Greenville Memorial Hospital is a 746-bed hospital in Greenville, SC and is the flagship hospital of Prisma Health-Upstate. As an academic medical center, it primarily serves a safety net population and the largely rural area known as “Upstate” in South Carolina.¹

**Problem**

Leaders from Greenville Memorial Hospital were interested in assessing physician knowledge of costs associated with common OB/GYN products, tests, and services and subsequently identifying high-cost items that could be eliminated.

High value health care leaders, including Lauren D. Demosthenes, MD, Clinical Associate Professor, Department of Obstetrics and Gynecology; Dawn Blackhurst, DrPH, Manager, Clinical Data Analysis; and Andrew Lane, MD, Clinical Assistant Professor, performed a prospective observational pilot study to assess OB/GYN physician knowledge. They distributed an anonymous survey to 70 OB/GYN clinicians practicing at Greenville Memorial, including 44 attending physicians (private and staff), 24 resident physicians, and 2 certified nurse midwives. Survey questions included case scenarios, inquiring about hospital expense; including “cost of the product, overhead, and workers’ salaries.” Survey results indicated that clinicians underestimated the cost of many common OB/GYN services, including medications, laboratory tests and pharmaceuticals. Distribution of this survey aided in identifying knowledge gaps in high value services in the Greenville Memorial OB/GYN department.²

**Solution**

The project leaders’ post-survey intervention included cost awareness education at ground rounds. Additionally, they implemented changes to the ordering system to discourage ordering hydrocortisone acetate/pramoxine hydrochloride and dinoprostone vaginal inserts; the Cochrane Review indicated that equally effective but less expensive alternatives were available for both products. An alternative topical was available for cervical ripening as well as a mechanical method with a Foley bulb. Other alternative topical agents for postpartum pain were also available instead of hydrocortisone acetate/pramoxine hydrochloride. Greenville Memorial’s survey identified that clinicians grossly underestimated the difference in the cost of the drugs and alternatives. These interventions were effective in reducing hospital costs and maintaining patient safety, as shown in the “Results” box.²
**Results**

- 71% of clinicians completed the survey.
- $159,155 cost savings in the 1-year post-intervention period.
  - Dinoprostone vaginal insert use decreased 50.5% with a savings of $66,500. Dinoprostone vaginal insert removed from formulary
  - Hydrocortisone acetate/pramoxine hydrochloride decreased 90% with a savings of $92,655.²

**Challenges**

- **Communicating Across Multiple Platforms.** “The largest barrier was the number of people and committees we had to go through to get approved,” Dr. Demosthenes said. “To overcome it, we persisted and communicated across multiple platforms, including email and ground rounds.”³

**Keys to Success**

- **Identify Your Organization’s Quality Improvement Leaders.** “There is still a lack of awareness in the OB/GYN sector surrounding costs and order sets,” Dr. Demosthenes said. “People listen when you can actually show them the high costs, and explain the value of your quality improvement project. It is important to identify quality improvement leaders in your health system.”

- **Conduct Your High Value Care Project as a Research Study.** “We conducted our study as a research project with IRB approval,” Dr. Demosthenes said. “We also identified stakeholders to support the study.” Formalizing the high value care project generated legitimacy, and thus subsequent clinician attention, within the OB/GYN department at Greenville Memorial.³

**Core Interventions**

- Anonymous electronic survey distributed to 70 OB/GYN clinicians at Greenville Memorial Hospital.
- Grand rounds review of survey results.
- Changes to the order system
  - Hydrocortisone acetate/pramoxine hydrochloride was removed from standing postpartum order set for vaginal deliveries
  - Misoprostol vaginal or oral was preferred over dinoprostone vaginal inserts
- Utilization and cost savings tracked for a 1-year pre-intervention and a 1-year post-intervention.²

**References**