

Interdisciplinary Approach to Bowel and Bladder Care for Individuals with Multiple Sclerosis

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Background

- Prevalence of Neurogenic bowel and bladder symptoms: ~50% of people with MS experience neurogenic bowel dysfunction and ~40-90% of patients in US with MS experience some degree of neurogenic bladder symptoms^{1-2, 4}.
- Historically, clinic visits focus on medical management of disease process and DMARDs
- Bowel and bladder function is complicated and require multiple disciplines working in tandem, due to compounding factors such as cognitive issues
- Fitting into a busy clinic with waiting lists for all ancillary services was unnecessary and complicated
- Many patients experienced emotional burden from bowel and bladder dysfunction, which is supported by the literature¹⁻². This finding warrants further exploration of providing psychological support to individuals participating in a bowel and bladder clinic.

Objective

To provide comprehensive and integrative bowel and bladder treatment to individuals with multiple sclerosis from a multi-disciplinary team including a medical provider (MD and PA), pelvic floor physical therapist, occupational therapist, registered nurses, and other specialists as needed.

Methods

- 1) Completed literature review of evidence-based practice and CMSC Algorithms to develop practice guidelines & design education materials.
- 2) Developed a 4-week clinic format to evaluate and treat MS patients' B&B function while considering patient population and neurogenic bowel and bladder (B&B) practice guidelines.
- 3) Built necessary orders, visit types, and templates in Epic (EMR)
- 4) Critically assessed and selected patient reported outcomes to assess impact of B&B clinic.
- 5) Utilized RedCap for PROs and collected CROs during visits

Discussion

Positive effects:

- Many patients expressed improvement in self-efficacy following participation in the clinic. Adding a self-efficacy outcome measure may better assess patient improvement.
- Similar to previous literature, there was benefit in having a healthcare professional encourage discussion on bowel and bladder concerns.¹⁻²

Areas of improvement:

- Preparing patients for possibility of pelvic floor work, internal assessments and treatments
- Creating an app or other resource for improved carryover for patients with cognitive concerns
- Potentially having more time between visits to implement strategies/exercises
- Helping set up next steps for patients needing additional care
- Optimizing logistics of getting patient information prior to beginning clinic
- Improving communication within hospital system to enhance patient experience

Clinic Process

Figure 1: Process prior to bowel and bladder clinic evaluation

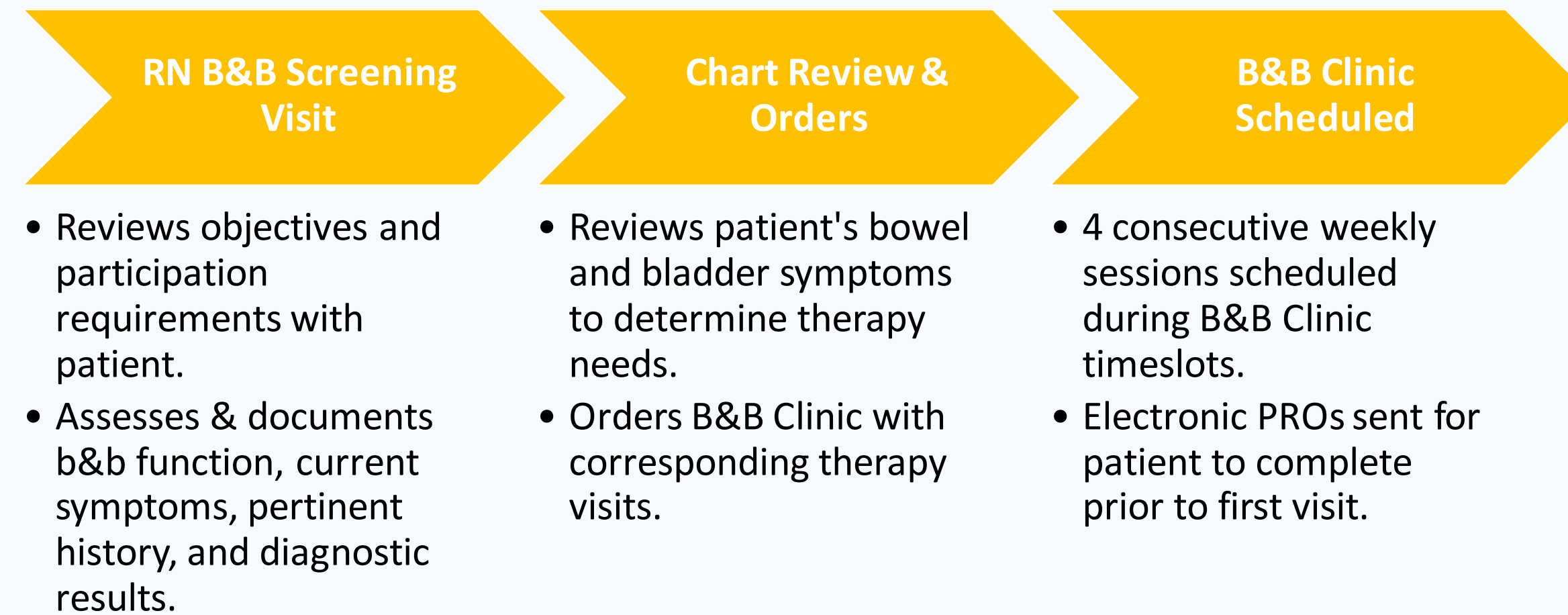


Figure 2: Process during bowel and bladder clinic

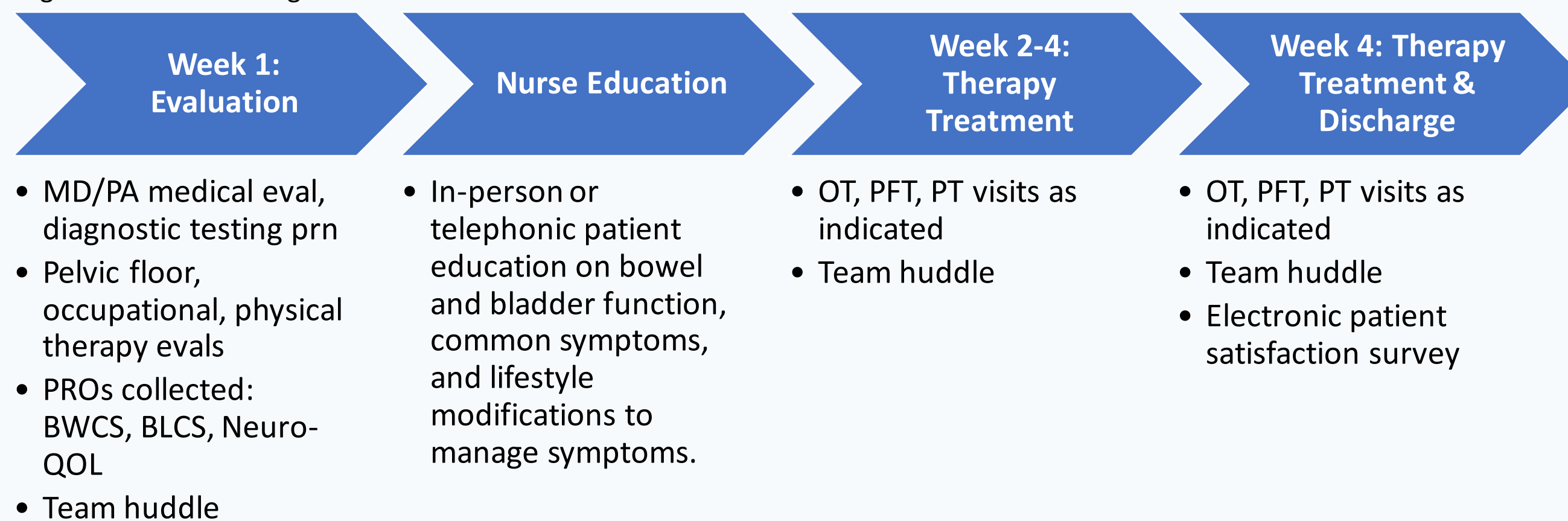
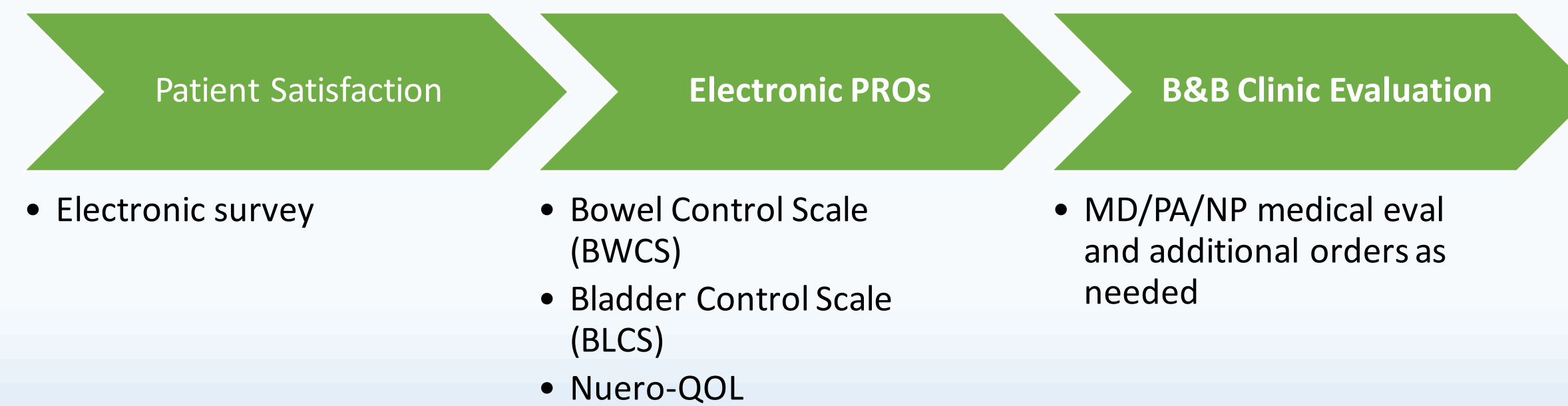


Figure 3: Process post bowel and bladder clinic



Patient Feedback

"You're the first person to bring it all together for me!"
 "I feel much more confident managing my symptoms."
 "I'm not afraid of having accidents anymore."

"I was able to poop!"
 "I learned so much in just the first visit!"

Next Steps

- Develop an evidence-based algorithm for treating bowel and bladder concerns in individuals with MS that would potentially have patients sorted into treatment tracks or plans.
- Create a reproducible program for treating bowel and bladder concerns in individuals with MS that can be shared across different healthcare systems.
- Expand program to include sexual dysfunction.

Results

Between January 2022 and May (time of publication), 10 people with MS went through the program. Below is a summary of a sample set of patients:

	Impairments	Education	Modifications
P A T I E N T 1	Urinary urgency, frequency, & incontinence, nocturia	Lifestyle modifications (bladder irritants, adequate hydration, limiting fluid before bedtime),	Double voiding, lifestyle modifications, urge suppression
P A T I E N T 2	Fecal & urinary incontinence, constipation	Urge strategies, constipation management, pelvic floor muscle re-ed, nerve fiber fatigue, heat intolerance, energy conservation, adjustable handheld shower head, bidet, bowel routine	Adjusted toilet position & mechanics for BMs, urge suppression strategies, meal planning, long handled loofah, diet
P A T I E N T 3	Constipation, fecal incontinence, bloo dy stools, post-void leaking, urinary frequency & urgency	Lifestyle modifications, elevating feet prior to bedtime, urge suppression strategies, & stress management	Bowel routine, position, double voiding, diaphragmatic breathing with BMs, diet

Conclusion

An integrative and comprehensive approach may be an effective approach to addressing bowel and bladder concerns in individuals with MS and improve quality of life in this population.

References

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