Implementation of Group Medical Visits in Rural Diabetic Patients

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Goals and Objectives

- Discuss the Group Medical Visit concept and its importance for utilization in rural health/primary care settings
- Discuss how the use of Group Medical visits improve metabolic outcomes and knowledge for diabetic patients
- Discuss strategies in improving self-care management skills in diabetic patients while increasing access to health care and patient satisfaction
- Discuss how Group Medical Visits increase provider productivity
Problem:

- Significant shortage of primary care providers
  - AAFP projects a shortage of 150,000 providers by 2020
  - HRSA projects a shortage of 65,000 Primary Care Providers by 2020
- Providers are being asked to see more patients in the same amount of time
- Affordable Care Act – an additional strain on clinics as additional patients are seeking to establish care with PCP’s
Rural Problem

- Rural populations at high risk of poor diabetes control
- Decreased self-care management
- Lack of Diabetes Education
- Development of complications
Background and Significance

Prevalence of Diabetes

- National Level
- State Level
- Rural Level

Imposed Cost on Louisiana Healthcare System

Diabetes Self Care Management
Current patient’s experience

Typical office visit

- Present to front desk
  - Asked to arrive early
  - Bottle neck – 5-10 minutes of waiting
- Sit in waiting room
  - Read an out-of-date magazine – 10-15 minutes of waiting
- Brought back to exam room
  - Wait for physician – 10-15 minutes of waiting
- Physician in the room
  - 15-20 minutes

- Total time in office – 40 to 60 minutes, less than half that time is actually spent talking to the physician!
What has to occur during an office visit for Diabetes?

A provider is asked to address:

- Blood glucose control
- Nutrition
- Physical activity
- Foot care
- Eye care
- Address co-morbidities:
  - Hypertension
  - Hyperlipidemia
  - Cardiovascular disease
- Order additional lab work
- Review and establish goals
- Arrange for follow up appointment
During a typical diabetes follow-up appointment, a provider:

- Addresses 17 topics, questions or symptoms
- Writes on average 2 prescriptions
- Discusses nutrition and medication changes
- All within 17 minutes

ASK YOURSELF THIS QUESTION

What is your healthcare organization doing differently to improve:

- access, quality, & chronic disease treatment?
- the cost effectiveness of care?
- patients’ care experience?
- providers’ ability to manage busy practices
- ‘job doability’ for clinicians and staff?
One possible solution!!!

Group Medical Visits
Group Medical Visits

**Multiple names for this concept:**

- Shared Medical Visits
- Shared Medical Appointments
- Group Medical Visits
- Group Medical Appointments

- Not common in the South and Midwest – (yet!)
- Much more common in areas with HMO’s
- Now a requirement for family medicine residency programs to teach
Group Medical Visit Process

- 90 minute appointment (starts on time)
- Clinician conducting serial individual visits in group setting
- Follow-up visits & Physical Exams
- Used in all areas of primary care and medical specialties
- Homogenous, Mixed & Heterogeneous groups
What Problems Do GMVs Address?

- Access (shortage of physicians)
- “Job Doability” (for clinicians & staff)
- Variability in Quality (Performance)
- Cost Effectiveness of Medical Care
- Patient and Physician Satisfaction
Other Advantages

✔ Patient Experience
✔ Chronic Disease & Practice Management
✔ Reflective Practice of Medicine (time to think)
✔ Teaching Opportunities
✔ Growth of your Practice (function of Access)
Commonly used GMVs

**Chronic care visits:**
- Asthma
- COPD
- Heart Failure
- Type 2 Diabetes
- Pregnancy
Review of the Literature

- Cole, Boyer, & Spanbauer (2013) - improvement of self-management skills and HbA1C in group medical visits. 3

- Eisenstat, Ulman, Siegel, & Carlson (2013) - group diabetes visits improve diabetes control and increased responsibility in self-care management. 4

- Smith, Paul, Kelly, Whitford, O’Shea and O’Dowd (2011) – increased peer support with group visits. 7
Randomized Trials

Managed Care Setting:
- Monthly, 2 hour SMA’s with multidisciplinary team vs. usual care
- A1C’s > 8.5%
- Results for SMA patients:
  - Greater reduction in A1C (1.3% to 0.2%, p < 0.001)
  - Lower hospital admission rates (P = 0.04)
  - Improved self efficacy in balancing food intake (P = 0.003)
  - Improved self-treatment of hypoglycemia (P = 0.03)
  - Improved management of glucose when ill (P = 0.001)

Randomized Trials

Five year follow-up study, 112 patients with Type 2 DM

- Group appointments vs. usual care
- Received four educational sessions on weight control, meal planning, improved glycemic control, preventing complications
- Results for the group appointments:
  - Knowledge of DM2 improved (+12.4 vs. -3.4, P =0.001)
  - Improved problem solving ability (+5.7 vs. -2.3, P = 0.001)
  - Improved quality of life over 5 years (-23.7 vs. +19.2, P = 0.001)
  - Improved A1C control (-0.1% vs. +1.7%, P = 0.001)

Local Rural Health Research

Setting

- Rural Health Clinic in Southern Louisiana

Participants

- Convenience Sample – target number was 65
  - Inclusion Criteria
  - Exclusion criteria
Framework

AADE7
Self-Care Behaviors

Healthy Eating
Being Active
Monitoring
Taking Medication
Problem Solving
Healthy Coping
Reducing Risks
Intervention Details

- Administer Diabetic Knowledge Test (Pretest/post test)
- Measurement of baseline Hemoglobin A1C (pretest) and post intervention at 3 and 6 months
- Weekly (five) diabetic group education sessions consisting of 10-15 participants each, using the AADE7 Self-Care Behaviors Guidelines for a period of six weeks
Knowledge Instrument

- Measure improvement of diabetes knowledge.
- 23-item questionnaire (University of Michigan)- DKT
- Readability
- Validity and Reliability of DKT
Data Analysis

Descriptive Statistics

- Diabetic Knowledge Test (pre and post-test)

Paired Sample $t$-test

- Hemoglobin A1C baseline, to three and six months post intervention
Results
Diabetic Knowledge Test Mean Scores
Pretest and Post Implementation
Results of A1C Results

Comparison of Mean A1C levels

- Baseline: 9.387
- Post 3 Month: 8.704
- Post 6 Month: 8.222
Patient satisfaction

Patients uniformly enjoy shared medical visits

- Every patient that we surveyed stated that they would recommend these to others
- However, it is a self-selecting population
Benefits of Group Medical Visits

- **Patient**
  - Access to PCP & specialists
  - More time with physician & more relaxed pace
  - Greater patient education & disease self-management
  - Support & learning from other patients (including community resources)
  - Max-packed visits, 1-stop healthcare, & greater satisfaction

- **Provider**
  - Documenter & team support (visit efficiency/job doability/practice management)
  - Can focus on patients & practice of medicine (less repetition)
  - Able to see patients w/ more frequency & provide higher quality care
  - Enhanced revenue (panel size, encounters, immunity to no-shows)

- **Staff**
  - ‘Team medicine’
  - Closer to patient care
  - Learning experience
Organizational Benefits

Quality of Care

- Access
- Patient Satisfaction
- Standardized team protocol for screening & preventive measures
- Enhanced health education (questions & concerns addressed)
- Behavior change due to “peer to peer” interactions & support
- “Mind” as well as “Body” needs addressed

Financial

- Increased revenue
  - leveraging of existing resources
  - increased productivity (encounters)
- Decreased unnecessary costs
  - decreased urgent care & ED visits
  - decreased use of external specialists & external ancillaries
Additional Benefits

Systematic approach to diabetic patients

- May assist in meeting standards of care
- No special training required
- Offers additional support to patients
  - Patients regularly discuss lifestyle changes with each other
- Structured opportunities for dieticians, pharmacists, specialists to meet with patients
- No additional costs involved
- Reimbursement is the same as regular office visits
  - Potential for increased revenue
- Patients enjoy them!
Conclusion

- Group Medical Visits - an innovative approach
- Improves knowledge and diabetes control
- Provides times for education and medical care
- Provides patient centered goals
- Provides peer support
- Cost Benefits
Questions????