

Making Sense of Your Data

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Objectives

We hope that this time can be used to discuss how your data may change, how those changes may differ from (or confirm) expectations and how to frame your results.

What are you measuring?

Mortality

Compliance

Morbidity

SSI

LOS

Compliance = Process

- Can be measured in 'real time'
- Time Series or single comparison
- What is your 'threshold' and what are you plans if you vary?

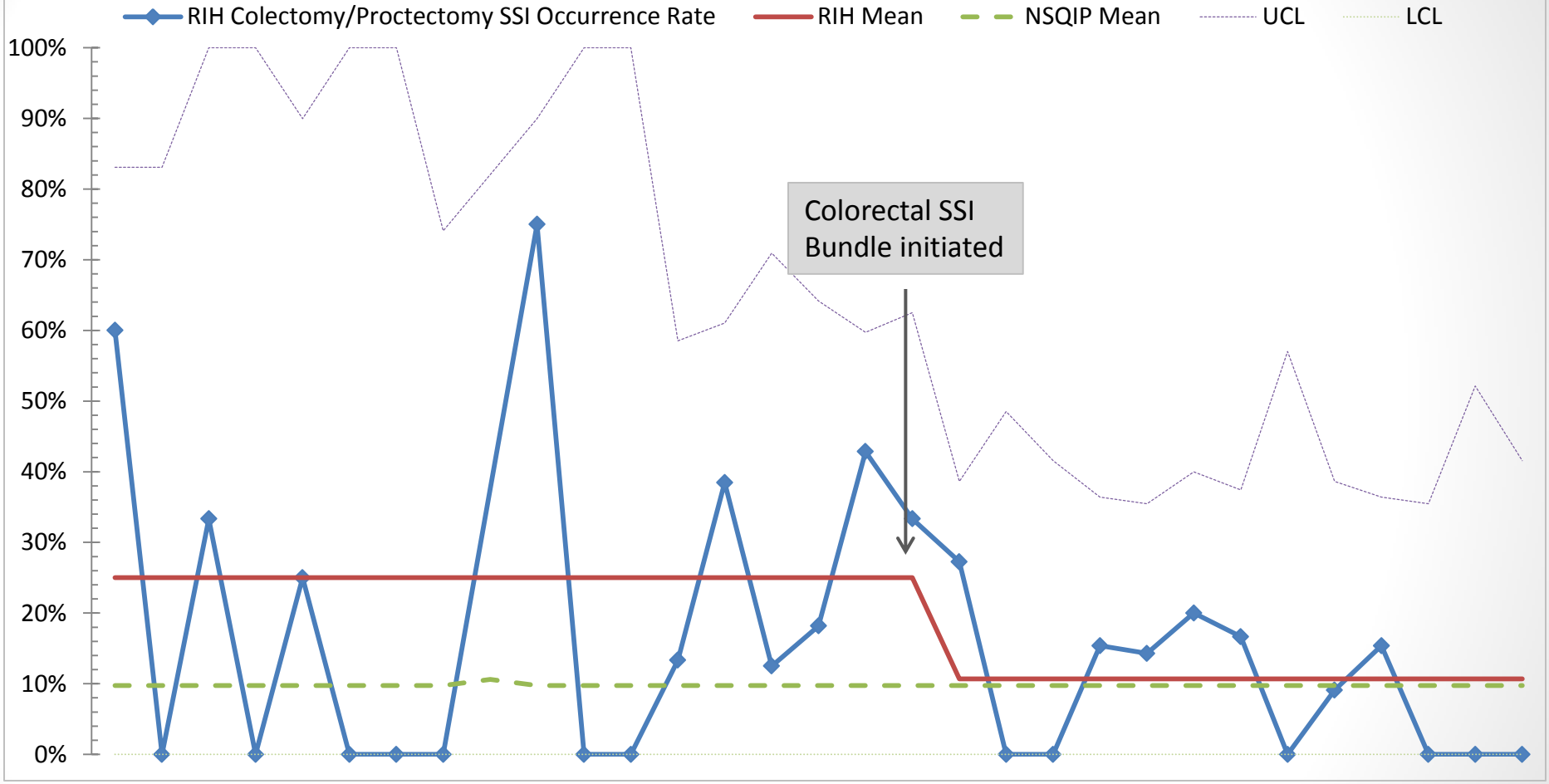
SSI = Outcome

- Usually measured for 30 days
- Takes into account both in and out of hospital occurrences
- Can look at time series or pre/post

Questions to consider....

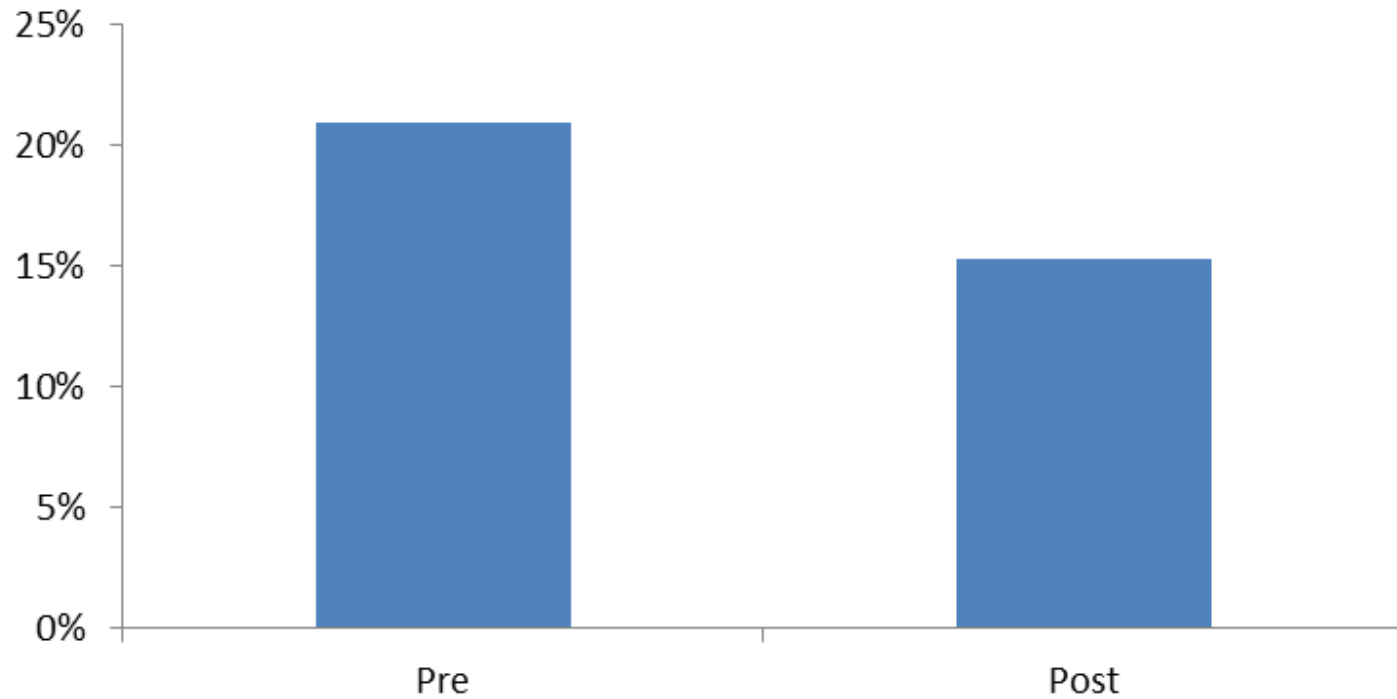
- How frequent is your outcome?
- How quickly do you expect it to change?
- How do you decide a change has happened?
- Is there a better way to measure infrequent events?
- Does it matter when it happened?

RIH Post Op Colectomy/Proctectomy SSI (All Wound) Occurrence Rate (NSQIP Non risk adjusted data)

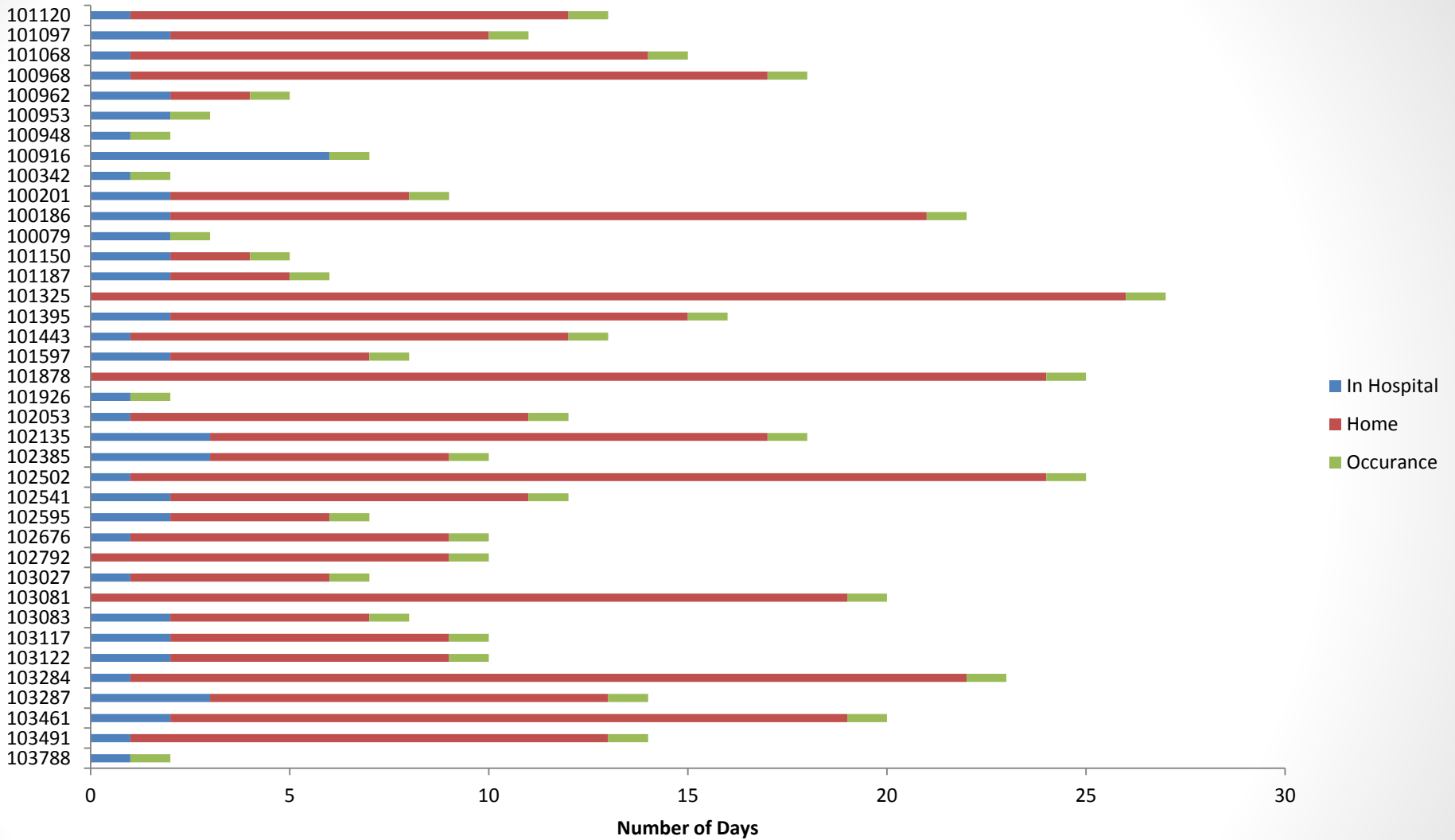


Month	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	April-13	May-13	June-13	July-13	Aug-13	Sept-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	April-14	May-14	June-14	July-14
Occurrence	3	0	1	0	1	0	0	0	0	3	0	0	2	5	1	2	6	4	3	0	0	2	2	2	2	0	1	2	0	0	0
# of Surgeries	5	5	3	2	4	2	3	7	0	4	1	3	15	13	8	11	14	12	11	6	9	13	14	10	12	4	11	13	14	5	9

Colectomy/Protectomy SSI Rates



Time to Adverse Event



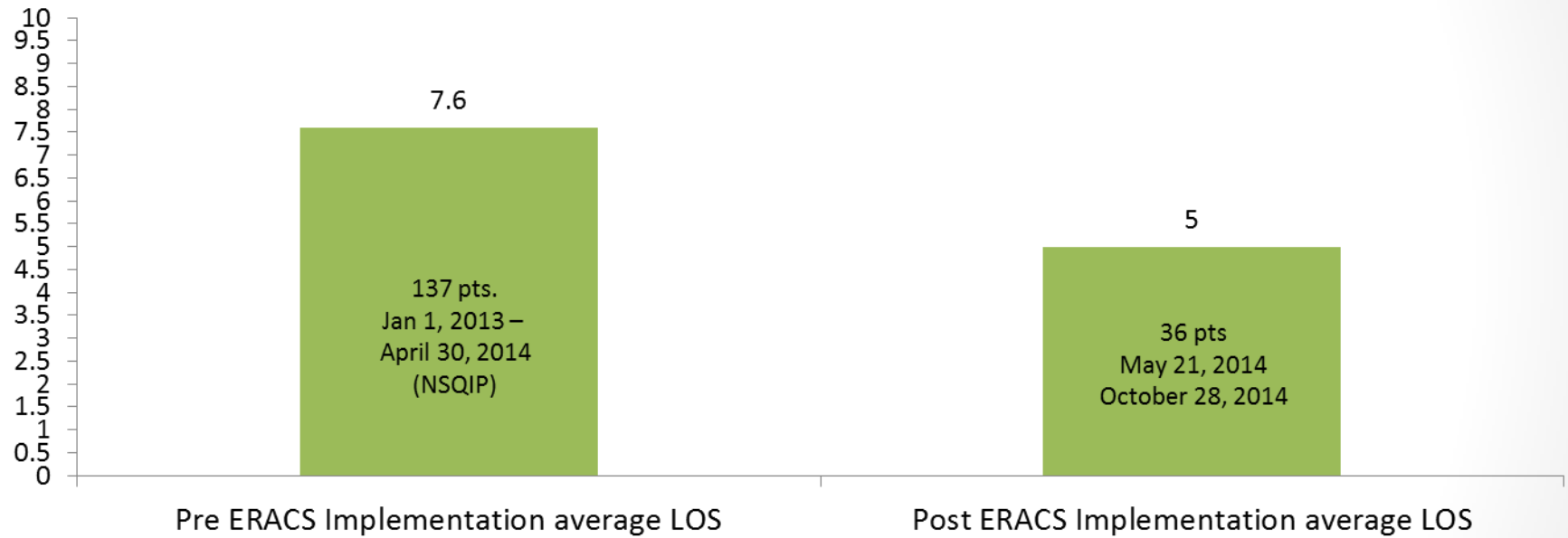
LOS = Balancing or Outcome

- Is LOS an outcome we are actively trying to change? Or is it a happy by product of the changes we are making?
- What if your LOS is already low?
- What about the outliers?

Questions to consider....

- How soon can you say that you have changed?
- What happens if LOS goes up?
- How are you going to deal with outliers?
- How do you know that the additional days of stay are related to ERAS?
- Is there a point after which you cannot improve?

Pre & Post ERACS LOS

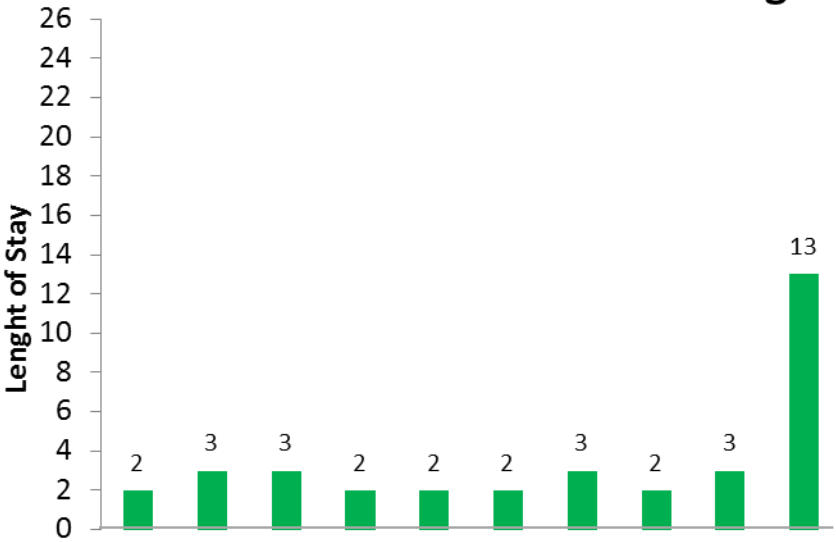


Is it significant?

	Group One	Group Two
Mean	7.62	5.06
SD	10.22	5.18
SEM	0.87	0.88
N	137	35
The two-tailed P value equals 0.1530		

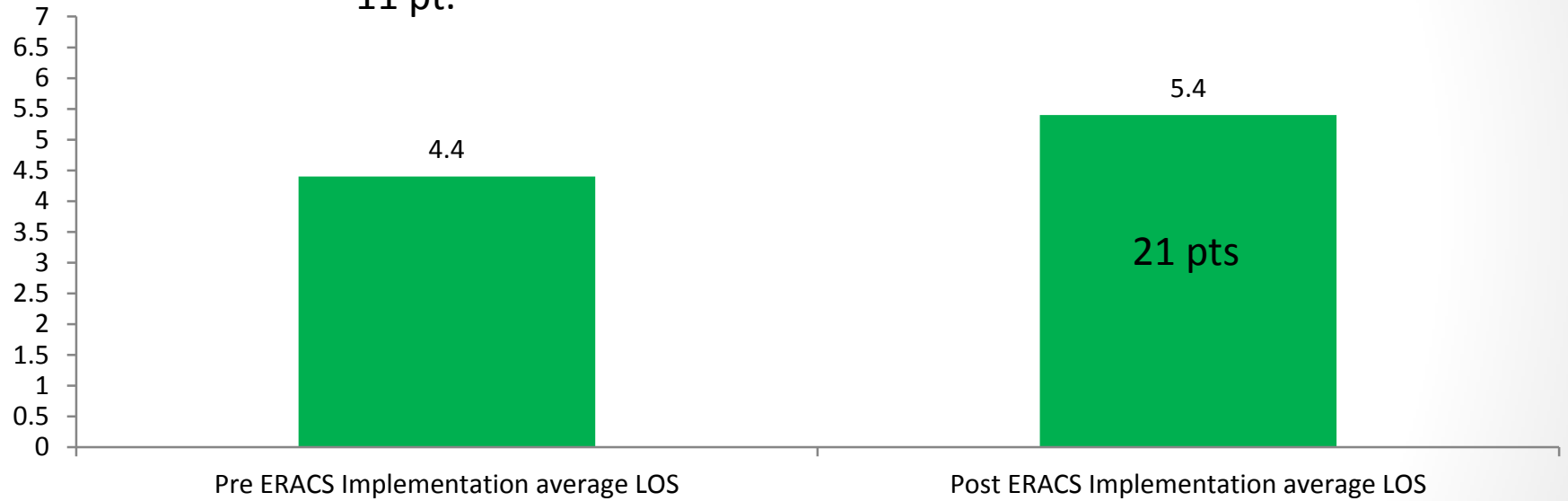
Does it matter?

Length of Stay

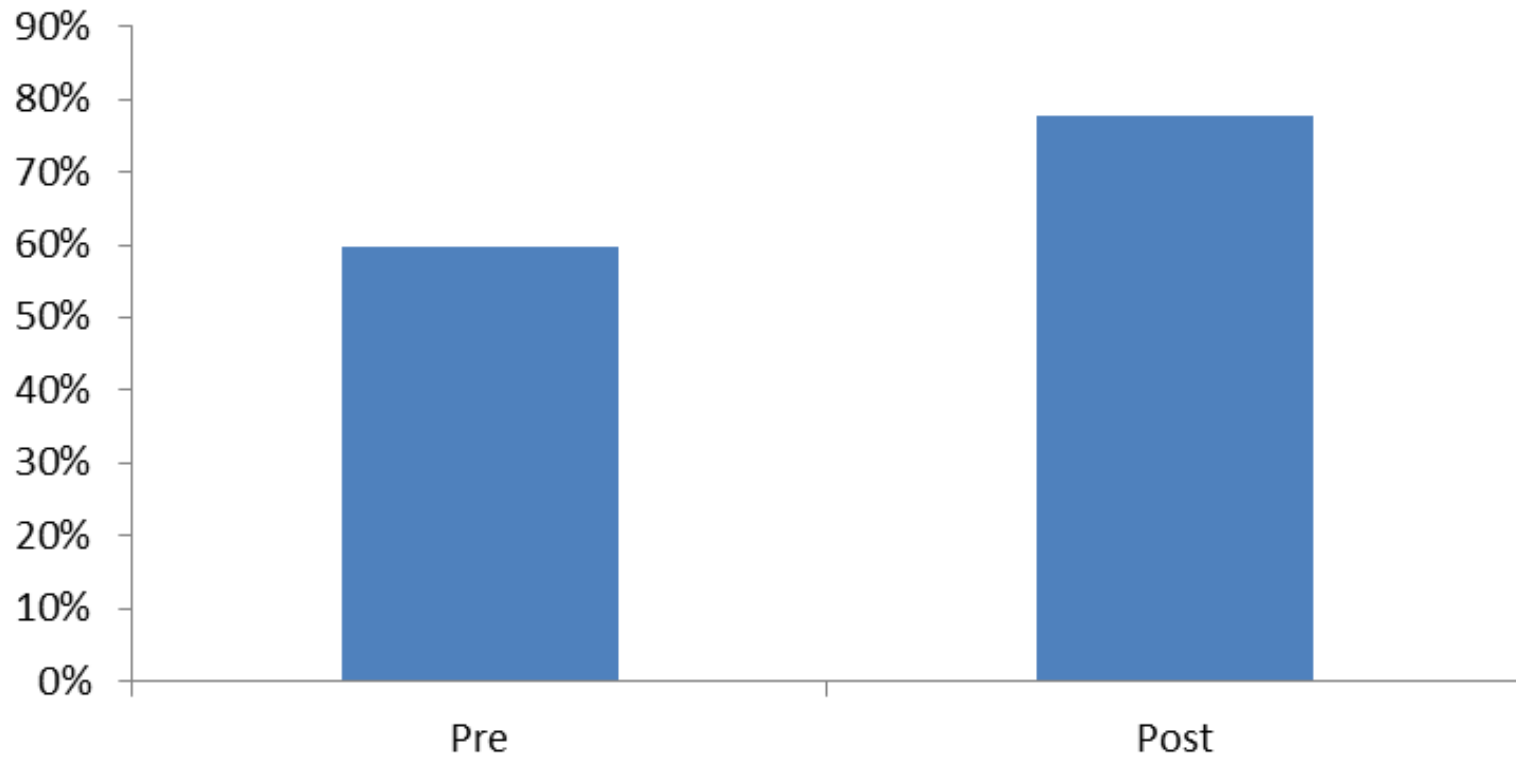


Patient

Pre & Post ERACS LOS



Percent of Patients Home with 5 Days



What else have you seen in your data?

Other questions?

Thank you all for attending.

Feel free to contact me:

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HUGE THANKS to Julie Wootton at RIH for sharing results, data and tons of great ideas