

Measurement Strategy

Interpreting the IBD Qorus QI Reports



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Today's Session

Improvement Measurement



What are we measuring?

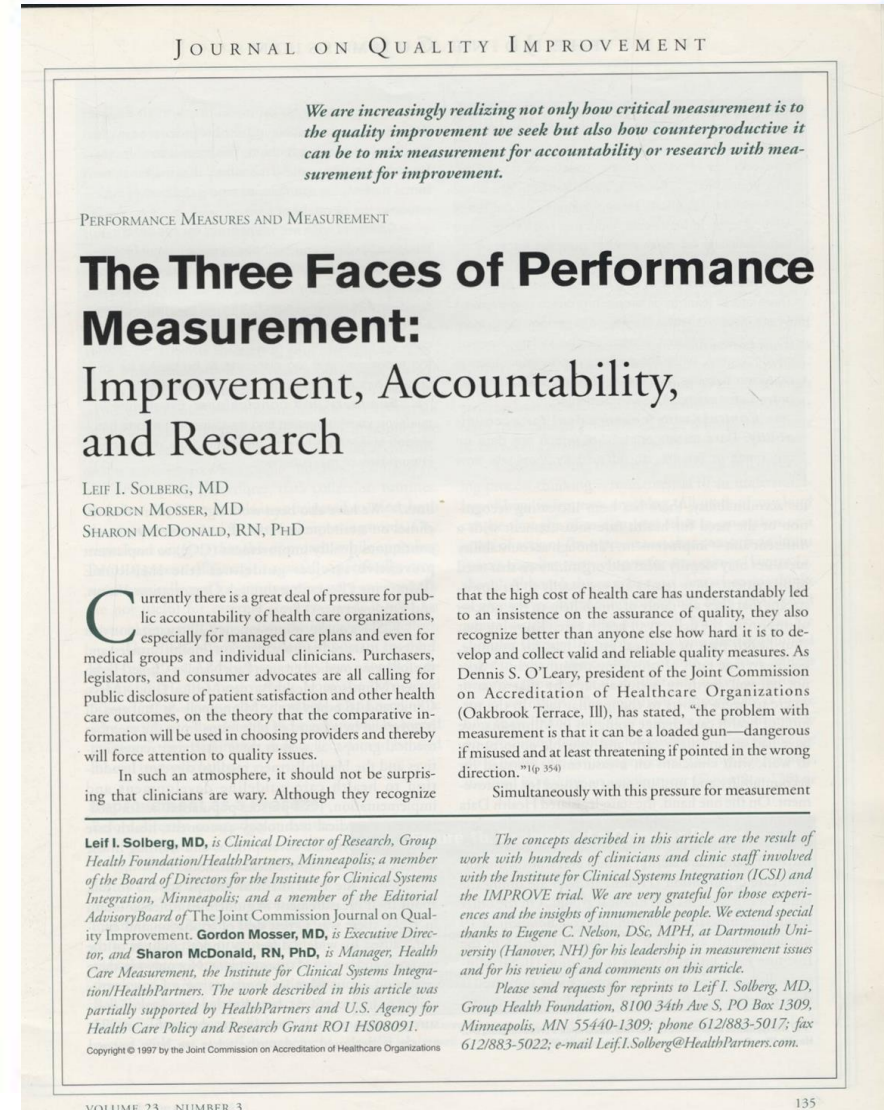
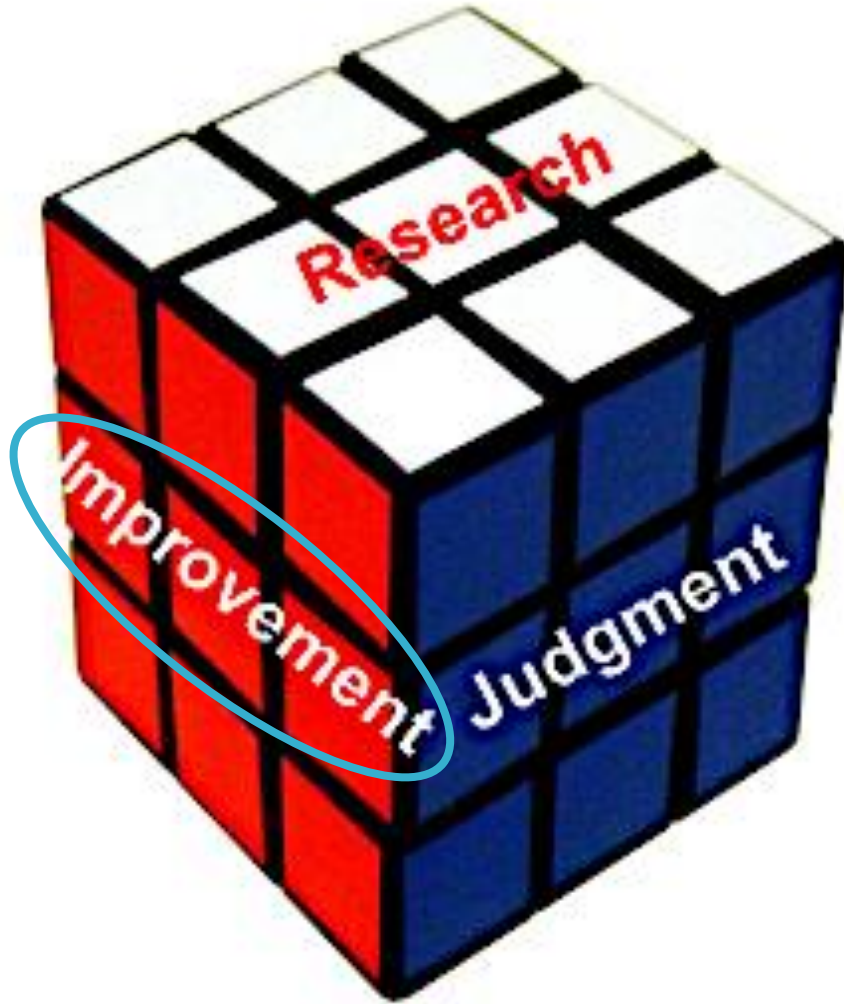


Qorus QI Reports



Basic SPC Interpretation

Three Faces of Measurement



Solberg LI, Mosser G, McDonald S. The three faces of performance measurement: improvement, accountability, and research. Jt Comm J Qual Improv. 1997 Mar;23(3):135-47. doi: 10.1016/s1070-3241(16)30305-4. PMID: 9103968.

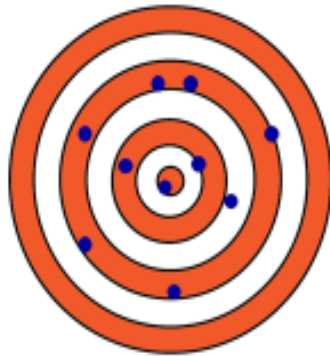
Improvement Measurement: Informing Intelligent Action

A Practical Illustration of Variation

The figure below shows how two individuals, Mary and Bill, threw ten darts.



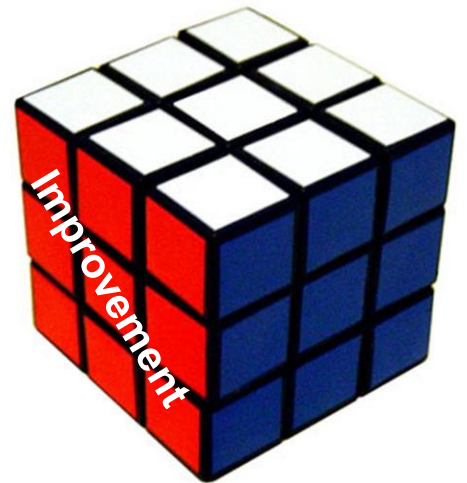
Mary



Bill

“If I had to reduce my message for management to just a few words, I’d say it all had to do with reducing variation.”

W. Edwards Deming



IBD Qorus Data Collection Tool: The IBD Qorus Previsit Survey (PVS)

Improving Care for People with Inflammatory Bowel Disease (IBD)

DATE: / /
MM/DD/YYYY

What is your treatment Number One Goal (Target) related to your IBD? This could be related to healing your bowel (mucosal healing), specific symptoms (e.g., diarrhea, abdominal pain), or how IBD might impact school or work, or life events (e.g., wedding, travel, having children).

My Number One Goal (Target) is: _____

How confident are you that you can reach this goal / target within the next six months?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Not Confident Somewhat Confident Fully Confident

IBD includes Crohn's disease and ulcerative colitis. I have been diagnosed with (choose only ONE response):

☐ Ulcerative Colitis ☐ Crohn's disease ☐ Other (specify): _____

When you are not experiencing symptoms of your inflammatory bowel disease, how many bowel movements do you typically have each day?

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Not Applicable (I have an ostomy)

Now, please tell us about your current symptoms. Over the past 7 days...

What is your average (typical) number of bowel movements that you had in a single day last week?

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

Not Applicable (I have an ostomy)

Daily abdominal pain (check one)

☐ None ☐ Mild ☐ Moderate ☐ Severe

Blood in stool (check one)

☐ No blood seen ☐ Blood less than 50% of the time ☐ Blood 50% or more of the time

In the past 7 days, have you had bowel movement(s) when you passed blood alone? ☐ Yes ☐ No

How would you rate your general well being over the past 7 days? (check one)

☐ Generally well ☐ Slightly under par ☐ Poor ☐ Very Poor ☐ Terrible

Have you been to an Emergency Department (ED) in the past 3 months due to your IBD? ☐ Yes ☐ No

Have you been hospitalized in the past 3 months due to your IBD? ☐ Yes ☐ No

Are you currently taking prednisone by mouth for your IBD? ☐ Yes ☐ No

Are you currently taking opioids (pain medications) for your IBD? ☐ Yes ☐ No

Gender: ☐ Male ☐ Female

Improving Care for People with Inflammatory Bowel Disease (IBD)

Age (in Years):

☐ Less than 21 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ 61-70 ☐ 71-80 ☐ Greater than 80

FOR PROVIDERS ONLY

In your best estimate how close is your patient to achieving steroid free mucosal healing?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

No healing Halfway there Complete healing

Did you discuss steroid free mucosal healing with your patient today?

☐ Yes ☐ No

Did you and your patient discuss your patient's targets (goals of care) today?

☐ Yes ☐ No

How recently have you done endoscopy/imaging to assess mucosal healing?

- Within the past 6 months
- More than 6 months and less than 12 months
- More than 12 months and less than 3 years
- More than 3 years

When do you next plan to assess mucosal healing (endoscopy/imaging)?

- Within the next 6 months
- Within the next 12 months
- Longer than 12 months
- I would like to assess mucosal healing but patient declines assessment
- I don't know at this time

Which medications is your patient currently taking for their IBD (check all that apply)?

- 5-ASA (oral and/or rectal)
- Immunomodulators (methotrexate, thiopurines)
- Corticosteroids (prednisone, budesonide)
- Anti-TNF agent
- Non-TNF biologic agent (vedolizumab, ustekinumab)
- Targeted small molecule inhibitors (tofacitinib)
- Other

If your patient has NOT achieved steroid-free mucosal healing, are you making any treatment changes (select all that apply)?

- o No treatment change – patient choice
- o No treatment change - I do not feel that any change in treatment will lead to a meaningful improvement
- o No treatment change - due to cost/insurance coverage
- o No treatment change today – will decide based on therapeutic drug monitoring
- o Optimizing current therapy (such as increasing dose)
- o Adding new therapy
- o Switching to alternative therapy
- o NOT RELEVANT – patient has mucosal healing
- o Other

What is your Physician Global Assessment (PGA) for this patient today?

- Normal
- Mild
- Moderate
- Severe

IBD Qorus QI Reports



Opioid Treatment (Lower is better ↓)

Are you currently taking opioids (pain medications) for your IBD?

Date Range

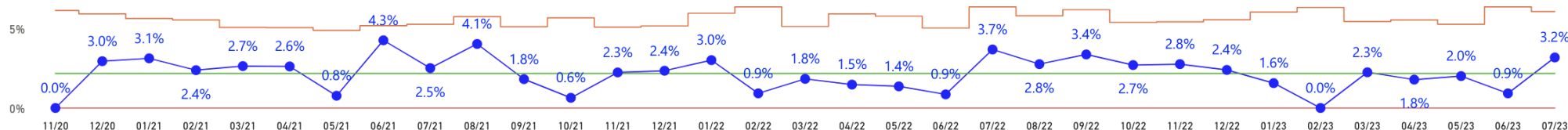
Nov-2020
From

Jul-2023
To



Monthly Opioid Proportion for your Site (p Chart)

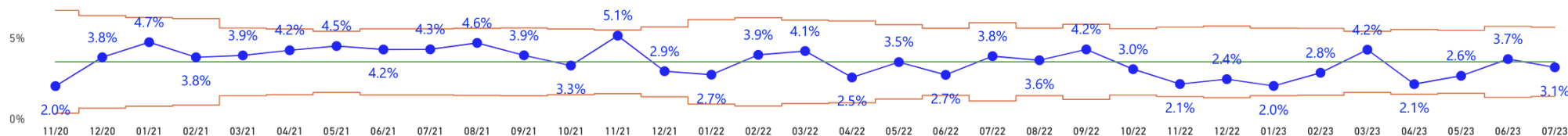
Average (Green Line) = 2.2%



Your site over time

Monthly Opioid Proportion for all Sites (p Chart)

Average (Green Line) = 3.5%

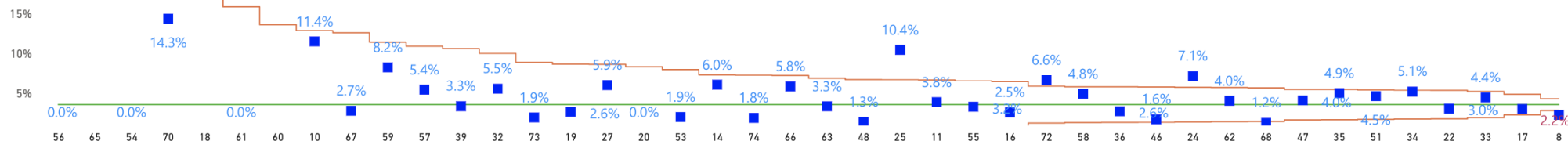


Collaborative over time

Proportion Opioid by Site for Date Range (p Chart)

Average (Green Line) = 3.5%

(Your Site Number is 8)



Collaborative by site

For time points in which only one response is received, control limits will disappear (2 or more responses required per time point for control limits to show).

Your Site

5540
Total (Denominator)

121

Yes (Numerator)

All Sites

20825
Total (Denominator)

725

Yes (Numerator)

42

Number of Sites Reporting

IBD Qorus QI Reports

Date range

Which way is better?

Average

Opioid Treatment (Lower is better ↓)

Are you currently taking opioids (pain medications) for your IBD?

Date Range
Nov-2020
From

Jul-2023
To

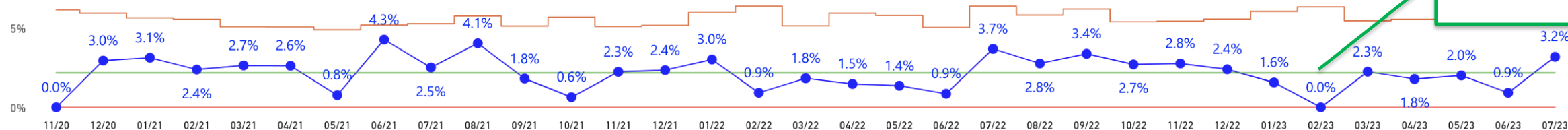


pPrime

Monthly Opioid Proportion for your Site (p Chart)

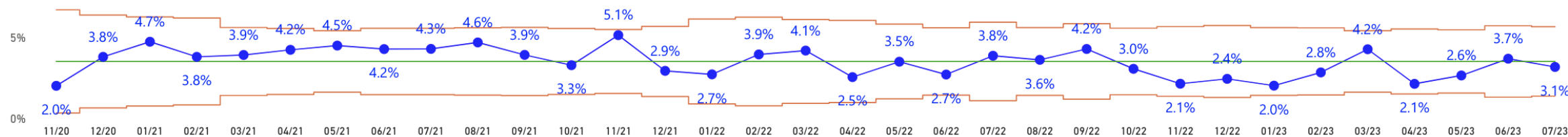
Average (Green Line) = 2.2%

Average



Monthly Opioid Proportion for all Sites (p Chart)

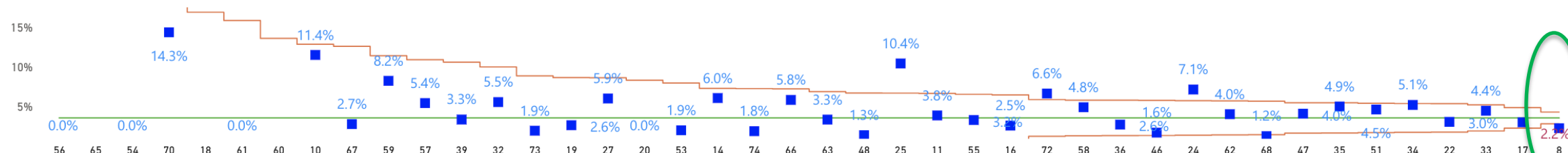
Average (Green Line) = 3.5%



Proportion Opioid by Site for Date Range (p Chart)

Average (Green Line) = 3.5%

(Your Site Number is 8)



Your Site

5540
Total (Denominator)

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For time points in which only one response is received, control limits will disappear (2 or more responses required per time point for control limits to show).

Statistical Process Control (SPC)



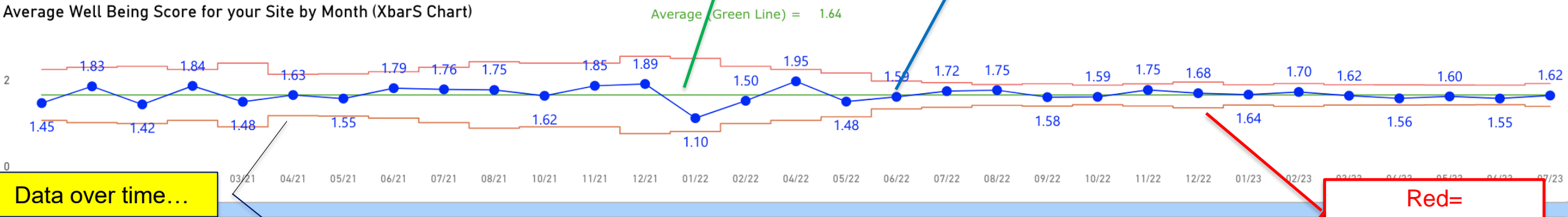
General Well Being (Lower is better ↓)
How would you rate your general well being over the past 7 days?

Date Range
From Nov-2020 To Jul-2023

Green Line= Average

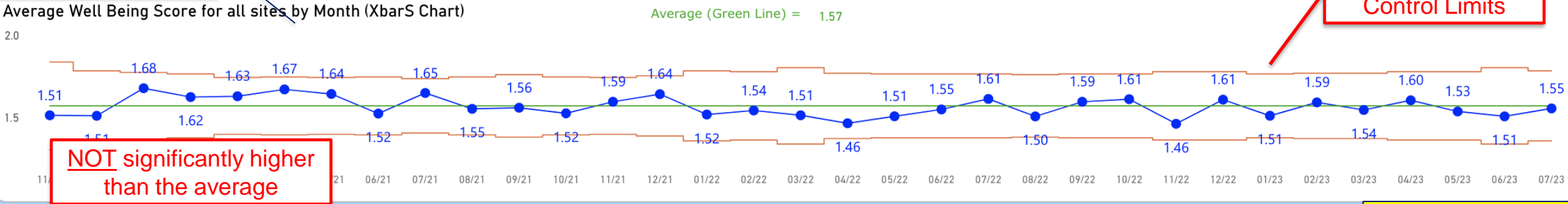
Blue= Observed Values

Average Well Being Score for your Site by Month (XbarS Chart)



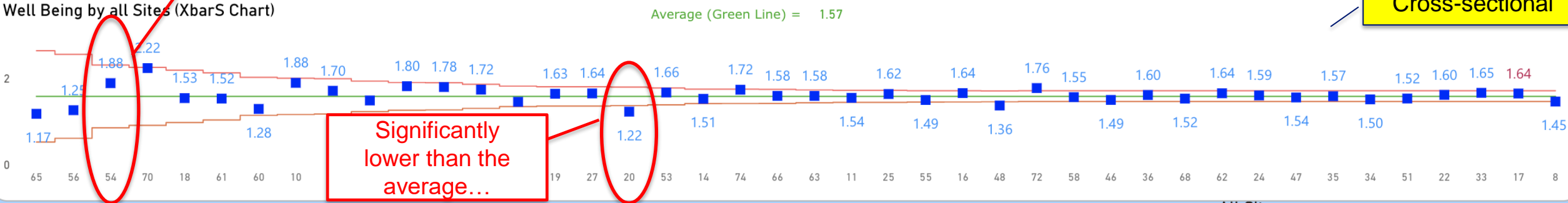
Red= Control Limits

Average Well Being Score for all sites by Month (XbarS Chart)



NOT significantly higher than the average

Well Being by all Sites (XbarS Chart)



Significantly lower than the average...

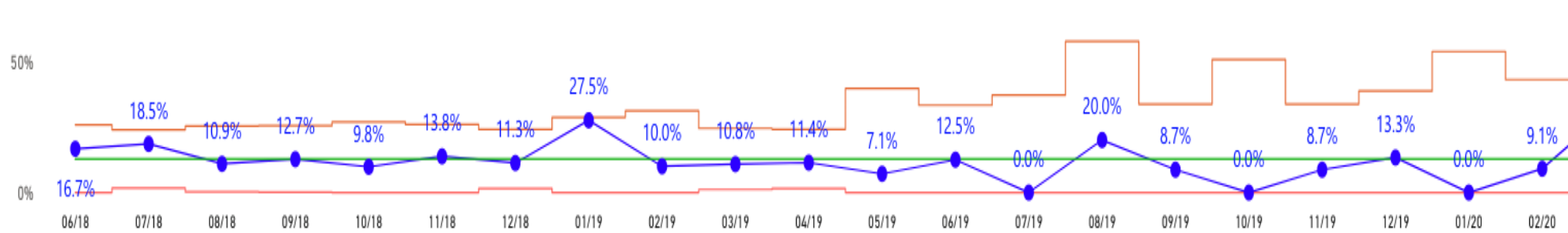
Cross-sectional

Three Basic Detection Rules (IHI Criteria)

1. **SHIFT** = 8 or more consecutive points above or below the average
2. **Points outside the control limits**: One or more points outside of the upper or lower control limits
3. **TREND** = 6 or more consecutively increasing or decreasing points

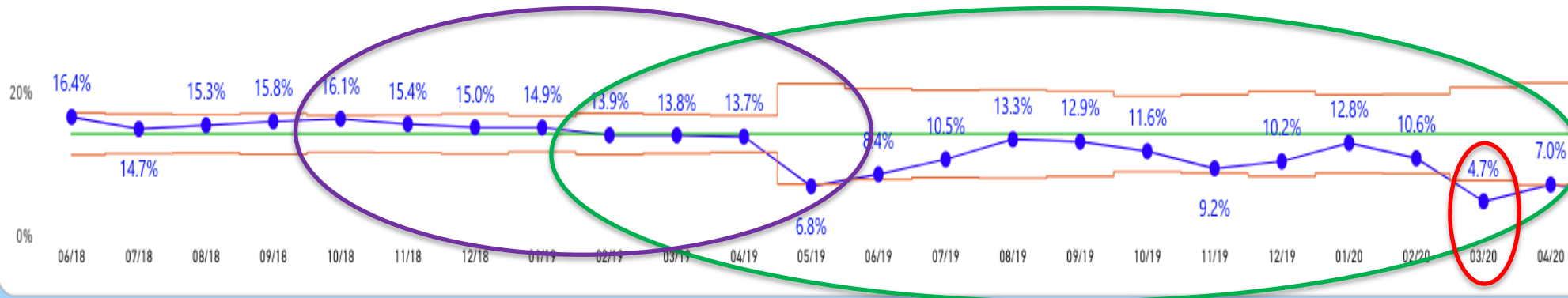
Monthly ED Utilization for your Site - Proportion (p Chart)

Average (Green Line) = 12.8%



Monthly ED Utilization for all Sites - Proportion (p Chart)

Average (Green Line) = 14.0%

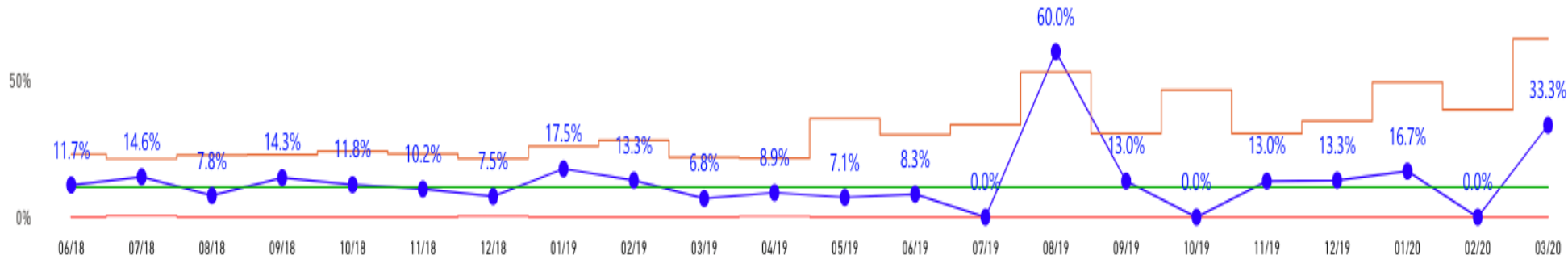


Three Basic Detection Rules (IHI Criteria)

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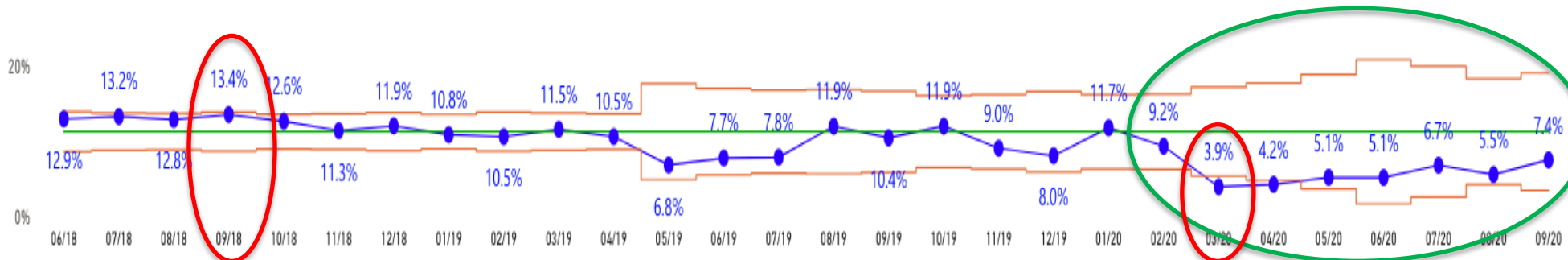
Monthly Hospitalization Proportion for your Site (p Chart)

Average (Green Line) = 10.8%



Monthly Hospitalization Proportion for all Sites (p Chart)

Average (Green Line) = 11.2%



Summary

Improving Care for People with Inflammatory Bowel Disease (IBD)

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MM/DD/YYYY

What is your treatment Number One Goal (Target) related to your IBD? This could be related to healing your bowel (musical healing), specific symptoms (e.g., diarrhea, abdominal pain), or how IBD might impact school or work, or life events (e.g., wedding, travel, having children).

My Number One Goal (Target) is: _____

How confident are you that you can reach this goal / target within the next six months?

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Not Confident			Somewhat Confident				Fully Confident			

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What is your average typical number of bowel movements that you had in a single day last week?

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Blood in stool (check one)

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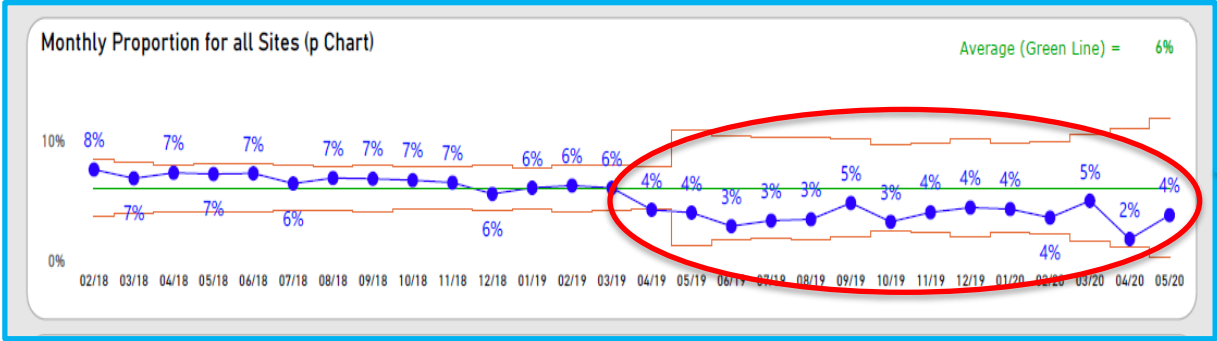
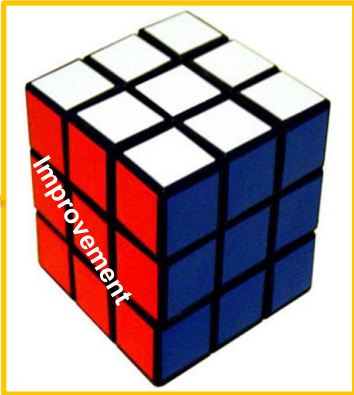
Gender: ☐ Male ☐ Female

Improvement Measurement

What are we measuring?

Qorus QI Reports

Basic SPC Interpretation



Next Steps

ACTIVITY	MATERIALS
Review this lesson and share with key members of your team	Microlesson powerpoint or recording
Collect data for your QI reports	
Review your data with your team and look for areas of improvement!	Data Driven Improvement Story Template