

# A Multi-Disciplinary Definition of an Episode of Care for Patients in Urogynecology and Pelvic Reconstructive Surgery Practice

Keith O'Brien

*Lehigh Valley Health Network, keith.o'brien@lvhn.org*

Kyle Ingram

*Lehigh Valley Health Network, Kyle.Ingram@lvhn.org*

Lennox Hoyte MD

*USF MCOM-LVHN Campus*

Renee Bassaly DO

*USF MCOM-LVHN Campus*

H Leigh Terwilliger MSN, FNP-BC

*USF MCOM-LVHN Campus*

Follow this and additional works at: <https://scholarlyworks.lvhn.org/select-program>



Part of the [Medical Education Commons](#)

---

## Published In/Presented At

O'Brien, K., Ingram, K., Hoyte, L., Bassaly, R., & Terwilliger, H. (2012, April 26). *A multi-disciplinary definition of an episode of care for patients in urogynecology and pelvic reconstructive surgery practice*. Poster presented: The Community-Based Clinical Mentoring - Action Research Project, University of South Florida, Tampa, FL.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).

# A Multi-Disciplinary Definition of an Episode of Care for Patients in a Urogynecology and Pelvic Reconstructive Surgery Practice

Keith O'Brien, Kyle Ingram, Lennox Hoyte, MD, MSEECS, Renee Bassaly, DO, H Leigh Terwilliger, MSN, FNP-BC



## Background and Methodology

- Overview:** Our Community-Based Clinical Mentoring (CCM) experience for the SELECT program was with the USF Female Pelvic Medicine and Reconstructive Surgery Practice (a division of the Department of Obstetrics and Gynecology). Every Tuesday morning from November 2011 through April 2012, each student was present in either the Gynecologic Surgery OR at the Women's Center of Tampa General Hospital, or, in the ambulatory setting at the USF Morsani Center for Advanced Health Care. This rotating CCM format allowed students to observe patients longitudinally across the continuum of care and at different points in their clinical course (i.e. initial visits, pre/post operatively, follow up).
- Description of the Practice:** The Female Pelvic Medicine and Reconstructive Surgery Division focuses primarily upon the diagnosis and management of female pelvic floor disorders. Patients are typically women 55 years and older, but may include women of childbearing age. Typical diagnoses related to urinary/fecal incontinence, complications of vaginal prolapse surgery, pelvic prolapse, bladder and vaginal pain, vesicovaginal and rectovaginal fistulas, and childbirth related pelvic floor injury. Team Members Include: Urogynecologists, Fellows, ARNPs, Physical Therapists, Medical Assistants, Surgical Technicians, Ancillary Service Specialists (Dynamic MRI, Urodynamic testing) and other specialists patients may be referred to/from (Gastrointestinal, Urology, OB/GYN, Psychiatry).
- Action Research Project:** Students were asked to evaluate the Division in the context of Clayton Christensen's book "*The Innovator's Prescription: A Disruptive Solution for Health Care*". To enable 'disruptive innovation', Christensen asserts that there are three essential components: a technological enabler, business model innovation, and a value network. Christensen believes the Health Care industry needs to separate its business models (into the categories listed below). **Students identified patients in the practice that correspond to each of Christensen's models, and studied their experience from the perspectives of medical care, pathophysiology, surgical intervention, quality of life, and billing/reimbursement. Students also provided recommendations to the practice for opportunities going forward based on their experiences.**
  - Value-Adding Process (VAP) Businesses:** Treating conditions that have a well understood and clearly defined solution. The notion is to take in something incomplete/broken and transform it into more complete output of higher value. In health care, this would be procedures performed after a definitive diagnosis.
  - Solution Shops:** The diagnosis and solving of unstructured/complex problems, requiring a need for intuitive investigation (versus results-based treatment for conditions that are well understood).
  - Facilitated Networks:** Enterprises in which people exchange things with one another. In health care, this would be networking for patients with chronic illnesses (dLife; patientslikeme.com).
- Rationale:** The Patient Protection and Affordable Care Act (PPACA) has encouraged new payment and delivery models to enhance quality and reduce expenditures. Development of Accountable Care Organizations (ACOs) that utilize bundled payments through episodes of care have been at the forefront of health care reform. We believe that our analysis offers a preliminary exploration of defining an episode of care at surgical practice, utilizing Christensen's framework.

### Value Added Process (VAP) Model: Pelvic Organ Prolapse w/Incontinence

Visit Date	CPT-4 Code	CPT-4 Code Description	RVUs	Total Charges <sup>a</sup>	Total Payment <sup>a</sup>
11/4	72195	MRI pelvis w/o dye	12.24	\$1,090.00	\$755.37
11/23	51729	Cystometrogram	9.78	\$1,042.00	\$488.32
	51797	Intra-abdominal pressure test	3.13	\$335.00	\$210.63
	51784	Anal/Urinary Muscle Study	5.56	\$296.50	\$148.50
	51741	Electro-Uroflowmetry, First	0.94	\$131.50	\$65.41
	52000	Cystoscopy	5.75	\$312.00	\$156.00
12/27	57425	Laparoscopy, Surg, Colpopexy	29.32	\$3,242.00	\$1,545.73
	57288	Repair Bladder Defect	20.87	\$1,157.00	\$569.34
2/14	99213	Office/Outpatient Visit, Established Pt.	2.11	\$138.00	\$101.90
2/20	57288	Repair Bladder Defect	20.87	\$2,314.00	\$1,138.68
3/2	74178	CT Abdomen/Pelvis w and w/o contrast	13.35	\$1,520.00	\$708.11

**TOTAL** **123.92** **\$11,578** **\$5,888**

<sup>a</sup> Professional fees charged and collected for services provided. Facility fees were not available due to a the limited time between discharge date and cost calculation.

### "Solution Shop" Model: Sub-Urethral Sling Revision

Visit Date	CPT-4 Code	CPT-4 Code Description	RVUs	Total Charges <sup>a</sup>	Total Payment <sup>a</sup>
9/29 <sup>c</sup>	99204	Office/Outpatient Visit, New	4.8	\$351.00	\$182.00
12/18	99203	Office/Outpatient Visit, New	3.13	\$226.00	\$119.50
	76830	Transvaginal Ultrasound, Non-OB	3.61	\$379.00	\$150.00
	76377	3D Rendering, w/Post Process	2.26	\$244.00	Not Covered
1/19	99213	Office/Outpatient Vist, Established Pt.	2.11	\$138.00	\$78.50
2/20	53500	Urethrllys, Transvag, w/Scope	21.91	\$2,460.00	\$952.20
	57287	Removal or revision of sling for stress incontinence	20.04	\$1,111.00	\$423.49
	64614	Destroy Nerve, Extrem Muscle	4.7	\$278.50	\$83.75

**TOTAL** **62.56** **\$5,188** **\$1,989**

<sup>a</sup> Professional fees charged and collected for services provided.

<sup>c</sup> This patient was treated between 2007-2008.

### Network Model: Chronic Pelvic Pain; Interstitial Cystitis

Visit Date	CPT-4 Code	CPT-4 Code Description	RVUs	Total Charges <sup>a</sup>	Total Payment <sup>a</sup>
3/20	99244	Office Consultation	5.2	\$411.00	\$248.71
	51700	Irrigation of Bladder	2.38	\$257.00	\$117.38
	81002	Urinalysis, Non-Auto w/o Scope	0.1	\$12.00	\$2.39
PT <sup>b</sup>	97001	PT Evaluation	-	N/A <sup>b</sup>	\$45.00 <sup>b</sup>
	97110	Therapeutic Exercises	-	N/A <sup>b</sup>	\$45.00 <sup>b</sup>

**TOTAL** **7.68** **\$2,355<sup>b</sup>** **\$2,043<sup>b</sup>**

<sup>a</sup> Professional fees charged and collected for services provided. Facility fees were not available due to a the limited time between discharge date and cost calculation.

<sup>b</sup> PT patients are seen for 45 minute sessions, and typically complete 12-20 sessions depending on the severity and duration of symptoms. For example, pain patients are usually seen 2x/week for 6/weeks. Private payers reimburse at a fixed rate (\$40-\$50). Medicare can be billed in 15 minute increments. For this patient, we assumed 15 visits at a rate of \$45 per visit (\$1,675 in total payment collected).