Results from Likert scale survey regarding perceptions of Accessibility of PCHD records, Completeness of PCHD records, ECU OB/GYN's Confidence in providing care based off PCHD records, PCHD's Efficiency in completing records, and Cooperativity between ECU OB/GYN and PCHD.

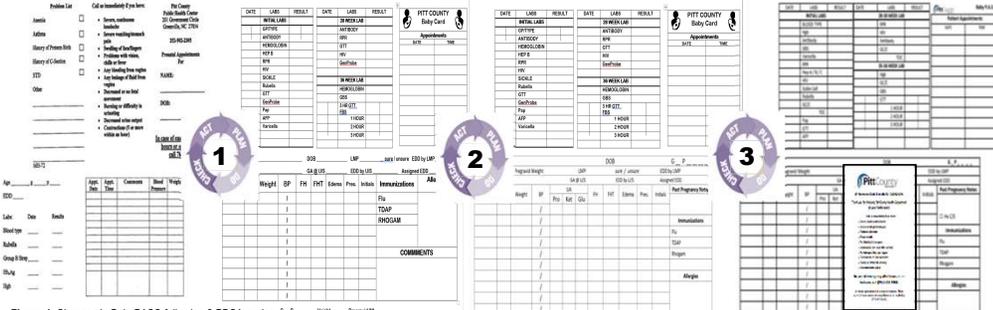


Figure 4: Changes in BabyPASS following 3 PDSA cycles.

Conclusions

The BabyPASS is an inexpensive, HIPAA-compliant tool to incorporate pertinent antenatal data into a handheld patient medical record as a process for improving antenatal handoffs. Data of particular importance included history of Cesarean section, vaccination status, and test of cure for sexually transmitted infections. Current PDSA cycles are underway to understand if this tool opens dialogue among patients and providers, increases patient empowerment through health education, and streamlines information between a rural county health department and hospital staff at a tertiary-care academic center.

Low provider satisfaction with the current process yielded goals for improvement in both environments.

The root cause analysis identified an existing tool as a change point.

- A patient-centered, wallet-sized prenatal medical record (BabyPASS) was created from the existing document to address the barriers of record transmission (**Cycle 1**)
- Feedback was given from ECU providers and the document was amended to include relevant clinical data from the prenatal record (**Cycle 2**)
- The same process was repeated with PCHD providers to increase provider awareness and reduce workflow redundancy (**Cycle 3**)

Implementation of the BabyPASS as the standard mode of communication is under way.