

Patient Safety Learning Series

Preparing for the Unpredictable in Perinatal Care

Consider the following case study...

Jane (name changed), a primipara, was scheduled for a c-section because her twins were breech. While the OR was preparing for Jane's scheduled c-section, the twins were monitored. As soon as one twin began exhibiting fetal bradycardia, Jane was immediately removed from the fetal heart rate (FHR) monitors and rushed off to the OR. The OR was still preparing for Jane's scheduled c-section and was unaware of the twins' sudden change of condition. While Jane was outside the OR, the OR team, including anesthesia, were made aware of the need for what was now an emergency c-section by both the admissions nursing team and a code alert. Yet, both the attending anesthesiologist and OB were elsewhere, and thus unaware of the fetal bradycardia. Jane was rolled into the OR and FHR monitors were reattached, searching for the twins. One twin was found while the other was not. Jane was placed under general anesthesia and the emergency c-section was performed.

In healthcare, we allocate percentages and probabilities to circumstances and outcomes. Nothing is 100% certain—that is, until it happens. While we might attribute a low probability to this event recurring, or even happening at all, the fact is that it did happen, and that contributing factors similar to those from this event (i.e. communication, teamwork, processes, rushing, etc.) occur across various specialties daily. In healthcare, our collective drive for patient safety requires that we continue to confront and manage such unpredictability. How are we anticipating and preparing for unpredictable circumstances, and how do we ensure that we perform well in our roles?

We've reviewed over three years-worth of perinatal events and their outcomes. Of the events reviewed, 75% of those that involved the mother, and occurred during the birthing process, had an outcome of either a hemorrhage or *other*. Superficially, these *other* events appear to be unique "one-offs" that do not fit into a standardized data collection, and subsequently we may judge them to have a low probability of occurrence. Yet, when we dive into these "one-offs," we see threads of similarities across these events, and on an even grander scale across our standardized data sets.

Figure 1 on the following page shows the similarities that were revealed when reviewing events that were related to the mother, the birthing process, and had an outcome of *other*. As can be seen, over 70% of the data had themes of either the provider not being present for the delivery or the delivery being a c-section. Many of the events in which a provider was not present for the delivery were related to spontaneous vaginal deliveries—in other words, unpredictable circumstances. Many of the c-section events were related to emergency c-sections being performed—again seemingly unpredictable.

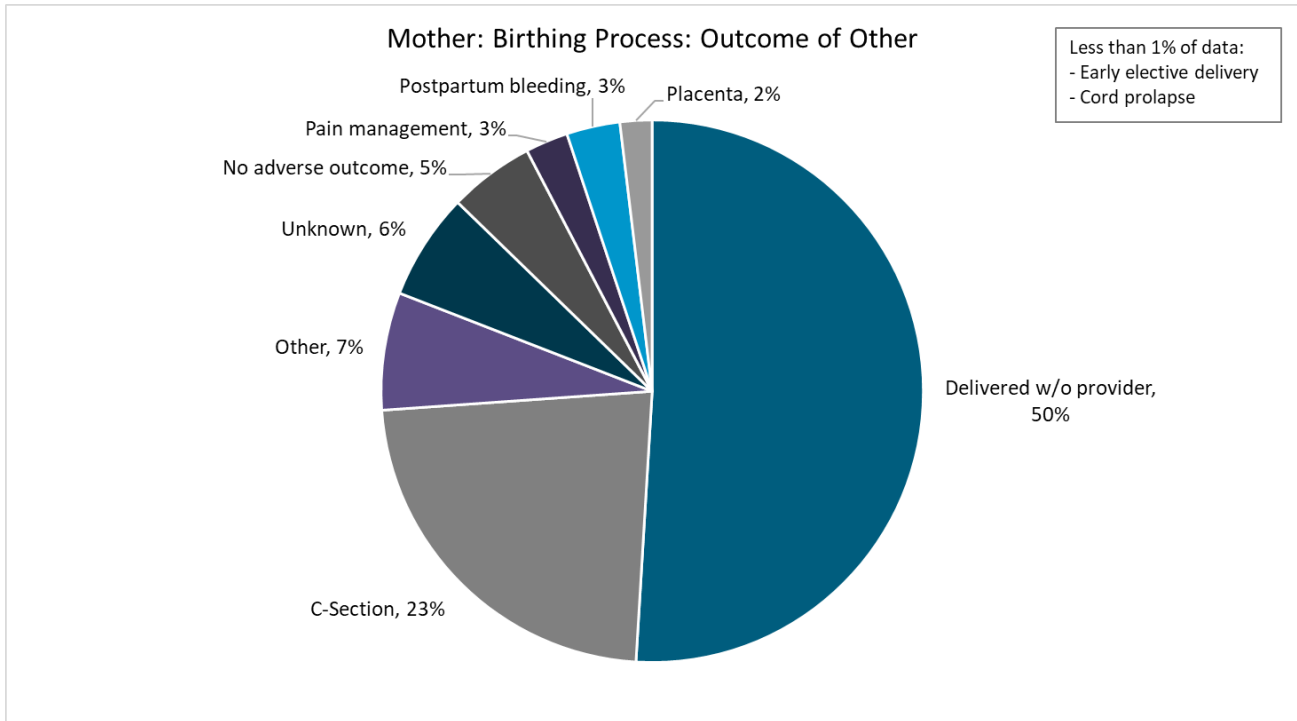


Figure 1. Mother: Birthing Process: Outcome of Other. This graph demonstrates the types of events that were submitted as *Other* outcomes.

Another way to think about unpredictability, from a frontline perspective, is that this is our job. We have been educated and trained to assess and act in these moments. But performing well in unpredictable situations depends upon having a good foundation in place. Such a foundation is built on elements that include: teamwork; good communication pathways; high-quality and applicable training; resource availability; and well-designed processes and procedures that incorporate human factors and principles that are supported by our colleagues and leaders, and are aligned with the best, most efficient, most timely, and safest practices.

While we don't know what ultimately happened to Jane and her twins, that outcome should not define the learning. Ask any provider and they can imagine multiple ways in which the outcome for either Jane or her twins could have been harmful. And providers can list those possibilities because they have happened before to other patients whether within their organization or elsewhere. But regardless of where this particular outcome falls on the harm scale, this is how patients die of medical errors, how perfectly healthy women end up having hysterectomies or losing their babies, and how lives are forever changed by what we do and how we do it. It is only a matter of time until the next unpredictable event. *Not if, but when.* The difference lies in what we choose to do in the meantime, and how we will prepare for the next seemingly unpredictable situation.

In an industry that specializes in unpredictability, how do we anticipate and prepare for the unexpected?

Here are a few Clarity recommendations:

- Analyze and learn from your organization's event data. Include your perinatal team members in the analysis and learning cycles to help generate insight and awareness of both improvement opportunities and solutions.
- Partner with your Patient Safety Organization and perform a 'deep dive' into your data. Deep dives can inform the team on both active and latent failures that culminate in events. In the same token, deep dives can help prepare the team's response to unanticipated situations.
- Work with your Patient Safety Organization to determine if there are lessons learned from others of their clients that can be shared.
- Seek additional resources and learning tools to guide internal training. The following resources and considerations were utilized in preparing this report and can be used to further the conversation.

Additional Resources & Considerations in Preparing for the Unexpected:

Teamwork, Communication, and Culture: Going Back to Basics

[AHRQ's TeamSTEPPS®](#)

[The CUSP Method by AHRQ](#)

Simulation and Improvement

[Society for Simulation in Healthcare \(SSH\): About Simulation](#)

[IHI's "How to Improve" Resources](#)

Storytelling, Business, and Change

[IHI's Optimizing a Business Case for Safe Health Care](#)

[Joint Commission's Video-Storytelling Guide](#)