Patient Safety Forum

Julie Everett, MD
Stacy Nguy, MD
Sarah Abla, DO

Objectives

- Perform a **system-based root cause analysis**

- Identify **one system-level intervention** to offer to leadership

Last time on PSF…

Systems Audit

- Review the case
- Identify **one outcome** to work on
- Determine the overall **cost** of this outcome
- Perform a **system-based root cause analysis**
- Pick **one systems issue** to address
- Propose **system-level interventions**
- Prioritize based on **effort-yield projections**

Case

35 yo G1P0 at 40.1 wks transferred from Dar a Luz for epidural placement for pain management and labor augmentation

Problems: GBS+, hyperemesis gravidarum, anxiety, vitD deficiency, AMA, asthma, symphysis pubis separation

Timeline

11/12

12:15-15:00 Initial exam DAL 3/100/-1, more pain with minimal cervical change

18:26 AROM at DAL performed without much progress

23:15 Arrived at UNM for pain/augmentation, birth plan

23:40 Epidural placed

11/13

00:15 4/90/0, cephalic OP**,** epidural

01:19 Pitocin started

5/80/-1 @ 09:33

6/80/-1 @ 14:06, 8/80/0 @ 18:20

9/90/0 @ 19:30, 9/90/0 @ 21:00

11/14

9.5/100/0 @ 00:30 - IUPC placed at 00:30

Fetal heart rate monitoring through this point has remained overall category I with rare early decelerations, moderate variability, +15x15 accelerations, and normal baseline.

10/100/0 @ 04:30; Pushing started @ 05:45

Day team arrives to continue pushing at 07:30, Pitocin @ 32 (max)

IUPC appears to be displaced, unknown how long

Surgical back-up called at 08:30 for minimal to no descent

Consented for pLTCS, Pitocin stopped at 09:10

pLTCS, baby girl born at 10:18

- APGAR 8/9, NICU for respiratory support
- Weaned down on CPAP to room air

QBL 1878, PPH management

- Pitocin, massage, methergine, hemabate, misoprostol, TXA
- Hysterotomy reopened to re-enter uterus, Bakri placed

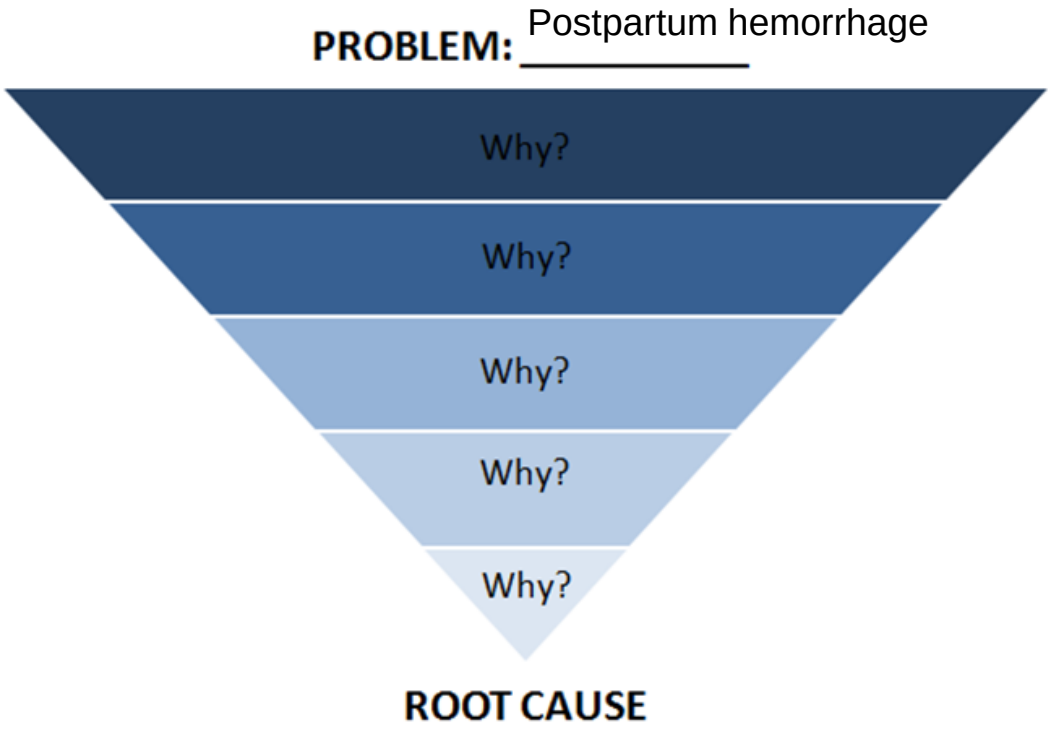
AROM > 36 hrs, Pit ~33 hrs, AOL2, pLTCS ~6 hours after, PPH with PRBCs

Outcome

Severe postpartum hemorrhage, requiring Bakri and blood products

Systems-Based Root Causes

“5 Why’s”



Potential Systems-Level Interventions?

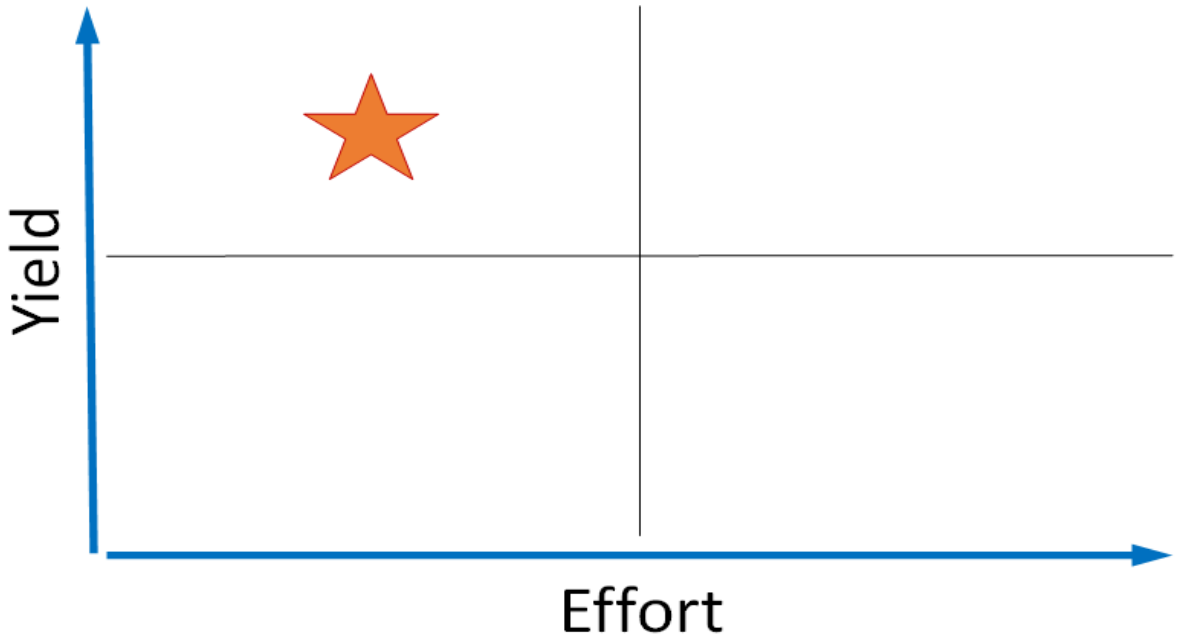
(Small Group Exercise: 5-6 people per group max – 10 min)

Think about interventions

Potential Systems-Level Interventions?

(Large Group Discussion – 5 min)

Effort vs Yield?



Our Suggested Interventions?

- Ideally 1 suggestion for clinical leadership

Objectives

- Perform a **system-based root cause analysis**

- Identify **one system-level intervention** to offer to leadership

Per the ACOG, Friedman Curve is out...

“Cesarean delivery for active phase arrest in the first stage of labor should be reserved for women at or beyond 6 cm of dilation with ruptured membranes who failed to progress despite 4 hours of adequate uterine activity (>200 Montevideo units), or at least 6 hours of oxytocin administration with inadequate uterine activity and no cervical change.”

Contemporary “dystocia” definitions for active labor:

After 6cm:

Multips (16,000 pts)

- Median 6 cm to 10 cm 1.5 hrs
- 95% percentile 5.1 hrs
- 0.5 to 1.3cm/hr

Nullips (25,000 pts)

- Median 6 cm to 10 cm 2.1 hrs
- 95% percentile 7 hrs
- 0.5 to 0.7cm/hr

References

•Szostek, Jason H., et al. "A systems approach to morbidity and mortality conference." *The American journal of medicine* 123.7 (2010): 663-668.