

# EVALUATION OF DISCHARGE EDUCATION: AN EDUCATIONAL INTERVENTION TO IMPROVE PATIENT SAFETY WITH OPIOID MEDICATIONS

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## BACKGROUND

- From 2000-2014 nearly half a million people in the United States died from drug overdoses; many of them from prescribed or illicit opioids (CDC, 2016).
- Unauthorized access and use of opioids outside the context of supervised medical use is a major contributor to the problem of substance use disorder and overdose deaths (Compton, Jones, Baldwin, 2016; Rudd, et al., 2016).
- Effective January 1, 2018 new pain standards issued by The Joint Commission went into effect, calling for clinicians and leaders to improve opioid safety (The Joint Commission, 2017).

## PURPOSE

The purpose of this project was to increase the knowledge of staff nurses working on a surgical unit at Massachusetts General Hospital to effectively educate patients being discharged regarding the safe use, secure storage and proper disposal of opioids when prescribed.

## METHODS

### Design

The project was conducted as quality improvement.

### Sample and Setting

A convenience sample was obtained by administering two web-based surveys (pre-education and post-education) via email to approximately 60 staff nurses on the chosen study unit. The survey tool contained twenty-three questions that were open ended dichotomous or scored on a five point Likert scale. Collection of data occurred during a three month period, with one month allowed for completion of each of the surveys and one month allowed for the educational sessions.

## DATA ANALYSIS

Data were exported from REDCap to an Excel spreadsheet and data was subsequently uploaded into an SPSS statistical analysis program for further examination. Descriptive data (e.g. frequencies, ranges, and mean scores) were reviewed. Open-ended responses were examined to identify common themes evident in the pre-and post-surveys. Where appropriate, pre- and post-scores were analyzed for differences using nonparametric or t-Test methods.

## RESULTS

- There were 50 survey respondents for the pre-education survey for a completion rate of 83% and 50 nurses participated in the educational sessions. Following this intervention of on-unit educational sessions, 35 respondents finished the post-education survey for a completion rate of 58% of the total population.
- Demographic Data – Participants consisted of nurses with less than 1 year to 43 years as a registered nurse, less than 1 year to 38 years working in orthopaedics, and less than 1 year to 38 years working on the study unit.
- Results show that nurses were more confident to educate patients being discharged from the hospital with opioid prescriptions in the post-education survey. The intervention boosted nurse's confidence to educate patients about opioids  $t=63.3$ , ( $df=34$ ),  $p > 0.001$ .

- The content of the educational program emphasized the importance of safe use, secure storage and proper disposal of opioids using an EHR based tool. Nurses were better able to educate patients on these topics after the intervention (See Figure 1). Nurses were also significantly more aware of the EHR tool. Nurses placed a greater emphasis on safe storage, safe use and proper disposal after the intervention (See Figure 2).

Figure 1: Confidence to Educate Opioid-prescribed Patients

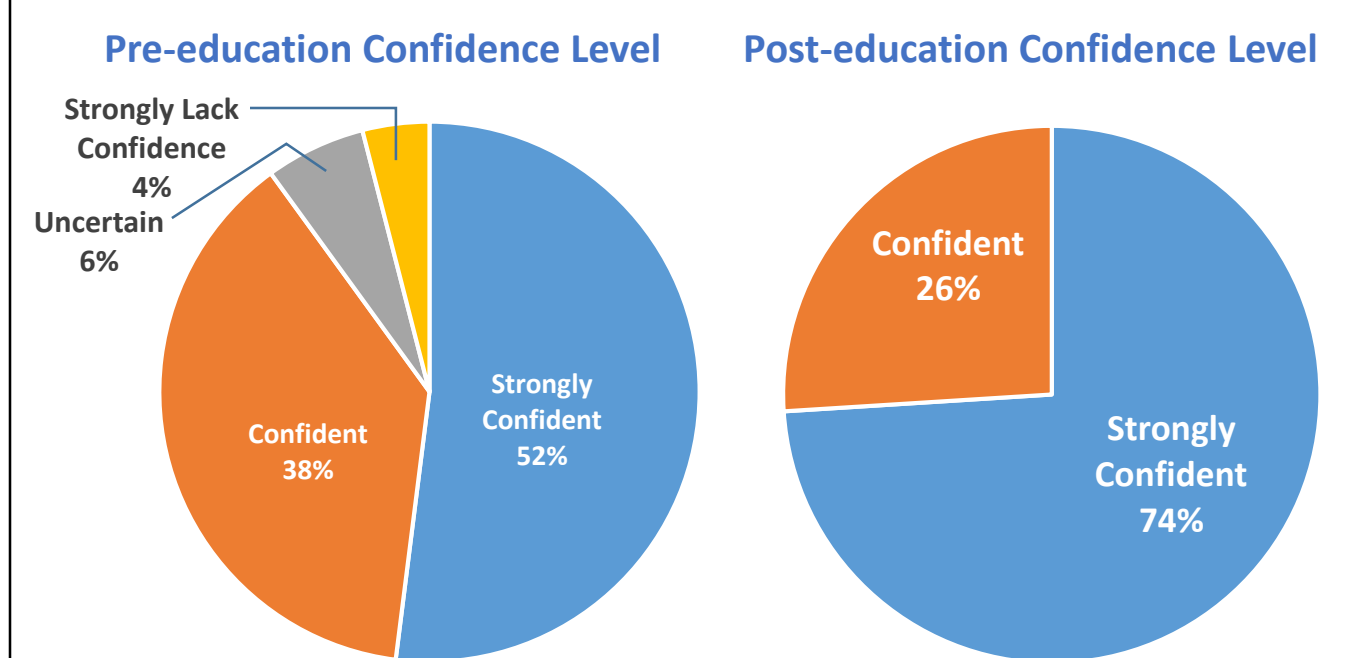
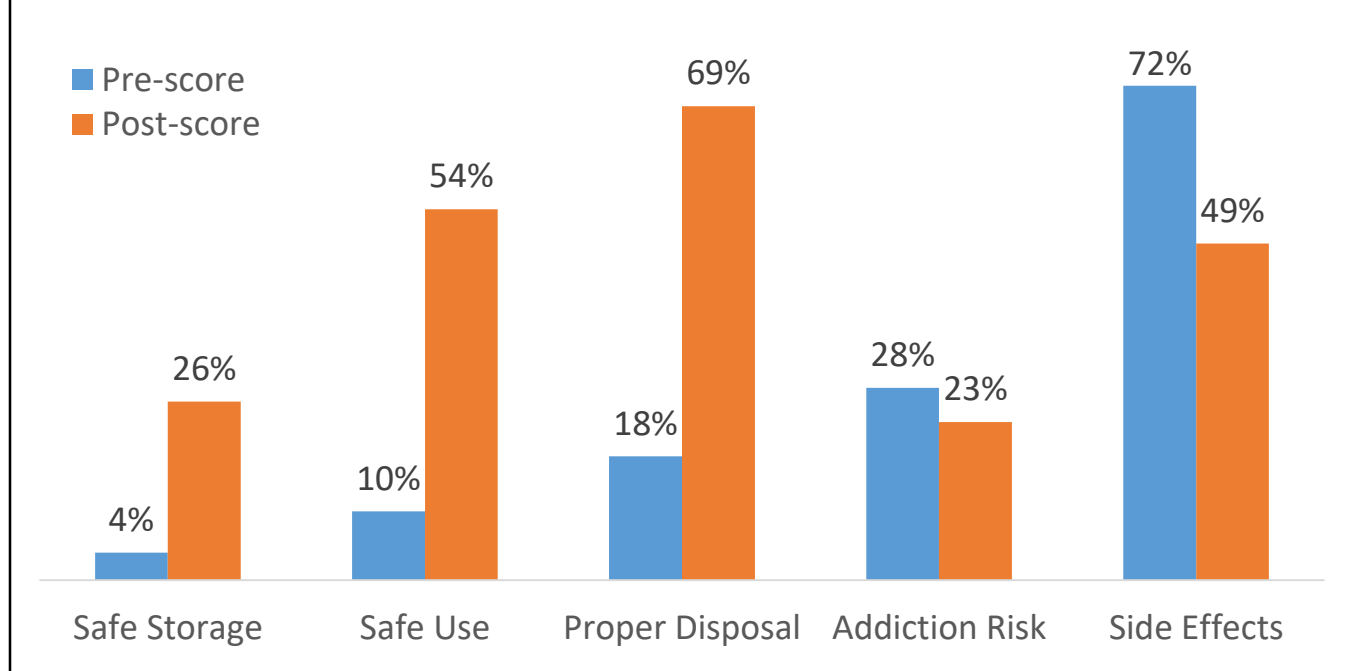
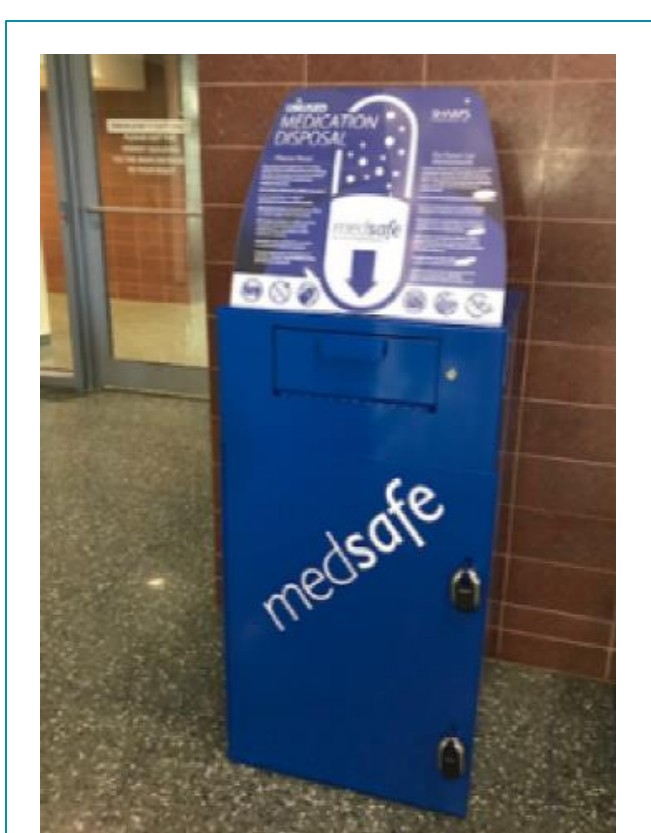


Figure 2: Nurse Emphasis of Opioid Patient Education



## CONCLUSIONS

- Results of this study suggest that nurses benefited from brief educational sessions focusing on the importance of instructing regarding safe use, secure storage and proper disposal when they were discharging patients with an opioid prescription. Although an EHR tool is available to guide this information, many of the population studied were unaware of it.
- Next steps will be to expand this educational program to other units in the hospital.
- Future research should explore differences in confidence levels of nurses in relation to years of experience and didactic versus computer-based teaching methods.



One Of The Medsafe Receptacles Located In The Hospital

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