Flu vaccine best practice alert 2023 (BPA) daily firings reduced significantly with slightly lower vaccination rate

PROBLEM:
Inpatient influenza vaccine alert firings have been reduced considerably - from 23.0 to 3.2 per patient per day - but continue to fire at high frequency. We tested whether limiting the firing to specific times during admission could reduce firings, without reducing vaccination rate.

INTERVENTIONS:
We randomized patients in a 1-1 ratio to receive one of two alerts: (1) a control alert that fired each time a patient’s flowsheet was opened; (2) an intervention alert which fired once on patient admission, then every time the flowsheet was opened but only after the discharge order was entered. Outcomes compared were daily firings, total firings and vaccination status at discharge.

RESULTS:
The difference in average firings between alerts was highly significant both in terms of daily firings (0.6 intervention vs. 2.7 control, p<.0001) and total firings per admission (1.6 vs. 5.8, p<.0001). However, the intervention alert also had a significantly lower percentage of patients vaccinated at discharge (8.9% vs. 11.0%, p=0.04). This suggests that it takes around 4 more firings per encounter to raise the vaccination rate by only 2% - a level of alert burden that may not be worth it.

The Rapid Randomized Controlled Trial (RCT) Lab is helping transform NYU Langone into a learning healthcare system by using rapid-cycle randomized controlled trials to test simple, pragmatic ideas. We use our findings to quickly change healthcare practice.