Bringing a health equity lens into ePCTS: The experience of the Nudge Study

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Strategies to represent the experience of the different perspectives involved in the study

- Gathered multiple layers of data prior, during, and following the intervention:
  - Patient interactions with text messages
  - Community Advisory Panel input
  - Patient text message responses to medication refill reminders
  - Patient self-reported experience with the intervention through surveys and qualitative interviews
  - Provider, pharmacist and health care leadership perspectives

Creation of culturally appropriate nudges

- **N of 1 interviews**
  - A diverse and representative sample of 35 patients were recruited from the 3 HCS to provide in-depth perspectives of our proposed message library. Qualitative methods and AB testing were implemented to ensure messages were readable, appropriate, and meaningful.
  - Findings included a dislike of humor and emojis in the nudges. Patients demonstrated a preference towards direct and simple communications.

- **Community Advisory Panel**
  - A Nudge-specific Stakeholder Panel provided additional input on both the messages and the opt out packets.

Interesting finding #1: Black, Hispanic and Spanish speaking patients less likely to opt-out of study intervention

- Intervention patients received text message medication refill reminders

- Could reply with "STOP" to opt out in response to any text

- Data from DH and VA
  - 8.5% opted out during study
  - Median 44 days (IQR: 7, 157)

- Patient factors associated with opting out:
  - Black (RR 0.46)
  - Hispanic (RR 0.58)
  - Spanish speaking (RR 0.47)

- Age, gender, CV comorbidities, study arm and number of medications at baseline not associated with opting out

Interesting finding #2: Patients were **satisfied with intervention especially among Spanish speaking populations**

- Text message survey after intervention follow-up period completed

- 100 patients surveyed via text messages

- Only able to identify between Spanish speaking patients versus English

- Mostly or very satisfied with the Nudge messages.
    - 62.5% (SS) vs. 64.5% (ES)
- Mostly or completely satisfied with the messages serving as refill reminders.
    - 95% (SS) vs. 50.0% (ES)
- Very or completely likely to use a text message system to remind them to take medications in the future.
    - 73.3% (SS) 38.3% (ES)
- Would be somewhat or very likely to recommend that a friend or family member use a text message system to remind them to take their medications
    - 80.0% (SS) vs. 40.7% (ES)

Next steps: Dissemination of findings

Organized by Levels of Influence, NIMHD Health Disparities Research Framework

- **Individual**
  - Primary outcome analyses on study's impact on medication adherence, clinical measures, CV clinical events
  - Sub-population analyses within African American, Latinx populations; Spanish-speaking patients; Older vs younger patients
  - Patient satisfaction analysis, English vs Spanish language
  - Opt out studies to identify patient populations that opt out of the research study
- **Interpersonal**
  - Analysis of provider, pharmacist, and health care leadership perspectives on Nudge Study
- **Community**
  - Analysis of intervention through the Area Deprivation Index
  - Sub-population analyses within African American, Latinx populations; Spanish-speaking patients; Older vs younger patients
- **Societal**
  - Analyzing health equity through RE-AIM and PRISM factors to address sustainability
  - Cost analysis and replicability/scalability of intervention to other HCS