Evolving Models of DSME: The Critical Role of Ongoing Support

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Estimated Worldwide Prevalence of Diabetes

2007

World Prevalence ~ 194 Million

2025

World Prevalence ~ 333 Million
 Diabetes: Statistics for the U.S.

- 23.6 million people (~ 8%) have diabetes
- 43 million people have pre-diabetes
- 1.6 million new cases of diabetes are currently diagnosed each year
- 1 out of every 3 children born after 2000 will develop type 2 diabetes during their lifetime
County-level Estimates of Diagnosed Diabetes for Adults aged ≥ 20 years: United States 2007
“Where are we going wrong?”

No doubt that more resources are needed, especially in low-resource and underserved areas, yet . . .

- US spends 250 billion to treat and prevent diabetes and its complications
- Only 7.3% of people with diabetes in the US achieve recommended levels of glucose, cholesterol, and blood pressure control ([www.cdc.gov](http://www.cdc.gov))
- Not just a function of access to health services, as far more than 7.3% have access to quality care . . . .
- Clinic-based - lack of time, personnel, and resources
Diabetes affects all aspects of people’s lives, all the time, for the rest of their lives.

[Sustained] behavior change is influenced by dynamic and evolving “real-world” conditions.

- Medical treatment is critical - but often not enough to master and maintain the kinds of everyday behaviors that enable them to live as healthily as possible.
- Improving self-management will have far greater impact on population health than any improvement in specific medical treatment (WHO, 2003).
“Well how is this different than just good clinical care?” Shapiro, NPR

8,766 = 24 \times 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
From DSME to DSMS:

Case for Social & Peer Support

Self-management = Point of Care + Beyond!

People with diabetes need . . . .

➤ Help figuring out what changes and strategies might work in her/his daily life
➤ Skills to put these things into practice
➤ Ongoing encouragement and support – for day-to-day needs and when things change
➤ Community linkages and resources
➤ Help tying this all together with good clinical care
Flexible programs are needed to provide ongoing social support that is responsive to the unique and individual lives of patients (Funnell et al., 2007; Brownson & Heisler, 2009)

Diabetes is far more complex than medications and medical treatment, and people living with diabetes should complement healthcare personnel to address ongoing demands and challenges (IDF, 2008)

DSME is not sufficient to sustain diabetes self-care, and people need ongoing support (Funnell et al., National Standards for DSME, 2010)

Community health workers/ongoing support can improve health care access/outcomes and strengthen health care teams. (Rosenthal et al., 2010)
Outline

• Frame the need for and contributions of ongoing support in chronic disease/diabetes self-management, empirically and experientially

• Describe core functions of peer support that form a standardized framework and core approach for diverse implementation

• Illustrate the tailored application of ongoing support and related improvements in outcomes

• Share reflections about connecting support interventions with local health care providers and early thoughts about sustainability
Why Social & Ongoing Support?

✓ Protectively, social relationships may be as important as the negative effects of established risk factors such as smoking, obesity, and high blood pressure. Conversely, the risk associated with social isolation is stronger than that between cigarette smoking and mortality.

  *House, Landis & Umberson, Science, 1988 241: 543*

✓ Duration of contact, not necessarily novelty of intervention, is critical to sustained behavior change and managing health.

  *Diabetes: Norris et al., Diabetes Care 2002 25: 1159-1171*  
  *Smoking: Kottke et al., JAMA 1988 259: 2882-2889*  
Asthma Coach for Mothers of Children Hospitalized for Asthma
Standardized Approach

7 Key Asthma Management Behaviors

Asthma Action Plan
Use of Controller Medications
Use of Responder Medications
Regular Physician Visits
Partnership with Physician
Avoidance of Second-hand Smoke
Avoidance of Cockroach Allergen

Defined Schedule of *Planned* Contacts
Nondirective & Flexible Approach

Flexible application of schedule

- If not interested, “check in” next month
- Precontemplator Track = Monthly Check In
- Thus, *No Such Thing as A Drop-Out*

Staged Approach – Key behaviors addressed according to readiness

Accept feelings, reluctance to pursue recommendations

Occasional help, but not direct services

Mode (phone, home visit, accompany to physician visit, neighborhood locations)
Attention to Stressors not Directly Related to Asthma

Referrals to crisis nursery, homeless shelters, food pantries
Support groups for domestic violence, smoking
Locating funding for medications, low-income clinics, jobs

Substantive Contact (Face-to-face or by phone, at least one key management behavior discussed)

- 35% within 7 days of assignment of Coach
- 63% with 1 month
- 92% within 3 months
- Averaged more than 1 contact per quarter throughout last year of 2-year intervention
Hospitalizations
Admissions in Year Prior to Randomization (Year Pre) and 1st and 2nd Years of Coach Program

Interaction of Group X Time significant, p < .02. Year 1 is adjusted by subtraction of index hospitalization. Thus Year 1 mean reflects hospitalizations other than index.

Demonstrating feasible, sustainable self management programs as part of high quality diabetes care in primary care and community settings

www.diabetesinitiative.org
Promotor(a) Roles and Responsibilities

• Provide informal counseling, social support and culturally sensitive health education
• Advocate for patient needs
• Assure that patients receive the health services they need and provides referral and follow-up services
• Assist and guide the patient in the management of their disease process
• The promotor(a) is considered part of the medical team and plays a key role on the delivery of DSM
Gateway Diabetes Self Management Project
Phase I - HbA1c (n = 109)

- 88% Retention Rate in SM Courses
- 49% of clients return to the support groups

Average HbA1c Values

Baseline 3mths 6 mths 12 mths
6 6.5 7 7.5
7.2 7.2 7.5
8.7
Why *Peer* Support?

- People living with diseases and conditions have a great deal to offer each other (emotional, social, and practical assistance)
  - “Mother Coordinators” trained other mothers to recognize signs and symptoms of malaria and give chloroquine; reduced mortality by 40%
  - TB Control in Bangladesh – programs with lay health workers resulted in $64 per patient cures; programs without lay health workers costs $96 per patient cured
  - Patient education for diabetes – 80% with lay health workers completed education (vs. 40% without), and those completing education reduced GHb

### Peer Support Programmes in Diabetes

Report of a WHO consultation, 5 – 7 November 2007

**World Health Organization**

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→ Peer support is promising approach
→ Key functions are global
→ How they are addressed and implemented is local

[www.peersforprogress.org](http://www.peersforprogress.org)
Peers For Progress

• Accelerate and promote best practices in peer support as a regular part of health care and prevention around the world

• Responsive both to the promise of peer support and need for further research
  – Better self-management will have far greater impact on population health than improvement in specific medical treatment (WHO, 2003)
Peer Support Around the World

- **Global Network of Peer Support Organizations** started with 14 Peers for Progress grant programs in nine countries on six continents
- **Expanding Global Network** with other programs and organizations

![World map with markers indicating the locations of the Global Network of Peer Support Organizations](www.peersforprogress.org)
Peer Support: Key Functions

1. Assistance, consultation in applying management plans in daily life

2. Social and Emotional Support
   a) Encouragement of use of skills, problem solving
   b) Personal relationships
   c) Social networks and community resources

3. Linkage to clinical care
   a) 2-way relationship between peer program and providers
   b) Peers encourage use of clinical care
   c) Advocacy for enhanced clinical care (and other community resources)

4. Ongoing support, extended over time
   a) Proactive contact and ad lib access to peers
   b) Negotiated plan for support
   c) Variable frequency/intensity over time as needs of recipients change, evolve
1. Assistance in Daily Living (Ex.)

- Integrate skills building for “home navigation” with attention to Latino families (*AYALA*) and “community navigation” (e.g., shared trips to restaurant buffets) (*GAGLIARDINO*) to address nutrition, physical activity
- Paper-based personal health record, part of notebook (“Carpeta Roja”) to track goals and progress (*KNOX*)
- Motivational Interviewing to set goals (*SAFFORD*)
- Monthly support groups in community venues (*MBANYA*), regular home visits (*SANGUANPRASIT*) focused on skill-building
- Closed network (*BAUMANN*), other cell phone systems among supporters, participants, providers (*ROtheram-Borus*)
2. Social, Emotional Support (Ex.)

- Home visits to enhance communication and positive family interactions among Latinos (AYALA)
- Characterization of peer supporters as “Care Companions” to address particular social, emotional relationships among persons ages 65+ (KNOX)
- Social gathering and alternative group activities (e.g., arts, cooking, quilting) versus one-on-one interactions to address social isolation (KNOX)
- Mobile technologies for support between Diabetes Buddies (ROTHERAM-BORUS)
3. Linkages to Care (Ex.)

• Pre, post preparation for clinic visits (*SAFFORD; TANG & HEISLER*); co-attending visits (*MBANYA; OLDENBURG*)

• Clinic tours to familiarize with resources (*AYALA*)

• Appointment log books among health care providers (*AWAH*)

• Integrating General Practitioner’s (GP) Care Plan (part of Australia’s infrastructure) into participant handbooks; peer leaders are trained to discuss it and engage in F/U with participants and GP (*OLDENBURG*)

• Peer supporter is part of health care team with clinic liaisons (*BODENHEIMER*) *
3. Linkages to Care (*Ex. Contin.*)

• Clinician-guided text messaging (*ROTHERAM-BORUS*)
• Phone system to supplement education sessions from medical professionals (*CHAN*); other free cell phone communication plans (*GAGLIARDINO*)
• Development and use of “referral pathway” to connect peer support with project nurse and address clinical difficulties (*SIMMONS*)
4. Ongoing Support (Ex.)

- Participant groups, connections to peer supporters developed locally to minimize distance challenges; enable regular, face-to-face relationships, bonding; and strengthen program survival (*OLDENBURG; SANGUANPRASIT; SIMMONS*)
- Revisiting peer supporter contracts, expectations for extension and transition plans (*SAFFORD*)
- Existing infrastructure for group social support programs (Diabetes Victoria) (*OLDENBURG*) and opportunities for institutionalization
- Existing referral systems from villages to respective health centers (*SANGUANPRASIT*)
Peer support in “real-world” clinics and communities (Tang & Heisler, MI)

With African-American adults in community-based setting and Latino adults in a clinic-based setting

All receive 3 mos DSME; Peer support receives 12 mos ongoing, peer-led diabetes self-management support (DSMS)

Peer-led weekly group sessions – empowerment, focus on participants’ diabetes-related priorities, questions, concerns

Follow-up telephone calls from peer leader to provide emotional support and follow-up on participant-identified goals

Participants encouraged to call peer leaders

Participants matched with one ‘peer buddy’ for ongoing reciprocal support; encourage at least weekly contact
Peer Support for Diabetes

Community Resources

Healthcare System

CHA

Activated Patient

Behaviors

Outcomes (A1c, BP, LDL, QOL)

Support

Assist

Productive Interactions

Healthcare Team

www.peersforprogress.org
Issues/Challenges

- Practical (economy, other cost issues, transportation, electricity and its impact on e-strategies)
- Organizational (logistics of partnerships among multiple organizations, capacities among other, payment/reimbursement)
- Programmatic
  - Innovative use of technologies
  - Cultural issues (e.g., relationships with health care providers; lack of physician buy-in regarding need for active patient participation in ongoing management; “burden” if I share my problems)
Implications for Providers

- Integrate peer support as a powerful outreach and engagement strategy for enhanced systems to care (e.g., Community Oriented Primary Care and Patient Centered Medical Home (PCMH) activities)
  - Culturally sensitive outreach and follow-up
  - Enhanced access to and team-based care
  - Coaching patients to assume more active roles in health care
  - Enhanced communication between patients and providers
Looking Forward

Enhanced Quality and Availability of Peer Support Worldwide

Peers for Progress
Peer Support Around the World

“Go to” Source on Peer Support

- Reliable, Up-to-Date Information on Peer Support
- Program Models, Materials for Program Development
- Tools for Program Monitoring, Quality Improvement
- Global Networking and Website for QI, Knowledge Sharing
- Regional Networks for Collaboration, Advocacy

Enhanced Quality and Availability of Peer Support Worldwide

www.peersforprogress.org
Looking Forward

- Qualitatively and quantitatively describing
  - Who is a peer? How are they recruited, selected, trained? What is their role?
  - What do peer support encounters look like? How do they vary based on contexts?
  - What are the clinical, behavioral, quality of life, and cost impacts of peer supporters on health (shared evaluation measures across 8 sites)?
  - How can peer support interventions and impacts be sustained?
Some Resources

- WHO Report on Peer Support Programs in Diabetes:

- Family Practice, Vol 27, Supplement 1, June 2010: Peer Support in Diabetes Management,
  [http://fampra.oxfordjournals.org/content/vol27/suppl_1/index.dtl](http://fampra.oxfordjournals.org/content/vol27/suppl_1/index.dtl)

- Link to ICBM presentations on web portal:
  [http://www.peersforprogress.org/whatsNew.php](http://www.peersforprogress.org/whatsNew.php) and

- Guide to Peer Support for Health Professionals/ Providers (under development)
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