

## 1 Background

### •ABIM: The Trend

While the American Board of Internal Medicine (ABIM) pass rates for first-time initial certification exam takers have remained fairly stable in the eightieth percentile, many residency programs have actually experienced an unexpected decline in ABIM initial certification exam pass rate over the past several years according to the statistics released annually by ABIM.



### •Cleveland Clinic Study: The Predictors

In 2012, researchers at the Cleveland Clinic found that the strongest predictors for passing the ABIM to be scores on other standard exams and making more time available for dedicated study.



## 2 Objective

### •A Novel Approach To Board Preparation

In an effort to engage resident participation for board preparation, a dedicated team-based learning curriculum with incorporation of a novel live audience technology was implemented in an internal medicine residency.

## 3 Innovation

### •Team-Based Learning

Every five-weeks for a dedicated one-hour session, residents participated in a team-based learning environment to study a set of selected, high-yield questions from the Medical Knowledge Self Assessment Program (MKSAP).



### •Protected Time

The session coined as the “MKSAP Marathon” is structured as a protected learning period prior to any clinical work during the outpatient block of a well-established “4+1” resident rotation schedule.



### •Poll Everywhere

Poll Everywhere, a novel live audience technology, was incorporated to promote a professional audience engagement during the session as residents work together through the MKSAP questions.



## 4 Results & Discussion

### •MKSAP Marathon: Ready, Get-Set, Go!

All 75 residents in an internal medicine residency participated in the MKSAP Marathon, at which time residents would work through a selected 20 high-yield MKSAP questions.

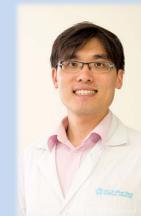


### •600 MKSAP questions in 30 hours

For a total of 10 sessions annually through a traditional 3-year internal medicine residency, 600 MKSAP questions (approximately 50% of all MKSAP questions) will be efficiently covered in only 30 dedicated hours during MKSAP Marathon alone.

### •More comfortable answering board-type questions

After the 5 month pilot of MKSAP Marathon, preliminary focus group analysis found that residents feel more comfortable in answering Board-type questions...



### •More aware of personal gaps

... are more aware of personal gaps in medical knowledge necessary for more focused learning

### •Learning is fun

... and the interactive, nonjudgmental environment created by Poll Everywhere makes learning comfortable and engaging.

## 5 Conclusions

### •MKSAP Marathon introduces a novel, replicable learning environment for board preparation in residency

With the implementation of MKSAP Marathon with incorporation of Poll Everywhere, we hope to introduce a novel, replicable learning environment for Board preparation in any internal medicine residency.

## 6 Future Directions

### •Correlation to ABIM pass rate

Ultimately implementation of the novel board preparation curriculum is to enhance successful passing of ABIM for residents and to create a more manageable process in doing so during the busy clinical training of residency.

### •Building on sustainability

MKSAP Marathon has been voted as highly valuable for resident learning, especially for the seniors residents, and will be incorporated for future academic years.

### •Extending the utility of the system

The ease of use of Poll Everywhere allows for adaptability in other settings (i.e. noon conference, other institutions).

## 7 Critiques

### •Participation of house staffs

Given the team- and technology- based nature of the curriculum, housestaff and institution with less familiarity of such teaching style may find difficulty to adapt to new learning environment.

### •Financial sustainability

While minimal cost was spent in the development of the curriculum (including tablet and MKSAP 17), successful implement of curriculum requires intuitional buy-in for purchase of curriculum materials and loss of clinical productivity from protected learning time.

## References

1. Michaelsen, L., Sweet, M. & Parmalee, D. (2009) *Team-Based Learning: Small Group Learning's Next Big Step. New Directions in Teaching and Learning*, 7-27.