Enhancement of Promotora-Led Self-Management Class Improves Sustained Metabolic Control

1. Introduction

Sustaining improved self management is central to meaningful improvements in metabolic control, reduced morbidity and improved quality of life in diabetes. Self management programs have often demonstrated improvements in all of these in the short term but have less often been shown to sustain these benefits. A successful, integrated Promotora-based diabetes program has been demonstrated at Gateway Community Health Center in Laredo, TX.

In a self-management class led by Promotoras, program enhancements resulted in greater maintenance of improved metabolic control over 12 months. The self-management class was based on the curriculum or the CDC-Diabetes Education and Empowerment program. During the 12-month implementation of the classes’ improvements to the course included: incorporation of self-analysis and positive thinking activities to address emotional issues that may complicate self-management and incorporation of material on depression and on the link between diabetes management and prevention of cardiovascular disease. Additionally, the process employed in the group was revised to emphasize a mutual aid model as opposed to an emphasis on education and goal setting.

2. Gateway Community Health Center

- Located in Laredo, Texas which is situated on the U.S.-Mexico border;  
- Funded by the U.S. Department of Health Human Services;  
- 501 (c) (3) private, non-profit corporation with a governing board of 15 directors whose responsibility is to oversee the overall operations of the Center;  
- Began operations in 1963; Center offers a wide array of medical care services provided by physicians and/or mid-level practitioners;  
- Over 72,000 medical, dental and specialty care patient visits were provided serving over 17,000 residents.
4. Program Components

Gateway utilizes all components within the Center to integrate the implementation of the self management intervention into the Center’s medical practice.

Components
- Patients
- Promotores
- Medical Providers
- Certified Diabetes Educator
- Medical Support Staff
- Administrators
- Board of Directors

Goal: To build a consistent infrastructure and methodology that will assist patients with diabetes to maintain their HbA1c below 7.5% over an extended period of time by implementing and integrating diabetes self-management activities in a culturally sensitive manner.

3. Demographics

<table>
<thead>
<tr>
<th>Gateway</th>
<th>Texas</th>
<th>U.S.</th>
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<tbody>
<tr>
<td>-99% Hispanic</td>
<td>-32% Hispanic</td>
<td>-13% Hispanic</td>
</tr>
<tr>
<td>-63% Uninsured</td>
<td>-25% Uninsured</td>
<td>-16% Uninsured</td>
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<tr>
<td>-21% has diabetes</td>
<td>-8% of Hispanic adults have diabetes</td>
<td>-13.6% of Hispanic adults have diabetes, almost twice that for non-Hispanics whites.</td>
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Webb County
- 91% of county population resides in Laredo
- 95% Hispanic
- >32% falls below 100% FPL
- >35% lacks health insurance
- >50 colonias (most within 20 miles of Laredo)
6. Promotoras–Integration into Healthcare Team

**Benefits of the Promotor(a) Program**

**To Provider**
- More efficient use of time
- Reinforce treatment plan
- Assessment of social needs
- Extension of MD services
- Health advocate/additional clinic services and referrals
- Improved diabetes control

**To Patient**
- More time received on education
- Greater adherence
- Individualized care
- Improved access to care
- Specific needs met by appropriate referrals
- Improved health outcomes

**Baseline Data**
- HbA1c, Lipid Profile, BP, BMI, Foot Exam, Eye Exam, Flu vaccine, Pneumovax, Hospitalizations, ER visits, Knowledge & Health Belief, PHQ

**3-month Data**
- HbA1c, BP, BMI, Knowledge, Health Belief, Retention Rate, and Patient Satisfaction

**6 & 12-month Data**
- HbA1c, Lipid Profile, BP, BMI, Foot Exam, Eye Exam, Flu vaccine, Pneumovax, Hospitalizations, ER visits, Knowledge and Health Belief, PHQ

**Intervention Begins**
- Medical Provider Refers Patient to Promotora
- 10-week Promotora-Led SM Course (2.5 hours/week)
  - Baseline Behavior and Lab Assessment (knowledge, health beliefs, PHQ)
  - Advise (Diet, Nutrition, Physical Activity)
  - Advise (Prevention/Management DM Complications)
  - Behavioral Goal-setting (individual) every week
  - Buddy Support System (Choose and Support Buddy)
  - Group Problem-solving Session Weekly (Barriers)
  - Goal Follow-up weekly (revision/resetting of goals)
  - Telephone call weekly (remind, answer questions, problem solve, support)

**Intervention Ends**
- Voluntary Biweekly Support Group
11. Demographics - Phase 1 2003-04

Gender
Male: 28% (55)
Female: 72% (148)

Age Categories
20-39: 7%
40-59: 37%
60-79: 35%
80-100: 2%

Spanish as Primary Language: 74% (150)

Household Income
<$10,000: 52% (107)
$11,000-$20,000: 19% (39)
>$20,000: 9% (12)

Work Status
Working: 24% (49)
Not Working: 63% (128)
No Answer: 13% (26)

12. Results - Phase 1 HbA1c (12 Courses-203 Participants)

All analyses used the course as the unit of analysis to avoid exaggerations of changes caused by a few participants. Across all 12 classes, the mean GHb at the start of the class was 8.71 (standard Deviation=.879) and that at month 12 was 7.47 (Standard Deviation=.511; p for change < .001).
13. Results PHQ9 Screening

Phase 1

N=78

- Not Clinically Depressed: 66%
- Mild Depression: 23%
- Moderate Depression: 5%
- Severe Depression: 6%

Phase II

- Not Clinically Depressed: 37
- Mild Depression: 18
- Moderate Depression: 4
- Severe Depression: 5

14. Conclusion

- Open and frequent communication
- Wide organizational acceptance of promotoras
- Regular status meetings to assess progress, identify issues
- Extensive training for promotoras
- Thorough documentation
- Management support
- Provider involvement (training, recruitment, support, participation)
- Regularly assess patient satisfaction/feedback
9. Depression Screening Protocol

PHQ administered by Promotoras at the 2nd and 9th class of Diabetes SM Course

- Patient participating in SM Course with a PHQ score of 5-9/10-14
  - PHQ Form will be placed in Provider’s box for review.
- Patient participating in SM Course with a PHQ score of higher than 15
  - Refer to Nurse in Charge-Medical record will be given to Provider for review.
- Patient participating in SM Course with suicidal thoughts.
  - Patient will be walked to nurse’s station and the patient will be seen by the Provider that same day.

Patient will be followed-up by medical team.

If patient states he/she feels depressed and has suicidal thoughts continue talking to patient and have someone call 911.

- Doctor may refer to the Promotoras for Follow-up
  - If Yes: Promotora documents in Progress Note.
    - Weekly phone calls continue until symptom improvement.
  - If No: Medical team contacts patient for follow-up or treatment plan/change

Group Classes and Support Groups add content specific for Depression

PHQ will be filed in medical record. Promotora will not conduct further follow-up.

Note: All classes and support groups are conducted during clinic hours.

Medical team contacts patient for follow-up or treatment plan/change

Note: PHQ should be reviewed immediately.

10. Comprehensive Disease Management Intervention

Diabetes Education

- Depression Education
- Cardiovascular Disease Education

Fact: Out of 78 patients screened for Depression during phase 1:
  - 6% severely depressed
  - 5% moderately depressed
  - 23% mildly depressed
  - 66% not clinically depressed

Fact: 77% of the patients that participated in SM courses had both diseases.

Benefits of integration:
* Maximizes Promotora’s work time
* Removes barriers for patients
* Depression information is introduced in more patient friendly environment

Cardiovascular Disease Education

Note: PHQ should be reviewed immediately.

Depression

Group Classes and Support Groups add content specific for Depression

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If Yes

If No
7. Promotora Training and Evaluation

- Clinic Site Orientation
- Medical Records
- Diabetes/Cardiovascular Self Management
- Leadership
- Time Management
- Listening Skills
- How To Make a Home Visit and Referrals

250 Hours of Training

- Skills List
- 3 Mths Evaluation
- 12 Mths Evaluation
- Patient Evaluation

5. Role of the Promotora

- Provides informal counseling, social support and culturally sensitive health education;
- Advocates for patient needs;
- Assures that patients receive the health services they need and provides referral and follow-up services;
- Assists and guide the patient in the management of their disease process;

The promotora (a) is considered part of the medical team and plays a key role on the delivery of diabetes self-management.