

W E L C O M E



Creating perinatal units that deliver care safely and reliably with zero preventable adverse outcomes

The Maryland Patient Safety Center Perinatal Collaborative

Improvement Lead Workshop
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Support for the Perinatal Collaborative was provided by a grant from the Maryland Department of Health and Mental Hygiene Center for Maternal and Child Health.



The Maryland Patient Safety Center
Perinatal Collaborative

Chart Review

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You want us to do WHAT?

- Review the charts of 20 full-term births using “Perinatal Trigger Tool”
 - Identify adverse events/patient harm events
 - Identify potential areas of improvement that can be incorporated into Aim Statement.

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I know sounds boring....but

- Learning how to quickly review charts with the filter of patient safety is a useful tool...
- Cool terms such as adverse outcome, root cause analysis, identification of latent factors, and perinatal trigger tools will help you be in the “cool” crowd at risk management meetings and during JCAHO site visits!

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Why Chart Review?

- Efforts to improve safety should include the ability to know the underlying cause and nature of events that injure patients.
 - Resar, Rozich and Classen 2003

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Adverse Event

- Any injury caused by medical management rather than by the underlying condition of the patient.

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Medical Error vs. Adverse Event

- Medical error does not always lead to harm and harm is not always a result of medical error.

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Advantages of Looking for Adverse Events v. Errors

- Patient-focused
- Non-punitive
- Allows for evaluation of “unavoidable or unforeseen events”.
- Includes outcomes that occur despite operational compliance.

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OK, OK, So How Should We do This?

1. Select two people to review charts and one person to be “arbitrator”
2. Reviewers should get to know the Triggers
3. Reviewers get to know the chart
4. Select a time frame >30 days ago <365 days ago.
5. Use a randomization tool to select 20 births within selected time frame.
6. Each reviewer spends 20-30 minutes per chart looking for Triggers
7. If reviewer finds a Trigger, reviews chart to determine if adverse event occurred.

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Don't Worry we will go through this step by step!



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Pick Your Reviewers

- Individuals who are familiar with both the site and with clinical subject matters.
- May need a third to serve as an alternate.
- Also need an “arbitrator”



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The Triggers?

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Trigger not Tigger!



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Not that one either...

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Or that one.

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AHA! Triggers

- Clues/sentinel word(s) that may indicate the presence of an adverse event



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Perinatal Triggers

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- Apgar <7 at 5 minutes
- Admission to NICU >24 hr
- Maternal/Neonatal Transport
- Terbutaline
- Naloxone
- Infant serum glucose <50
- 3rd and 4th degree laceration
- Prolonged decelerations
- Blood Transfusion
- Platelet count <50,000
- Abrupt medication stop
- Hypotension/Lethargy
- Transfer to higher level of care (ICU)
- Unplanned return to surgery
- Estimated blood loss >500 mL
- Specialty Consult
- Post partum oxytocic
- Instrumental delivery
- Administration of general anesthesia for delivery
- Cord gases ordered
- Gestational diabetes
- Other



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Triggers...(Con't)

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- Triggers are not in and of themselves adverse events.
- If a trigger is found, further reading is necessary to determine whether harm occurred.
- May need to adjust some of the Triggers to make them most relevant/useful to your site.



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Getting to know the chart!

- Ma'am, will that be paper or plastic?
 - What is the format of your L&D and neonatal charts?
 - How do you retrieve your charts
- Which documents will yield the most information?
 - OB pathways
 - Discharge summary
- Make a cheat sheet!



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OK. So to Review...

- You have your team
- You have your reviewers
- You know and understand the Triggers
- You have access to and are familiar with the charts
- Now you need to choose your charts!

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Pick the time frame of births you want to review.

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- Choose time frame that will ensure that charts are complete and accessible.
- Choose a wide enough time frame that will be representative of the births you see at your institution.
- Don't go too far back in time so that care that is reviewed in charts is representative of care now.



Randomization

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- Decide on numbering scheme for charts that makes most sense for way that your information is stored
- Use randomization tool.





Excel RANDBETWEEN

RANDBETWEEN

[See Also](#)

Returns a random number between the numbers you specify. A new random number is returned every time the worksheet is calculated.

If this function is not available, and returns the #NAME? error, install and load the Analysis ToolPak add-in.

[How?](#)

On the **Tools** menu, click **Add-Ins**.

In the **Add-Ins available** list, select the **Analysis ToolPak** box, and then click **OK**.

If necessary, follow the instructions in the setup program.

Syntax

RANDBETWEEN(bottom,top)

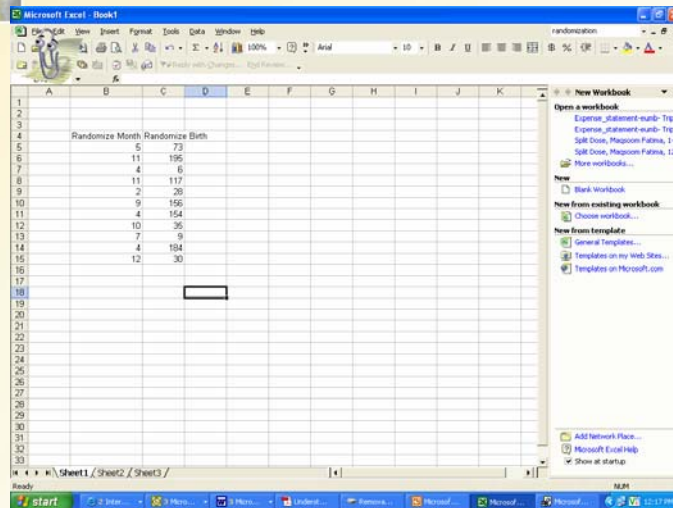
Bottom is the smallest integer RANDBETWEEN will return.

Top is the largest integer RANDBETWEEN will return.

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Get down to it!

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- Give yourselves enough time to complete a certain number of charts in one seating.
- Remember you should not be reading the entire chart.
- You are NOT charged with finding every adverse event.



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I think I found an Adverse Event – Now What?

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- Mark it, assign it a category, and process it through main booking!
- Clarify sequence of event:
 - Care management problems
 - Clinical context
 - Factors contributing to their occurrence
- Review with your team
(Vincent article NEJM)



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Team Review of Event

- Agree on the fact that this is indeed an adverse event and on the temporal/logistic sequence of actions.
- Analyze event using a framework
 - How did this happen?
 - Do not focus on the individuals involved but on discovering the factors that contributed to this event.

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Table 1. Framework of Factors Influencing Clinical Practice and Contributing to Adverse Events.^a

Framework	Contributory Factors	Examples of Problems That Contribute to Errors
Institutional	Regulatory context Medicolegal environment	Insufficient priority given by regulators to safety issues; legal pressures against open discussion, preventing the opportunity to learn from adverse events
Organization and management	Financial resources and constraints Policy standards and goals Safety culture and priorities	Lack of awareness of safety issues on the part of senior management; policies leading to inadequate staffing levels
Work environment	Staffing levels and mix of skills Patterns in workload and shift Design, availability, and maintenance of equipment Administrative and managerial support	Heavy workloads, leading to fatigue; limited access to essential equipment; inadequate administrative support, leading to reduced time with patients
Team	Verbal communication Written communication Supervision and willingness to seek help Team leadership	Poor supervision of junior staff; poor communication among different professions; unwillingness of junior staff to seek assistance
Individual staff member	Knowledge and skills Motivation and attitude Physical and mental health	Lack of knowledge or experience; long-term fatigue and stress
Task	Availability and use of protocols Availability and accuracy of test results	Unavailability of test results or delay in obtaining them; lack of clear protocols and guidelines
Patient	Complexity and seriousness of condition Language and communication Personality and social factors	Distress; language barriers between patients and caregivers

^a The framework is based on Vincent et al.⁸

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Contributory Factors

- Important to differentiate between factors that were relevant only in this one particular occasion and those that are long-standing features (i.e. are there trends in the types of contributing factors that you are identifying)

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And in the end...

- Look for recurrent themes
- Most common triggers
- Most common types of events
- Highest acuity events
- You now have an evidence-based, site specific list of areas to target.

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Chart Review and AOI and Claims Analysis

- Chart review will not be used continuously in this process.
- Not all adverse events end in claims yet these events are still worth addressing.
- AOI will be how progress is measured during this Collaborative (rather than monthly chart review)
 - Less time consuming
 - Easier to find
 - Tested and standardized

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