

# Mastering Utilization Review and Patient Status

a NAHRI virtual event 

## From Insight to Action! Mastering Utilization Review Data

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## Presented By



**Jeffrey Echternach, MBA, AAS, NRP, DSC**, supports clients with nearly 20 years of experience in clinical systems, software, and business intelligence improvement experience. At the center of Jeff's experience are the maturity of case management and patient flow data models, BI/visualization, and IT systems.

Echternach is passionate about gaining insight from data, providing analysis that informs, and translating data into meaningful, actionable information. He is the founder of the Center for Case Management's 'CARTBoard' Clinical Case Management Dashboard tool. He holds an MBA from Averett University, a graduate certificate from the Darden School of Business in human-centered design, and is certified proficient in SQL, DAX, M-Language, PowerBI, and Tableau. His experience includes work with a multi-hospital integrated delivery network, including a large next-gen accountable care organization, support of a large transfer center, and the division of case management.

Additionally, he is a nationally registered paramedic, firefighter, and fire instructor who remains affiliated with his local department in his community

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## Learning Objectives

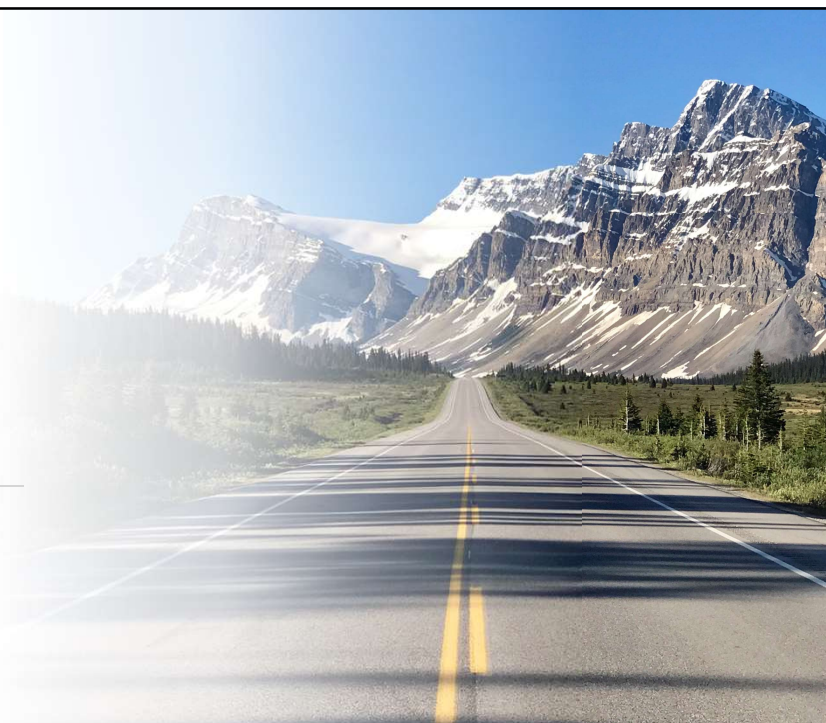
- At the completion of this educational activity, the learner will be able to:
  - Identify essential utilization review (UR) metrics
  - Differentiate a process metric from an outcome metric
  - Describe the benefits and minimum standards for a UR dashboard

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Every System is  
Perfectly Designed  
to get the results it  
gets

- Don Berwick



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## Creating Essential UR Metrics

Process and outcome metrics  
Essential UR metrics



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## Concepts Explained: Process Metric

### Process measures defined....

- Evidence-based best practices that represent a health system's efforts to systematize its improvement effort
- Data that aids leaders and staff members in tracking adherence to a given process, workflow, or procedure
- Common examples of process measures include:
  - Completion of initial assessment
  - Accuracy in estimated day of discharge
  - Discharge order by 10 a.m. or a goal time of day
  - Completion of social determinants of health assessment for a high utilizer

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## Concepts Explained: Outcome Metric

### Outcome Measures Defined...

- The achievement of a result that has impact
- Outcome measures reflect the impact of the healthcare service or intervention on the health status of patients
- For example:
  - Reduction in length of stay
  - Less wait time for a bed
  - Spending less money on care per Medicare beneficiary (MSPB)
  - Having fewer patients return for repeat hospitalization in 30 days or less (readmissions)
  - The rate of surgical complications or hospital-acquired infections
- Outcome measures can track the impact of a specific process or the collective result of changes in:
  - Behavior
  - Attitude
  - Knowledge

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## Establishing A Process & Outcome Measure

- Step 1: Identify the measure population

### Admissions to the hospital that require UR

- Step 2: Establish the inclusion or exclusion
  - One of the following:
    - Patient class (inpatient, observation)
    - Outpatient class, and remaining in the hospital overnight



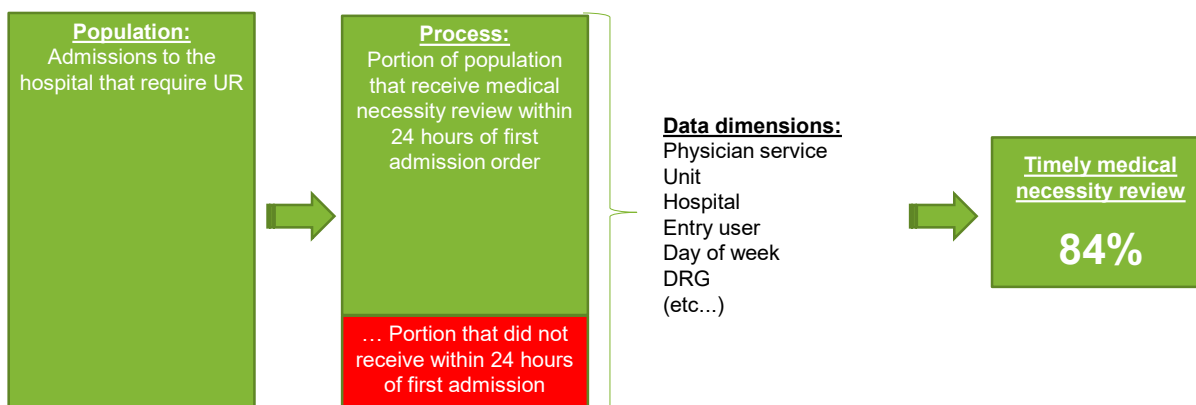
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## Establishing a Process & Outcome Measure

- Step 3: Define your process measure and desired “dimensions”

### Timely medical necessity review



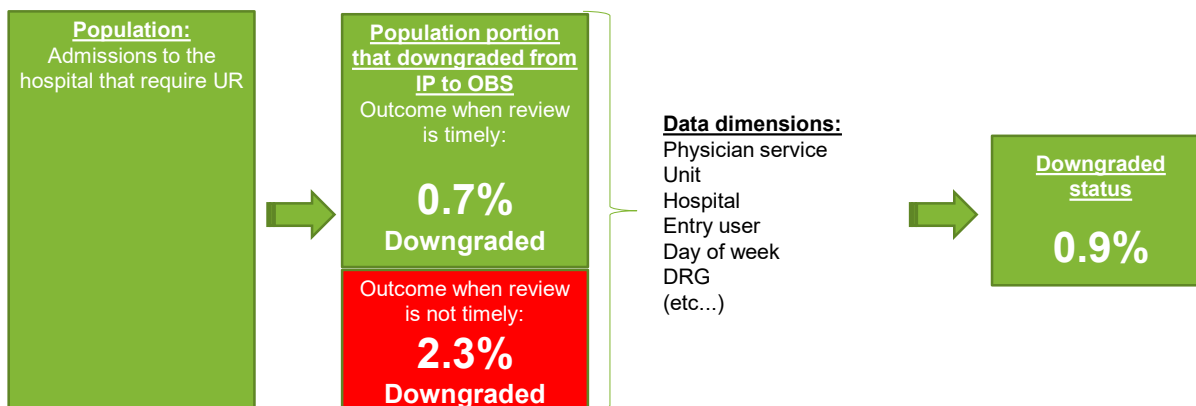
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## Establishing a Process & Outcome Measure

- Step 4: Define your associated outcome measure and desired “dimensions”

### Downgrades in status (inpatient to observation)



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## Essential Utilization Review Metrics

### Medical necessity (MN) and commercial cases (CC)

1. Time (in hours) to first MN review
2. % Of status recommendations filed before admission order
3. % Of admission MN reviews completed within 24 hours of admit
4. % Of reviews that match the current patient class (meets inpatient, inpatient status)
5. % Of CC w/ payer response within 24 hours of sending clinical
6. % Of CC w/ payer response by discharge

### Concurrent denials (denied), peer to peer, and physician advisor

1. % Of all commercial days that are denied
2. % Of 'denied' days that are upheld
3. % Of 'denied' days that are partially overturned
4. % Of 'denied' days that are completely overturned
5. % Of cases referred to physician advisor
6. % Of cases that receive peer to peer
7. Time from physician advisor (PA) referral to PA response
8. % Of peer-to-peer cases overturned
9. % Of peer-to-peer cases without physician response
10. % Of PA cases where inpatient is supported

### Status changes

1. % Of changes in status from observation to inpatient
2. % Of changes in status from inpatient to observation
3. % Of Medicare inpatient-observation changes that are correctly executed before discharge

### Formal denials for medical necessity attributed (claim)

1. % Of denials
2. % Of denials overturned
3. % Of denials upheld (final)
4. % Of denials downgraded without appeal
5. % Of denials appealed – level 1
6. % Of denials appealed – level 2
7. % Of denials appealed – level 3+

### Letters

1. % Of Medicare discharges with compliant IMM
2. % Of Medicare observation admissions with compliant MOON
3. # Of HINN letters delivered to patients

### Other

1. # Of avoidable days documented
2. Time from discharge until all days captured (approved or denied)

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## Appropriate Visuals

Apply the most appropriate visualization based on data type

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## The Essentials For Appropriate Visuals

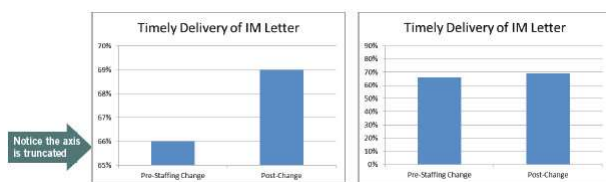
- Match the proper graph/graphic to the data type *(most common)*
  - Over time:
    - Comparison: Line graph
    - Composition (parts of a whole): Stacked column chart
  - Static:
    - Composition (parts of a whole): Pie chart
    - Comparison, among items: Bar or column graph
  - Distribution:
    - A histogram
    - A scatter chart

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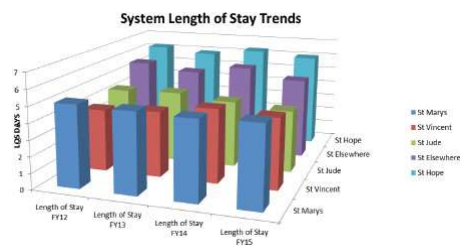
## Avoid Visualization Pitfalls

### Distortion



A truncated axis can lead viewers to initially think that the variables you are comparing are further apart than reality.

### Unnecessary Effect



Research has demonstrated that 3D charges often reduce comprehension, take longer to interpret, and lead to confusion (Chapman, 2009).

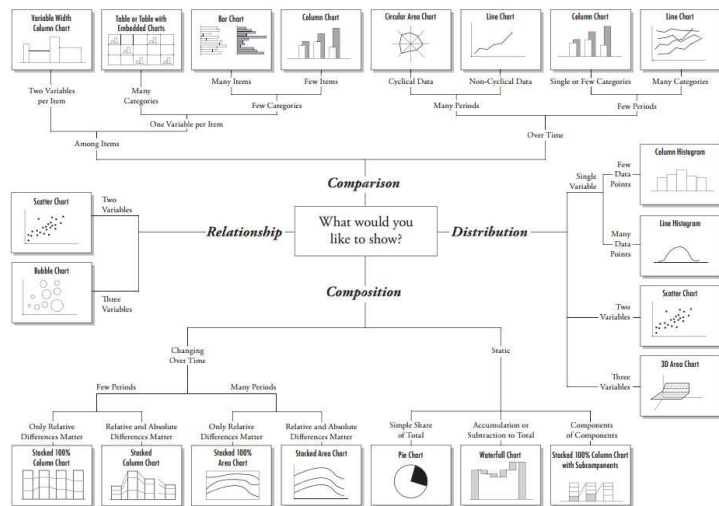
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## Decision Support For Appropriate Visuals

### Chart Suggestions—A Thought-Starter



- Selecting the right graph is essential. The graph needs to speak to the information you are reporting on.
- The decision tree here, created by Dr. Abela and available on [www.extremepresentation.com](http://www.extremepresentation.com) can guide your graph selection.

Abela, A. (n.d.). The Extreme Presentation(tm) Method. Retrieved June 18, 2017, from <http://extremepresentation.typepad.com/>

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## Strategies for Performance Improvement

Identify and describe data strategies that communicate measurable performance improvement



## Data Strategy

What is **your** role in creating and maintaining an effective data strategy?

- Invest in your reporting tools
- Advocate for dashboards
- Ensure that your solutions allow for:
  - Interactive data exploration
  - Appropriate filtering
  - Offers various ways to view the data
  - Adequate coverage of your metrics
- Ensure that solutions group your data appropriately
- Review for accuracy in all metrics
- Use additional tools to ensure validity
- Centralize your data, focus on:
  - An enterprise support strategy
  - Automated resources and refresh
  - Consider “enterprise data warehouse”
- Avoid:
  - Extracting data to Excel before analysis
  - Manual tally or counting up data
  - Reports that have “half” of the answers
- Work with data experts in your organization
- Advocate for dedicated or “primary” analyst resources

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## Fluency in Data

- Can you speak the language?
  - Can your staff, leaders, and physicians?
- It's important to know your audience and their data literacy level
- Play to your audience's strengths....

**Since the human visual system is a “very high bandwidth channel to the brain,” the data literate person understands various ways to visualize data and their respective pros and cons**

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## Standards for a Dashboard

Describe the benefits and minimum standards for a UR dashboard



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## Does It Feel Like Everyone Has A Different Expectation For Your Utilization Management Dashboard?



- It's time to set a standard in our data measurement
  - Employ metrics from our earlier slide in a prioritized display
  - Offer insights in trending
  - Ensure that each page tells a story
  - Offer concise solutions, limit “all in one”
- No two dashboards are built equally



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## Dashboard Deliverables



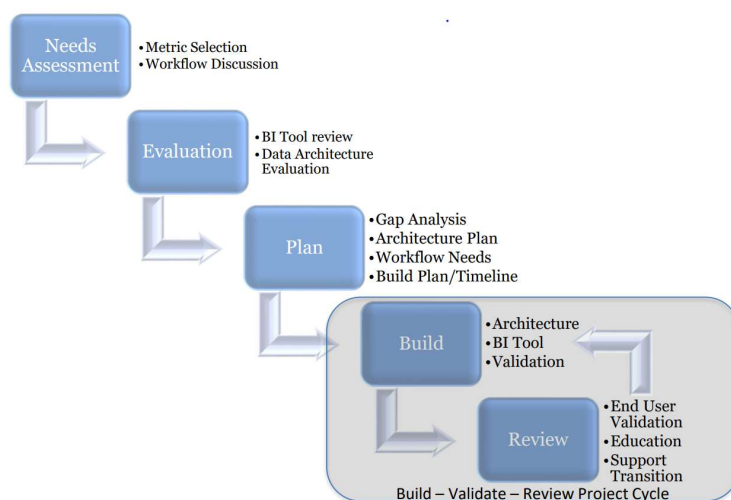
- Your dashboard should generally be...
  - Timely: it should automatically update, and answer questions for “today”, “Month – to – date” and allow you to look back in history.
  - Clutter-Free: Be mindful how many distinct metrics (or visuals) are on one page.
    - Try to keep the interactive or “feature” visual to 1, sometimes 2 at the max
    - 5 or 6 independent metrics (single text box display, or simplistic visual)
  - Well Organized: Keep the visual guide in mind – Match visuals appropriately with their data element counter-part

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## Building a dashboard

- Your dashboard build is a journey
- Review workflow with an analyst
  - Front-line workflow should support data collection
- Plan carefully, Work with a contractor, consulting firm, or experienced internal resources on your build
- Ensure that you are always reviewing your build and data sources



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**Thank you!**

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In order to receive your continuing education certificate(s) for this program, you must complete the online evaluation. The link can be found in the continuing education section of the program guide.

