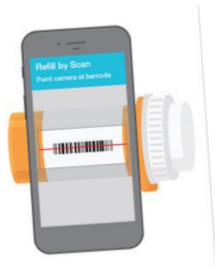


# Use of digital prescription management and reminder tools is associated with increased medication adherence among patients at a large chain pharmacy

Accepted to the Academy of Managed Care Pharmacy Annual Meeting, 2020



**Patients who used digital prescription management and reminder tools were more adherent than those who were not digitally engaged.**

## BACKGROUND

- Taking medication as prescribed is often critical to managing chronic conditions. Medication non-adherence is linked to adverse health outcomes including complications and worsening of the condition.
- Digital tools – digital prescription management and refill reminders -- may help improve medication adherence.

## STUDY DESIGN

- The objective of this study was to examine the differences in medication adherence between patients who used pharmacy-based digital prescription management and reminder tools and those who did not use these tools.

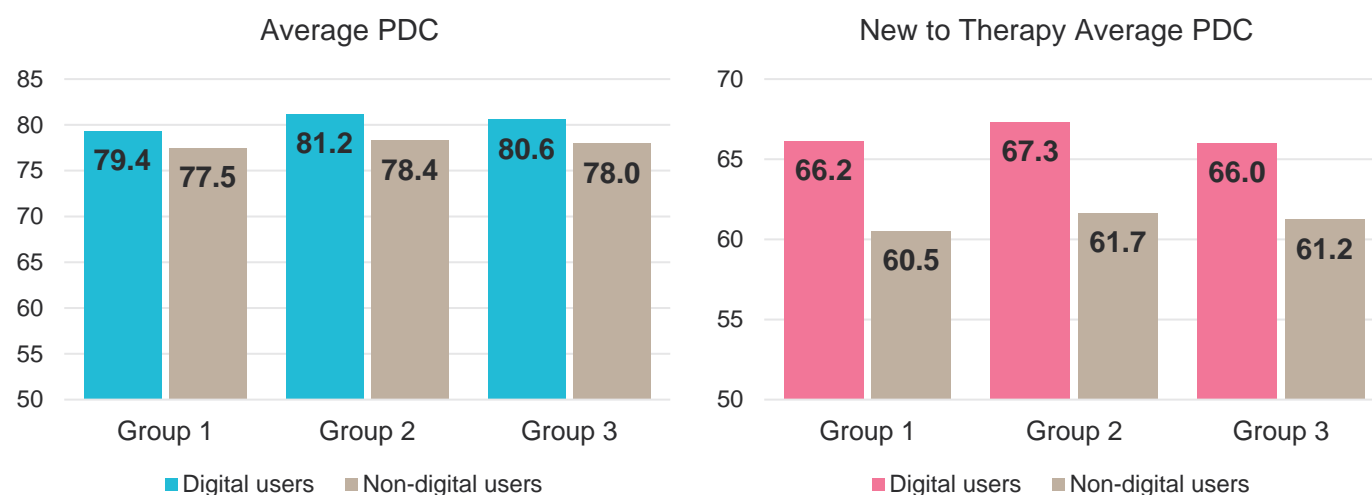
## POPULATION STUDIED

- Digitally active patients who filled prescriptions from top therapeutic drug groups between March and June of 2018 were selected and followed for 12 months. Those with only one medication fill were excluded.
- Patients were separated into three groups: those with confirmed use of the online or mobile tool to manage and refill prescriptions (**group 1**), those who activated the online or mobile tool but used email or SMS reminders to refill instead (**group 2**), and those who did not activate the online or mobile tool but did use email or SMS reminders to refill (**group 3**). Non-digital control patients were selected using the same criterion and matched with each digitally engaged group.
- A 1:1 propensity score match was used to minimize differences in age, gender, chronic condition score, copay, household income, and urban locality between the groups. Adherence was measured by calculating the proportion of days covered (PDC). Results were reported for all therapeutic groups combined, as well as by individual therapeutic group.

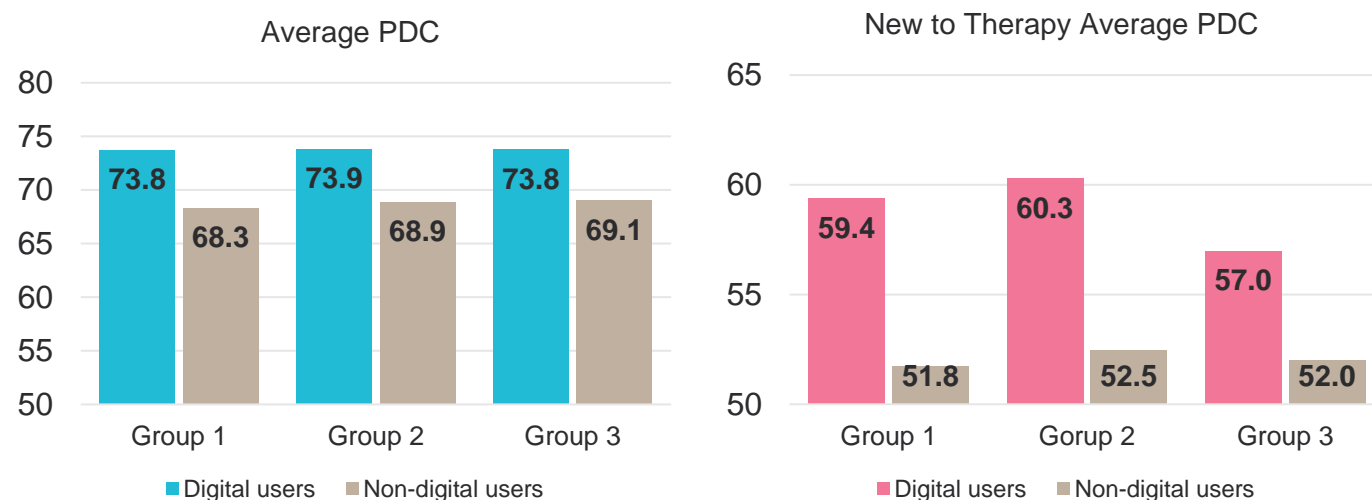
## RESULTS

- Patients who used the online or mobile tool to manage and refill prescriptions (**group 1**; n=1,016,490), were on average 52 years old, and 58.9% female. These participants had an average PDC of 79.4, compared to 77.5 for the control group ( $p < 0.0001$ ).
- Patients who could use the online or mobile tool but instead used email or SMS reminders to refill (**group2**; n=800,673) were on average 53 years old, and 59.2% female. These participants had an average PDC of 81.2, while the non-digital control group had an average PDC of 78.4 ( $p < 0.0001$ ).
- The last group did not activate the online or mobile tool but did use email or SMS reminders to refill (**group3**; n=305,618). They had an average age of 55 and were 59.7% female. This group also had a higher average PDC compared to the control, 80.6 vs 78.0 ( $p < 0.0001$ ).

### Total Patients



### Medicaid Patients



## CONCLUSIONS

- Patients who used digital prescription management and reminder tools were consistently more adherent than those who were not digitally engaged.
- There was a larger increase in adherence for those that were digital users vs non-digital users who were new-to-therapy patients.
- Medicaid patients had lower PDC than the total group but the adherence gap for digital users to non-digital user was larger than it was for the overall population.

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