Information Flow and Clinical Outcomes in a Fully Functional Perinatal Continuum of Care

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Information Flow and Clinical Outcomes in a Fully Functional Perinatal Continuum of Care

Phase I
Discrete data moves from office EMR to Triage/L&D information system

Phase II
Triage Summary document moves from Triage I.S. to office EMR

Phase III
Discrete data moves from Triage/L&D I.S. to office EMR

Provider/staff safety and satisfaction surveys

- Clinical Decision Making
- More labor inductions
- Improved information availability alters clinical decision making via more labor inductions

Phase A:
- Implement EMR in paper-based practices

Phase B:
- Interface discrete data from office EMR to Triage/L&D clinical information system

Phase C:
- Interface discrete elements from Triage to office EMR GIS Flowsheet

Physicians Perceive Limited Availability of Information From Triage at Offices and Find It More Difficult to Use EMR

1. Agrees Strongly that EMR Improves 2. Agrees (Strongly Agree)

Availability of data:

- Many times a patient would be seen in Triage in the interval between their visits, and you wouldn’t even know it. So at least seeing that document brings you to say, “oh, well she was in … triage. Why was she there?”

Surveys

- Physician

Trust:

- I don’t trust anything or anyone or anything automatically flowing

Clinical Data Elements

- Group B Strep Status
- Nonstress Test

Control Variables:

- POS/NIC risk score, quartile, age, race/ethnicity, insurance type, admission type, multiple birth, pre-existing condition, non-preventable complication, c-section, instrument assisted delivery, indicators for whether clinical data elements were present in system, physician fixed effects

Conclusions

- Physicians have difficulty transitioning to EMR as main source of clinical information
- Integrated EMR does improve information availability on L&D Triage
- Improved information availability is associated (in some cases) with fewer adverse pregnancy events
  - Nonstress test, blood pressure, Antenatal problem lists have a statistically significant impact
- Improved information availability alters clinical decision making via more labor inductions

Largest academic community hospital in PA
- Largest non-Tertiary care in a region
- Certified Comprehensive Stroke Center
- Magnet hospital
- Hospital Campus
- Steps to the L&D hospital in 1 or fewer for 14 consecutive
  - Carpool: 12,125
  - Medical Staff: 1,192

Grant Information

- Award Information
  - Project Title: Data Flows & CMMB Embraces in a Perinatal Continuum of Care System
  - Grant Number: 15-25386-04171R
  - Award Amount: $200,000

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