A Novel Expert Coaching Model in Urology, Aimed at Accelerating the Learning Curve in Robotic Prostatectomy

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INTRODUCTION

- Coaching in surgery has been correlated with increased technical skill, ability to self-assess, and improved non-technical skills, but formalized coaching programs for surgeons in practice are rare.
- Barriers to adoption range from concerns about image and authority, to the belief that a trained surgeon already has requisite technical skills.

OBJECTIVE

- To implement an expert peer–led, video-based surgical coaching program and evaluate its implementation, engagement, and utility.

METHODS

- Surgeons were scheduled for 3 coaching sessions 1-2 months apart.
- Sessions were held between surgeon and expert surgeon-coach (PTS).
- Before each session, the surgeon selected one of their recent intraoperative videos to review.
- During sessions, the coach led discussion on topics chosen by the surgeon; together, surgeon and coach developed goals to achieve before the next session.
- The next session included presentation and discussion of a case occurring subsequent to the prior session.
- Sessions were coded by discussion topics and analyzed based on level of experience.

PARTICIPANTS

- Six surgeons who performrobot-assisted laparoscopic prostatectomies were chosen and grouped by number of prior cases completed: junior (<100 cases), intermediate (100-500 cases), and senior (>500 cases).

EXPOSURE

- Three 1-hour coaching sessions over 8 months (February–October 2019).

MAIN OUTCOMES AND MEASURES:

- Survey results and recorded discussion topics.
- Steps completed with/by the participating surgeon are blue, steps completed with/by coach are yellow, and steps completed with/by both are green.

RESULTS

- All 6 surgeons completed 3 sessions.
- The average time between sessions was 7.1 weeks.
- Most respondents evaluated themselves as having improved in desired areas and feeling more confident performing the steps of the operation discussed during sessions.
- Discussion directed by surgical RALP steps varied by experience group (Table 1).
- The surgeons thought this program provoked critical discussion; they subsequently made modifications to their technique, and “agreed” or “strongly agreed” that they would sign up for further sessions.

DISCUSSION THEMES

- All surgeons over the course of the program discussed the posterior dissection, the dissection of the neurovascular bundle (NVB), and the apical/DVC dissection and urethral division (Table 1).
- The posterior dissection was discussed most commonly in the junior group (4 sessions, 67%).
- The NVB dissection was discussed most commonly in the intermediate group (5 sessions, 83%), followed by the junior group (4 sessions, 67%) and the senior group (3 sessions, 50%).
- The apical/DVC dissection and urethral division were discussed most commonly in the intermediate and senior groups (5 sessions, 83%), followed by the junior group (3 sessions, 50%).

CONCLUSIONS:

Surgical coaching at a large medical center is not only feasible but was rated positively by surgeons across all levels of experience. Coaching may shorten the learning curve for complex surgeries and offers surgeons a safe space to acquire new skills.

Figure 1. Surgical coaching program structure. Steps completed with/by the participating surgeon are blue, steps completed with/by coach are yellow, and steps completed with/by both are green.