



Lessons as a Surgical and Leadership Trainee

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Introduction

When thinking of leaders, who comes to mind? Political leaders? Department heads? An attending? A chief resident? The head nurse? Teams and leaders are all around us. As physicians we are all leaders. Our patients look to us for help as we fix or mitigate their concerns. In the operating room and clinic, we lead a team of ancillary personnel to accomplish our goals of improving the lives of our patients.

Everyone on the team has a role and an opportunity to lead. Leadership is a skill, and just like the skills of taking a good history, completing a good exam, or completing a surgical procedure require training and practice, so too does leadership. The formal leadership training provided by the Penn Orthopedic Leadership Academy is designed to jumpstart those leadership skills with one on one mentoring, completion of a leadership project, and conveyance of knowledge gained to our peers.

Project Summaries

Lauren Boden

Physician burnout and stress are prevalent within the medical and surgical communities. Mindfulness techniques have shown benefits in anxiety, stress, and burnout, however traditional techniques are time intensive and not practical for use by surgical residents. With the mentorship of Drs. Mike Useem, David Casper, and John Kelly, we have initiated a pilot study for an application-based Mindfulness program for orthopedic surgery residents. The app is customizable to the individual resident and can be used at their convenience. We will measure burnout, stress, and anxiety over the course of an 8-week program that culminates in a mindfulness retreat. If successful we hope to expand the program in the future.

Dr. Useem's expertise with leading through disruption has helped reinforce the qualities of a good leader and how leaders outside of medicine approach problems. Working on identifying a common goal and setting a leadership style has increased my leadership skills in times of adversity.

David Falk

Through my project working with Dr. Preston Cline, Co-Founder and Director of Research and Education at Mission Critical Team Institute, along with orthopaedic trauma attendings Dr. Samir Mehta and Derek Donegan, we identified that surgical residents transition from the controlled environment of medical school to the chaotic environment

in the operating room without much preparation for the transition. Instead of learning in lectures and the library, residents take on a more apprenticeship-based role with the goal of mastering technical skills. Given the new environment and new goals, we are working to identify possible solutions to improve resident understanding of this new learning environment to promote more rapid skill acquisition and growth.

Preston's experience working with professional athletes and Navy SEALs provides a unique perspective, and one that I never would have been exposed to without the Wharton Leadership Program. Beyond the bounds of our project, working with Preston has allowed me to get a better understanding of how high-performing individuals outside the medical field communicate and lead in high pressure situations.

Gregory Minutillo

Penn does a large volume of hip and knee arthroplasty. One would think that we had an institutional registry in order to study joint replacement, but we do not. My project was to see if there was an association between an institution having a joints registry and the number of publications it produced in the journal with the highest impact factor over the last decade.

We looked at every arthroplasty publication in the last 10 years of JBJS and looked at which institution each publication came from. We then surveyed each institution to see which ones had joints registries and which did not to determine this association. After analysis, it was demonstrated that institutions with a joints registry published more than those without.

The motivation for this study was to initiate a joints registry at Penn and show that it could add to our ability to produce more research.

Matthew Stein

The question of accurately knowing oneself, and how to obtain that self-knowledge if it is lacking stretches beyond the field of orthopaedics and medicine. Yet, as we learn more about the deficiencies of physicians' ability to communicate with patients, coupled with the well documented issue of burnout, a comingling of ideas began to bring forth the concept of self-awareness and its benefits into medicine. Could it be our lack of self-awareness leads to more complicated and frustrating encounters with patients and colleagues? That our inability to learn what we truly value and discover what drives us leads

to burnout, lack of thriving, and overall unhappiness. Inspired by and in collaboration with Tasha Eurich, the author of the book *Insight*, we developed a study to assess self-awareness in residents.

Our main study goal was to determine if residents own perception of themselves, their internal self-awareness, reliably matched up with how others perceived them. Secondly, we wanted to assess if this correlated with a residents' feeling of thriving in life and ability to avoid the well-known symptoms of burnout. This was made possible by Dr. Eurich's validated self-awareness survey.

This idea was important to me as I believe the problem of burnout has been very well described, and yet there are still so few solutions that have been discovered. My hope is to carve a new path towards physician self-realization in the hope that we become purposeful and joyful in the challenging path we have chosen.

Conclusion

It has been an honor and a privilege to be selected as the inaugural Penn Ortho Leadership Academy fellows. We would like to thank our formal mentors Dr. John D. Kelly IV, Dr. Derek Donegan, Dr. Marlene DeMaio, Mike Useem, and Jeff Klein along with the additional department members who assisted with our projects for their support over the last year. The lessons learned from our mentors and projects will help us be successful leaders now and throughout our careers. Choosing to develop these skills while concurrently being a surgical trainee has helped highlight the fact that you can lead from any position on a team. Leading up is just as important as leading from the top and can be an effective way to create positive change. We are excited to see where this program goes in the future and hope to see a more formal leadership curriculum open to all residents.