

Developing an implementation strategy for a text message-delivered diabetes support program in community health centers

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Background

- Text message-delivered interventions can improve chronic disease self-management among all patients, including those most at-risk.
- Text messages:
 - Can be tailored and timely
 - Do not require Internet access
 - Are used equally across racial/ethnic and socioeconomic groups
- Despite evidence of efficacy, limited research has explored implementation of these interventions in clinical care.
- As part of a 15-month RCT, we partnered with community health centers (CHCs) to evaluate an automated text messaging diabetes support program called REACH (Rapid Education/ Encouragement and Communications for Health).

Study Objective

- Identify options for adapting REACH processes to the clinic context.
- Identify barriers and facilitators to REACH's implementation and use those determinants to develop implementation strategies.

Methods

Interviews:

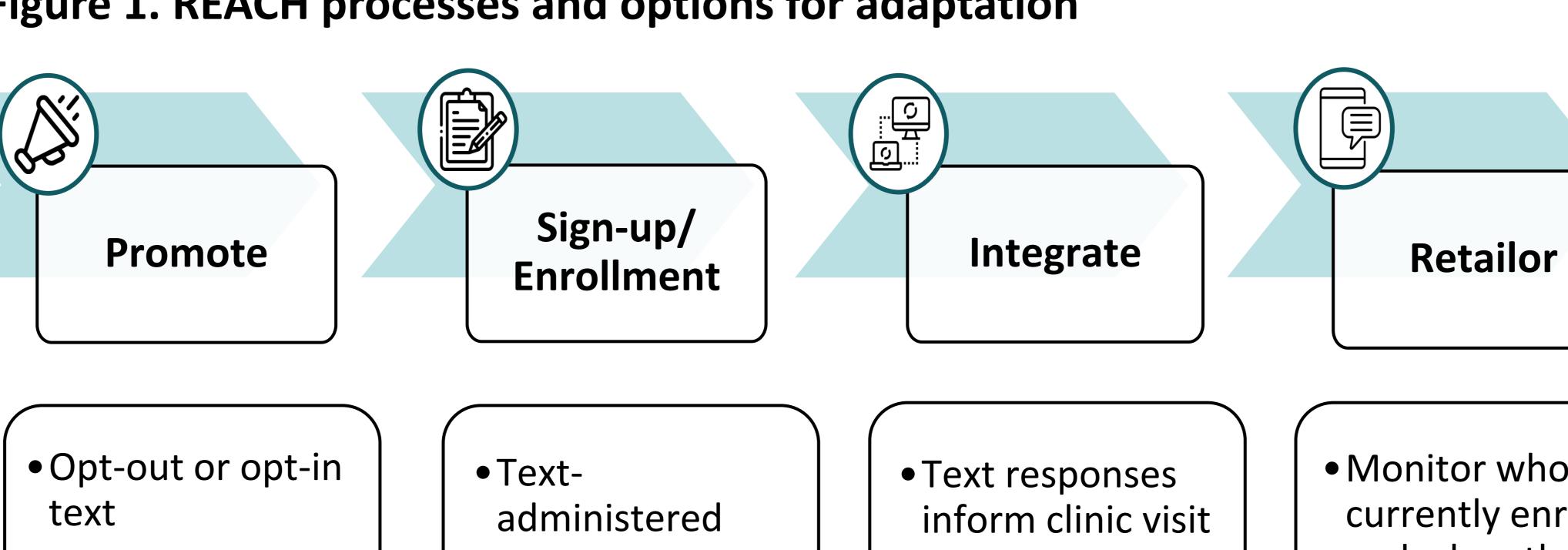
- Questions based on the Consolidated Framework for Implementation Research (CFIR)
- Administered to clinic staff across 4 CHC organizations
- Thematic analyses
 - Methods for adapting REACH processes to the clinic context
 - Barriers and facilitators (i.e., determinants) to implementation for each clinic

Mapping to Strategies:

Expert Recommendations for Implementing Change (ERIC)

Results

Figure 1. REACH processes and options for adaptation



- Letters and/or email
- Clinicians inform patients at clinic visit
- survey
- Portal sign-up by patient
- Patient fills out paper survey and clinic staff enter data in portal
- Send info via texts on available clinic services
- Monitor text responses and take appropriate action
- Monitor who is currently enrolled and when they are due for
- Update content using options under "signup/enrollment"

retailoring

- Clinic staff participants (n=12) (50% providers, 50% administrators)
- Staff mentioned several options for how REACH processes could be adapted to the clinic context (Figure 1).
 - Options and adaptations for employing the process varied across clinics. For example, the person responsible for the overseeing the process and the frequency with which a process would occur varied based on clinic site.

- Some determinants were common across clinics: staff turnover, workflow integration, and available funding.
- Other determinants were unique to clinics: relative priority and staff availability.
- We identified core implementation strategies to address determinants and enhance the adoption and sustainability of the REACH processes (Table 1).

Table 1. Implementation strategies to enhance the adoption of **REACH** and its processes

educational materials

Troubleshoot

Use clinic portal

to report issues

receipt/delivery

progress with

and track

resolution

with text message

Train and educate stakeholders

Use evaluative and iterative strategies

Utilize financial strategies

Identify/prepare clinic champion; distribute

Audit and provide feedback; develop quality monitoring systems

Create coalition for clinics to share costs; seek out funding from local organizations

Discussion

- Variance across clinics support tailored implementation plans.
- Next steps include:
 - implementation mapping with CHC partners to refine and enhance the strategies
 - deploy the strategies
 - examine when/how the strategies impact outcomes based on relevant contextual factors
- Findings will advance the science on implementation of mobile health in CHCs to benefit atrisk patients and reduce health disparities.

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