SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found, in the online version, at https://doi.org/10.1016/j.urology.2018.09.037.

References


EDITORIAL COMMENT

In the manuscript “Factors that Influence Selection of Urinary Diversion among Bladder Cancer Patients in 3 Community-Based Integrated Health Care Systems,” the authors present patient vs surgeon specific factors affecting the type of urinary diversion selection for patients undergoing radical cystectomy for bladder cancer. It is a well-designed examination of a large patient cohort in an integrated health system. In this study of 991 patients, 794 (80%) patients received an ileal conduit (IC) urinary diversion. This utilization of IC urinary diversion vs continent diversion is similar to a recent study by Kovell et al who looked at urinary diversion types in the National Surgical Quality Improvement Program database and found utilization of incontinent urinary diversions to be 80.0%. Furthermore, in that study, variables increasing a patient’s odds of undergoing IC over continent diversion included older age, female sex, estimated glomerular filtration rate <45, 4+ comorbidity index score, and stage III/IV tumors. These findings have also been supported in the literature by others. Raghman et al also looked at variables associated with patients receiving a neobladder which included younger age, male sex, fewer comorbidities, more likely to be privately insured, and increasing hospital volume. These patient specific variables were generally confirmed in the present manuscript. Surgeon specific variables were also investigated, and surgeons who performed neobladder or continent pouch diversions at Kaiser Permanente were higher volume surgeons, fewer years out from training, and more likely to have undergone fellowship training. This group of surgeons was also more likely to have been employed at Kaiser Permanente for longer than 5 years. Of interest, in the author’s predictive model, only patient variables impacted the model, indicating that surgeon factors may not necessarily be important in the type of urinary diversion selected.

Nevertheless, what is even more intriguing in this manuscript is that even at an employed, integrated health system where pro-
duction incentives are not relevant, there are a high number of surgeons performing a radical cystectomy at a low-volume rate on a yearly basis. The data on outcomes and volume in the radical cystectomy population is robust, but even at Kaiser Permanente where incentives are more aligned with quality than quantity, patients are having their complex surgery performed by a urologist who may not be best suited to produce an optimal outcome for the patient. We could certainly conjecture as to the reasons why this paradox exists, however, what is more relevant is that this data is a microcosm of the challenges that exist in centralizing care/realigning incentives in urology and medicine overall.

**Danica May, MD, Daniel J. Canter, MD, Department of Urology, Ochsner Health System, New Orleans, LA**

**References**


https://doi.org/10.1016/j.urology.2018.11.022


**AUTHOR REPLY**

We agree with the authors that our study data on surgeon volume underscore the challenges in ensuring timely, high-quality care in any health system. At Kaiser Permanente, changes have been made to increase the number of patients receiving surgeries by higher-volume surgeons and specialists during the past 5 years which are not fully reflected in our study data of surgeries performed during 2010-2015. These changes have included referring more cystectomies to high-volume surgeons, offering multidisciplinary genitourinary oncology clinics, or having a high-volume surgeon assist during cystectomies that are performed by a lower-volume surgeon. However, our study data do not account for specialists assisting with surgeries. Only the primary surgeon was captured and thus may not fully represent the experience of the surgical team. Additionally, while our health systems have increasingly emphasized specialization of care, they also place a heavy emphasis on access and patient preferences. Patient preferences may be influenced by factors such as travel distance, desire to stay with the urologist who has been treating the patient for bladder cancer, or other considerations, and may contribute to some surgeries being performed by lower-volume surgeons. Finally, while a multitude of factors influence who performs a surgery, there is no individual financial incentive for a urologist to perform these surgeries within our healthcare systems. Thus, we agree with the authors that the wide range of surgical experience observed in our study reflects the challenges encountered in centralizing care, and the need for proactive systems to increase specialization for these surgeries.

**Marilyn L. Kwan, PhD, Kim N. Danforth, ScD, David S. Aaronson, MD, Matthew D. Wagner, MD, Stephen G. Williams, MD, Carmit K. McMullen, PhD, Kaiser Permanente Division of Research, Oakland, CA; Kaiser Permanente Department of Research & Evaluation, Pasadena, CA; Department of Urology, Kaiser Permanente Oakland Medical Center, Oakland, CA; Department of Urology, Kaiser Permanente Sunnyside Medical Center, Clackamas, OR; Department of Urology, Kaiser Permanente Riverside Medical Center, Riverside, CA; Kaiser Permanente Center for Health Research, Portland, OR**

https://doi.org/10.1016/j.urology.2018.11.023