ABSTRACT

BACKGROUND: Low-value services have been identified as a major contributor to unnecessary healthcare spending in the United States. Brand name medications with existing generic equivalents are a prime example of a low-value service.

OBJECTIVE: To evaluate the association of an electronic health record intervention with provider prescription of generic equivalent medications.

DESIGN: Quasi-experimental study.
SETTING: General internal medicine (n=2) and family medicine (n=2) clinics at the University of Pennsylvania from June 2011 to September 2012.

PARTICIPANTS: Attending physicians (general medicine n=38, family medicine n=17) and residents (general medicine n=166, family medicine n=34)

INTERVENTION: In January 2012, the default in the electronic health record medication prescriber was changed for general medicine providers from displaying brand and generic medications to displaying initially only generics, with the ability to opt out and choose the brand.

MEASUREMENTS: Proportion of beta-blockers, statins, and proton-pump inhibitors with existing generic equivalents that were prescribed as brand name.

RESULTS: During the pre-intervention period there was a declining trend in the percentage of medications that were prescribed as brand name, however no significant differences were observed between IM and FM providers. Significant reductions were observed among IM attendings compared to FM attendings during the post-intervention period relative to the pre-intervention period as follows: all medications (-8.1 percentage points; p-value <.001), beta-blockers (-12.4 percentage points; p-value <.001), statins (-7.1 percentage points; p-value 0.02), and PPIs (-5.3 percentage points; p-value 0.079). Overall trends among residents showed no significance difference between providers.

LIMITATIONS: Observational single center evaluation, comparison groups represented different specialties, and a small subset of medication classes studied.

CONCLUSION: The use of default options was an effective method to reduce the low-value service of prescribing brand name medications with existing generic equivalents.