

Improving interdisciplinary communication on general medicine wards through the use of a two-way HIPAA-compliant text messaging app

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Introduction

Communication amongst providers and nursing staff is paramount in providing high-quality patient care, minimizing clinical errors, and maximizing workflow efficiency. Certain difficulties underlie the one-way paging system including: delayed or incomplete closed-loop communication, lack of documented history of verbal discussions, and pager fatigue.

We aimed to improve satisfaction with communication between Truman Medical Center-HSD (TMC-HSD) internal medicine residents (IMRs) and general medicine ward registered nurses (RNs) through the implementation of a HIPAA-compliant secured messaging app (SMA) between January 1 and February 28, 2019.

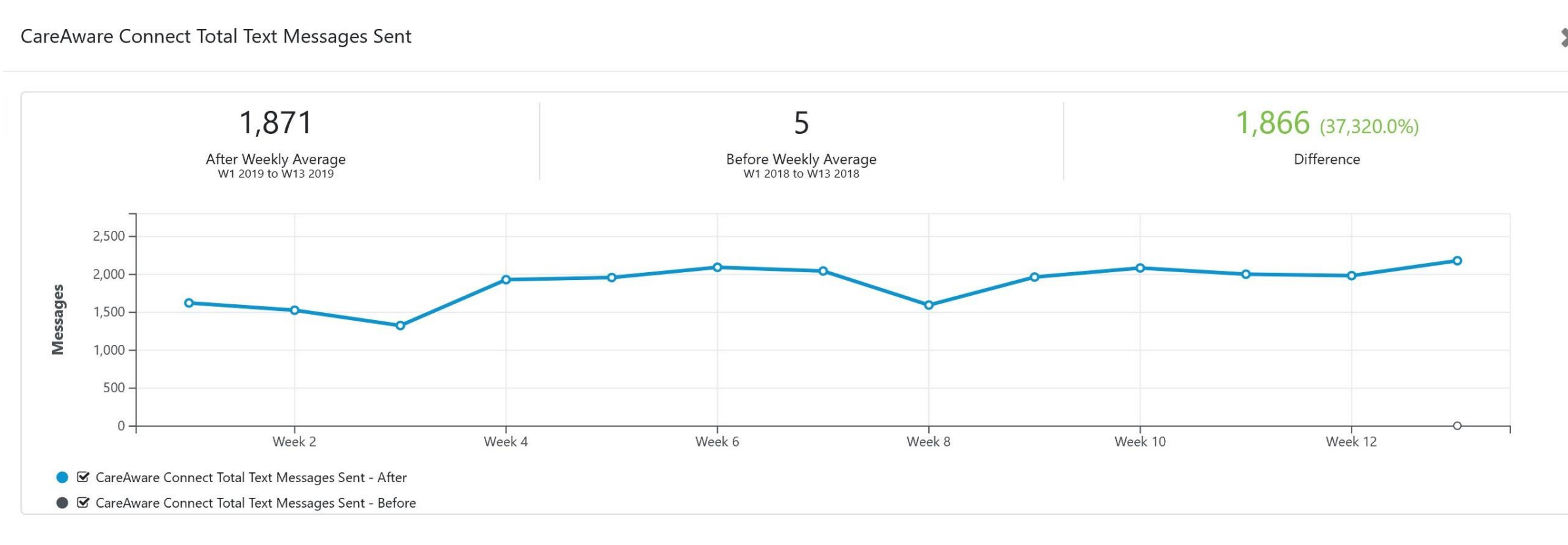
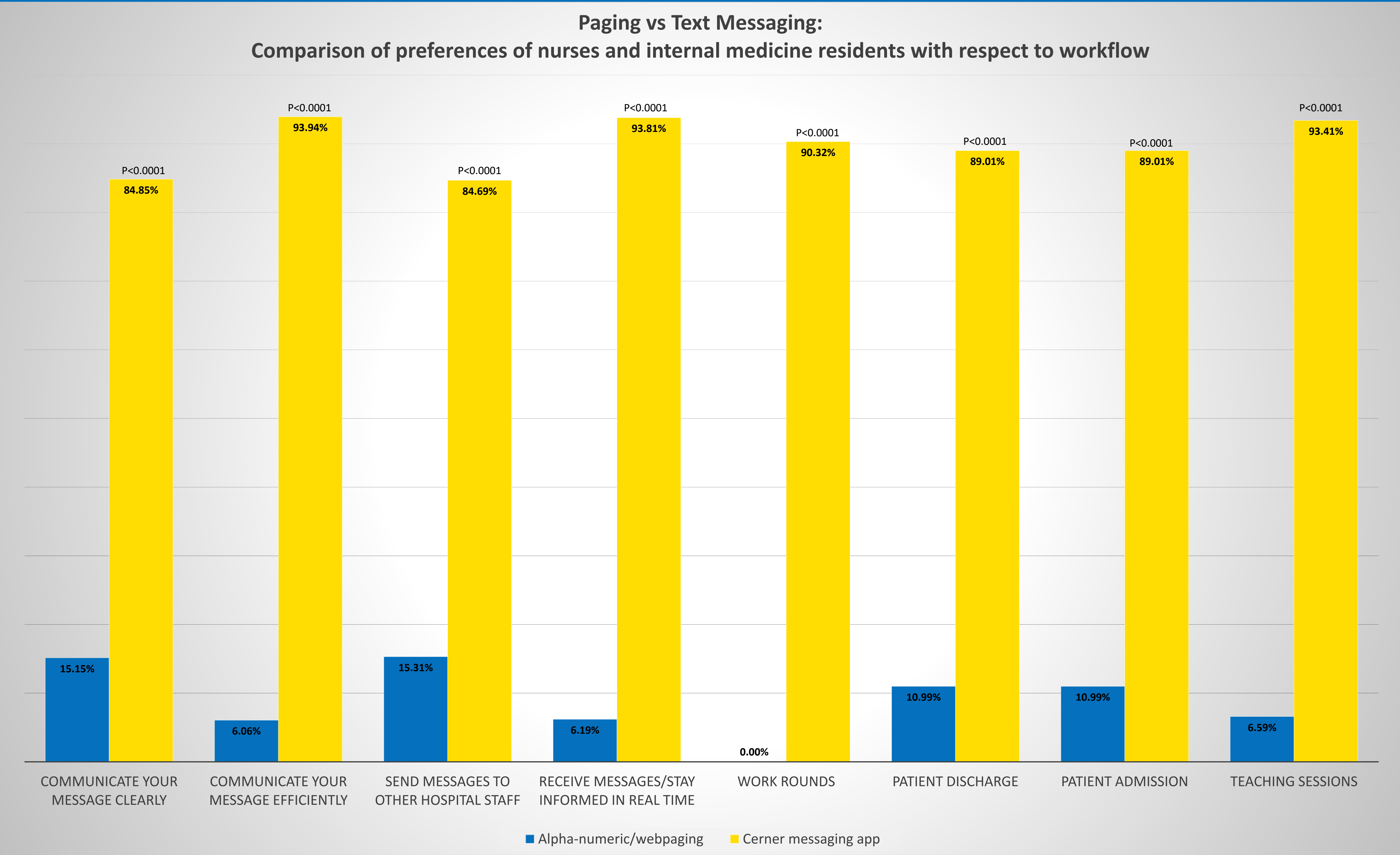
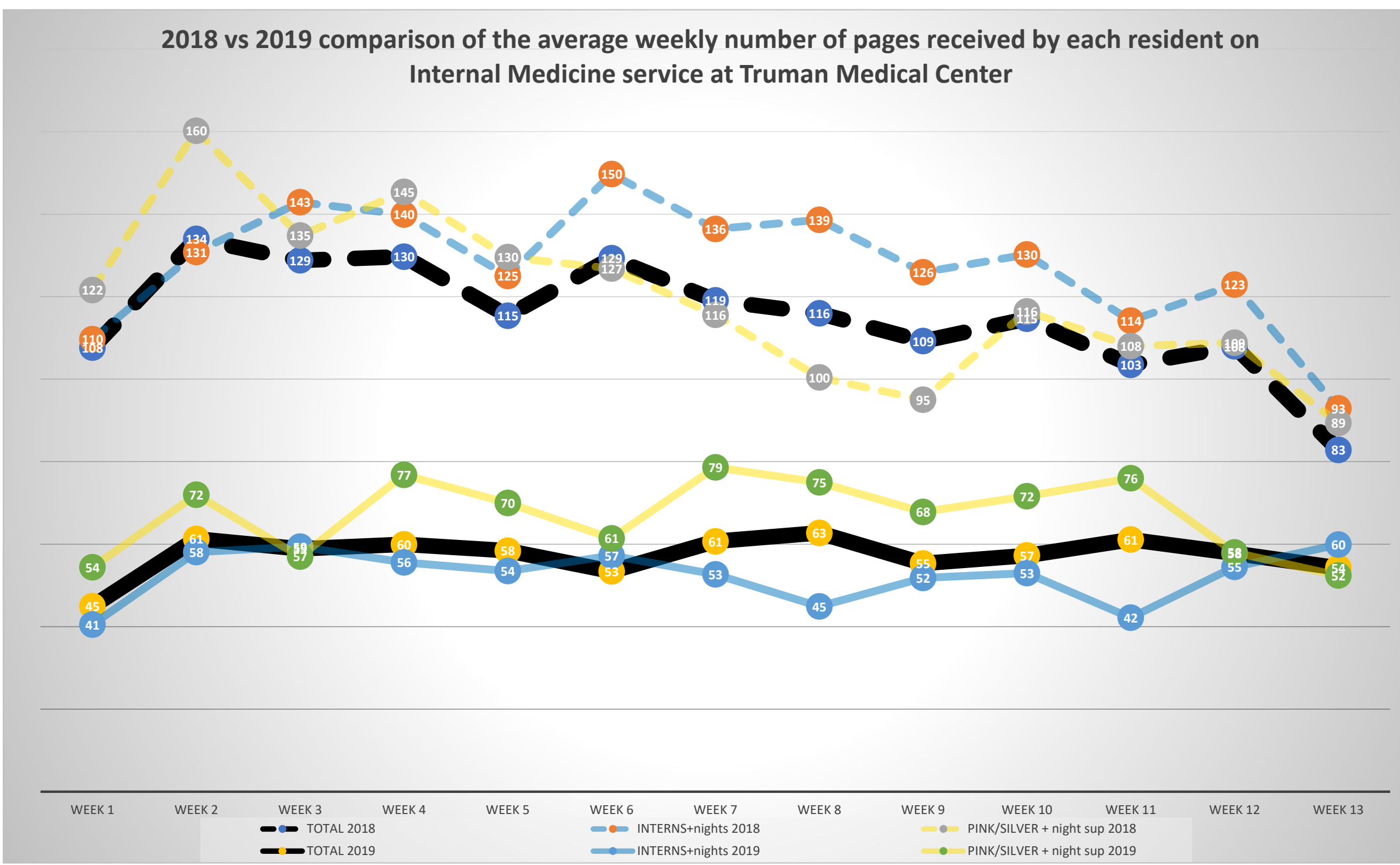
Methods

- We implemented the use of a HIPAA compliant secured text messaging app, Cerner Careaware Connect® as primary means of communication between nurses and residents, December 1, 2018
- Education of the app was achieved through the use of a Powerpoint® presentation distributed by oral presentation and through email to nursing staff and internal medicine residents
- Satisfaction and perception of communication was measured through 5-point Likert-scale surveys distributed electronically through SurveyMonkey®
- Surveys were compared prior to and post implementation of the messaging App
- Data was collected Jan through March 2019
- Where appropriate, fisher-exact and chi-square analysis was used to determine statistical significance

Results

Prior to intervention, RN perceived response time (RNPRT, n=47) to paging was 23 minutes. IMR perceived response time (IMPRT, n=58) to paging was 15 minutes. SMA use improved RNPRT (n=30) and IMPRT (n=12) to 11 and 7 minutes, respectively (both p<0.0001). 83% of all RNs and IMRs (n=80) were satisfied with use of the SMA, while 45% (n=80) were satisfied with use of the pager system (p<0.0001). The SMA was preferred over the pager system for workflow during patient admissions, work rounds, patient discharges and teaching sessions (91%, 89%, 89%, 91%, respectively, all p<0.0001; n=70).

Use of a two-way HIPAA compliant secured text messaging app improved satisfaction of communication and decreased response times amongst interdisciplinary team members on the internal medicine service.



Conclusion

Use of a two-way HIPAA compliant secured messaging app was the preferred mode of communication among internal medicine residents and nurses at TMC-HSD with increased satisfaction and integration into workflows.

Limitations

Our study was limited by using subjective surveys. Due to time constraints, data were collected over a two-month period. Thus, the post-implementation sample size was reduced. Compliance and technology literacy were issues.

Future Directions

- Implementation across other specialties and subspecialties at Truman Medical Center HSD and LW
- Integration into the onboarding process
- Delineate and define messaging protocol
- Increase compliance of use

