

background: Timely administration of naloxone, the antidote for opioid overdose, can be a life-saving intervention. At Maricopa Medical Center's (MMC) Adult ED we studied the fill rate of naloxone prescriptions after opioid overdose and naloxone education program. Fill rates for free naloxone kits were compared between recipients of education by video or written format. This study was a first of its kind in Arizona.

methods: This was a prospective, randomized controlled study of patients seen in the adult ED from August 1, 2017 to December 1, 2018. The patients were current opioid users or being seen in the ED for opioid related conditions. Patients were randomized to receive opioid overdose and naloxone education through a video or a written pamphlet. Upon discharge, the patients received a prescription for a free naloxone kit redeemable at a Maricopa Medical Center (MMC) pharmacy only. Patients who filled the prescription were contacted 3 months after prescription and asked if the naloxone kit was used. Chi-square test and odds ratio were performed with 95% confidence limits calculated to measure the magnitude of the association between education method and whether the prescription was filled.

results: Of the 769 patients screened for the study, 702 were excluded from study. Common reasons for exclusion include: patients who were admitted to the hospital (108) and patients who were deemed not be to candidates for naloxone by providers (21). Of the 67 patients enrolled, four withdrew consent and eighteen (28%) filled a naloxone prescription. Thirty-two percent (13/41) of patients who received video education and 23% (5/22) who received written pamphlet education filled naloxone prescriptions. Patients who received video education were 1.4 times more likely to fill their naloxone prescription ($p=0.654$). Four of the patients who filled naloxone prescriptions were successfully contacted after 3 months and none had used the naloxone kit.

conclusion: Patients who received video education were more likely to fill their naloxone prescription. The results of this study were limited by patient enrollment. Major barriers to enrollment were the inability to include admitted patients and provider perception of patient opioid overdose risk. As a result, a current follow up study focuses on opioid overdose and naloxone education for the providers of MMC's entire health care system, allowing for patients to receive naloxone prescriptions regardless of discharge location.