Diabetes Self Management in Rural Communities

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Rural Health Journalism Workshop 2008

http://www.diabetesinitiative.org/
“Well how is this different than just good clinical care?” J. Shapiro, NPR

8,766 = 24 X 365.25

6 hours a year in the doctor’s office or with dietitian or other health professional.

8,760 hours on your own

- Healthy diet
- Physical activity
- Monitor blood sugar
- Take medications, insulin
- Manage sick days
- Manage stress – Healthy Coping
What the individual needs

- Help figuring out what might work in her/his daily life
- Skills to do it
- Ongoing encouragement and support – it’s for the rest of your life (and help when things change)
- Community resources
- Tying it all together with good clinical care
Diabetes Initiative of the Robert Wood Johnson Foundation

Demonstrating feasible, sustainable self management programs as part of high quality diabetes care in primary care and community settings
The 14 Sites of the Diabetes Initiative
Richland County Health Department,
Sydney, Montana
“An Unlikely Recipe for Success: hospital and local public health partnership supports diabetes self-management"

The Richland County Community Diabetes Project
Richland County, Montana

Lisa Aisenbrey, RD, Diabetes Project Director
Richland County, Montana
Frontier, aging community on the border between North Dakota & Montana

Sidney, Fairview, Savage, Lambert, Crane

Population: 9,155 (4.6 persons per sq. mile)

Farming (beets), ranching, oil, small business

1/3 older adults

Median household income (1999) is 32K
Culture

- Scandinavian, German homesteaders, ranchers
- Seasonal migrant farmworkers (Hispanic, Native American)
- Near 2 Native American Reservations, one Indian Service area
- Small percentage Native American, Hispanic, Black American, Asian.
- Hardy, independent, stoic, resistant to change, wary of outsiders, private, loyal to neighbors and friends.
Richland Health Network

- Richland County Commission On Aging
- Richland County Health Department
- Sidney Health Center (hospital, clinic, pharmacy, extended care, fitness center, assisted living)
Community Collaboration

- Communities in Action
- WIC, At-Risk home visiting
- Richland County Nutrition Coalition
- Sidney Health Center Community Health Improvement Committee
- Parish Nursing
- RSVP
- Literacy Volunteers of America
- LIONS Club
- American Diabetes Association – Montana
- Montana Migrant Council (on Advisory Board)
- McCone County Senior Center
- Montana Diabetes Project
- Sidney Public Library
- Eastern Montana Mental Health
- Health Fair Planning Committee at hospital
- Media
- And more...
Project Components

- Addressing the whole person with diabetes
  - Physical activity
  - Healthy eating
  - Social support
  - Diabetes education
Social support & Continuing Education

- Diabetes Education Group
- Goal Setting
- Newsletter
- Resources at Public Library
- Community Resource Book
- Chronic Disease Self-Management Class
- Ambassadors (lay health workers)
Diabetes Education Center

- Formal group and individual diabetes self management education in medical setting
  - Housed at Sidney Health Center
  - Staff: RD, RN, Coordinator
- Physician referral required
- Coordinated by Public Health
  - Linked with community projects
  - Strong source of referrals
- Diabetes Quality Care Monitoring System
- Achieved ADA recognition!!
Other Activities

- Health literacy training
- Motivational interviewing training
- Provider education
- Local Worksite Wellness Programs
Campesinos Sin Fronteras, Somerton, Arizona
“Campesinos Diabetes Management Program” (CDMP)

A collaborative between
Campesinos Sin Fronteras, Sunset Community Health Center,
University of Arizona College of Public Health and Yuma County Cooperative Extension

By

Floribella Redondo, Program Manager
Maria Retiz, Promotora de Salud

Project Funded by The Robert Wood Johnson, Building Community Support for Diabetes Care
Selecting CDMP’s Target Population

Farmworkers and their Families
Needs of Target Population

Hispanic/Mexican farmworkers are greatly affected by diabetes due to:

- Limited access to health care services
- Working poor
- Lack of health insurance
- Lack of transportation
- Lack of knowledge and education on disease
Promotora Model

- Effective to reach minority and underserved populations
- Have trust and respect from their community members
- Have gained medical providers’ appreciation for their contribution to improving the health of their families and community members
- Represent the cultural, linguistic, socio/economic and educational characteristics of the population they serve
- Most Promotores are members of a farmworker family or are ex-farmworkers
CDMP Promotoras Outreach and Education

Promotoras reach the targeted population at their work site, their homes, churches and community

Promotora Diabetes Class
Community Support Services Offered by CDMP

- Diabetes Self-Management Education Classes
- Promotora Advocacy and Referral
- Home Visits
- Diabetes Support Groups
- Family and couple support
- Physical Activity
Community Support Services Offered by Promotoras

- **Patient Diabetes Education**
  Through educational sessions participants learn about diabetes and how to manage it

- **Family Diabetes Prevention**
  Through home visits, participant and family members are provided the tools to control and prevent diabetes.

- **Healthy Cooking Classes**
  Through classes and home visits participants and family members learn about proper food portions and healthy food
Physical Activity

Low Impact Aerobics

- 75% of participants reported this being their first time in their lives performing this kind of activity
Services Offered by CDMP Collaborator

- Patient’s Medical Care
- Patient Case Management
- Monitor Patient’s Medical Compliance
- Patient Diabetes Education Program
- Monitor Patient Medicine Intake
- Patient & Physician Communication
Participant follow-up

- **Patient Support**
  Promotoras help the participants to monitor and control their diabetes through advocacy, home visits and phone calls

- **Diabetes Portable Record**
  Participants use this document to keep a record of their doctor’s office visits in the U.S and Mexico
Glycated Hemoglobin
(or glycosolated/glycosylated Hemoglobin or Hemoglobin A1c or HbA1c)

- The extent to which circulating hemoglobin cells in the blood have glucose bound to them.
- The more sugar in the blood, the more hemoglobin cells are glycated.
- Half life of hemoglobin cell is about 8 weeks, so glycated hemoglobin estimates average blood sugar levels over several months.
- ≤ 7% considered good control.
- Change of ½ to 1 percentage point considered appreciable.
Results

- Over 12 months, mean decrease of glycated hemoglobin of 0.58 percentage point
- Among those who began ≥ 7%, mean decrease of 1.0 percentage point
- Decreases in glycated hemoglobin correlated with
  - Attendance at support groups
    \[ r = -0.343 \ (p = 0.004) \]
  - Instrumental support or advocacy
    \[ r = -0.410 \ (p = 0.001) \]

Law of Halves and Need for Choices

• Only about half of those for whom an intervention is appropriate will accept it
  – Only about half of those will follow it
  – Only about half of those will benefit -- 1/8 of those with whom started

• 60% to 70% of patients with diabetes have not received self-management interventions
  (Austin Endocrinology Practice. 2006 12(Suppl 1):138-141)

• Thus, diabetes self management needs to include choices for participants among channels and emphases of interventions.
To reach audiences and counter law of halves, we need:

- Many Good Practices
- Not Few Best Practices

Planning resources much better spent identifying several programs to try than trying to identify the best *one*
Rural in Metropolitan?
Holyoke Health Center, Holyoke, Mass.
Holyoke Health Center

Federally Qualified CHC
Western Massachusetts
17,277 medical patients
6,722 dental patients
One of the highest diabetes mortality rates in Massachusetts

• ≈ 100% of patients live at or below poverty level
Multiple Interventions provides ample opportunity for ongoing follow up and support

- Chronic Disease Self-Management Classes
- Community Health Workers
- Diabetes Education Classes
- Exercise Classes
- Individual Appointments with the diabetes educator and the nutritionist
- Breakfast Club
- Snack Club
Holyoke Health Center, Holyoke Massachusetts
Changes in HbA1c — 2000 - 2006

Average HgbA1c
- 2000
- 2006

# of Patients

A1c < 7%  A1c 7-9.9%  A1c >10%

2000  2001  2002  2003  2004  2005  2006
Core Concept: Resources & Supports for Self Management

- Individualized assessment
  - Including consideration of individual’s perspectives, cultural factors
- Collaborative goal setting
- Enhancing skills
  Diabetes specific skills
  Self-management and problem-solving skills
  Includes skills for “Healthy Coping” and dealing with negative emotions
- Ongoing follow-up and support
- Community resources
- Continuity of quality clinical care
Tri-Level Model of Self Management and Chronic Care

Organization & System
   e.g., Chronic Care Model

Implementation
   e.g., Resources & Supports for Self Management

Impacts
   e.g., AADE 7 Self-Care Behaviors

Clinical Status & Quality of Life
The Evidence IS There!!


The Critical Piece??

- **Policy change** and changes in guidelines/practices rest on **political processes** at least as much as rational processes and evidence

- **Have data** on clinical outcomes

- Need a **change in perspective**, expectations about what health care should entail, at least as much as we need better data
**Needed Shift in Public Understanding**

High Quality Diabetes Care:
- Elite internist or endocrinologist
- 15 minutes, quarterly
- Rx adjustments
- Exhortation to lose weight; diet plan
- Pat on back and good luck

High Quality Diabetes Care:
- 15 minutes, quarterly w/ pt-centered clinician
- Self management classes, support groups
- Activities, classes for healthy eating, physical activity
- Bimonthly calls from/prn access to Comm Hlth Wrkr (linked to nurse, pcp)
- Healthy community
World Views that Frame Journalism and Reporting on Self Management

Newtonian Physics – Quantum Physics
Linear Systems – Integrative Systems
Positivism – Post Modernism
“Just Say ‘No’!” – “It Takes a Village”
PC – Macintosh

Narrative
Protagonist/Antagonist/Solution – No Country for Old Men
Fargo, Cohn Brothers

Magic Bullets – Multicausality
Cute Child/Sick/Heroic Doctor – Self Management
Challenge to Journalism

- No magic cures, breakthroughs
- Skills and influences are subtle and diffuse, not dramatic and tangible
- How to cover diabetes self management and make it appreciable, more than “just good medical care”
The Story

For folks with diabetes

• 6 hours a year with the doctor, 8,760 “on your own”

• “Different strokes for different folks,” but need
  – Help to figure out how you want to manage your diabetes
  – Help learning the skills to do it
  – The encouragement and community resources to stay with it

• It can be done with real people in real places
Contact

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