

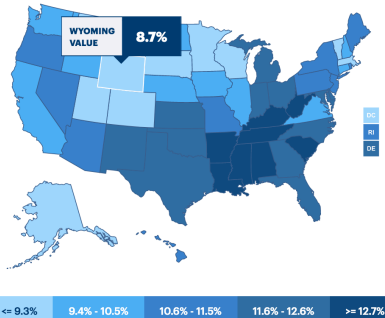
INTRODUCTION

- In the United States, diabetes is impacting 34.2 million Americans. It is projected that 1 in 3 adult will be diagnosed with diabetes by 2050.
- The rise of uncontrolled diabetics is very expensive for the individual and the healthcare system. It is imperative to reach A1C level less than 7% to lower the risk of long-term complications.
- Most patients with diabetes receive their medical care from primary care providers and they are faced with roughly 15-20 minute visit to address multiple issues and complex care.



- Shared medical appointments (SMAs) are one option to meet the various medical and education needs of patients in one appointment, while also providing peer support and motivation.
- There is not a one specific model of an SMA that is universal. SMAs can be conducted in many different formats with different purposes.
- Research suggests that SMAs can be effective for enhancing a patient's self-care, increasing patient satisfaction, and improving outcomes.
- SMA usually consists of patients with similar medical issues such as diabetes. The group visits range between 6 to 15 patients and typically sessions are 90 minutes long.

Percentage of adults who reported being told by a health professional that they have diabetes (excluding prediabetes and gestational diabetes)



OBJECTIVES

- To find effective models of care to improve the quality of life and reduce the disease burden of our patients with diabetes.
- To understand to explore patient insights into how the SMA visits influenced their diabetes management.
- To provide an understanding of current guidelines



PICOT

In adults with diabetes between the ages 16 and 80 years (P), how does shared medical appointments (I) compared with traditional office visit (C) affect hemoglobin A1C levels (O) in 3 months (T)?"

METHODS

Critical key reviews were chosen:

1. Effectiveness of group medical visits for improving diabetes care: a systematic review and meta-analysis (Housden et al., 2013)
 2. Shared medical appointments for patient with diabetes mellitus: A systematic review (Edelman et al., 2015).
 3. Effect of group medical appointments on glycemic control of patients with type diabetes. (Caballero et al., 2017) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5291948/figure/fig2/>
 4. Imbedding interdisciplinary diabetes group visits into a community-based medical setting (Berry et al, 2016).
 5. Shared medical appointments for patients with diabetes: Glycemia reduction in high-risk patients. (Watts et al., 2015)
- Reviews provided background information on the intervention of SMAs. Findings on practice outcome and recommendations are summarized.

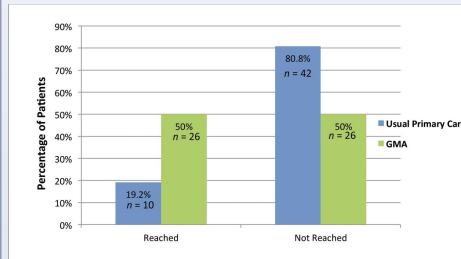
RESULTS

Berry et al. (2016)

- Results showed significant decrease in A1C in the patients in the experimental group than the control group, from time 1 to time 5.
- Patients in the experimental group decreased their A1C by 1.2% while the control group increased their A1C by 1.3%.
- Although the experimental group patients were still not at goal (<7.0%) they were moving in the right direction.

Caballero et al. (2017)

- The results showed a greater proportion of group medical appointment patients (50%) versus usual primary care patients (19.2%) reached target A1C goals.
- Shared medical appointment participants had a significantly faster rate of decline in A1C over time compared to usual primary care patients.



Edelman et al. (2015)

- Findings showed shared medical appointments improved A1C by approximately 0.6 percentage points and systolic blood pressure by about 5 mmHg.
- In addition, diabetics that participated in shared medical appointments had lower rates of emergency department visits and hospital admission rates.

Housden et al. (2013)

- Findings showed that shared medical appointment intervention had significantly reduced A1C in diabetic patients compared to usual standard of care provided.
- The study reported a link to patients who attended group visits for longer periods had better A1C outcomes.
- In perspective, an increase of duration every year with treatment led to a decrease in effect size of 0.25, which meant a drop in A1C of 1%.

Watts et al. (2015)

- Findings reveal significant A1C reductions (~1%) overall for diabetic patients.
- Correlation to the number of shared medical appointment patients attended affected the trend in A1C.
- Patients who attended three or less group visits showed an average increase of 0.6% in their A1C level over 1000 days.
- Patients who attended more than four group visits showed an average decrease of 0.4%.

CONCLUSIONS

- SMA model can improve glycemic control by supported evidence therefore should be implemented in primary care.
- Group exposure combats isolation, which in turn helps to remove doubts about one's ability to manage illness.
- Relatively prefer small SMA group who met regularly over the course reduced A1C level and allow time for patients to feel supported.
- Participants reported applying the education they received on diet and exercise.
- Learning about good foods and foods that are good for diabetes was a big help..."
- "I'm not doing a lot, but I am doing more [exercise] than what I was doing before I started."
- One participant stated, "Coming to these meetings kinda cheers you up because you know there are other people in the same boat, so you're not alone. That relieves my anxiety a little bit."

RECOMMENDATIONS

- Interactive demonstrations to teach cooking and exercise techniques, asked for virtual group interactions through social media, and wanted the opportunity to mentor new group members in a more meaningful way.
- More randomized trials are necessary to show
- More randomized trials are necessary to show that it is superior and to determine in which health care settings SMAs are optimal.
- Further studies with standardized tools to determine the most effective SMA frequencies, durations, and interventions and to closely monitor behaviors.
- In addition, large-scale RCTs of community-based populations to clarify the broader applicability of SMAs and their short- and long-term clinical outcomes.

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