Old Problem, New Solution: Engaging Patients with Group Medical Visits for Type-II Diabetes
Martin Robison, PsyD¹, Elisa Rudd, PsyD¹, Roseann Fish-Getchell, PsyD¹, Ruyun Jin, MD²

1. Primary Care Integrated Behavioral Health, Providence Medical Group-Bethany, Portland, OR
2. Medical Data Research Center, Providence Heart Institute, Providence St. Joseph Health, Portland, OR.

Background

- DM-II continues to increase rapidly in its prevalence
- There is significant economic impact due to diabetes costing an estimated $327 billion dollars (American Diabetes Association, 2018)
  - Direct medical care
  - Time off work
  - Reduced productivity
  - Several risk factors associated with DM-II including heart disease
  - Due to increase of prevalence there is a shortage of specialty providers who can treat with traditional individual visits
  - There is a growing interest in shared medical appointments (SMA) or group visits for treatment of type-II diabetes
- SMA’s have proven to be
  - Time efficient
  - Cost effective
  - Improve patient care

Methods

- Observational study of historical cohort data
- Patients of Providence Medical Group - Bethany who have A1C > 7.0, or self-selected to attend DM-II group visits.
- Participants engaged in a series of three to four 90 minute group visits held once weekly at the same time each week.
- Have to attend at least two visits to be included in the analysis.
- Average of each measurement within 90 days prior to 1st group visit is considered as the value for pre; Average of each measurement between 30-365 days after to 1st group visit is considered as the value for post.

Results

Number of patients

- 43 identified patients who participated in the study
- DM-II Group visits from October 2017 to November 2018
- 4 patients had 4 visits, 25 had 3 visits, 6 had 2 visits and 8 had 1 visit.
- Final n=35 patients in the study analysis.

A1C

20 out of 35 patients had A1C available both pre- and post-group visits.
Mean ± SD of A1C:
Pre = 8.3 ± 1.3
Post = 7.9 ± 1.1
Paired t-test: p=0.053

BMI

23 out of 35 patients had BMI available both pre- and post-group visits.
Mean ± SD of BMI:
Pre = 33.0 ± 7.1
Post = 32.7 ± 7.4
Paired t-test: p=0.307

PHQ-2

19 out of 35 patients had PHQ-2 available both pre- and post-group visits.
Mean ± SD of PHQ-2:
Pre = 1.1 ± 1.4
Post = 0.8 ± 1.1
Paired t-test: p=0.339

EAG

20 out of 35 patients had EAG available both pre- and post-group visits.
Mean ± SD of EAG:
Pre = 190.3 ± 37.1
Post = 180.7 ± 32.1
Paired t-test: p=0.059

ED visit

There were no change in ED visits for the 35 patients in the study:
5 ED visits pre-group visit in 5 patients
5 ED visits post-group visit in 4 patients

Limitations

- Data was inconsistent due to patient participation and follow up
- Sample size is small
- The primary measures are objective and may not capture well the patient experience of group participation
- Some of the other measures are self-report and are dependent on accurate reporting

Conclusions

- A decreasing trend on A1C, EAG, BMI and PHQ-2 was found, but none of them reaches statistical significance. A larger study with more patients participation is needed to evaluate the DM-II group visit.
- Obtaining the measures from patient routine care will help to study data collection.