Peer Support in the Management of Chronic Disease

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American College of Chest Physicians
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CHEST 2012
Atlanta, Georgia – 24 October, 2012
Peers for Progress is a program of the American Academy of Family Physicians Foundation supported by the Eli Lilly and Company Foundation, Bristol-Myers Squibb Foundation, and Sanofi U.S.
Fundamental Role of Social Connections and Support

Human beings are more effective and happier when they have someone

• they can talk to about personal matters
• who cares about them
• who can help them when they need help

The risk of death associated with social isolation is greater than the risk associated with cigarette smoking

References for Peer Support Interventions in Asthma


Asthma Coach for Mothers of Medicaid-Covered Children Hospitalized for Asthma
STUDY DESIGN

Randomized Controlled Trial
Children, aged 2 - 8
Hospitalized for Asthma
Very Low Income; almost all in homes without fathers

Enrolment only contingent on willingness to complete reimbursed assessments

Thus, assess reach of intervention to generalizable sample

Total enrolment = 189
96 Asthma Coach, 93 Usual Care
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
• Thus, No Such Thing as A Drop-Out

Staged Approach – Key behaviors addressed according to mother’s readiness to do them

Accept feelings, reluctance to pursue recommendations

Flexible contact by phone, home visit, accompany to physician visit, neighborhood locations
Coaches Reach “Hard to Reach”

Substantive Contact (Face-to-face or by phone in which 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.

Chronic Disease – 8,760

8,766 = 24 \times 365.25

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

8,760 hours “on your own”

- Healthy diet
- Physical activity
- Monitor status
- Take medications
- Manage sick days
- Manage stress – Healthy Coping
- Arrange medical appointments and testing
- Sleep
8760 – Evidence

• Only predictor of reduced HbA1c in diabetes self management: Length of time over which contact was maintained (Norris et al., Diabetes Care 2002 25: 1159-1171.)

• Psychosocial interventions > 3 mos more effective in depressive Sx, QOL (Forsman Health Promo Int 2011 26: i85-i107)


• Meta-analysis of Smoking Cessation by Kottke (JAMA 1988 259: 2882-2889)
  “Success was … the product of personalized smoking cessation advice and assistance, repeated in different forms by several sources over the longest feasible period.”
Peer Supporters as Sources of Chronic Disease Self Management Support

• Not professionals
• Often have the health problem they are assisting with – e.g., people with diabetes helping others with diabetes
• Share perspectives, experience of those they help
• People believe them because they are “like me”
• Can teach how to implement basic self management plans (e.g., healthy diet, physical activity, adherence to medications)

• *Have time!!!*
Peers for Progress

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American Academy of Family Physicians Foundation

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Program Development Center at the University of North Carolina-Chapel Hill

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funded by the Eli Lilly and Company Foundation, Bristol-Myers Squibb Foundation, Sanofi U.S.
Enhanced Quality and Availability of Peer Support Worldwide

Collaborative Quality Improvement, Knowledge Management

Regional Networks, Consultation for Program Adoption

Build the Evidence Base

"Go to" Source on Peer Support

Peers for Progress
Peer Support Around the World

www.peersforprogress.org
1. Key functions are global
2. How they are addressed needs to be worked out within each setting
Key Functions of Peer Support

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

Assistance in applying management plan in daily life

Problem
Doctor Educator Nurse
Plan
Peer Supporter
Action Implementation

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Key Functions of Peer Support

1. Assistance, consultation in applying management plans in daily life
2. Social and Emotional Support
3. Linkage to clinical care
4. Ongoing support, extended over time

Global Standardization with Local Adaptation

KEY FUNCTIONS
- Assist in managing diabetes in daily life
- Social and emotional support
- Link to clinical care
- Ongoing support

Local, Regional, Cultural Influences

Diverse Implementation of Key Functions
Key Functions of Peer Support
In Asthma Coach

1. Assistance, consultation in applying management plans in daily life
2. Social and Emotional Support
3. Linkage to clinical care
4. Ongoing support, extended over time

Assistance in Daily Management

Of 7 Key Asthma Management Behaviors

Asthma Action Plan
Use of Controller Medications
Use of Responder Medications
Avoidance of Second-hand Smoke
Avoidance of Cockroach Allergen
Key Functions of Peer Support In Asthma Coach

1. Assistance, consultation in applying management plans in daily life
2. Social and Emotional Support
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Nondirective & Flexible Approach

Flexible application of schedule

• If not interested, “check in” next month
• Thus, *No Such Thing as A Drop-Out*

Staged Approach – Key behaviors addressed according to mother’s readiness to do them

Accept feelings, reluctance to pursue recommendations

Flexible contact by phone, home visit, accompany to physician visit, neighborhood locations
Crisis Interventions

- Enrolling patients in free programs i.e. 100 Neediest Cases Assistance with Rent and Utilities
- Referrals to crises nursery for children &/or homeless shelters, food pantries, clothing sources
- Support groups for bereaved families, domestic violence, smoking, abuse
- Help with finding foundation funding for medications when they have no insurance or money
- Referrals to low-income clinics
- Help with finding employment, with typing resumes, or completing an job application
- Resources if a parent abandons the child, and the grandmother or aunt is left to care for the child without financial support
- Legal adoption information
Respected but Not Authoritarian: Names Participants Use for Coaches

- Miss Mya
- Miss Angela
- Miss Debra
- Asthma Lady
- Asthma Teacher
- Asthma Girl
- Auntie Debra

- That Lady about Asthma
- My Asthma Coach
- Asthma Nurse
- Asthma Doctor
- Ms. Asthma Doctor
- Asthma Friend

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Social Isolation

How many friends [family members] do you have with whom you can talk about personal matters?

How many … whom you can call on for favors?

High Family / High Friend
High Family / Low Friend
Low Family / High Friend
Low Family / Low Friend
Latency to Protocol Contact by Level and Source of Social Support Group

Social Support Group by Medians of Friends and Family

Mean Days to First Contact
### Is the Asthma Coach more likely to:

<table>
<thead>
<tr>
<th>Number</th>
<th>Choosing</th>
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<tbody>
<tr>
<td>78</td>
<td>Help you to “take charge” of your child’s asthma care</td>
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<tr>
<td>2</td>
<td>“Take charge” of your child’s asthma care</td>
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<tr>
<td>51</td>
<td>Motivate <strong>you</strong> to take care of [Child’s] asthma</td>
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<tr>
<td>29</td>
<td>Show <strong>you how</strong> to take care of [Child’s] asthma</td>
</tr>
<tr>
<td>66</td>
<td>Help you to do what <strong>you</strong> think is right for your child’s asthma</td>
</tr>
<tr>
<td>14</td>
<td>Push you to do what <strong>she</strong> thinks is right for your child’s asthma</td>
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</tbody>
</table>
Key Functions of Peer Support In Asthma Coach

1. Assistance, consultation in applying management plans in daily life
2. Social and Emotional Support
3. Linkage to clinical care
4. Ongoing support, extended over time

Linkage to Clinical Care

Of 7 Key Asthma Management Behaviors

Asthma Action Plan, including plan for responding to persistent symptoms

Regular Physician Visits

Partnership with Physician
Key Functions of Peer Support In Asthma Coach

1. Assistance, consultation in applying management plans in daily life
2. Social and Emotional Support
3. Linkage to clinical care
4. Ongoing support, extended over time
Dashed horizontal line = 1 contact per participant per quarter
Systematic Review of Peer Support

• 01/01/2000 – 5/31/2011: “peer support,” “coach,” “promotora” etc.
• 66 separate studies
• 52% from US
  Others: Canada, UK, Pakistan, Bangladesh, Brazil, Mozambique, New Zealand
• 31% Pre/Post-Natal Care
  Others: Asthma, Diabetes, CVD, HIV, Smoking cessation, Mental health, Drug Use
• Overall, 56/66 (84.8%) showed benefit of peer support
• 6/6 with asthma showed benefit of peer support

Elstad et al., Internat Cong Beh Med, Washington, D.C., August, 2010; Fisher et al., in preparation
### Results of Systematic Review

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<thead>
<tr>
<th></th>
<th>RCTs</th>
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<th>All Controlled Studies</th>
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<tr>
<td></td>
<td>Objective Measure</td>
<td>Objective or Standardized</td>
<td>Objective Measure</td>
</tr>
<tr>
<td>Sig Between Group</td>
<td>5</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>Sig Within Group</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Nonsig</td>
<td>27/32 = 84.4%</td>
<td></td>
<td>35/42 = 83.3%</td>
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</table>
Results from Projects Funded by Peers for Progress
Peer Support For Self-Management Of Diabetes Improved Outcomes In International Settings

ABSTRACT Self-management of diabetes is essential to reducing the risks of associated disabilities. But effective self-management is often short-lived. Peers can provide the kind of ongoing support that is needed for sustained self-management of diabetes. In this context, peers are nonprofessionals who have diabetes or close familiarity with its management. Key functions of effective peer support include assistance in daily management, social and emotional support, linkage to clinical care, and ongoing availability of support. Using these four functions as a template of peer support, project teams in Cameroon, South Africa, Thailand, and Uganda developed and then evaluated peer support interventions for adults with diabetes. Our initial assessment found improvements in symptom management, diet, blood pressure, body mass index, and blood sugar levels for many of those taking part in the programs. For policy makers, the broader message is that by emphasizing the four key peer support functions, diabetes management programs can be successfully introduced across varied cultural settings and within diverse health systems.
Evaluation

Efficacy
Effectiveness
Emerging Results from Projects

Feasibility → Reach, Engagement → Efficacy, Effectiveness → Sustainability → Adoption


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Emerging Results from Projects

- Feasibility
- Reach, Engagement
- Efficacy Effectiveness
- Sustainability
- Adoption

Implemented in all 14 project sites


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Emerging Results from Projects

- Feasibility
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Implemented in all 14 project sites.

Mean baseline HbA1c = 8.92%


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Emerging Results from Projects

- Feasibility
- Reach, Engagement
- Efficacy, Effectiveness
- Sustainability
- Adoption

Mean baseline HbA1c = 8.92%
Mean HbA1c Reduction = 1.345 % points
Reduced Hospitalizations

Emerging Results from Projects

Feasibility  Reach, Engagement  Efficacy Effectiveness  Sustainability  Adoption

Groups in Uganda, South Africa continue without funding; increase participation

Mean baseline HbA1c = 8.92%

Implemented in all 14 project sites


Emerging Results from Projects

- Feasibility
- Reach, Engagement
- Efficacy, Effectiveness
- Sustainability
- Adoption

In Texas, WellMed extends program from 15 test sites to regular care in all 23 sites.

Cost Effectiveness

Peer Support in Hong Kong, over a one-year period:
- Hospitalizations – 0.205 per patient relative to 0.329 among controls
- Day admissions – 0.125 per patient relative to 0.351 among controls.

In FQHC in Denver, Peer Supporters
- Shifted costs away from urgent care, inpatient care, and outpatient behavioral health care
- Increase utilization of primary and specialty care visits.
- ROI = 2.28:1.00.

(Whitley et al. J Hlth Care Poor Underserved 2006 17: 6-15)

Diabetes Initiative of the Robert Wood Johnson Foundation
- 3 of 4 projects in cost analysis emphasized peer supporters
- Cost per Quality Adjusted Life Year (QALY) = $39,563 (well below $50,000 criterion for good value)

(Brownson et al., The Diab Educator. 2009 35: 761-769)

Asthma CHW Project with Medicaid Covered Children in Chicago
- Three to four CHW home visits over 6 mos and liaison with care team
- ROI: $5.58 saved per dollar spent

NOT Peers for Progress
Networks & Network of Networks
A Learning Community of Peer Support

Peers for Progress is building a Global Network of Peer Support Organizations, and invites you to join in this global endeavor.

JOIN THE GLOBAL NETWORK

peersforprogress.org
National Peer Support Collaborative Learning Network

For organizations providing and managers of peer support programs

Collaboration of Peers for Progress with National Council of La Raza and, we hope, other major organizations

Webinars on topics of interest, e.g.,

- Affordable Care Act opportunities for funding peer support
- Evaluation of peer support programs
- Building the business case for peer support
- Keys to quality and effectiveness of peer support programs
- Approaches to sustaining the peer supporters
- Addressing depression and other emotional health issues

Produce: Documents for the field – quality improvement as well as policy oriented

Sponsored by Bristol-Myers Squibb Foundation Together on Diabetes Program

To join: jlbr@email.unc.edu

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Community Health Workers in Pakistan – CBT for Post-Partum Depression

Rural Gujar Khan and Kallar Syedan,
Basic Health Units:
15,000 – 20,000 people
Physician, midwife, vaccinator
15-20 CHWs, “Lady Health Workers”

CHWs
Completed 2ndry education
Responsible for ≈ 100 households
Primarily general health education and preventive maternal and child care

≈ 96,000 CHWs cover 80% of Pakistan rural population
Community Health Workers in Pakistan – CBT for Post-Partum Depression, cont.

40 Communities randomized to intervention and usual care
All women entering 3rd trimester evaluated for depression
463 out of 1787 (26%) meeting DSM-IV criteria for major depression offered CBT in intervention communities
Manual based intervention, “Thinking Healthy Programme”
- Active listening
- Collaboration with family
- Questioning to promote change in beliefs thought to engender depression
- Homework

Integrated into regular CHW care
- Weekly in last month pre-delivery
- 3X in 1st postnatal month
- 9 monthly sessions thereafter

PEARL, JADE and Emotional Distress

JADE  (Chan et al. *Diabetes Care* 2009 32: 977–982.)
• Structured Care
• Doctor-nurse team 4X/year
• Nurse follow-up on adherence/self-care 6-8X/year

PEARL  (Chan, Am Diab Assoc, June, 2012)
• Peers work through and trained by nurses
• Peer support classes
• Individual contacts – average of 17 over 12 months
Peer support reduced stress and non-compliance in patients with negative emotions (DASS>17)

20% of patients have significant depression, anxiety and stress

<table>
<thead>
<tr>
<th>Changes in scores</th>
<th>Group</th>
<th>N</th>
<th>Mean±SD</th>
<th>p</th>
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<tbody>
<tr>
<td>DASS_sum</td>
<td>JADE+PEARL</td>
<td>48</td>
<td>11.9±16.7</td>
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<td>JADE</td>
<td>62</td>
<td>5.9±15.3</td>
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<td>48</td>
<td>4.3±6.2</td>
<td>0.044*</td>
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<td>JADE</td>
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<td>2.2±5.9</td>
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<td>JADE+PEARL</td>
<td>48</td>
<td>3.5±5.8</td>
<td>0.036*</td>
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<td>JADE</td>
<td>62</td>
<td>1.5±5</td>
<td></td>
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<tr>
<td>DASS_stress</td>
<td>JADE+PEARL</td>
<td>48</td>
<td>4.0±6.1</td>
<td>0.009*</td>
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<tr>
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<td>JADE</td>
<td>62</td>
<td>1.9±5.6</td>
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</tbody>
</table>

DASS – Diabetes Anxiety Stress Scale
(*Adjusted for DASS_Depression_Pre, DASS_Anxiety_Pre, and DASS_Stress_Pre)
DDS – Diabetes Distress Scale

Chan JC et al ADA 2012
Negative emotions, peer support and hospitalizations

DASS > 17 and no peer support

Chan JC et al ADA 2012
Lessons Learned from Failures

- Lack of Contact, e.g., 9 group meetings over 24 months
- Reactive rather than proactive, e.g., leave card with mother after delivery offering support for breast feeding
- Didactic rather than interactive, e.g., responses to previous meeting’s questions and planned presentation
- Limited rather than flexible frequency of meetings – should be as-needed as well as proactive
Frequently Asked Questions:
Who is a Peer?

• Volunteer?
  – Depends on specific duties – e.g., required times or extensive required services may justify payment

• Person with the disease?
  – What about patient with, e.g., diabetes, arthritis, hypertension, hypercholesterolemia, depression?
  – Recommend person with close experience with disease or other chronic diseases
  – May be exceptions for, e.g., type 1 diabetes

• Peers for Progress has defined peer support according to four key functions (assistance in daily management, social/emotional support, linkage to care, ongoing support)

• Details of who, organizational support, payment, cover of expenses, honoraria, etc. left to individual settings and systems
Frequently Asked Questions: Quality Control, Misinformation?

• **Key:** Consider situation of peer supporter – basically a good person wanting to do no harm but wanting to help people who often face serious obstacles
  – If provide readily accessible resources, peer supporter will use them
  – If make resources hard to access, peer supporter will try to help with whatever resources they have available

• Recognize that information is not controllable
  – Promoting good information creates channel of influence
  – Trying to control or police information (impossible task) shuts off a channel

• Solid training and careful selection for those willing to be part of team as opposed to wanting to be heroes or the source of all knowledge and help

• Clarify: key role is support and assistance, not clinical expertise

• Key is back up, support, monitoring
  – Regular supervision, opportunity for peer supporters to discuss problems
  – 24/7 contact for peer supporters (titrate according to, e.g., routine, need within 24h, emergency)
  – Becomes major value added – peer supporter can get authoritative answer to questions from nurse, primary care provider, specialist prn

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Frequently Asked Questions:
How to Recruit and Select Peer Supporters

• Time available – availability to those served is key
• Like to talk to others, happy to find out about others’ children, interests, etc.
• Broad minded
  – Do not see diabetes or people’s problems as simple
  – No easy answers
• Able to learn and teach basic diabetes management
• Willingness to use back up support from professionals
Frequently Asked Questions: How to Train Peer Supporters

• Goal is to be able to help others implement their management plan
• Don’t need skills of nurse or dietitian
• Do need to learn skills of a patient who understands and implements diabetes management well
• Organize training around curriculum or protocol – training anchored in specific tasks
• Teach skills for
  – Simple counseling (e.g., active listening, motivational interviewing)
  – Promoting behavior change
Success Factors

• **Keep it simple** – Remember that peer support is meant to be from “**people like me**”

• Avoid too many details of training – Remember, key is **knowing, listening, and being available**

• Key: ongoing support and information for peer supporters

• **Back up system** in place is critical

• **Organizational structure** to support the peer support program – whether in community or clinical setting
Benefits for Health Care Providers

1. Strategy for culturally sensitive outreach and follow-up
2. Coaching patients to assume more active roles in health care
3. Enhanced linkage between patients and provider teams
4. Strategy for chronic disease self management support
5. Emerging evidence of reduced costs (e.g., hospitalization in Hong Kong)
6. Strategy for recognizing and promoting appropriate care for psychosocial problems
7. Alternative to PCP or other professional serving as amateur social worker and psychologist
8. “With all of this, I get to practice medicine”
Quality Control by Program Rather than Certification

“For these individuals [lay health and community workers and peer counselors], a system must be in place that ensures supervision of the services they provide by a diabetes educator or other health care professional and professional back-up to address clinical problems or questions beyond their training.”

(Standard 5, p. 3)

Thank You!

peersforprogress.org

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To join National Peer Support Collaborative Learning Network:
jlbr@email.unc.edu