

A New Model of Primary Care: Patient-Centered Shared Medical Appointments for Patients with Pre-Diabetes

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Objectives

- To explore patient and provider perceptions on the shared medical appointment (SMA) model in a primary care setting
- To determine if SMAs are a feasible and effective primary care model for patients with pre-diabetes

Background

- SMAs are designed to administer health education and counseling in a group setting. They have shown improved patient access and education in primary care without increasing physician hours¹
- Patients and physicians spend more time together and may benefit from the effects of group learning². SMAs have been explored as a nontraditional healthcare delivery model that may increase quality of care, patient empowerment, patient trust and physician-patient communication³. They have also been found to potentially improve biophysical outcomes such as hemoglobin A1c and systolic blood pressure¹
- The structure of SMAs typically involve more than one health care provider. The care team often includes a person trained or skilled in delivering patient education or facilitating patient interaction (e.g. nurse, nutritionist) and a prescribing provider to create and initiate a comprehensive care plan. SMAs have the potential to offer chronic disease care that is more efficient than traditional individual appointments, while improving staff satisfaction and patient outcomes.
- SMA implementation is fragmented as there are no universal guidelines/programs on their structure. They are typically created based on the clinical setting, provider perceptions of group needs and resources. The SMA model may help the US healthcare system move towards care that is more patient-centered and team-based (Heyworth et al., 2014). This study will add to the limited research on SMAs and physician/patient perceptions, and hopefully moves the needle as an integrated part of the patient-centered medical home/primary care model and value-based care.

SMA Mechanism

Comprehensive education
(i.e., nutrition, sleep,
exercise, medication)

Behavioral intervention e.g.,
motivational interviewing

Peer-to-peer support

Multi-professional expertise
(pharmacist, physician,
nutritionist)

Providers understand how to
better support their patients

Outcomes

More motivated patient

Self-management
knowledge,
skills, abilities

Greater self-efficacy, reduced
isolation

Positive clinical
outcomes

Methods

- Each SMA cohort consists of 8-10 patients meeting once a week for 90 minutes for 4 weeks with a physician and nutritionist. Evaluation will involve surveys assessing patients' and providers' perceptions of the SMA experience, both pre and post-SMA
- Data will be collected as qualitative surveys. Measurements will be divided into the major themes of patient and clinician experiences. The data collection for this project will involve distributing anonymous qualitative surveys through Qualtrics to physicians and patients pre and post-SMA. Physicians will be primary care doctors employed by Women's Medicine Collaborative and will be one of the leaders of the SMA, along with a nutritionist.

Questionnaire

Qualtrics survey will include:

1. Do you have any prior knowledge on what SMAs are? Y/N
2. What made you decide to do this SMA?
3. What barriers might have kept you from joining? Select all that apply
 1. Transportation
 2. Time commitment
 3. Cost/insurance
 4. Other (specify)
4. What do you hope to learn from this SMA?

Next Steps/Conclusions

- At this time, no conclusions have been made due to a lack of data.
- Data will be collected via Qualtrics surveys
- Address barriers to implementation of SMAs

Limitations

- The major limitation to this study is not having a control group. With this I will refrain from making any causative conclusions
- The study will also not be randomized, so patients may self-select into the SMA
- Another limitation is measurement of effects; evaluation of SMA effectiveness is overall limited in the literature and I will be confined to pre and post-surveys. There are no widely accepted surveys to assess SMAs, and thus I plan to use surveys utilized in previous studies
- Low participation in the SMA will require assessing multiple groups

References

1. Heyworth L, Rozenblum R, Burgess JF Jr, Baker E, Meterko M, Prescott D, Neuwirth Z, Simon SR. Influence of shared medical appointments on patient satisfaction: a retrospective 3-year study. *Ann Fam Med*. 2014 Jul;12(4):324-30. doi: 10.1370/afm.1660. PMID: 25024240; PMCID: PMC4096469.
2. Menon K, Mousa A, de Courten MP, Soldatos G, Egger G, de Courten B. Shared Medical Appointments May Be Effective for Improving Clinical and Behavioral Outcomes in Type 2 Diabetes: A Narrative Review. *Front Endocrinol (Lausanne)*. 2017 Oct 4;8:263. doi: 10.3389/fendo.2017.00263. PMID: 29046662; PMCID: PMC5632846.
3. Wadsworth KH, Archibald TG, Payne AE, Cleary AK, Haney BL, Hoverman AS. Shared medical appointments and patient-centered experience: a mixed-methods systematic review. *BMC Fam Pract*. 2019 Jul 8;20(1):97. doi: 10.1186/s12875-019-0972-1. PMID: 31286876; PMCID: PMC6615093.

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