Impact of Phased Implementation on Adoption of a Secure Messaging Platform

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PURPOSE
To explore how sequential cross-device and cross-platform implementations in addition to a phased approach toward enterprise-wide user access has impacted adoption of a secure messaging platform, Secure Chat, within NYU Langone Health, a large and rapidly growing health system.

BACKGROUND
Communication is imperative to safe, quality, and efficient health care delivery. Large health systems are often rapidly growing with dispersed campuses, as is the case at NYU Langone Health. This has driven the need for clinicians and support staff to become increasingly mobile. Clinicians and their supporting teams must be able to communicate and collaborate across their organization’s myriad units, facilities, and geographical regions. The literature provides ample evidence that mobile devices greatly improve interprofessional communication. In particular, secure messaging is correlated with increased efficiency and improved communication amongst clinicians.

METHODS
For each implementation phase, retrospective longitudinal data were captured for total unique users and total number of messages sent by clinicians and support staff. Average unique users per day and average number of messages per day were then calculated. The impact of each implementation phase was then measured as a percent increase on these metrics chronologically from one phase to the next.

RESULTS
Our secure messaging pilot went live in June 2017 for a segment of NPs, physicians, fellows, and residents on smartphone and tablet versions of the mobile application. During the pilot, a total of 6,366 unique users (individuals who downloaded and used the application) and an average of 49 messages per day were observed. In phase two (May 2018-June 2018) Secure Chat went live on a mobile application version for a segment of RNs and physician assistants. A 114% increase in average unique users (AUU) per day and a 224% increase in the average number of messages (ANM) per day were observed. In phase three (June 2018-July 2018) the organization went live for in-scope users with the grand opening of two new facilities, Kimmel Pavilion and Hassenfeld Children’s Hospital, leading to a 460% increase in AUU per day and a 1,131% increase in ANM per day. In phase four (July 2018-Nov 2018), Secure Chat went live on Clinical Mobile Companions (locked smart phone devices) distributed at our Brooklyn campus leading to a 48% increase in AUU per day and 35% increase in ANM per day. In phase five (Nov 2018) we launched the desktop version of Secure Chat in Epic Hyperspace. The desktop version interfaces with the mobile applications granting access to users across all campuses and roles with Epic system access. In phase 5, we observed a 196% increase in AUU per day and a 107% increase in ANM per day at six weeks post go-live.

CONCLUSIONS
Secure messaging helps meet the communication needs of large and growing health systems. To spur adoption and maintain active engagement, we recommend supporting access to all roles on treatment teams at a minimum and to all appropriate roles, including ancillary support, as quickly as possible. When system users are unable to contact colleagues because they do not yet have access or were not included in the scope of users to be granted access to secure messaging, adoption may be hindered.

REFERENCES