

Neurology

CASE STUDY FACILITATOR COPY

Describe the Practice:

Large neurosurgery group that is affiliated with a university—part of their neuroscience center.

Current State:

The group has a very conservative approach to surgery (surgery is last resort) but does perform a high volume of lumbar spine surgeries. On average, 8% of the patients undergoing lumbar spine surgery are re-admitted to the hospitals within 30 days of discharge for various reasons. Two of the primary reasons are related pain management and incisions that are not healing. The average LOS is just under 2 days. Currently, a team of one neurosurgeon and a research assistant are gather more data and meeting to determine what interventions might help in reducing presentations to the emergency department and, subsequently, readmissions.

TCPI Change Package and Goal Alignment:

Reduce unnecessary re-hospitalizations/re-admissions for patients undergoing spine surgery.
Reduce unnecessary care: Use the evidence-base and best practices to reduce unnecessary testing and procedures

1. Identify what they are doing now to assess cost and utilization strategies – where do they feel overuse in the system is now? What can they do to reduce cost?
2. Empower staff to know and politely question any orders not meeting guidelines
Implement Choosing Wisely guidelines
3. Build best practice information order sets and documentation templates and incorporate these into the EHR where possible
Use shared decision aids

Implement evidence-based protocols: Use evidence-based protocols to improve patient care and safety

1. Develop evidence-based protocols in house or use those externally available
2. Document protocols through flow sheets, process maps, care maps, swim lanes or other visual depiction
3. Invite visiting faculty in academic settings to learn protocols embedded in EHR
4. Use protocols to guide communication with patients and families after a patient safety event
5. Embed protocols in the EHR
6. Use condition-specific pathways for care of chronic conditions (e.g., hypertension, diabetes, depression, asthma and heart failure) with evidence-based protocols to guide treatment to target

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Target Ideal State:

Ideally, we would like to reduce readmissions for lumbar spine surgery patients from current average of 8% to $\leq 4\%$. What success would look like is that all parts of the system would be coming together in making this happen. I.e., it would not just be one interested surgeon and research assistant but, rather, many surgeons, the hospital care team, the neurosurgery center office staff, PT, OT, pain clinic, and the family themselves—all activated around preventing unnecessary readmissions to the hospital.

Recent Changes to your Process:

- **What you changed:** Have worked on the pre-op processes such as standardizing education for patients and caregivers as to what to expect after surgery and their roles & responsibilities re: recovery. We have also just started to make post-d/c phone calls to patients to check in on their pain management, any wound issues and if they have an appointment to see their PCP (if applicable).
- **What is going well:** It seems to be working in that patients like it and staff like the idea of starting the process of thinking about discharge early.
- **What areas still need work:** It has been hard to measure if this is making a difference or not. We get our data from a registry that currently only produces data quarterly so we won't know if any of this is working unless we collect additional data. Having trouble reaching patients—they don't answer phone. Time that it takes to make call is substantial and we only have non-clinical people available to make the calls so if clinical questions then have to call back—redundant.
- **How consistent the new process is:** Currently, only the one surgeon and her team engaged in the work so process is not reliably done in the group.
- **What your next step is in adjusting the target process:** We are thinking of asking the hospital staff if they could let the patient know we will be calling them w/in 3-5 days of discharge so they can anticipate it. Also, that they would provide information to them about how to contact people with questions or concerns. Needing to get others involved in this.

Available Data:

As mentioned above, current data is from registry on quarterly basis and is a benchmark report with other centers—not data over time on readmissions w/in 30 days. The research assistant making the calls is tracking qualitative data about what she is finding out on phone calls, action taken, etc. So we do have a sense that this is making a difference but no quantitative data yet.

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What areas still need improvement? Data collection. Expanding the team and getting their buy-in that post d/c calls are effective without “hard” data to support. Some thinking that the person making the calls has to be a clinical person and we don’t have the capacity to support that currently.

Barriers to Beginning Change:

We are still early in post d/c calls and trying to figure out best way to do that. Who makes the calls? What questions we ask? How to collect data that shows they are potentially resulting in fewer readmissions. Regarding the discharge information, finding it hard to get hospital staff on board—we are asking them to do things and they are already overwhelmed with the things they already have to do.

Questions for Your Peers:

Frame at least two questions for your peers (remember that they are here to learn from you and to suggest ideas). Put them in order of priority, in case we run out of time to discuss them all. Examples include:

1. How have you managed to get all of the necessary people involved and engaged in the improvement effort? (e.g., like we need to engage hospital staff, primary care, folks from wherever patients are being discharged to, etc. to be most impactful)
2. Are you able to collect real-time data (e.g., every discharge, daily data, weekly data, etc.) in a way that is helpful and not too burdensome?
3. Have any of you tried the same approach and how did it work for you?
4. What type of data do you collect and how do you collect it?