A Woman’s Guide to Pelvic Health
In women the pelvic floor is a group of muscles that form a hammock-like support across the opening of a woman’s pelvis. These muscles, together with connective tissues, ligaments and nerves, keep all of the pelvic organs, such as the bladder, uterus, vagina and rectum, in place and help these pelvic organs function.

Sometimes the pelvic floor can be compromised. Surgery, childbirth, scarring, chronic spasm of the pelvic muscles, sexual abuse or pelvic fractures can result in a number of health problems if not properly treated.

**Women may experience:**
- Feeling a bulge and/or pressure of the uterus, bladder, vagina or rectum
- Loss of bladder control, leakage of urine, frequent urination
- Sense of urgency to empty the bladder
- The inability to hold a bowel movement
- Pelvic pain
Pelvic organ prolapse (POP)

Pelvic organ prolapse (POP) occurs when pelvic muscles and tissues become weakened, stretched or are injured. Some possible causes of injury include childbirth, chronically elevated intra-abdominal pressures (due to chronic cough, chronic constipation and obesity) or surgery. When the pelvic floor tissues which hold pelvic organs in place become weakened or stretched, it can cause the pelvic organs to bulge (or prolapse) into the vagina. In some cases, the pelvic organs may prolapse past the vaginal opening.

Pelvic organ prolapse is a common, treatable medical condition which affects an estimated one-third of all women – and half of all women ages 55 and older. While pelvic organ prolapse can affect women of all ages, the risk of developing POP increases with age. Post-menopausal women are at the highest risk for developing POP.

Pelvic organ prolapse may include one (or more) of the following conditions, including prolapse of the:

**Bladder (cystocele):** When the wall of the vagina overlying the bladder weakens and the bladder pushes against the vagina, producing a bulge. Pelvic pressure or protrusion are common sympotms. Urinary incontinence, inability to fully empty the bladder or recurrent bladder infections may also be a symptom.

**Rectocele:** When the vaginal wall overlying the rectum weakens and the rectum pushes against the vagina, producing a bulge. Pelvic pressure, protrusion and difficulty with bowel movements may result.

**Rectal prolapse:** Rectal prolapse is differentiated from rectocele in that with rectal prolapse the rectum actually protrudes out the anus rather than protruding into the vagina.

**Uterus or womb (uterine prolapse):** When a group of ligaments (uterosacral and cardinal ligaments) at the top of the vagina weaken, causing the uterus to drop.

### Stages of uterine prolapse:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Stage 1</td>
<td>The uterus descends into the upper portion of the vagina.</td>
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<tr>
<td>Stage 2</td>
<td>The uterus descends to the opening of the vagina.</td>
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<tr>
<td>Stage 3</td>
<td>The cervix, located at the opening of the uterus, sags past the vaginal opening and may protrude outside the body.</td>
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<tr>
<td>Stage 4</td>
<td>The uterus is completely out of the body. This condition also is called complete prolapse (procidentia).</td>
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**Vaginal vault (apical vaginal prolapse):** Vaginal vault prolapse may occur following a hysterectomy surgery (removal of the uterus). About 10 percent of women who undergo a hysterectomy develop some degree of vaginal vault prolapse, where the top of the vagina drops toward the vaginal opening. Just like uterine prolapse, vaginal vault prolapse is staged according to the severity of the prolapse.
Bladder Function
Women of all ages may have bladder control issues and may experience:

Bladder urgency and frequency:  
Frequent urination means needing to urinate more often than usual. Urgent urination is a sudden, strong urge to urinate, along with discomfort in your bladder.

Painful bladder syndrome:  
Causes recurring discomfort or pain in the bladder and the surrounding pelvic region.

Urinary incontinence (UI):  
A loss of bladder control resulting in the leakage of urine from the body. This includes stress incontinence, which is urine loss while laughing, sneezing, coughing, running or other physical activity or urge incontinence, which is leaking urine with a sense of urgency while unable to reach a bathroom in time.

Urinary incontinence, both temporary and persistent, may be caused by:

Temporary UI:  
• Alcohol  
• Dietary habits, including consumption of carbonated drinks, artificial sweeteners, corn syrup, citrus fruits and others

• Medications, such as sedatives or muscle relaxants  
• Urinary tract infection  
• Constipation

Persistent UI:  
• Pregnancy  
• Childbirth injury  
• Advanced age  
• Menopause  
• Hysterectomy  
• Obstruction  
• Neurological disorders

Bowel Function
Many people take normal bowel function for granted. However, this is a delicate system with the potential for issues to arise, such as:

Coccyx (tailbone) pain:  
A rare condition that causes persistent pain in the bottom of the spine.

Constipation:  
Bowel movements that are infrequent or hard to pass.

Fecal incontinence:  
Fecal incontinence is the involuntary loss of stool or mucous from the rectum, including the inability to hold a bowel movement until reaching a toilet and passing stool into one’s underwear without being aware of it happening.

Fecal incontinence may be caused by a variety of factors, including:

• Diarrhea  
• Constipation  
• Muscle damage or weakness of the anal sphincter muscles  
• Nerve damage of the anal sphincter muscles  
• Loss of elasticity (stretch) in the rectum  
• Childbirth injury  
• Hemorrhoids or rectal prolapse  
• Rectocele  
• Inactivity

Pelvic Pain
Pelvic pain refers to pain in the lowest part of the torso, in the area below the abdomen and between the hipbones, or pelvis. The pain may be sharp or similar to cramps, and it can be steady or come and go. Pelvic pain differs from abdominal pain, which occurs higher in the torso.

Conditions include:

• Pelvic muscle spasm  
• Endometriosis  
• Vulvodynia  
• Dyspareunia (pain with sexual intercourse)  
• Pregnancy and post-partum related pain  
• Vaginal atrophy (dryness and pain associated with aging tissues)
There are a wide range of both nonsurgical and surgical treatment options available to treat pelvic floor disorders.

Nonsurgical Options

Women of all ages may have bladder control issues. Women may experience:

- **Medications**
  Several medications can improve bladder or bowel control by blocking the signals from the nervous system which cause urgency.

- **Pelvic Exercises**
  Kegels consist of repeatedly contracting and relaxing the muscles of the pelvic floor. Strengthening these muscles is beneficial for bladder and bowel control.

- **Pelvic Floor Physical Therapy**
  Patients learn techniques that help them regain pelvic floor control and function.

- **Behavioral and/or Dietary Modifications**
  - Bowel training helps patients develop a regular bowel movement pattern. Over time, the body becomes accustomed to a regular bowel movement schedule, thus reducing constipation and fecal incontinence.
  - Changes to diet such as eating the right amount of fiber can help with diarrhea and constipation. Increasing fluid intake can help prevent constipation. Avoiding beverages with caffeine, alcohol, milk or carbonated beverages (fizzy) may help control urinary urgency and incontinence.

- **Pessaries**
  A small silicone device, similar to a diaphragm, is inserted into the vagina to relieve symptoms of uterine or vaginal prolapse.

- **Biofeedback**
  Electronic monitoring of a normally automatic bodily function in order to improve bladder and bowel control.

- **Botox Injections**
  Botox can be injected into the bladder muscle for treatment of urge incontinence.
Pelvic Floor Physical Therapy

Summa Health offers pelvic floor physical therapy to help women regain pelvic floor control and function.

The importance of maintaining a healthy pelvic floor can easily be overlooked. Surgery, natural aging, childbirth, scarring, sexual abuse, pelvic fractures or tailbone injuries can result in a number of pelvic floor problems if not properly treated. These situations can cause excessive muscle tightness or weakness that may lead to muscle spasm, pain, incontinence or constipation.

Restoring muscle balance through physical therapy leads to less pain, resolved incontinence issues and an improvement in your overall quality of life. Nonsurgical, pelvic floor physical therapy techniques may be used to successfully treat the following pelvic floor disorders:

**Bowel Function**
- Bowel disorders
- Coccyx (tailbone) pain
- Constipation
- Fecal incontinence

**Pelvic Pain**
- Pelvic muscle spasm
- Endometriosis
- Dyspareunia (pain with sexual intercourse)
- Pregnancy and post-partum related pain

**Bladder Function**
- Bladder urgency and frequency
- Painful bladder syndrome
- Urinary incontinence

Depending on the cause, treatment may include both physical and educational techniques.

**Physical:**
- Anal rectal balloon retraining
- Biofeedback
- Bladder and bowel retraining
- Customized exercise program to achieve muscle balance
- Internal and external manual therapy
- Pelvic floor, trunk and hip musculature strengthening exercises
- Post-operative recovery exercises
- Posture and gait assessment
- Pre-operative strengthening exercises and education
- Relaxation training

**Educational:**
- Patient and partner education
- Patient education on topics such as pelvic floor anatomy, bowel and bladder retaining and pelvic muscle function
- Post-operative recovery education
- Pre-operative pelvic floor muscle education

Summa has specially trained physical therapists who work one-on-one with patients in a comfortable, private setting. A physician’s referral is required. Most major insurance plans are accepted, including Medicare and Workers’ Compensation. Talk to your doctor about getting a referral for treatment.

**Take the Pelvic Floor Health Quiz**

Visit [summahealth.org/pelvicquiz](http://summahealth.org/pelvicquiz) to take our 5 minute quiz to help determine if you have a pelvic floor disorder and the appropriate next steps. Your results will be emailed to you confidentially.
Surgical Options

Surgical procedures used to treat pelvic organ prolapse and incontinence may be performed using minimally invasive surgical techniques. These procedures often can be performed on an outpatient basis and often have a fairly short recovery time.

No matter what type of surgery you are considering, talk to your doctor about your options. Minimally invasive surgery techniques offer potential benefits over traditional abdominal “open” surgery, including:

- Reduced blood loss
- Less post-operative pain
- Less risk of infection
- A shorter hospital stay
- A faster recovery

The decision about which surgical technique is right for you is an important one. Your surgeon will take into account many factors before choosing which technique to use, including your past medical history, previous surgeries, overall health status and anatomy.

Before having surgery, discuss all treatment options carefully with your physician. Understanding the benefits and risks of each treatment will help you and your doctor decide which option is best for you.
Colpopexy
Colpopexy is a surgical procedure used to elevate a prolapsed vagina back to its correct position within the pelvic cavity. During this procedure, a surgeon attaches the vagina to surrounding tissue in the abdomen to hold it in place. There are two major types of colpopexy:

- **Vaginal sacrospinous or uterosacral colpopexy:** Surgery is performed through the vagina, which allows repairs to be made in a minimally invasive fashion. The vagina is attached to the sacrospinous or uterosacral ligaments to hold it in the correct position using either absorbable sutures or other synthetic material.

- **Sacrocervical colpopexy:** This is an approach where the surgeon makes a small incision in the abdominal wall or uses a laparoscope/robot to perform the surgery through tiny incisions. The vagina is attached to a support material made of either synthetic material or the patient’s own tissue (fascia), depending on the surgeon’s preference, and then the support material is attached to strong ligaments in the pelvis.

Uterine Suspension
Uterine suspension is the treatment of choice where preservation of the uterus is desired. In this procedure, the surgeon returns the uterus to its position within the pelvis by reattaching the uterus to the pelvic ligaments. Another technique uses synthetic material to support the uterus. A uterine suspension may be performed via the vagina using minimally invasive surgical techniques or laparoscopically, using very small incisions on the abdominal wall.

Injections of Urethral Bulking Agents
A procedure where a water-based gel containing particles made of calcium hydroxyapatite is injected around the urethra to build up the area and tighten the sphincter muscles near the opening of the bladder.

Mid-Urethral Sling Procedure
A procedure in which a surgeon makes a small incision in the vagina and places a sling made of synthetic material under the urethra. The sling functions as a hammock for the urethra, providing support during activity and sudden increases in abdominal pressure (i.e., during coughing and sneezing).

Pubovaginal Slings
Similar to a mid-urethral sling procedure, but in this procedure, a biological tissue instead of a synthetic material is used to create a sling under the urethra.

Electrical Stimulation
Also called sacral nerve stimulation (SNS) or neuromodulation, this procedure involves placing a tiny wire connected to a battery near the tailbone under the skin. Electrical impulses are then generated and travel along the sacral nerves to the pelvis. The sacral nerves control the function of the anus, bladder and bowel. This device is used to treat both urinary and fecal incontinence. A small remote control device allows one to adjust the amount of stimulation to the optimal level depending on symptoms. The stimulator can be turned on or off at any time. The procedure is performed in an outpatient center using local anesthesia.
Colostomy
A colostomy is a surgical procedure in which a pouch is formed by drawing the healthy end of the large intestine or colon through an incision in the abdominal wall and stitching it into place. A plastic bag-like device is attached to the opening, which provides an alternative way for feces to exit the body. A colostomy may be temporary or permanent, depending on the reason the procedure was performed.

Rectal Prolapse Repair
Rectal prolapse repair can be performed via an abdominal approach (either through an open incision or laparoscopic/robotic incisions) or a transperineal approach (no abdominal incisions). Surgery involves moving the rectum back into its correct anatomical position.

Sphincteroplasty
Sphincteroplasty involves repairing a damaged anal sphincter by rejoining the separated ends of a sphincter muscle torn by childbirth or injury.

Nonabsorbable Bulking Agents
Nonabsorbable bulking agents can be injected into the wall of the anus to build up the tissue around the anus. This narrows the opening so the sphincters are able to close more tightly.

Pelvic Health Team

References:
National Digestive Diseases Information Clearinghouse (NDDIC) website, last accessed on November 11, 2013, at http://digestive.niddk.nih.gov/ddiseases/pubs/fecalincontinence/#sup1

Treatment of Mesh-Related Complications
Summa urogynecologists and colorectal surgeons also treat patients with mesh-related complications from surgery. Some of the complications which can result include:
- Vaginal and pelvic pain
- Pain in the abdomen, groin, leg or buttocks
- Painful sexual intercourse
- Urinary tract issues, including the inability to void (urinate/pee) secondary to obstruction from mesh

Additional complications also can develop years after the initial surgery. In menopausal women, the thinning of vaginal tissue increases the risk for developing ulcerations. While uncommon, ulceration can lead to exposure of the mesh through the vaginal wall. Mesh erosion can occur when mesh enters the urinary tract or bowel.

Some of the treatment options for mesh-related complications include:
- Vaginal hormone replacement treatment (HRT) using estrogen
- Excision (surgical removal) of the mesh
- Physical therapy for pain

Treating mesh-related complications in a timely manner is important. Patients have a much better chance of resolving complications if they seek treatment as soon as they notice a problem. If you are experiencing symptoms, discuss them with a doctor.
Locations

**Akron**
Richard M. and Yvonne Hamlin Pavilion
Summa Health Akron Campus
95 Arch Street, Suite 220
Akron, OH 44304
Christopher M. Rooney, M.D.
Bogdan Orasanu, M.D.
Erica Laipply, M.D.

Summa Health Medical Group
51 Park West Boulevard, Suite 200
Akron, OH 44320
Sevasti K. Yeropoli, M.D.

Summa Health Therapy at Kohl Family YMCA at University Park
477 E Market Street, Suite 100
Akron, OH 44304
330.375.7357
Amy Senn, PT, MSPT, BCB-PMD

**Barberton**
Summa Health Barberton Campus
201 5th Street Northeast, Suite 6
Barberton, OH 44203
Bogdan Orasanu, M.D.

**Green**
Summa Health Green Medical Center
Green Medical Center
1835 Franks Parkway
Uniontown, OH 44685
Christopher M. Rooney, M.D.

**Medina**
Summa Health
Medina Medical Center
3780 Medina Road, Suite 200
Medina, OH 44256
Christopher M. Rooney, M.D.

**Wadsworth**
Summa Health
Wadsworth Community Center
621 School Drive
Wadsworth, OH 44281
330.334.0705
Kelly Holden, PT

For an appointment with any of our specialists, please call 800.237.8662
Talk to a Doctor

Women who suffer from pelvic organ prolapse, fecal and urinary incontinence or pelvic floor issues often don’t report their symptoms due to embarrassment. As a result, patients are unaware of possible treatment options, many of which can be performed on an outpatient basis.

Call 800.237.8662 to make an appointment with a Summa pelvic health specialist.

summahealth.org/pelvic