

Urologist engagement with a quality improvement dashboard on ureteral stents: a mixed-methods study

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### Introduction/Objective

Decreasing unnecessary ureteral stenting (e.g., after uncomplicated ureteroscopy) decreases morbidity, but there are many barriers to stent omission. Showing surgeons data on their practice patterns relative to other surgeons (“audit and feedback”) is an effective behavior change strategy and could decrease unnecessary stenting. We piloted an interactive dashboard to allow urologists to compare their stent rate across different case characteristics to other urologists. Given that “audit and feedback” may struggle with engagement, we measured dashboard usage and interviewed urologists for their perspectives on dashboard design, acceptability, and utility.

### Methods

The Michigan Urological Surgery Improvement Collaborative (MUSIC) stent dashboard is an online, interactive “audit and feedback” tool showing individual urologist, practice, and MUSIC-wide stent rates and ER visits with display adjustments for patient characteristics (e.g., stone size). We sent links to 3 pilot practices at 3 time points and recorded dashboard views and user count via Google analytics over 12 weeks. After eight weeks, we interviewed 10 study urologists on dashboard design and attitudes towards “audit and feedback.”

### Results

Eighty-three urologists across 3 MUSIC practices were provided dashboard access; 28 (34%) unique users contributed 97 views. Use increased around e-mail reminders (Figure 1). In interviews, urologists were receptive but reported time constraints and means of dissemination as primary barriers to engagement. Dashboard design was viewed favorably. Some felt data granularity was helpful; others found details to be “distracting.”

### Conclusions

We found modest levels of stent dashboard use, likely impairing its ability to impact stenting. While urologists are receptive to audit and feedback, future focus should include formats that are tailored to urologists’ needs to increase engagement and therefore effectiveness.

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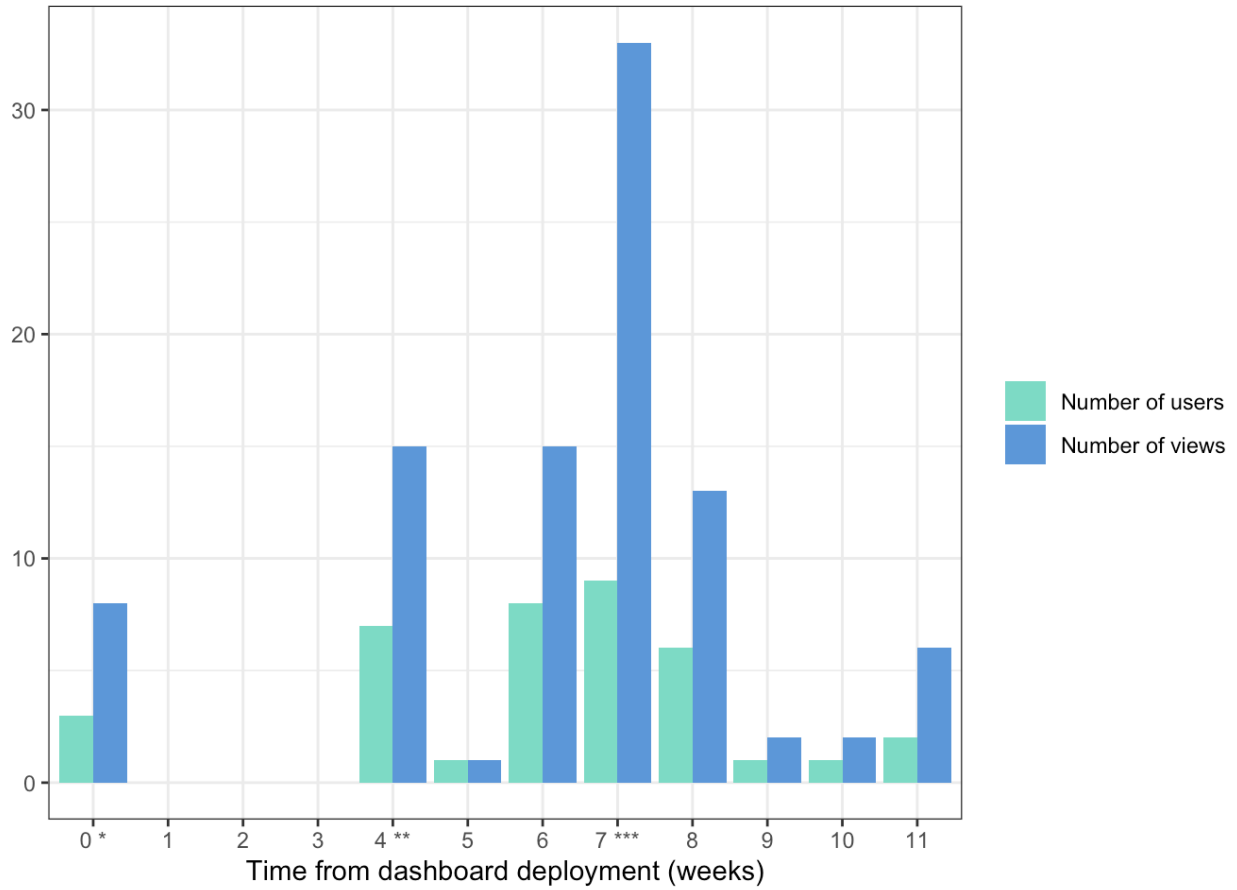


Figure 1. Histogram showing number of dashboard users and website views by week from initial dashboard deployment. Asterisks along x-axis demarcate timing of e-mails containing dashboard link. \* = initial e-mail; \*\* = e-mail to site champions; \*\*\* = e-mail with invite to short interview.