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Platinum Priority – Editorial

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Obscenity, Michael Jordan, and Measuring Outcomes: Explaining and Improving the Quality of Kidney Cancer Care

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Every urology trainee quickly recognizes variability regarding surgical indications, technical skill, efficiency, and postoperative management, particularly for complex surgeries such as partial nephrectomy. Although not definitively proven, it seems self-evident that ultimate surgical proficiency depends on innate skill, quality of education, and the cumulative experience of a surgeon. Innate skill is not easily quantified but probably can be assessed in a similar way to that in US Supreme Court Justice Potter Stewart's comment during a landmark case on obscenity: "I know it when I see it". Perhaps an easier-to-understand corollary is that we could train daily for many years under the tutelage of Michael Jordan on how to shoot basketball free throws and practice incessantly, but would be unlikely to ever reach the success rate of Stephen Curry (90%). Quality of education may be equally difficult to quantify, but a compilation of surrogates such as exposure (number of cases seen or done), the level of complexity of those cases, quality of mentorship, extent of a surgery the trainee was allowed to perform, and whether fellowship training was completed could plausibly be applied. Nevertheless, it is easy to envision many counterexamples, such as a graduating resident who has profoundly better skills for a specific surgery than an individual completing a fellowship.

Robust assessments of the quality of care are lacking in the management of renal cell carcinoma (RCC) and renal tumors in general. Guideline statements and quality indicators are available for the diagnosis, staging, management, outcomes, and surveillance of such patients [1,2]. However, these have not permeated clinical practice and are not routinely integrated by health care payers or national quality initiatives in a meaningful manner. In addition, nearly all research is focused at the hospital level, such as management allocation (utilization of partial nephrectomy and minimally invasive surgery), surgical outcomes (complications), oncologic outcomes (positive margins), and administrative data (length of stay and readmissions), and broadly demonstrates better quality at high-volume centers [3,4].

In this issue of *European Urology*, Dagenais and colleagues [5] evaluate surgeon-specific outcomes for patients undergoing partial nephrectomy for a clinically localized renal mass suspicious for RCC. Using a large institutional cohort, optimal methodology, and complex statistics, the authors attempt to distinguish patient and surgeon factors contributing to variability in care, and conclude that surgeons account for 18–100% of the variability in measurable perioperative outcomes. Notably, an individual surgeon was a major influence on complication rates and readmissions but was not associated with glomerular filtration rate preservation or chronic kidney disease upstaging. Prior studies indirectly evaluated provider-specific outcomes via learning curves, fellowship experience, and surgeon volume, whereas this study was far more comprehensive. It is reasonable to extrapolate whether surgeon-level variability exists in perioperative outcomes as there is certainly variability in diagnostic strategies, management tendencies, and long-term follow-up.

The analyses are comprehensive, novel, and insightful. They are valuable for surgeon feedback and quality improvement initiatives, and serve as a benchmark for other medical centers or cooperative initiatives. However, as Elliot Eisner, Education Professor and author noted: "Not everything important is measurable, and not everything

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measurable is important." For instance, the relevance of many of these reported outcomes (eg, surgical margins, operative time, blood loss, and ischemia) are extensively debated. In addition, by focusing exclusively on partial nephrectomy outcomes, we run the risk of "not seeing the forest for the trees". For individuals and populations, it seems far more consequential to recognize the large proportion of patients with small renal masses who can be safely managed with active surveillance or biopsy to safely avoid or delay treatment. It is easy to see how a provider's penchant for biopsy, comfort with surveillance, and threshold for radical nephrectomy could easily bias a partial nephrectomy cohort. While the rationale for partial nephrectomy is intuitive (disclosure: we both perform it frequently), it is important to remember that both randomized and large comparative studies with long-term follow-up have suggested that radical nephrectomy is equally efficacious (and perhaps more so) as partial nephrectomy [6,7]. Lastly, these analyses did not explore the potential influence of the three different hospitals, as it is conceivable that logistics, personnel, systems, or processes might also be associated with meaningful patient-specific outcomes.

As health care systems strive to deliver consistently excellent, cost-effective care, surgeon- and hospital-specific outcomes will play an increasingly important role. For the management of RCC, these outcomes will probably be stage-specific, as a provider who treats mostly localized disease will be dramatically different from a provider who treats predominantly patients with locally advanced and/or metastatic RCC. We encourage researchers and policy advocates to define outcome measures of true importance rather than easily accessible data from administrative or outcomes databases. For instance, the proportion of patients who undergo radical nephrectomy for a benign tumor may be a much more important metric than estimated blood loss during partial nephrectomy when considered across an entire health care system. The authors of this paper should be recognized for making an important step in the right direction by generating provider-specific outcomes and reporting variability in the management of RCC and renal tumors.

Conflicts of interest: Scott Eggener is a member of the American Society of Clinical Oncology Small Renal Mass Guideline Panel. Phil Pierorazio is a member of the American Urological Association Guideline Renal Mass and Localized Renal Cancer Panel and a consultant for Urogen Pharma.

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