



# Weekly Phone Calls to Improve Nurse-Led Diabetes Self-Management Education for Older Adults

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### 3 Take-Aways

- Diabetes disproportionately impacts older adults.
- Older adults experience the highest incidents of complications from diabetes.
- Nurse-led DSME with follow-up calls to adults with diabetes leads to clinical improvement in HgbA1c and better diabetes management

### Introduction

#### Significance

- Americans aged 65 or older represent 40% of diabetics(Laiteerapong & Huang, 2018).
- They have the highest incidence of lower extremity amputation, retinopathy, myocardial infarction, and end-stage renal disease (Kirkman et al., 2012).
- Adequate glycemic control measured by HbA1c levels has improved clinical outcomes and reduced adverse complications of diabetes in older adults (Laiteerapong & Huang, 2018).
- Nurse-led DSME with follow-up calls to people with diabetes leads to clinical improvement in HgbA1c and better diabetes management (Brown-Deacon et al., 2017; Chamany et al., 2015; Suksomboon et al., 2014).

#### Problem, Local

- Diabetic adults make up 11.2% of Kansas’ population (ADA, 2021).
- Diabetes care in Kansas accounts for \$2.4 billion in annual medical costs (ADA, 2021).
- In 2020, \$587,000 was spent on KanCare costs associated with diabetes care (KDoHE, 2021).
- Approximately 293,000 adult Kansans live with diabetes, and 69,000 are undiagnosed (ADA, 2021).
- Diabetes is highest among adult Kansans 50 years and older (35.3.%) (KDoHE, 2021).

### Inquiry

For adults with poorly controlled diabetes aged 45 or older living in northeastern Kansas, does participation in nurse-led diabetes self-management education that includes weekly follow-up phone calls lead to improved self-management and HbA1c results within 12 weeks in the outpatient setting?



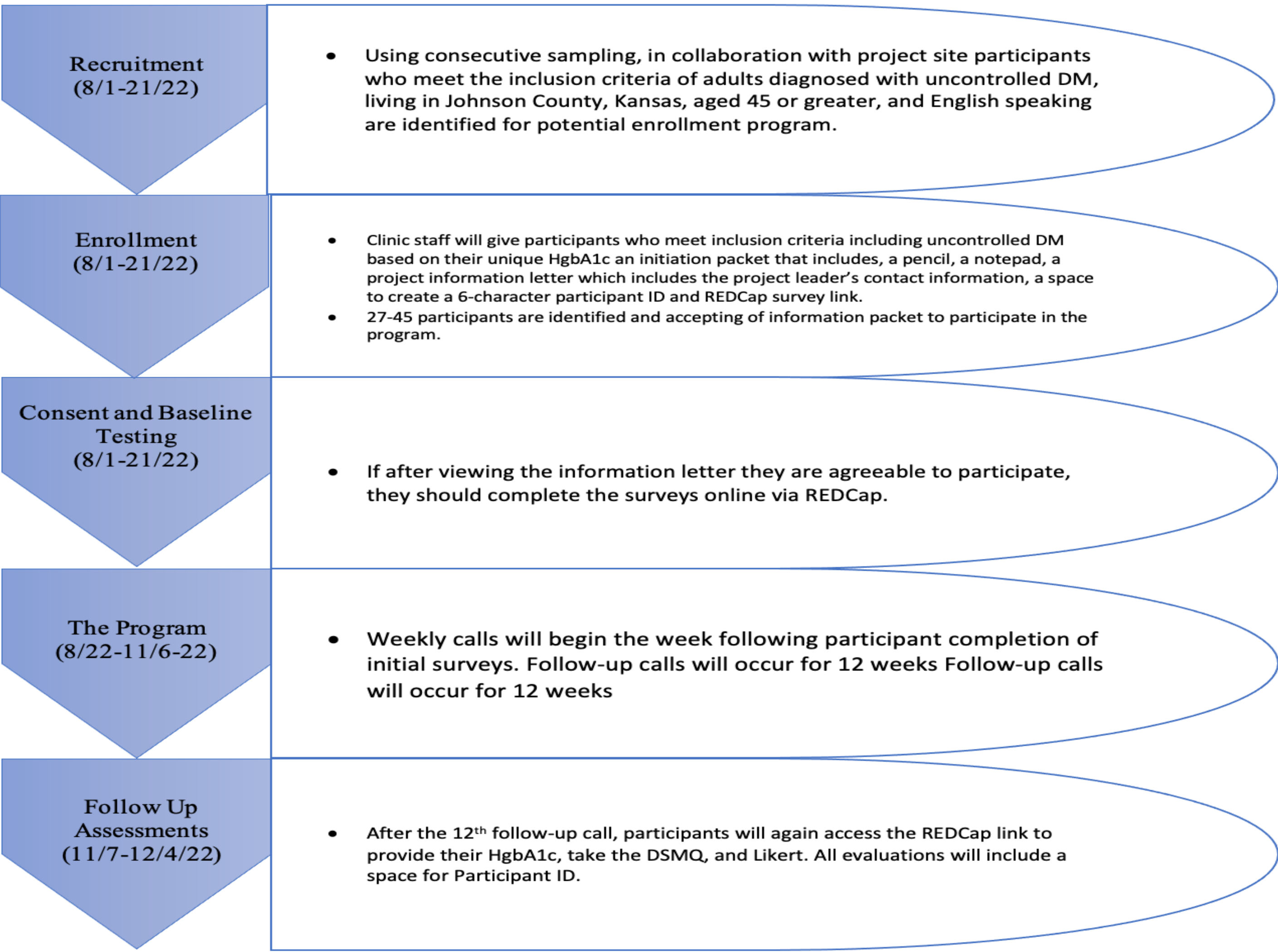
### Methods

#### Design, Time Period

- This project is a one-group pretest-posttest quasi-experimental project design that lasts 12 weeks.
- Implementation August 2022- November 2022

#### Setting, Participants

- A northeastern, KS diabetes education program.
- Inclusion criteria: adults diagnosed with uncontrolled DM, living in northeastern, KS, aged 45 or greater, English speaking, reliable telephone access
- Exclusion criteria: inpatient adults, gestational diabetes, those who cannot care for themselves, extremely hard of hearing, and those who receive palliative or hospice care.
- Consecutive sampling to enroll 27-45 participants.



#### Intervention

The intervention will be weekly nurse-initiated phone calls to participants of an established DSME program who have uncontrolled DM based on their individual HgbA1c goals. Pre- and post-evaluations via The Diabetes Self-Management Questionnaire will be conducted. Baseline self-reported HgbA1c measurements will be collected prior to intervention and reevaluated post-intervention.

### Results

The anticipated results will demonstrate improvements in the average participants' HgbA1c, post-intervention DSMQ scores that show collective improved self-management, and participants' reported benefits to diabetes management from weekly phone calls.



### Funding

Funding will be sought from the Sigma/Doris Bloch Research Award which encourages nurses to contribute to the advancement of nursing through research and The Sigma/American Nurses Credentialing Center (ANCC) Evidence-Based Practice Implementation Grant encourages nurses in clinical settings to apply evidence to practice and evaluate the effects on patient outcomes.

### Conclusions

If anticipated results are achieved, these results will illustrate those older patients with uncontrolled DM benefit from nurse-led DSME in outpatient settings. Furthermore, frequent follow-up can enhance self-management awareness. The duration of the intervention coupled with the associate benefits implies that to better assist older patients with DM management, ongoing consultation is needed outside of scheduled follow-ups in the office

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