

Group Medical Appointments for Persons with Diabetes

A way to improve self-efficacy and improve clinic
productivity.

Jill F. Diede, DNP, FNP-C

University of Colorado, Colorado Springs

Evans Army Hospital, Ft. Carson, CO



OBJECTIVES

- Discuss the current issues with chronic disease management
- Explore an alternative chronic disease management approach, group medical appointment (GMA)
- Define the content, structure, and planning for GMAs
- Review the research findings



Chronic Disease in the U.S.

- Chronic disease affects over 90 million Americans, this is a significant problem as evident by 70% of all deaths in the USA, & 75% of medical care costs in USA (CDC, 2009).
- Diabetes consumes ~\$174 million annually in USA (ADA, 2007) & ~\$116 billion is spent on DM healthcare costs/complications/care (CDC, 2009)

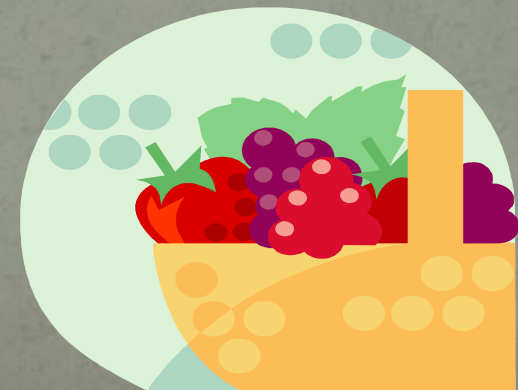
Traditional Acute Care Model

- Rushed Practitioners, challenged to follow EBP guidelines
- Episodic care
- Lack of care coordination
- Lack of follow-up to ensure best outcomes
- Patients do not have adequate self-care skills to manage their disease



Acute Care Model

- Compromised Patient & Provider satisfaction
 - High patient volumes
 - Complex disease states, competing for attention
 - Increased demand for productivity.
- Clearly a different approach is needed for DM care, one that meets the growing demands of the health care system.



Would you be interested in....

- A care delivery model that;
 - Increases productivity, access, and efficiency?
 - Improves pt education, prevention, and chronic disease self-care
 - Enhances clinical outcomes
 - Controls costs
 - Delivers high levels of pt and provider satisfaction
 - More time with the patient in relaxed setting
- (Noffsinger, 2009)

Group Medical Appointments (GMA)

- Shared medical appointment with 8-12 patients and a multi-disciplinary team, that meet for 90 to 120 minutes.
- Provider speaks with each patient individually for about 10 minutes regarding their healthcare needs.
- Patients benefit from hearing questions, advice, and management of other patients.
- Interactive group education topic.
- (Bartley & Haney, 2010)

✓ Preparing for GMAs

- ✓ Review Referral & confirm dx
- ✓ Before the appt Office Staff/RN:
 - ✓ Schedule patients
 - ✓ Make reminder phone calls
 - ✓ Prepare chart
 - ✓ PMH
 - ✓ Medications
 - ✓ Labs



Anatomy of the GMA

- Large room
- HIPAA release statement
- Make a decision about “individual time” check with billing/coding on requirements
- 15 mins = 99213



GMA interactive content areas:

- Diagnostic criteria/Arriving at the DX
- Lab values review with target goals
- Blood sugar meters/goals
- Pathology & Management of Diabetes
- Vital signs/BMI/Waist Circumference
- Carb Counting with the RD
- Medications with the PharmD
- Setting self-care mgmt goals
- Long-term Complications
- Sick Day Mgmt/Alcohol use/Vaccines
- DM foot care and foot exam
- Hypo/Hyperglycemia recognition/management



Aim of the Research

- Design an innovative, productive approach to educating and managing pre-diabetic and diabetic patient.
- Provide multi-disciplinary team of diabetes experts to assist the patient in achieving clinical target goals that are recommended by the American Diabetes Association (ADA) standards of care guidelines.

Aim of the Research



- Engage patients in learning the skills and confidence required for diabetes self-care
- It was hypothesized that GMA model would:
 - Improve patients self-efficacy
 - Increase productivity for the clinic, (the education classes that were in place generated no RVU's)

Objective/Purpose:

- To explore, implement, & evaluate group medical appointments (GMAs) - an alternative approach for chronic disease & diabetes
- Replace the diabetes classes that were not interactive or productive.

Design & Methods

- **Study Design** Pretest/Posttest Survey, program evaluation
- **Methods** GMAs for patients with DM were implemented at a Military Health Clinic using The Stanford Self-Efficacy Questionnaire & Relative Value Units (RVUs).

Target population

- Evans Army Healthcare system provides services to appropriately 65,000 enrolled patients that are eligible for healthcare services at the facility.
- There are active duty, family members and retirees.
- Of the total eligible population there are 1,200 diabetics and 900 prediabetics.
- The primary care provider placed a referral to the clinic.

Methodology

- Patients received 4 interactive sessions on self-care management (8-10/class) for 2 hours, each over 2 months time.

Method of Measurement

- Self-efficacy was measured using a Stanford diabetes self-efficacy questionnaire.
- Pre-test was give at GMA #1 prior to education taking place
- Post-test was given at GMA #4, after completion of the series of four GMAs.

Method of Measurement

- Reliability/Validity Reliability for the self-efficacy scale was $\alpha=0.85$.
- Test/retest reliability was 0.80 (n=20).
- Score was the mean of the eight questions, the highest score possible is 10; the higher the number score, the higher the diabetes self-efficacy.
- Data were analyzed with SPSS statistical analysis software to determine changes in the self-efficacy outcomes pre and post GMA participation.
- Significance level was set at .05.

Method of Measurement

- Clinic Productivity RVUs were examined for a two month period when the traditional diabetes education classes were being conducted.
- The RVUs were then measured for the 2 months of the GMAs.

Results of the Study

- 37 patients that had an established diagnosis of either pre-diabetes or diabetes
- The time since diagnosis; 1 month to 384 months (32 years)
 - The majority were 1-6 months since dx

Demographics

- 7 active duty soldiers
- 3 family members of active duty
- 15 retired veterans
- 12 family members of retired veterans

Ethnic Backgrounds

- 1 Asian
- 12 Hispanic
- 3 African American
- 21 Caucasian



Evans Army Hospital "Care with Honor"

Ages of the participants

- 11 in the 19-44 years category
- 19 in the 45-64 year old category
- 7 were > 65 year old category



Self-Efficacy

- Pre-Test;
 - The range of scores for the pre-test self-efficacy was 1.63-8.75
 - Mean of 5.86 (SD= 1.64)
- Post Test;
 - Range of scores was 4.5-10
 - Mean score was 8.13 (SD=1.58)

Self-Efficacy

- The mean difference between the pre and post test questionnaire scores was 2.27
- The significance was at .000, ($p < .05$) Revealing that there is a statistically significant difference in the mean self-efficacy scores pre and post the GMA.

RVUs



	Traditional Ed Classes	GMA's
# pt encounters	28	158
Average RVU per encounter	0.07	0.81
Total RVU production for 2 months	1.87	127.2

Significance of the Research

- Venue for EBP and Multi-disciplinary, collaborative, team healthcare
- Alternative approach to chronic disease care
- Reports of high patient and provider satisfaction

Considerations

- Increases access to care
- Patients benefit from peer support
- Some challenges with scheduling
- No-Shows



Other GMA dx possibilities ...

- Asthma
- Hypertension
- COPD
- Dyslipidemia
- Women's Health



Future research

- Full Study
 - Laboratory Measurements
 - ER and Hospital Admission Reductions
 - Patient Satisfaction
 - Sustained self-care
 - Long-term outcomes

Discoveries..

- Doctorate Preparation & Research Project
- Broader view..
 - Leadership of a healthcare team
 - Moving EBP research into the clinic setting
 - Examining a program from various layers;
 - Individual patient
 - Staff in the clinic
 - Organizational
 - Business side of healthcare

Questions?



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