Mobility in the ICU: Making mountains into molehills

Karen Strybos, Judith Mehregani, Patricia Berger & Amy Ellis

Overview of our journey

- What, why, who and how?
- Data tracking
- Reporting & trending
- Quality huddles
- Barriers & contraindications
- Lessons learned & successes
- Results
- Sustainment

What was chosen? *Mobility!*

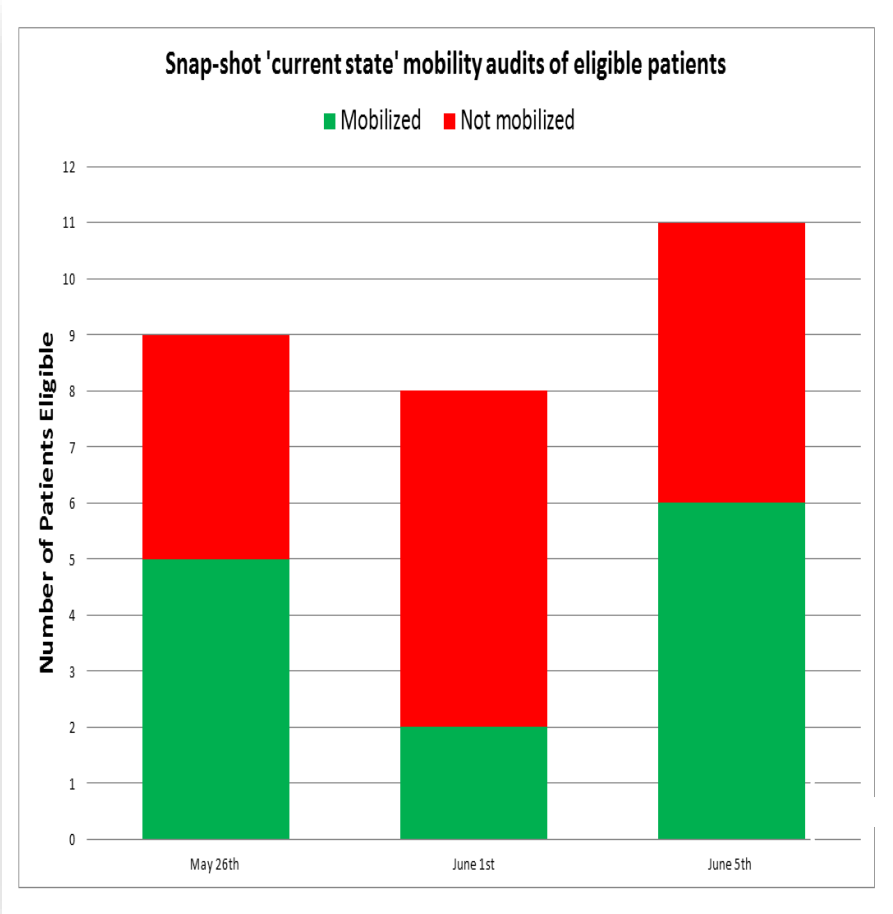
- To achieve the greatest impact possible:
  - Mobility helps prevent and/or treat delirium, hospital associated pneumonia (HAP), pressure ulcers, and falls
- To dispel mobility myths in critical care (the 'mountains'):
  - 'Patients are too sick to mobilize'
  - 'There are very few mobility options available'
  - 'It is dangerous to mobilize critically ill patients'
- To inspire: if we can mobilize ICU patients, <u>any</u> patients can get up and move! (Make mountains into 'molehills' ☺)

ICU patient walking in Johns Hopkins Hospital Critical Care Unit

https://idiopathicmedicine.wordpress.com/category/intensive-care/

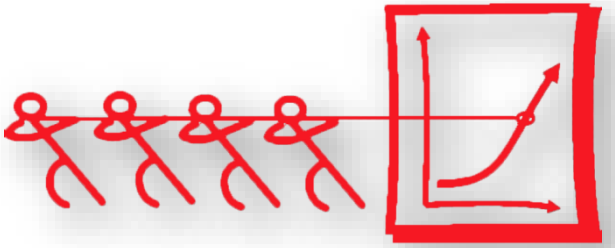
Why did we need to improve this?

- **Supporting evidence**
  - Pain, agitation, delirium (PAD) guidelines recently published - MOBILITY positively affects all three
  - Delirium has a significant impact on M & M, long term cognitive function, length of stay and ventilator days
- **Current state**
  - Completed an audit or 'snap-shot' of current mobility practice; we were not doing as well as we thought!



Who needed to be involved?

- RNs, PTs, RTs, educators, clinician, PCCs, quality consultants, physicians, management, informatics, etc.
- <u>This is where we learned the most lessons!</u>
  - There were more people/disciplines that needed to be involved than we thought
  - Inform and involve the WHOLE team early on; let them tell you if they have a role to play or not
  - Think about who is involved in the area of practice you are trying to improve – be sensitive to how the message might be perceived
  - If the working group is too large progress may be slowed; establish key people and a communication plan
  - Think about the possible impact on operations and budget
  - Ensure action items are specifically assigned and have timelines attached

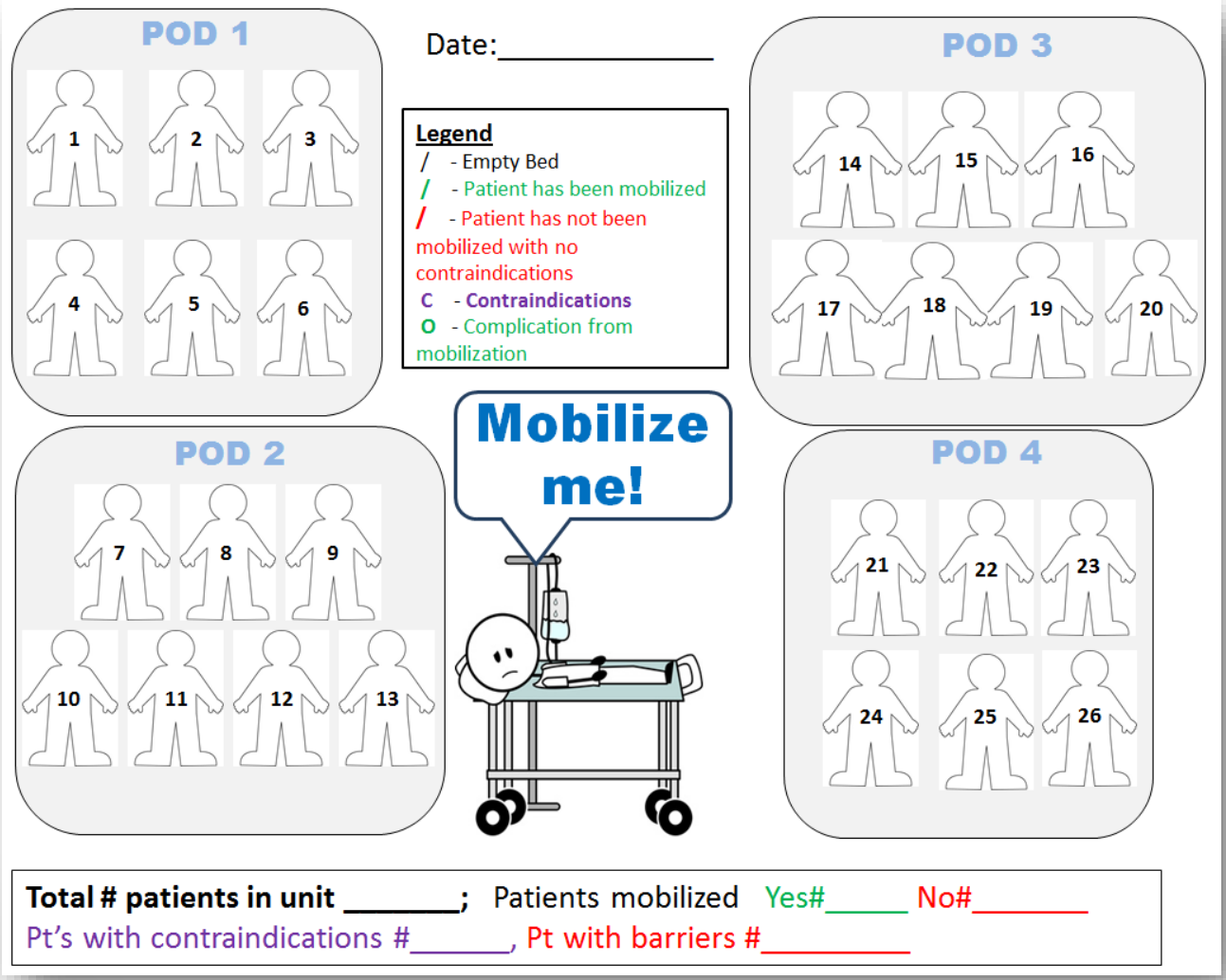


How did we measure our success?

- What metrics did we look at?
  - We wanted to have hard, measurable data so that we could share and post the evidence of our success with the team, but we ended up with anecdotal evidence as well
  - We looked at average delirium scores and ventilator days the quarter before the mobility initiative and compared them to the period following
- Thought about how this might be tracked – was it realistic?
  - We felt mobility was one of the easier initiatives to measure and track (either they mobilized or they didn't) while others were more obscure
- Outcomes
  - We had to consider what outcome we were looking for BEFORE deciding on which data to track

Data tracking tools

- We called this the "cookie sheet" and it's what we used to record and post the data for the daily huddles



The ‘cookie sheet’

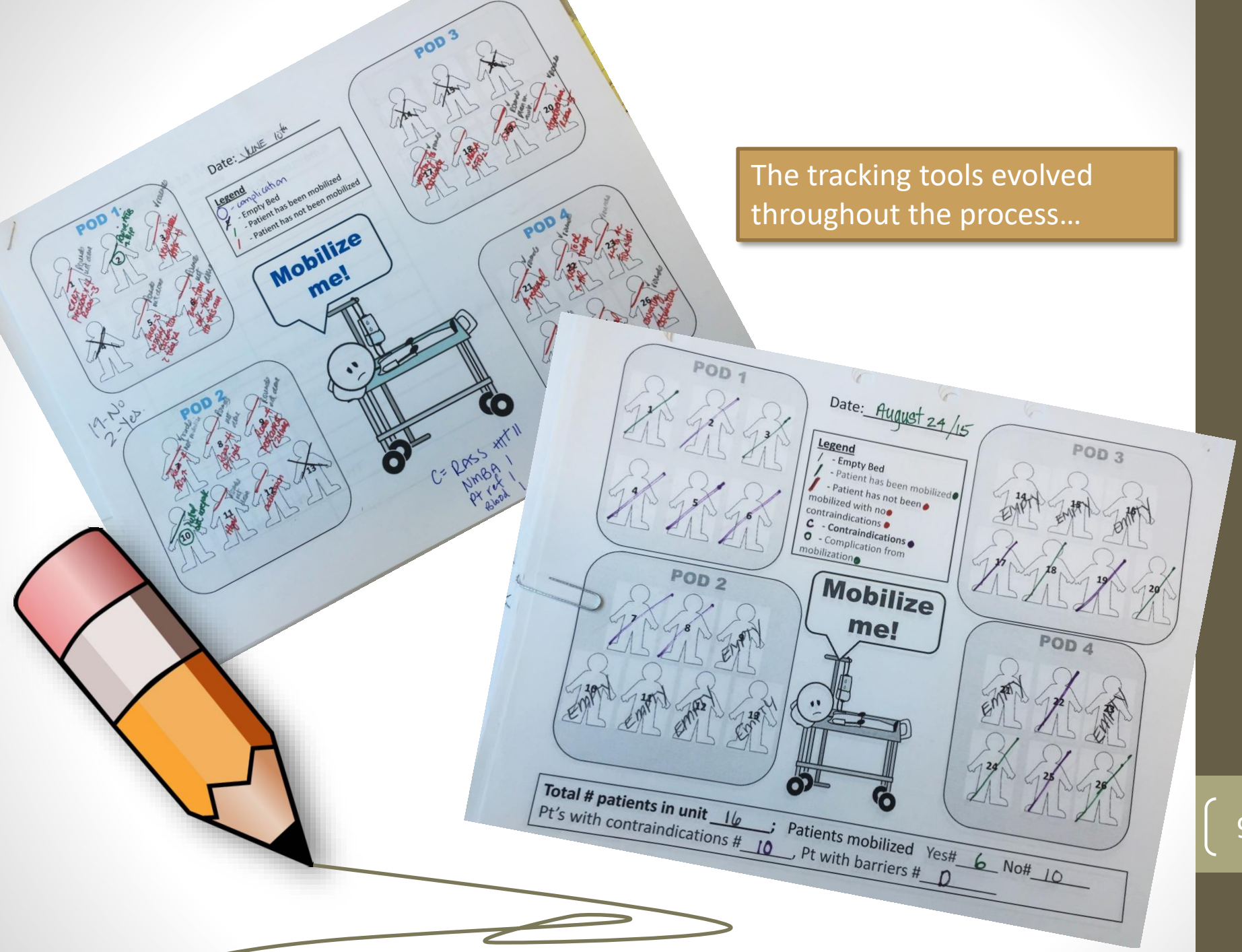
Challenges:

- Just the simple definition of ‘mobilization’ was not clear or differed amongst team members
- People felt red lines were unfair if the patient had contraindications or barriers to mobility
- Many things were considered contraindications when they were actually barriers (e.g. CRRT, vasopressors)
- Data was perceived and recorded differently depending on who was collecting it
- Barriers and contraindications were not associated with patients so there was no follow up or further exploration that could be done

Successes:

- Great visual display of the data
- Easy to complete
- Adaptable according to learnings

The tracking tools evolved throughout the process…



Mobility Data Tracking: Please gather data by 1500 hours and update as needed before next day

DATE: HUDDLE LEADER:

Bed #	Mobility discussed in rounds (Y/N)	Mobility type (see key)	Contraindication present (see Mobility Algorithm and keys)	Barrier present (Specify)	Complication directly related to mobilizing (specify)		Today's graph (see instructions)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
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22							
23							
24							
25							
26							

MOBILITY/ ACTIVITY
B - Bedrest
AROM - Active range of motion
BB - Bed bike
D - Dangle
SS - Sit to stand
C - Chair
W - Walk
... Up as

Contraindications Determined in Rounds
HI – Hemodynamic Instability
B/C – Bleeding or Clotting Disorder
C – Acute or Unstable Cardiac Status
R – Respiratory: Airway or Oxygenation

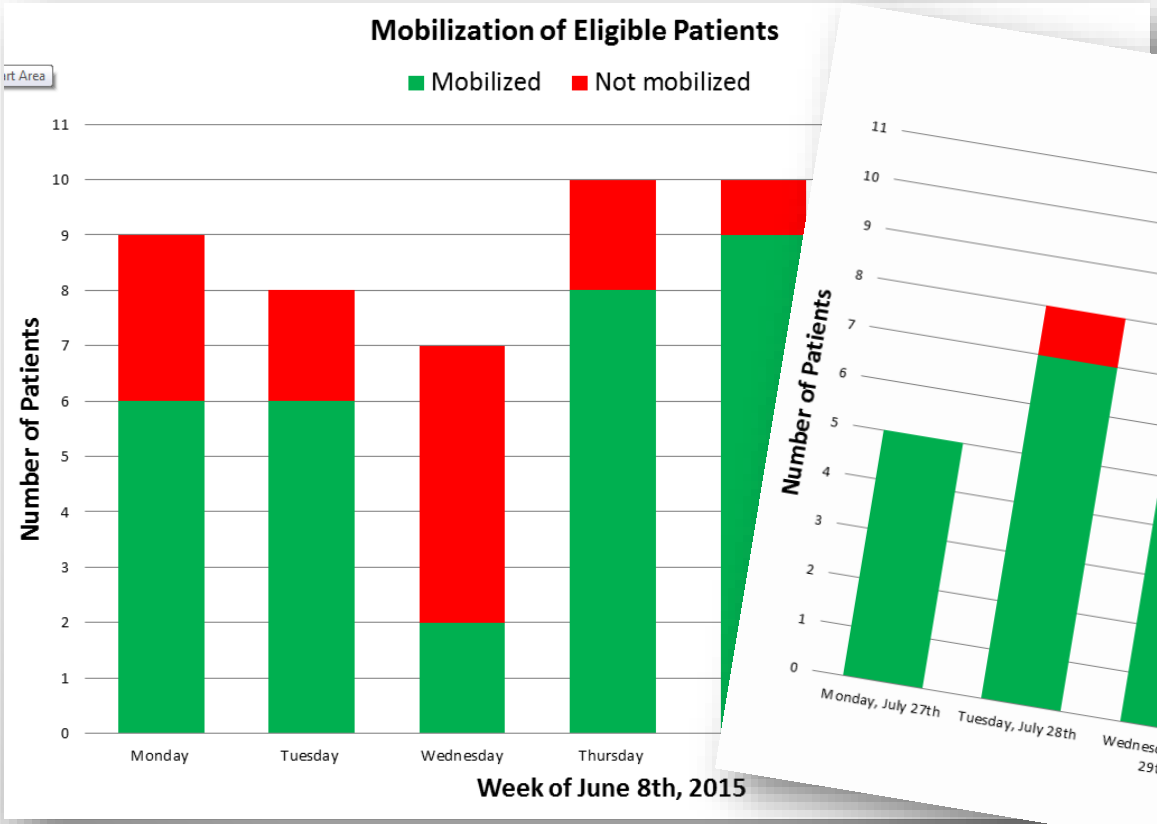
Absolute Contraindications
P – NMBA
TW – Terminal Wean
S – Spinal Precautions
IPR – Informed Pt. Refusal
A – Aggressive (RASS +3 to +4)
... RASS -3 to -5, neurological cause, not sedation related

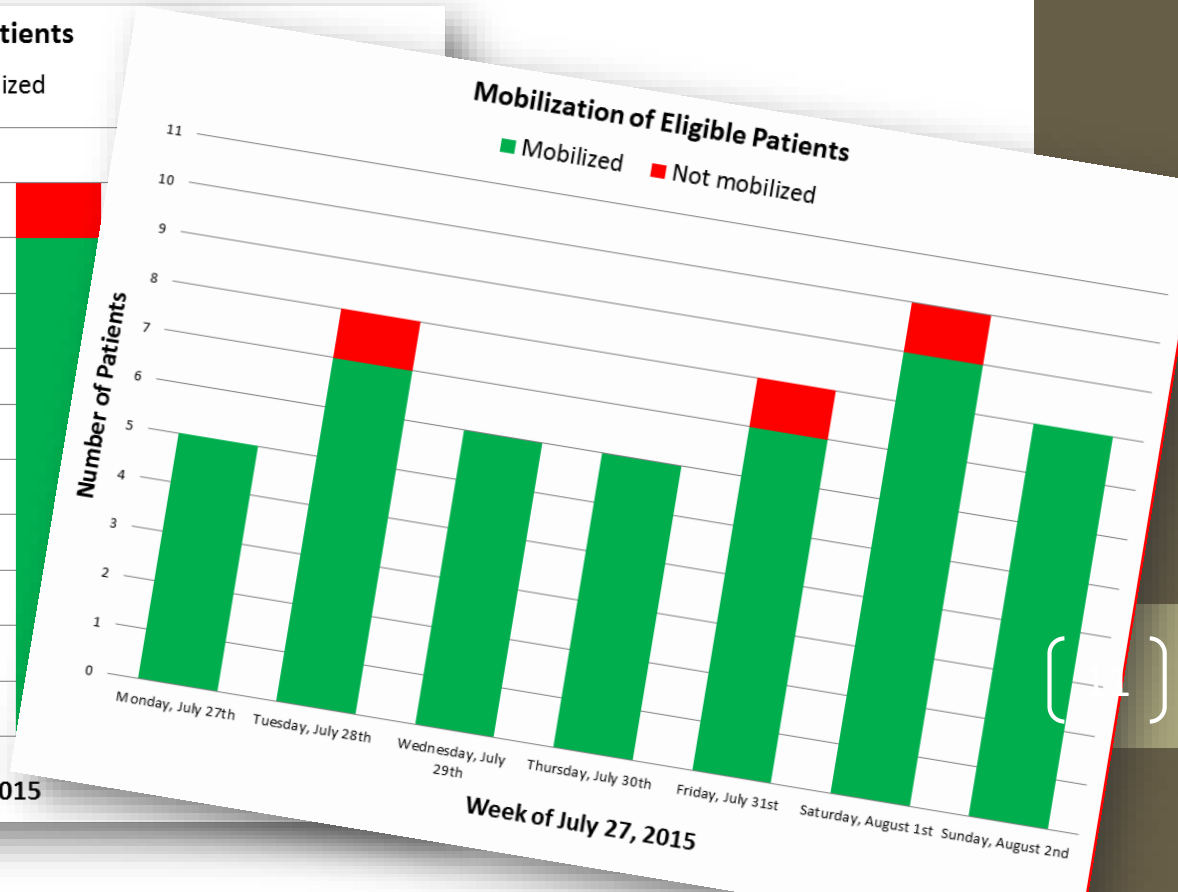
Graph Instructions:
Total mobilized pts in green starting from the bottom.
Total eligible pts NOT mobilized in red above the green bars

This tool was used to collect more detailed data – it helped to sort out what the true barriers were…

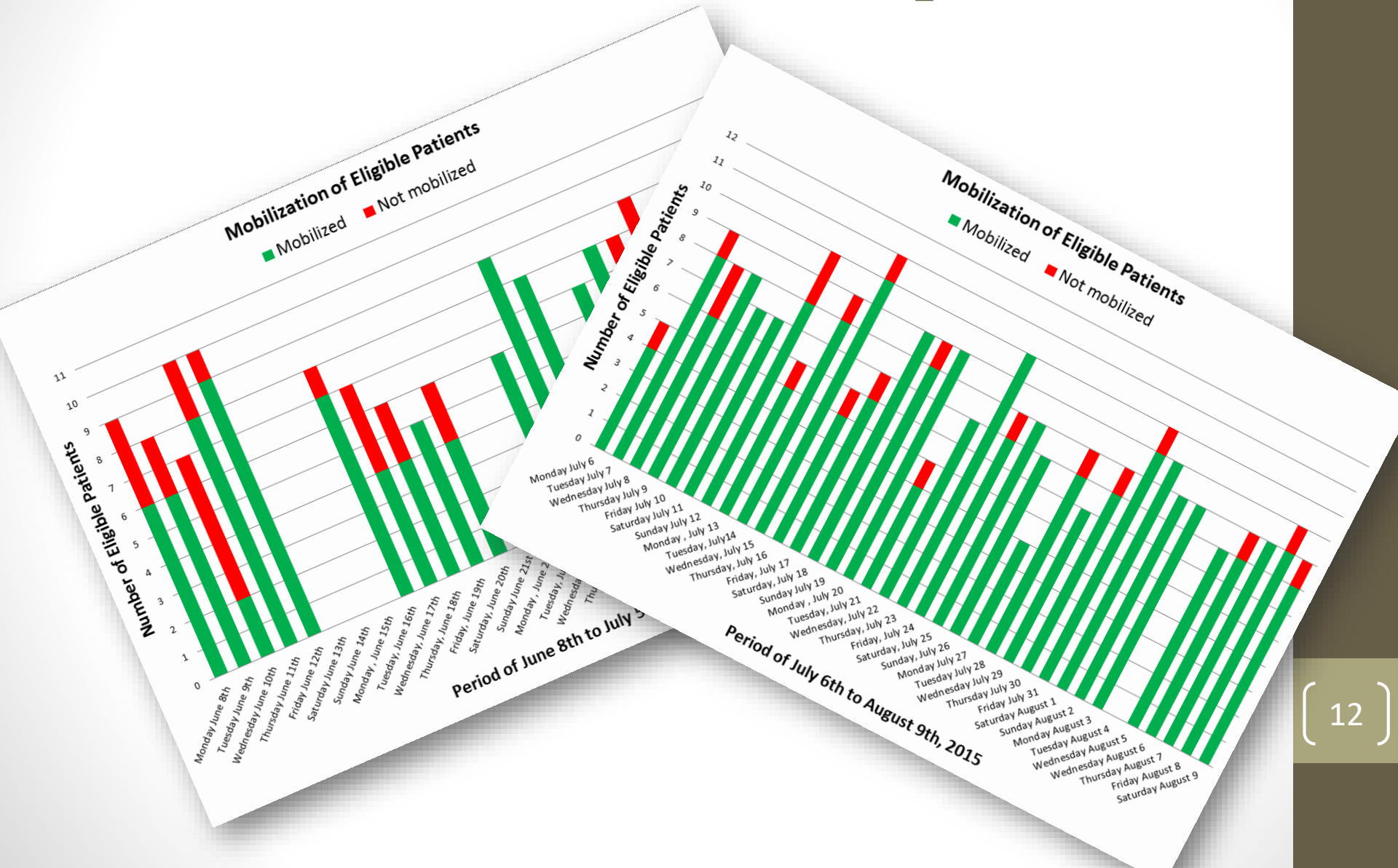
Reporting & trending

- Weekly graph completed on Friday and posted on Monday for the quality huddle that week





Trend over one month period



Quality huddles

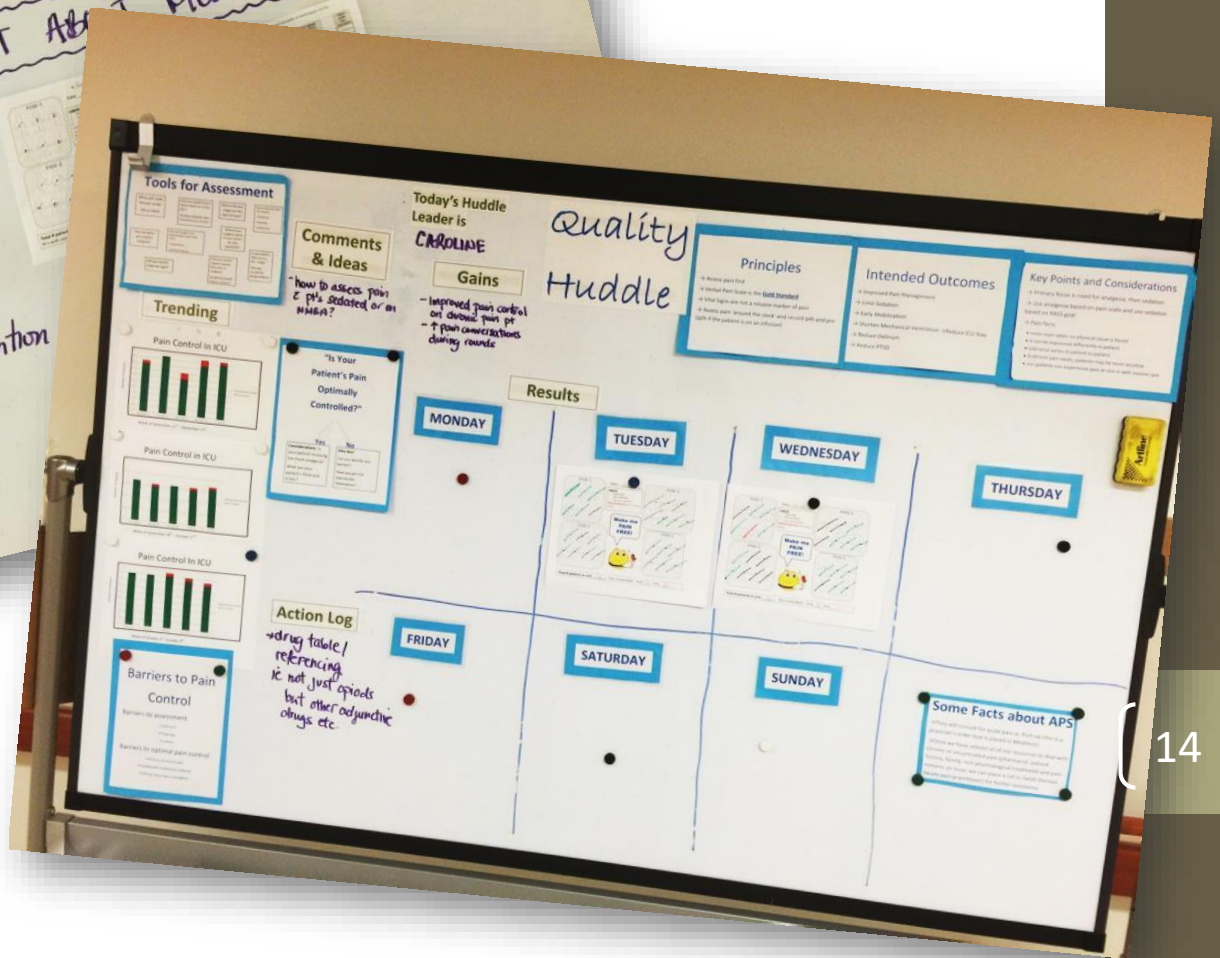
Challenges:

- Difficult to stay on time in a busy unit – don't wait for everyone to arrive
- Huddles lasted for 30 to 45 minutes in the beginning because there was so much discussion – this made some people decide not to go because they didn't have time
- Unable to get the whole team together for huddles as front-line had to be at the bedside – rotated to different pods each day to include more people

Successes:

- Great way to get discussion going and share what is really happening at the bedside
- Forum for staff to voice concerns/ideas/thoughts
- Opportunity to collaborate with the physicians on medical/clinical practice
- Provided a way to share real-time results and trends with the team
- Created a closed-loop communication system

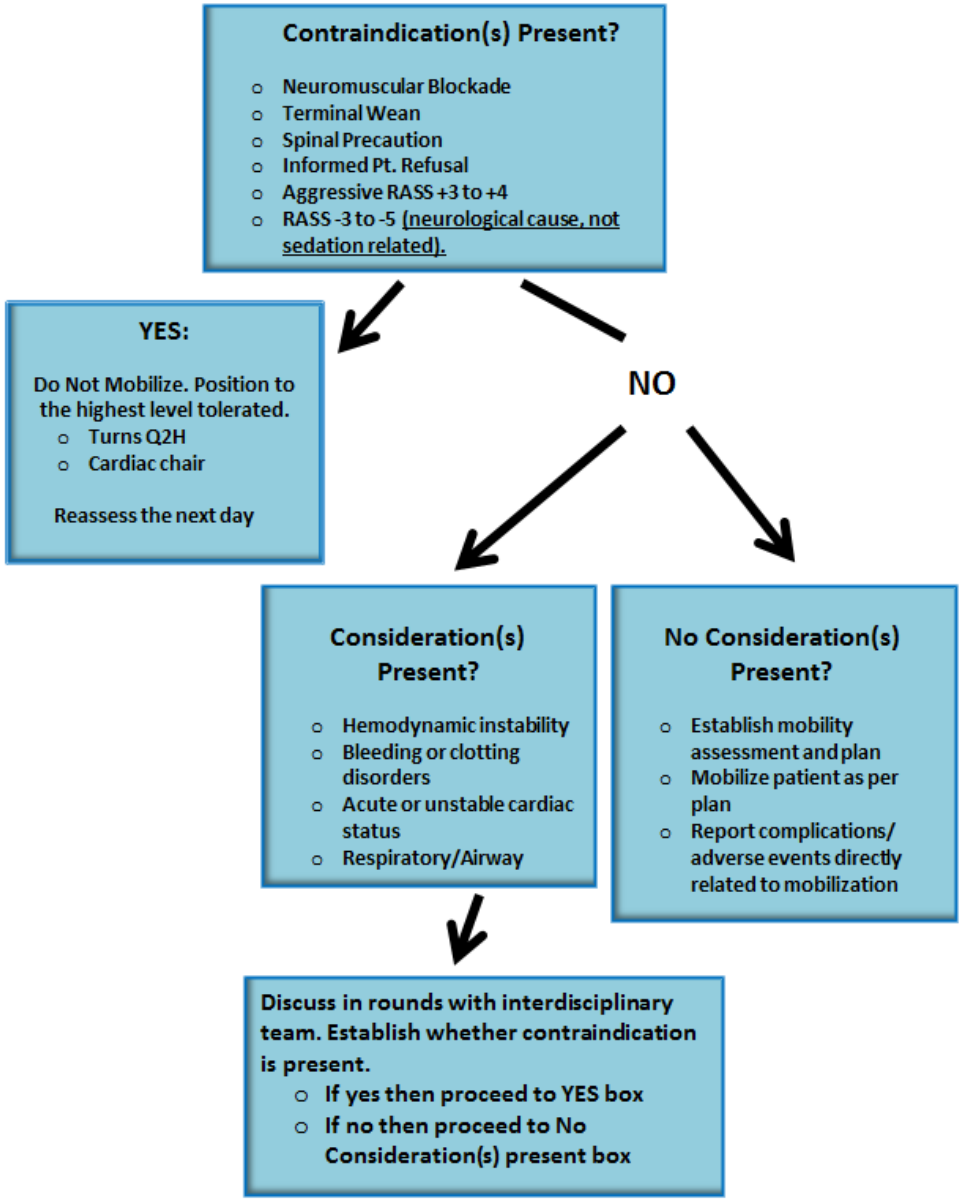
Mobility Discussion
Mobility Algorithm
LET'S NOT FORGET ABOUT MOBILITY!
So how are we actually doing?
(we will continue to do audits)
Good Job Team! On OCT 6th there were no barriers!
BUT ..... don't forget to mention rounds!


Tools for Assessment
Comments & Ideas
Today's Huddle Leader is
CAROLINE
Quality Huddle
Gains
Principles
Intended Outcomes
Key Points and Considerations
Trending
Pain Control in ICU
"Is Your Patient's Pain Optimally Controlled?"
Results
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
Action Log
Barriers to Pain Control
Some Facts about APS

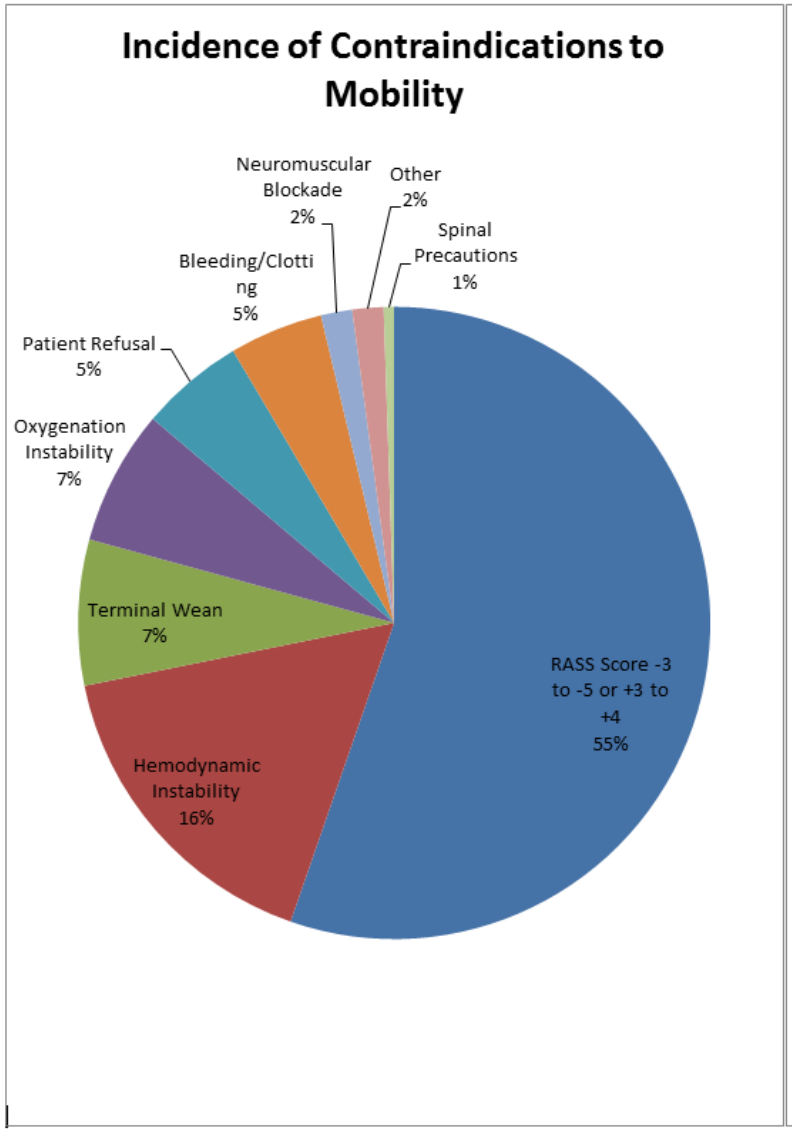
Barriers & contraindications

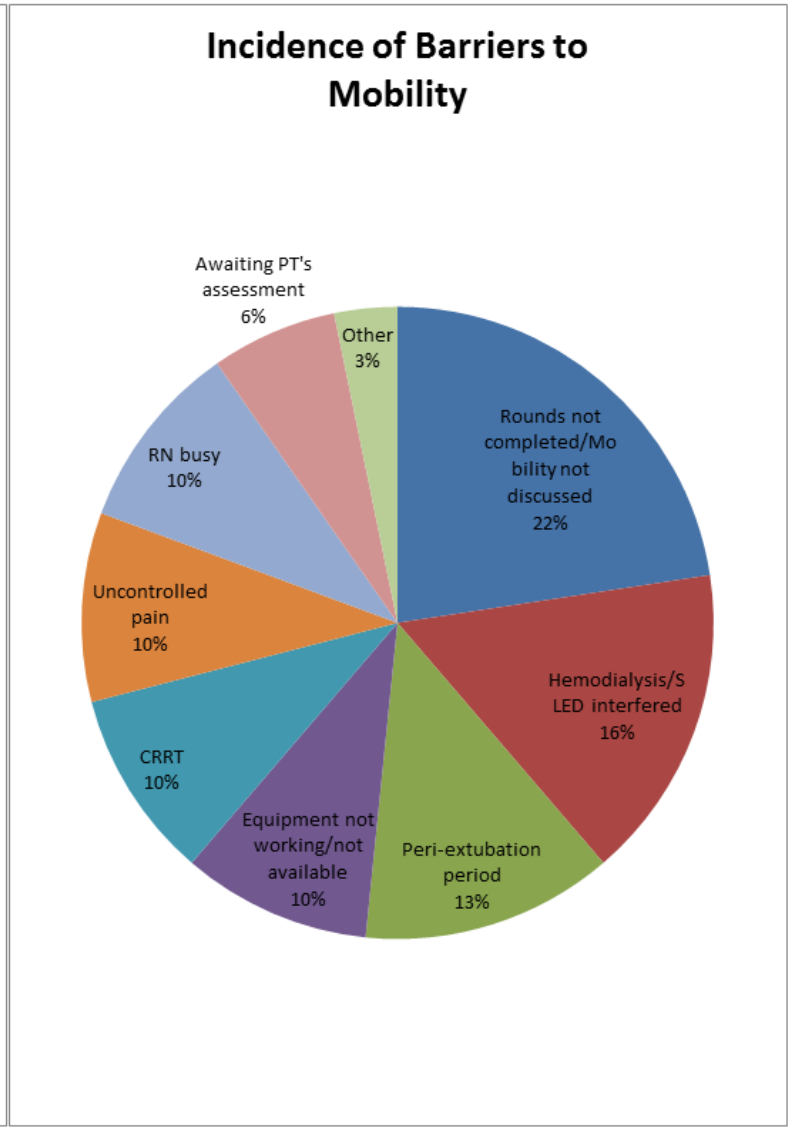
- **Challenges**:
  - Defining the difference between barriers and contraindications
  - Dispelling myths about true contraindications
  - Needed a tool to guide decision making
  - Difficult to keep people from feeling 'at fault' that their patient didn't/couldn't mobilize
- **Successes**:
  - Algorithm developed to distinguish barriers from contraindications
  - New ideas and practice changes established to overcome barriers (e.g. recirculating CRRT)
  - Barriers addressed earlier
  - Mobility discussion greatly increased – discussed daily in rounds as part of algorithm

Mobility algorithm



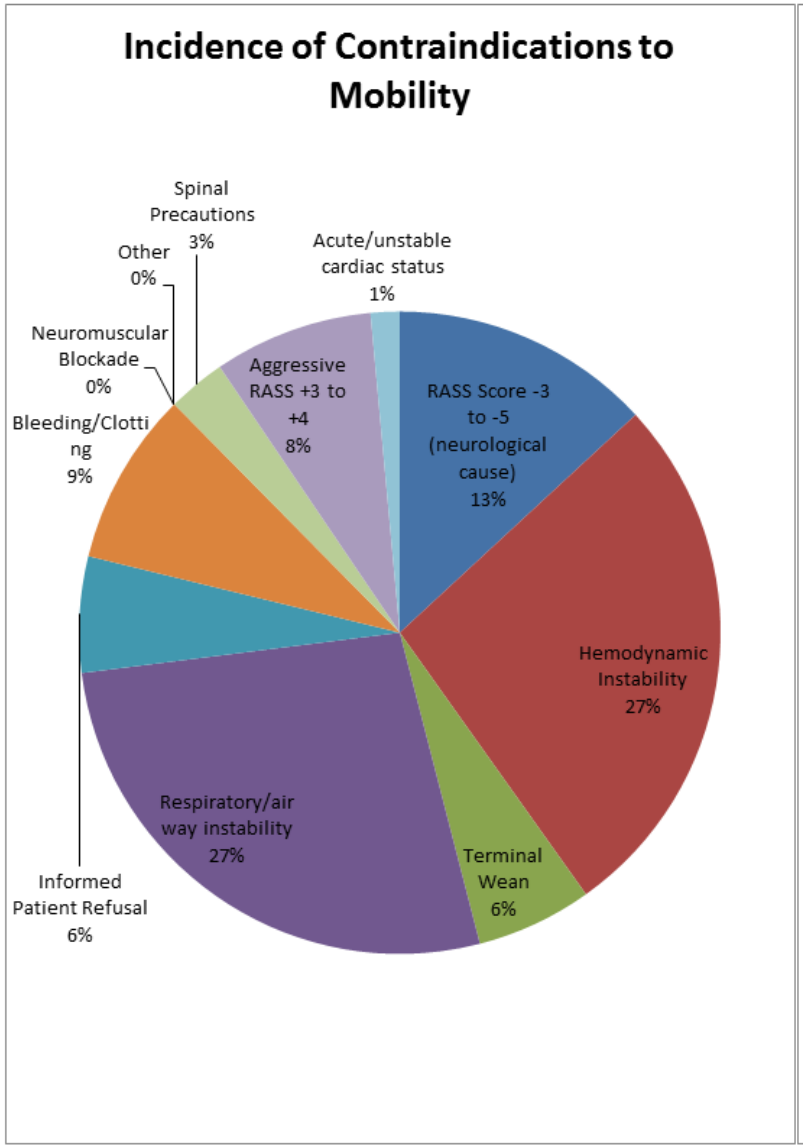
Barriers & contraindications: initial numbers

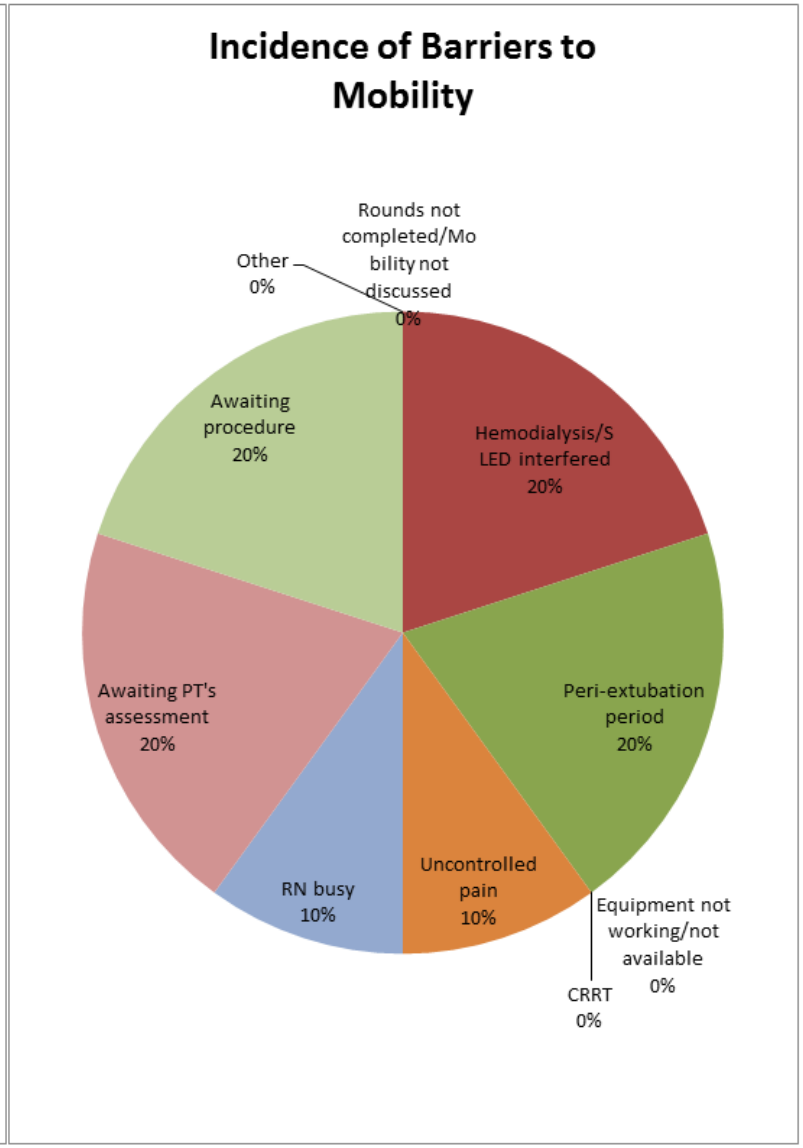




Period of June 8th to July 13th, 2015

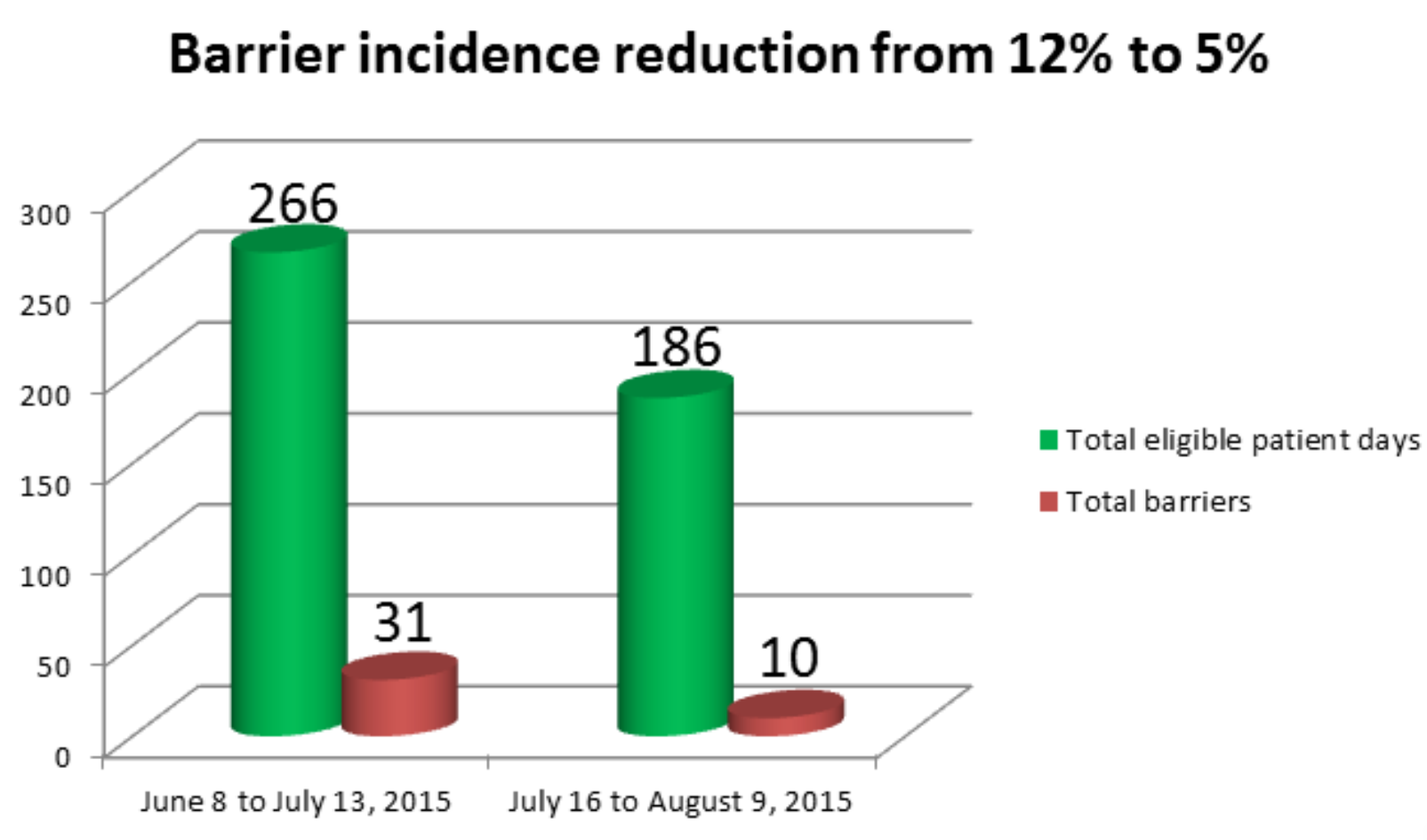
Barriers & contraindications: drilling it down!





Period of July 16th to August 9th, 2015

Barrier reduction over time



- Choose something you can have measurable success with for your first project
- Involve all team members from the start- even if you're not sure what role they might play
- Create and use standardized terminology
- Establish clear communication amongst the team and closed feedback loops
- Be sensitive to the team's perceptions without compromising quality standards
- Share data in real time and make it visible and accessible
- Remember that it's a process of learning and growing – it doesn't have to be perfect to achieve your goals

Physio Perspective

- Mobility was seen primarily as a PT responsibility; this resulted in a perception that all mobility should be done by PTs
- This quality initiative helped clarify roles and improve the team approach to mobility
- The role of Physio is to assess and establish mobility plan and then implement specific treatments to allow progression
- Nursing engagement with daily functional mobility increased our capacity to be doing therapeutic mobility and other interventions with patients
- The increased communication and collaboration between PT and nursing lead to stronger relationships and teamwork

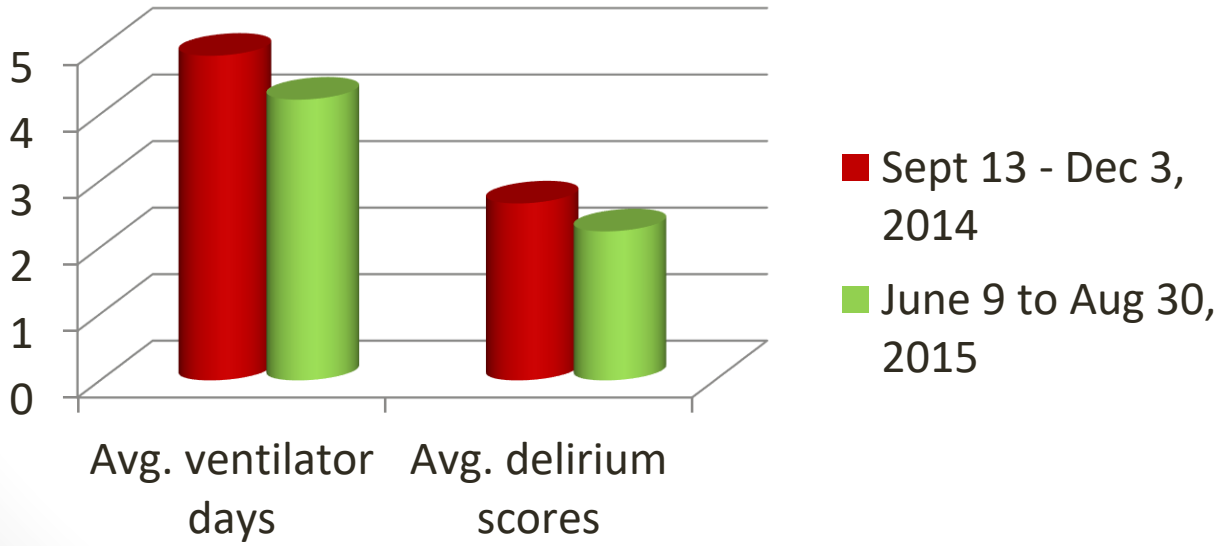
Successes

- Huge increase in discussion around mobility
- Dispelled myths – the more patients were seen mobilizing, the more patients were mobilized!
- Brought the interdisciplinary team together to work towards a goal
- Going through the 'storming phase' actually got people engaged
- This has been a springboard for future quality initiatives – we are currently working on Pain Management using the same principles
- Mobility is now a top priority and embedded practice in the unit!

Results

Looked at two 'before and after' periods:

- September 13th to December 3rd 2014 – **BEFORE**
  - Average mechanical ventilation days: 4.88 days
  - Average delirium score: 2.66
- June 9th to August 30th 2015 – **AFTER**
  - Average mechanical ventilation days: 4.22 days
  - Average delirium score: 2.24



Limitations to the data

- Done in different times of the year (fall/winter vs. summertime) which means there may have been different levels of illness in the unit at the time
- Delirium scoring is quite subjective, so scoring varies between clinicians
- Awareness and knowledge about how to score delirium increased between beginning period and end period; this might mean that there was a greater decrease in the incidence of delirium after the mobility initiative!
- All data averaged was on ventilated patients only; non-vented patients were not included

Sustainment

- Spot audits – frequency depends on results!
- PCCs receive report on mobility from front-line RNs daily – they keep their ears to the ground and let the educators know if practice is slipping
- Mobility is very briefly touched on at the start of the new quality huddles
- Mobility practice changes are incorporated into all new staff's unit orientation
- Flow sheet documentation has been changed to reflect increased focus on mobility (this was already in progress when we started)
- Mobility is now part of the systems report given in rounds each day on every patient

Thank you! ☺

Contacts:

Karen Strybos, RN, BSN, CNCC(C)
Clinical Nurse Educator, ICU
Surrey Memorial Hospital
karen.strybos@fraserhealth.ca

Judith Mehregani, RN, BScN
Interim Clinical Nurse Educator
Intensive Care Unit
Surrey Memorial Hospital
judith.mehregani@fraserhealth.ca

Pat Berger, RN, BSN
Interim Manager
Intensive Care Unit
Surrey Memorial Hospital
patricia.berger@fraserhealth.ca

Amy Ellis, BSc PT, MSc PT
Clinical Supervisor Physiotherapy – Critical Care and MedNephro
Surrey Memorial Hospital
Amy.Ellis@fraserhealth.ca