

# Pelvic Floor Dysfunction Leading to Bowel Disorders

A Physical Therapist's Role



October 21st, 2021

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# All about Me



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Physical Therapist for 14.5 years, and  
all that time has been spent at  
Advocate Christ Medical Center

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Background in outpatient  
orthopedics, oncology rehab,  
lymphedema, and pelvic floor rehab

# Objectives

Identify what is the pelvic floor?

What are the 5 functions of the pelvic floor?

What is Pelvic floor Dysfunction and the link to bowel dysfunction?

Identify signs and symptoms of bowel dysfunction.

# Objectives

Learn the risk factors and what can cause bowel dysfunction.

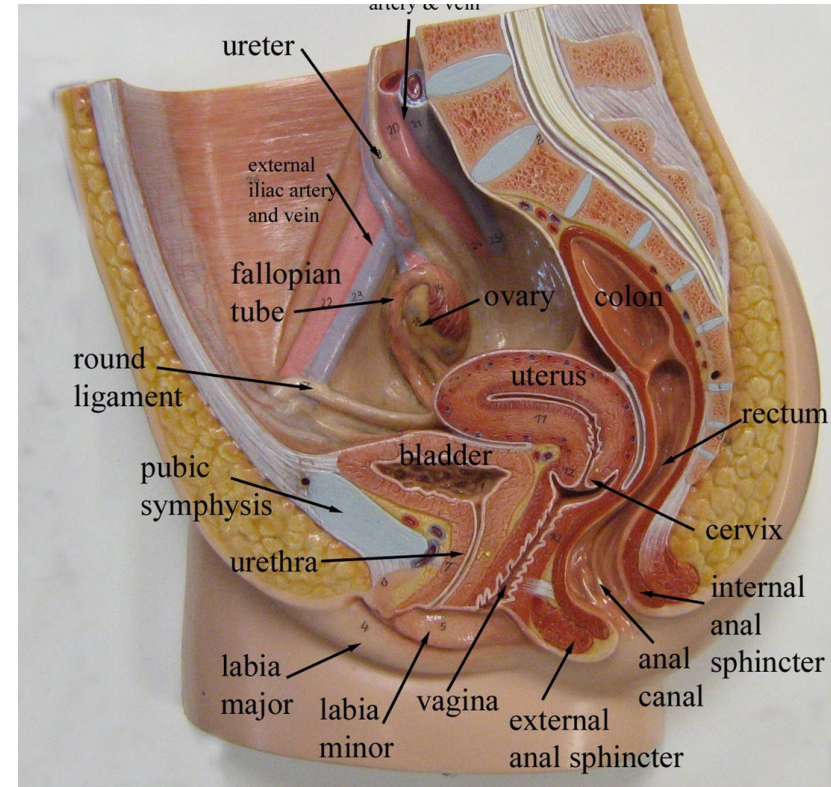
Identify the physical therapy interventions for patients with bowel dysfunction

Learn how to use Cozean Pelvic dysfunction screening tool in your practice to identify pelvic floor dysfunction and bowel dysfunction.

Learn how to refer to a pelvic floor physical therapist in your patient service area

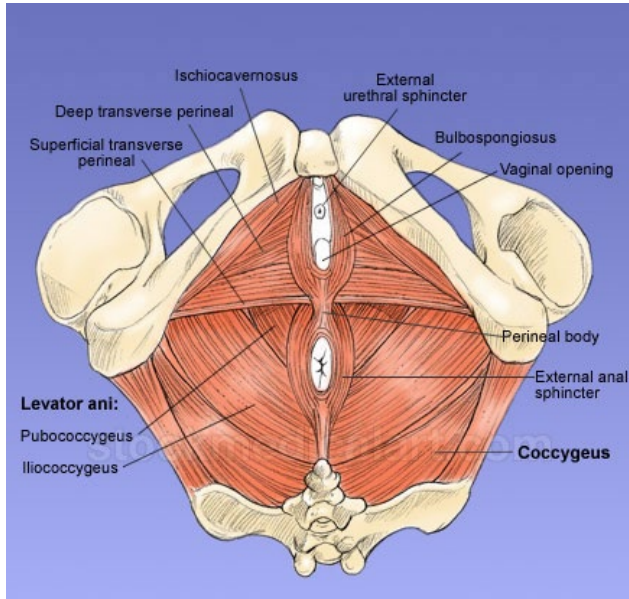
# Where is the Pelvic Floor Region?<sup>1</sup>

- Boundaries
  - Superior: Peritoneum of the pelvic viscera
  - Inferior: Skin of vulva, scrotum, perineum
  - Lateral: Pelvic floor muscles
- Pelvic Floor is made up of a group of muscles, ligaments, and fascia, and organs in pelvic region



# What is the function of the pelvic floor<sup>1</sup>

1. Support
  - Acts as a sling to support the organs of the pelvis
2. Sphincteric
  - The muscles of the pelvic floor wrap around and control the opening of your bladder and rectum.
3. Sexual
  - During intercourse, the pelvic floor muscles help to achieve and sustain an erection and allow for penetration.
4. Stabilization/Core activation
5. “Sump Pump” for circulation and lymphatic system



## What happens in a Healthy Pelvic floor?

- The muscles can voluntarily change length
- The muscles have symmetrical contractions
- The muscles have coordinated control with functional tasks

# Colon Reflexes

## 1. Colorectal Reflex

1. Allows for natural bowel emptying
2. Occurs about 30 minutes after eating

## 2. RAIR

1. Involuntary relaxes internal anal sphincter
2. Allows the rectum to discriminate between gas, liquid or solid

# Influence of Pelvic floor muscles on bowel function

- Sphincter and pelvic floor muscle control
- Puborectalis
  - Supports external anal sphincter
  - Can be weak, in spasm, or uncoordinated
- External anal sphincter
  - Somatic muscle
  - Can be weak, in spasm, uncoordinated, or paradoxical

# What is Pelvic floor Dysfunction (PFD)?

- A very general term to describe the variety of disorders that can occur when pelvic floor muscles, ligaments, or fascia are impaired.

# Link between PFD and Bowel Disorders

Underactive (weak muscles)

Overactive (tight muscles)

Dyssynergic (uncoordinated)<sup>10</sup>








Nonfunctioning

# Bowel Disorders

- Bowel Issues
  - Incontinence<sup>5,8</sup>
  - Constipation<sup>4,9</sup>
  - Pain
  - Dyssynergia<sup>6</sup>
  - Prolapse



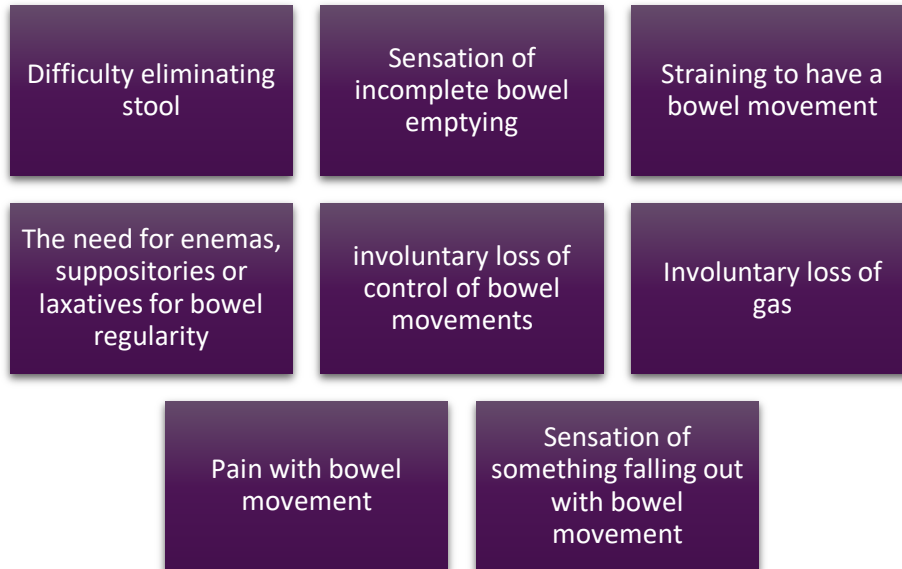
# THE BRISTOL STOOL CHART

TYPE	1		Separate hard lumps, like nuts	Severe constipation
TYPE	2		Lumpy and sausage like	Mild constipation
TYPE	3		A sausage shape with cracks in the surface	Normal
TYPE	4		Like a smooth, soft sausage or snake	Normal
TYPE	5		Soft blobs with clear-cut edges	Lacking fiber
TYPE	6		Mushy consistency with ragged edges	Mild Diarrhea
TYPE	7		Liquid consistency with no solid pieces	Severe Diarrhea



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# Signs and symptoms of Bowel Dysfunction



# Risk factors for Bowel Disorders

Childbirth<sup>3</sup>

Pregnancy

Traumatic injury to the rectal region

Spinal cord injury, or nerve injury to pelvis <sup>7</sup>

Traumatic Brain injury, stroke, or other neurological cognition

Poor Diet

# Risk factors for Bowel Disorders

Sedentary lifestyle <sup>4</sup>

Ignoring the urge for a bowel movement

Laxative overuse

Supplements

Cognitive Decline<sup>5</sup>

Age<sup>1</sup>

## Treatment for Bowel Disorders: Floor Physical Therapy

Biofeedback <sup>11</sup>

Manual  
therapy

Flexibility  
exercises

Strengthening

Postural  
retraining

✗ 90°



Intestine is pinched  
and blocked

✓ 35°

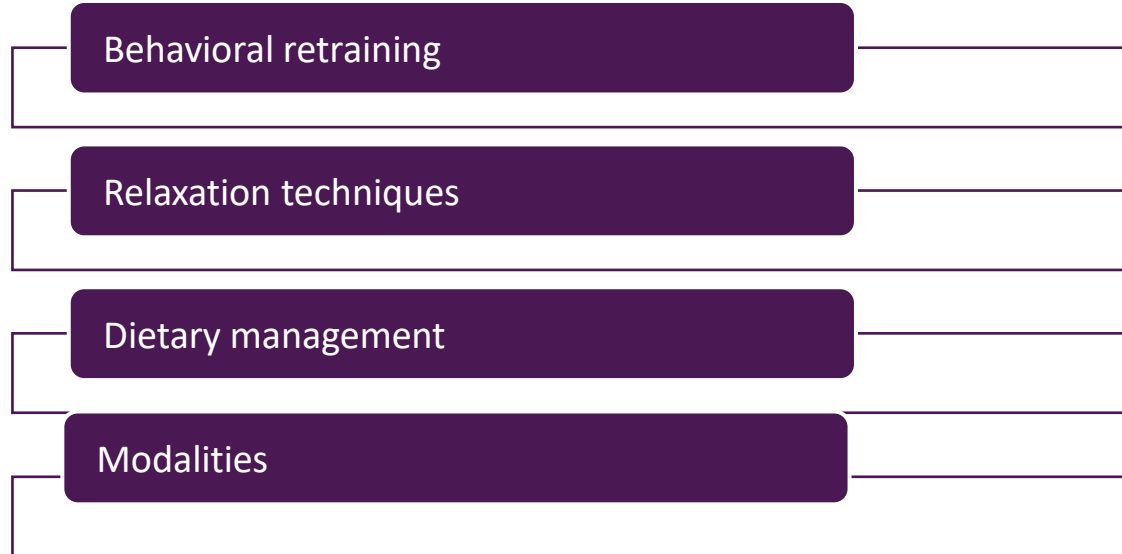


The healthier way to sit  
in the toilet.

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# Treatments for Bowel Dysfunction



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# COZEAN PELVIC DYSFUNCTION SCREENING PROTOCOL<sup>2</sup>

Created in 2017 by Nicole Cozean, a board-certified pelvic floor physical therapist.

A large study of patients was conducted to identify the most common symptoms of patients with pelvic floor dysfunction

This tool was found to correctly identify 90% of patients with confirmed musculoskeletal dysfunction causing pelvic pain and dysfunction

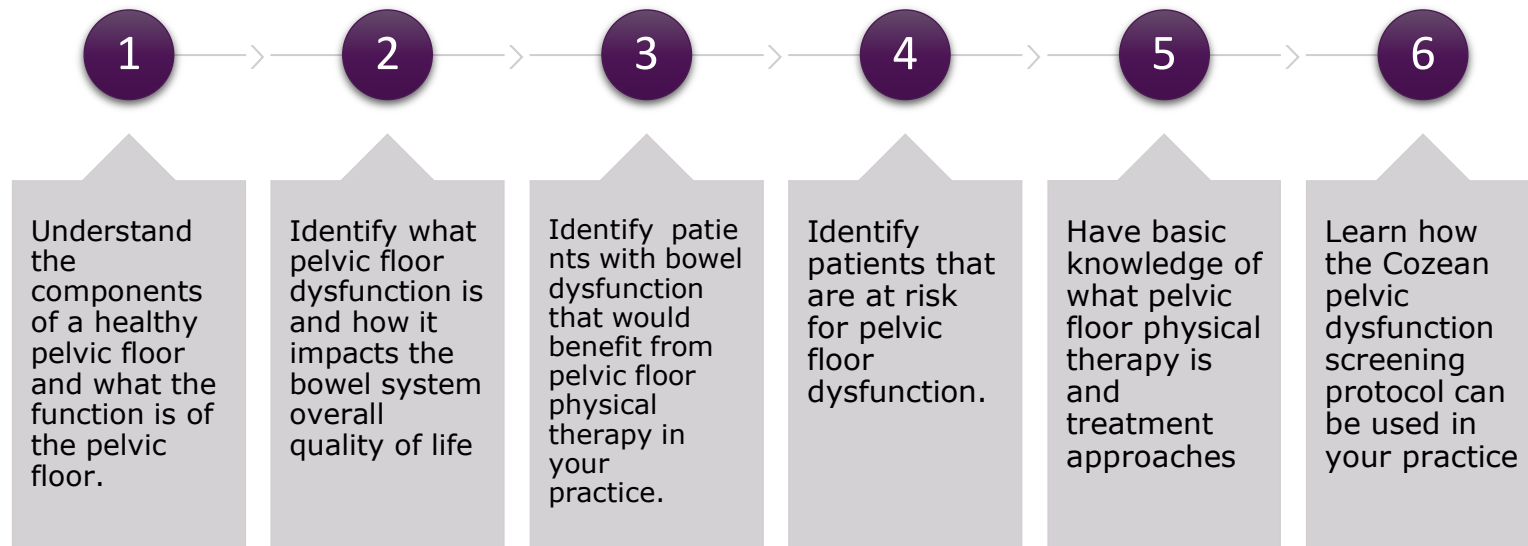
# COZEAN PELVIC DYSFUNCTION SCREENING PROTOCOL

## INSTRUCTIONS: CHECK ALL THAT APPLY

- ☐ I sometimes have pelvic pain (in genitals, perineum, pubic or bladder area, or pain with urination) that exceeds a '3' on a 1-10 pain scale, with 10 being the worst pain imaginable
- ☐ I can remember falling onto my tailbone, lower back, or buttocks (even in childhood)
- ☐ I sometimes experience one or more of the following urinary symptoms
  - Accidental loss of urine
  - Feeling unable to completely empty my bladder
  - Having to void within a few minutes of a previous void
  - Pain or burning with urination
  - Difficulty starting or frequent stopping/starting of urine stream
- ☐ I often or occasionally have to get up to urinate two or more times at night
- ☐ I sometimes have a feeling of increased pelvic pressure or the sensation of my pelvic organs slipping down or falling out
- ☐ I have a history of pain in my low back, hip, groin, or tailbone or have had sciatica
- ☐ I sometimes experience one or more of the following bowel symptoms
  - Loss of bowel control
  - Feeling unable to completely empty my bowels
  - Straining or pain with a bowel movement
  - Difficulty initiating a bowel movement
- ☐ I sometimes experience pain or discomfort with sexual activity or intercourse
- ☐ Sexual activity increases one or more of my other symptoms
- ☐ Prolonged sitting increases my symptoms

IF YOU CHECKED 3 OR MORE CIRCLES,  
PELVIC FLOOR DYSFUNCTION IS LIKELY

# Course summary



# Advocate Pelvic Health Physical therapy Locations in Illinois

## Algonquin

Sherman Outpatient Center  
600 S. Randall Rd., 60102  
P: 224-783-6128 F: 224-783-2823

## Aurora

AMG Physical Therapy - Highland  
1221 N. Highland Ave., 60506  
P: 630-264-8440 F: 630-264-8444

AMG Physical Therapy - Sequoia  
2363 Sequoia Dr., 60506  
P: 630-264-8440 F: 630-264-8444

## Chicago

Illinois Masonic Medical Center  
3021 N. Sheffield Ave., 60657  
P: 773-296-7450 F: 773-296-7370

## Trinity Hospital

2320 E. 93<sup>rd</sup> St., 60617  
P: 773-967-5221 F: 773-967-5972

## Crystal Lake

Good Shepherd Crystal Lake  
525 E. Congress Pkwy., #210, 60014  
P: 847-842-4846 F: 815-455-9359

## Downers Grove

Good Samaritan Health & Wellness Center  
3551 S. Highland Ave., #100, 60515  
P: 630-275-2600 F: 630-275-2698

## Libertyville

Condell Medical Center West Tower  
801 S. Milwaukee Ave., 60048  
P: 847-990-5350 F: 847-549-6920

## Niles

Oak Mill Mall  
7900 N. Milwaukee, Suite 16, Door C  
P: 847-410-3100 F: 847-410-3101

## Oak Lawn

Advocate Physical Therapy  
10201 S. Cicero Ave., Suite A  
P: 708-658-2770 F: 708-658-2757

## Christ Medical Center

4440 W. 95<sup>th</sup> St., 60453  
P: 708-684-3000 F: 708-684-3652

## Christ Physician Office Building

4400 W. 95<sup>th</sup> St., Suite 107  
P: 708-684-3000

## Park Ridge

Lutheran General Hospital  
1875 Dempster St., Suite G10, 60068  
P: 847-723-7500 F: 847-723-8981

## South Elgin

Sherman Outpatient Center  
2000 McDonald Rd., 60177  
P: 224-783-6128 F: 224-783-2131

## Tinley Park

Christ Outpatient Center  
18210 S. La Grange Rd., 60487  
P: 708-429-8700 F: 708-429-8720

# Aurora Male Pelvic Health Physical therapy Locations in Wisconsin

## **Brookfield**

16985 W. Bluemound Rd.  
262-821-4460

## **Fond du Lac**

210 Wisconsin American Dr.  
920-907-7270

## **Franklin**

9200 W. Loomis Rd.  
414-529-9160

## **Grafton**

975 Port Washington Rd.  
262-329-2700

## **Green Bay**

2845 Greenbrier Rd.  
4th Floor  
920-288-8510

## **Greenfield**

9000 W. Sura Ln.  
414-246-6500

## **Kenosha**

7610 Pershing Blvd.  
262-948-3600

## **Lake Geneva**

700 Geneva Pkwy N  
262-249-3500

## **Mequon**

1249 W. Liebau Rd.  
262-243-4161

## **Milwaukee**

945 N. 12th St., 4th Floor  
414-219-5241

1575 N. Rivercenter Dr.  
414-224-6424

## **Oshkosh**

855 W. Westhaven Dr.  
920-456-7100  
712 Doctors Ct.  
920-303-5300

## **Racine**

7300 Washington Ave.  
262-321-6000

## **Sheboygan**

2629 N. 7th St.  
920-451-5550

## **Summit**

36500 Aurora Dr.  
262-434-2600

## **Two Rivers**

5300 Memorial Dr.  
920-793-7570

## **West Allis**

8901 W. Lincoln Ave.  
Women's Pavilion, #405  
414-329-5658

# Aurora Health Female Pelvic Health Locations in Wisconsin

**Brookfield**

16985 W. Bluemound Rd.  
262-821-4460

**Burlington**

709 Spring Valley Rd.  
262-971-9300

**Fond du Lac**

210 Wisconsin American Dr.  
920-907-7270

**Franklin**

9200 W. Loomis Rd.  
414-529-9160

**Grafton**

975 Port Washington Rd.  
262-329-2700

**Green Bay**

2845 Greenbrier Rd., 4th Floor  
920-288-8510

**Greenfield**

9000 W. Sura Ln.  
414-246-6500

**Hartford**

1640 E. Sumner St.  
262-670-4300

**Kenosha**

7610 Pershing Blvd.  
262-948-3600

**Lake Geneva**

700 Geneva Pkwy N  
262-249-3500

**Marinette**

3003 University Dr.  
715-732-5111

**Menomonee Falls**

N84 W16889 Menomonee Ave.  
262-250-1870

**Mequon**

1249 W. Liebau Rd.  
262-243-4161

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**Pleasant Prairie**

12500 Aurora Dr.  
262-857-5800

**Racine**

7300 Washington Ave.  
262-321-6000

**Sheboygan**

2629 N. 7th St.  
920-451-5550

**Slinger**

1061 E. Commerce Blvd.  
262-644-6268

**Summit**

36500 Aurora Dr.  
262-434-2600

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5300 Memorial Dr.  
920-793-7570

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# References

1. Bo, K., Berghmans, B., Morkved, S., Van Kampen, M. (2015). *Evidenced based Physical Therapy for the Pelvic Floor: Bridging science and clinical practice*. (First Edition and Second Edition). Edinburgh :Elsevier.
2. Cozean, N. (2018). Simple Screening Questionnaire for Pelvic Floor Dysfunction. <https://hermanwallace.com/blog/simple-screening-questionnaire-for-pelvic-floor-dysfunction>. 7/17/2020.
3. Guise, Jeanne-Marie MD, MPH; Morris, Cynthia PhD, MPH; Osterweil, Patricia; Li, Hong MD, MSPH; Rosenberg, Deborah Merwyn PhD. Incidence of Fecal Incontinence after Childbirth. Obstetrics & Gynecology; 109(2):281-288. doi: 10.1097/01.AOG.0000254164.67182.78. 9/2/2021.
4. Iovino, P., Chiarioni, G., Bilancio, G., Cirillo, M., Mekjavic, I., Pisot, R., Ciacci, C. New Onset of Constipation during Long-Term Physical Inactivity: A Proof-of-Concept Study on the Immobility Induced Bowel Changes. PLoS ONE 8(8): e72608. doi:10.1371/journal.pone.0072608. 9/6/2021.

# References

5. Jerez-Roig, J., Souza, D., Amaral, F., Lima, K. (2015). Prevalence of fecal incontinence (FI) and associated factors in institutionalized older adults. Archives of Gerontology and Geriatrics. 60(3); 425-430. <https://doi.org/10.1016/j.archger.2015.02.003>. 9/7/2021.
6. Pelvic Floor Dyssynergia. <https://aboutgimotility.org/learn-about-gi-motility/disorders-of-the-pelvic-floor/pelvic-floor-dyssynergia/html>. 9/2/2021
7. Qi, Z., Middleton, J.W. & Malcolm, A. Bowel Dysfunction in Spinal Cord Injury. (2018). Current Gastroenterology Reports. 20(47); <https://doi.org/10.1007/s11894-018-0655-4>. 9/7/2021.
8. Rao, S. (2004). Diagnosis and management of fecal incontinence. American College of Gastroenterology Practice Parameters Committee. Am J Gastroenterol, 99(8), 1585-1604. 9/14/2020.
9. Roque, M., Bouras, E. (2015). Epidemiology and management of constipation in elderly patients. Clinical Interventions in aging; 10: 919-930.

# References

10. What is pelvic floor dyssynergia. <https://stanfordhealthcare.org/medical-conditions/digestion-and-metabolic-health/pelvic-floor-dyssynergia.html>. 8/28/2020.
11. Whitehead, W., Burgio, K., Engel, B. (1985). "Biofeedback treatment of fecal incontinence in geriatric patients." J Am Geriatr Soc;33(5): 320-4. doi: 10.1111/j.1532-5415.1985.tb07130.x. 9/14/20.

# Questions?

