Tips for Using Patient Navigators

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Definitions and Possible Mechanisms for Effectiveness
RoadMap

- Definitions and possible mechanisms
- Conceptual framework
- Types of peer support opportunities and effectiveness
- Problems with current research evidence
- Challenges
- Lessons from 3 peer coach studies focusing on recruitment, training, support/retention
- Breakout groups to discuss challenges
- Rapporteurs offer summaries
- Discuss future directions and interests
Definition

- Individuals without a formal medical education who offer services, support, and education for patients or others in the community
- Often from the same community that they serve
- Community health worker, lay leaders, peer educator, peer counselors, peer coach, promotores (Hispanic population)
Peer Support

• “Support from a person with **experiential knowledge** of a specific behavior or stressor and **similar characteristics** as the target population”

Dennis, Int. Journ Nurs Stud 40, 2003
Federal and WHO Support

- Move from paternalistic to partnership models of care
- Patient Protection and Affordable Care Act considers community health workers to be an integral component of the nation’s health care workforce
- WHO is encouraging peer support for diabetes care to help with everyday management
Conceptual Framework Hypothesized Effects of Peer Support

Peer Support

- Appraisal/Informational Support
  - Sharing experiences
  - Modeling effective skills

- Emotional Support
  - Encouragement
  - Reinforcement
  - Decreased sense of isolation

- Mutual Reciprocity
  - Shared problem solving
  - Help someone else with shared medical issues

Diabetes Attitudes
- Increased motivation
- Increased self-efficacy
- Decreased perceived barriers
- Increased positive mood
- Increased understanding
- Decreased diabetes-specific distress

Improved Diabetes-Care Behaviors (e.g. insulin use, blood glucose monitoring)

Improved Glycemic Control

Decreased Health Services Use and Costs
Types of Peer Support and Evidence of Effectiveness
Categories of Peer Support

- Task-limited: to obtain needed test, treatment, or health care services
- Short-term: decision making support (e.g., PSA testing)
- Longer term: self management of a disease
- Much longer team: adopting healthier lifestyles in persons with or without disease
Peer Mentor and Community Health (CHW) Models

Examples:

1) Enhancing linkages to clinical care
2) Providing individualized approach to assessment and treatment
3) Assisting in patient-centered collaborative goal setting
4) Supporting education and skills training,
5) Providing ongoing follow up and support, and
6) Linking patients to community resources.

(Brownson C and Heisler M, *The Pat* 2;2008)
Effect of Peers on Chronic Diseases

- 17 RCTs from 1986-2006 in persons with chronic diseases

  - Small, statistically significant standardized mean differences in favor of peer intervention for: pain (11 studies, SMD -0.10, CI -0.17 to -0.04); disability (8 studies, SMD -0.15, CI -0.25 to -0.05); fatigue (7 studies, SMD -0.16, CI -0.23 to -0.09); depression (6 studies, SMD -0.16, CI -0.24 to -0.07)

  - Significant improvement in self-rated general health (weighted mean difference, WMD -0.20, CI -0.31 to -0.10).

  - No statistically- or clinically-significant change in psychological well-being (5 studies; SMD -0.12, CI -0.33 to 0.09) or health-related quality of life (3 studies; WMD -0.03 (95% CI -0.09 to 0.02).

  (Foster G et al. Cochrane Systematic Rev 2007, Issue 4)
Effects on Health Behaviors in Persons with Chronic Diseases

- Small, statistically significant increase in self-reported aerobic exercise (7 studies, SMD -0.20, CI -0.27 to -0.12)
- Moderate increase in cognitive symptom management (4 studies, WMD -0.55, CI -0.85 to -0.26).
- No statistically-significant effect keeping office visits (9 studies, SMD -0.03, CI 0.09 to 0.04) or on reducing duration of hospitalization (6 studies, WMD -0.32, CI -0.71 to 0.07)
- Increased self-efficacy to manage condition (10 studies, SMD -0.30, CI)
Challenges?
Cochrane Recommendations

- Interventions need to be longer than six months
- Investigate under-representation of men
- Conduct studies in children and adolescents
- Explore disease-specific interventions
- Measure outcomes using biological measures of disease control or biomarkers
- Clarify the importance and meaning of self-efficacy
- Clarify of healthcare use outcomes
- Conduct cost-effectiveness studies
- Study effect of variations in the components of interventions, eg, adding clinician-delivered elements
- Qualitative studies of participants’ experience with the intervention

(Cochrane Review, 2009)
Negative Irish Study of Peer Support for Diabetes

- Cluster randomized trial, 30 practices
- Peers identified by GPs and practice nurses
  - Type 2 diabetes for >1 year
  - Generally adherent to treatment and lifestyle
  - Capacity and commitment to undergo training
- Training 2 evening 90 minute sessions
  - Diabetes self-care
  - Emphasis on confidentiality

Smith SM et al. BMJ 2011;342:d715
Negative Irish Study, cont.

- Intervention: 9 face-to-face group meetings over 2 years (education about diabetes care)
- Patient sample: mean baseline A1c 7.2
- Powered for a difference of 0.9% in A1c (and other outcomes)
- Mean attendance was 5 visits
- 18% attended none (RNs called repeatedly)
- No difference in any outcome
Key Challenges

- Need a theoretical model
- Recruitment—setting, qualifications, selection process
- Motives/incentives to participate
- Training—preparing materials, setting, teachers, duration, evaluation
- How much freedom to add personal style, beliefs
More Challenges

- Type of peer intervention – face-to-face group or pair, phone, mail with follow-up
- Oversight – ongoing support during intervention
- Reducing drop out
- Communication among peers and office
- Patient confidentiality
Lessons from Other Peer Coach Interventions
Peer Support for African-Americans with Uncontrolled Hypertension

- RCT of peer coach phone calls every other month (3 calls) alternating with office-based visits to trained office staff (2 visits)
- 2 academic general medicine clinics
- Theory of Planned Behavior (attitudes, social norms, and perceived behavioral control)
- Peer recruitment
  - Lists of African-American patients with mean controlled HTN over 2 years
  - Physicians, NPs review and nominate
  - PI called nominees (nights, wkends) to review study and assess interest
  - Focused on older persons who were not working
Training Program

- Two half day sessions, meal
- Community leader from AHA, lead peer coach
- Content pre-reviewed by community advisory board
- Engaging, educational slide shows
  - Epidemiology
  - CHD risk factors
  - Barriers to reducing risk factors
  - Community solutions
  - Patient communication skills – engaging
  - Teach aspects of motivational interviewing
High Risk and Not Natural!

- High calorie or low nutrition
  - Fried chicken or fish
  - Salty hi fat - Chips, ham, wings
  - Sodas, fruit juices, sugared ice tea or lemonade
  - White bread, white rice, and white pasta
  - Butter, mac and cheese
Tips for Eating Out or on the Go

- Don’t give in to unhealthy foods when on the go!
  - Order baked, grilled, broiled foods not fried
  - Get two appetizers instead of main course
  - Salads (a low fat dressing on the side) and vegetables not fries
  - Choose fruit or share a dessert
Practice, Practice

- Script guides (loose guide, awkward initially)
- Brochures from AHA
- Mock phone calls with lead peer coach and/or clinicians
- After first patient call – debriefing, support
- 3 monthly conference calls or face-to-face meetings to share successes and frustrations
Peer Coach Retention

20 invited

12 trained

5 out early

6 cont.

5 long-term

3 more trained

5 women and 3 men
Reducing Drop Outs

- Prescreen, practice calls, push comfort zone
- Make sure they have the time
- Avoid people with multiple comorbidities – get sick!
- Replacements from volunteers for professional societies (but may be zealots)
- Don’t overburden, average 3 patients at once (except lead peer coach), 11 per year (33 calls)
- More money (only $20 per call)
- MUST facilitate patient contacts
- Part-time job for a fabulous lead peer coach
- Lots of help for questions, concerns
“I liked the idea that someone who might be dealing with the same issues as I [have] could benefit from some of my triumphs as well as some of my low points... and to be able to just talk to them, not using medical terms and all of that other stuff. I thought it would probably benefit both the person and myself.”
“They [patient-clients] find it fascinating that somebody cares enough to call them, [and] that their doctors are interested in them enough to have people call and say “Are you working out?” …”What are you eating?”

“You’ve just got to hang in with them because the doctors can only deal with so much and the nutritionist can only deal with so much, so it takes some other help…to give them that extra push they need.”

Peer coaches thought that their advice was far more practical than that of the physician
More Motives

- A way to help to the community
- Personal rewards gained from helping others
- Passionate about giving back to their own physician who had helped them
- Personal benefits – improved their own self-management, learned a lot
- Invaluable support from the lead peer coach
More Rewards

“One of the great rewards was the fact that normally I am not a very outgoing person, but I can have a conversation with a total stranger and feel that I connected with them...they feel that someone cares...and it keeps me on track. I’m much less likely to deviate from my own program...to me, this is like saving someone’s life.”
Suggestions to Improve

“I’d like more time for peer coaches to get together and sit down and talk, to discuss their strong points and their weak points, to hear each others’ difficulties.”

“It would be helpful to have more comprehensive knowledge) about the person...to customize it, to give him something that seems to be right for him.”

Unanimous frustration with the need to make multiple attempts to establish an initial contact, generally successful after that

More support how to deal with people who are needy
Project-based Support

- Research team coordinates
  - Recruited patients, consented, and randomized
  - Obtained extensive contact information
  - Facilitated communication bw peer coach and office-based health educator (phone, voicemail, entered into EMR)

- Lead peer coach
  - Experienced
  - Loves to talk on the phone
  - Loves helping people
Sustainability

- Two year study – can it be maintained with support?
- Unusual to have someone last more than one year
- Part time (professional peers)
- Financial incentive without to great expense
- Camaraderie needed, especially for phone interventions where no personal contact
Behavioral Theory to Structure
There is no improvement, Henry. Are you sure you’ve given up everything you enjoy?
Empowerment Approaches

• Key aim to promote patients’ inherent drive toward wellness and encouraging informed choices and decision-making

• Agenda driven by participants’ interests and concerns—NOT a set curriculum

• RCTs have found improvements in glycemic control, diabetes-specific quality of life, self-efficacy and other patient-centered outcomes compared to controls in multiple settings and populations

Motivational Interviewing (MI)

- Client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence (Rollnick and Miller, Motiv Interviewing 2002)
- The goal is to facilitate fully informed, deeply contemplated, and internally motivated choices, not necessarily to change behavior (Resnicow K, Health Psych 21, 2002)
Mode of Contact
Important
Important
Telephone-Based Peer Support

- Promising to combine elements of peer-led self-management support and telephone-based care through telephone-based peer support

  **BUT:**

  - Patients may be reluctant to exchange phone numbers;
  - Patients may lack the initiative or organization to ensure that contacts are made regularly
  - From a health system perspective, telephone peer support initiatives can be difficult to monitor
  - Few if any have been designed to interface with standard outpatient nursing care
Interactive Voice Response (IVR)-Facilitated Phone System

- Participants contact their partner using a toll-free number and pushing in their own home phone number.

- A password-protected website monitors the calling process (when calls placed, who initiated, how long partners talked).

- If a call is not made within certain period, an automatic reminder telephone call is generated to both participants, and then can link automatically.

- Peer can also use IVR to leave voice mail messages for each other and for assigned care manager at any time (even during a peer call).
Lessons from Reciprocal Peer Support Intervention in Diabetes
Components of 6-Month Reciprocal Peer Support Intervention

<table>
<thead>
<tr>
<th><strong>Intervention</strong></th>
<th><strong>Control</strong></th>
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<tbody>
<tr>
<td>• 3-hour group session facilitated by a care manager and RA</td>
<td>• 1.5 hour session to review A1c, BP, and LDL and educate on care management</td>
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<tr>
<td>• Participants told to call peer partner weekly</td>
<td>• Contact information on assigned case manager</td>
</tr>
<tr>
<td>• Optional 1.5 hour group sessions at months 1,3,6</td>
<td>• Written educational materials</td>
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<tr>
<td>• Peer workbook and DVD</td>
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Peer Support to Complement and Reinforce More Structured Program

Diagram:

- Case Manager
- Peer Support
- Group Visits and IVR
- Peer
Mean A1c Difference of 0.88 Among Subjects with an A1c > 8.0
Implications

Reciprocal peer models can be an effective and efficient approach for helping diabetic patients help each other and themselves.
My Action Plan for Diabetes

People who pick their own goal with support from their health care providers can do better with long term health conditions. Please decide what changes you are willing and able to make right now. What is one change you would like to make during the next few weeks to improve your health?

What will I do?

Some examples of things you can do include:

- Diet
- Physical Activity
- Medications
- Self-monitoring

How will I do it?

When will I do it?

Where will I do it?

The things that could make it hard to achieve my goal are:

My plan for overcoming these difficulties is:

How confident am I that I can make this change?
How Best to Prepare Peers?

- Not a hierarchical model of ‘expert’ peer mentor helping another patient—both are helping and being helped

- Peers have to figure out what works best for them in their calls

- Give some basic guidance to help them get started—in initial face-to-face training, boosters and materials focus on following key points and skills
Key Points

- You don’t have to fix your partner or make things better
  - We’re not trying to turn you into counselors!
  - Often people can solve their own problems when they have a good listener
- It’s okay for you and your partner to have different experiences and opinions
- Try to put yourself in your peer’s shoes—“empathize”
- Try to really listen to what they are trying to say
- Try not to judge or use labels
- Generally, don’t give advice unless asked
- Be supportive
Input from prior participants with diabetes and heart failure who participated in our pilots and piloted script with group of older adults

Reinforce key skills and provide examples to review at home

At one-month visit discuss examples in DVD and time at all group visits discussing how to get peer relationship going

Illustrating ways of encouraging each other with their ‘action plans’

Ways to encourage partner to elaborate
Key Points from Segment

- Illustrated re-adjust overly ambitious action steps
- Illustrated both peer partners in the ‘helping’ and ‘receiving help’ roles
- Showed partners talking about range of issues besides chronic disease management
Patient Perceptions of Peer Support Calls

“A lot of old people with diabetes like us sit around at home and look out the window. We feel sick and pretty useless. I learned things I could be doing to take care of my diabetes from [my peer partner]. But I also felt that I helped him. I enjoyed talking to him on the phone, and it made me feel inspired to do more.”

“Ever since I’ve been in this program, I’ve done much better. I don’t want to have to admit to this guy that my blood sugars are up—it’s peer pressure.”

“I knew that he would be calling me in a few days, so I would either lie to him or would get up on that treadmill and start walking.”
“Before the program I was pretty dubious that the Veterans would open up at all and talk to each other. I was also worried that it would be a lot of extra work for me. I was amazed. Once these guys started talking with each other and sharing their experiences and strategies, if anything it was hard to get them to stop. My main role was occasionally to redirect them when they strayed too far afield from diabetes.”
Kaplan-Meier Time to Event (Failure) Function by Race/Ethnicity

- **White**: 138 (92) 17 (4) 11 (6) 4 (1) 3
- **Hispanic**: 228 (101) 42 (6) 29 (11) 12 (3) 9

Time to Dx 80% H/W ratio: 3.6
Time to Dx 50% H/W ratio: 2.3

Solution: Patient Navigation

Navigator is bridge

Medical Culture & Systems

Patient’s Culture & Community

Patient navigation addresses barriers…

- Financial
- Transportation
- Language
- Culture/race/age biases
- Communication
- Health care system
- Fear

Without it, barriers remain and patients…

- Miss appointments¹
- Delay cancer care until very sick¹
- Seek alternative treatment
- Don’t receive adequate medical treatment

¹Freeman, HP, Muth BJ, Kerner JF. Expanding access to cancer screening and clinical follow up among the medically underserved. Cancer Pract. 1995; 3:19-30

www.redesenaccion.org
Redes PN Intervention

Redes’ test if patient navigation can improve Latinas’ time to diagnosis and treatment

N=300 total patients
(SF, SD, SA, HOU, MIA, NY)

- NW RNC: S.F., 50 patients
- SW RNC: San Diego, 50 patients
- NE RNC: New York City, 50 patients
- SE RNC: Miami, 50 patients
- Central RNC: Houston, 50 patients
- NNC: San Antonio, 50 patients

www.redesenaccion.org
**Redes PN: Qualifications**

- Bilingual/bicultural
- HS degree + preferred college degree + 2-5 years experience in program development and community outreach in local area
- Resident of community
- Reliable transportation
- Flexible schedules
The Redes PN Intervention team trained navigators at a full-day, in-person training workshop in San Antonio. Training followed by 18 hours of topic-specific webinars. Site leaders/coordinators each provided local oversight. Ongoing support via monthly conference calls.

Lessons: PNs DO NOT…

- Get involved w/direct “hands-on” patient care
- Provide assessments, diagnoses, treatments; Opine or judge diagnoses or quality of care
- Give own money to patients or offer to drive them to and from appointments

Lessons: PNs DO…

- Use good communication: Empathy, Engagement, Education & Enlistment
- Get familiar with cultural issues: Familismo (Familism); Personalismo (Personalism); Respeto (Respect); Spirituality
- Identify potential resources (materials, translation, transportation, etc.)
**Redes PN: Patient-PN Contact**

- Contact (at a minimum):
  - Reminders for all medical appointments
  - Monthly phone call to check on patients

- Additional contact was frequent, but varied depending on case

- Some patients more PN-dependent than others:
  - More dependent patients tended to be monolingual, unfamiliar with health care system, have unreliable transit, limited social support, and other social needs
# Redes PN: Top Problems for Navigated Patients

<table>
<thead>
<tr>
<th>Problem</th>
<th>%</th>
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<tbody>
<tr>
<td>1. Getting the health information you needed</td>
<td>96.4</td>
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<tr>
<td>2. Understanding what you were being told</td>
<td>94.6</td>
</tr>
<tr>
<td>3. Knowing who to call when you had a question</td>
<td>91.3</td>
</tr>
<tr>
<td>4. Understanding the medical tests you got</td>
<td>89.3</td>
</tr>
<tr>
<td>5. Easy for me to reach</td>
<td>89.3</td>
</tr>
<tr>
<td>6. Involved you in decisions about your health care</td>
<td>85.7</td>
</tr>
<tr>
<td>7. Dealing with paperwork</td>
<td>85.7</td>
</tr>
<tr>
<td>8. Making medical appointments</td>
<td>80.4</td>
</tr>
</tbody>
</table>

Source: Unpublished *Redes En Acción* data.
Problems for navigators

- Patients often hard to reach (unreliable phone numbers for them, relatives; busy schedules)

Problems for intervention

- Some patients missed appts due to work schedules
- Limited number of techs to do mammograms at a given time
- Clinics sometimes lacked bilingual desk personnel, physicians
- Issues with patients lack of insurance
- So successful that other doctors, patients sought use of PNs
The Patient Navigator Manual: Developing and Implementing a Patient Navigator Program

Section 1: What is patient navigation?

Section 2: Is patient navigation right for your organization?

Section 3: How do you build/implement a navigator program?

Templates/Resources

Find manual at: www.redesenaccion.org
6-Step Decision Guide: Is PN Right for Your Group?

1. Assessing Organizational Need
2. Budgeting (i.e., navigator’s salary, supplies, phone, mileage, educational materials)
3. Training
4. Developing Internal Systems
5. Developing Navigation Support Materials
6. Navigation Accountability

Find manual at: www.redesenaccion.org
Find our Patient Navigation Manual and join our Latino cancer research network:

www.redesenaccion.org
redesenaccion@uthscsa.edu
Additional Slides
Social Network and Professional Support

Supportive Relationships

Social Relationships (social/lay support)

Professional Relationships (professional support)

Embedded Social Networks

- Family Members/Friends
- Natural Lay Helpers (church members, co-workers, neighbors)

Created Social Networks

- Self-help Groups/One-to-One (no/limited professional involvement)
- Support Groups/One-to-One (professional involvement)
- Paraprofessionals (extensive training and professional involvement)

Peer Relationships (provision of peer support)
Possible Mechanisms

• Sharing experiences with others undergoing the same medical tasks can be an effective means of gaining mastery of tasks

• Assimilating new knowledge and appraisals through mutual exchange of experiences may occur more effectively when presented by peers with whom individuals identify and share common experiences

• Providing support to others can lead to health benefits comparable to—or greater—than receiving support

• A key mechanism by which peer support may be effective is to ‘activate’ patients by encouraging them both to give and receive support
Prior Research on Peer Support Models

- Face-to-face peer-led group visits and training sessions can improve outcomes (Wagner EH, *Diab Care* 24, 2001; Lorig K, *Med Care* 39, 2001)

- Effective models include peer outreach and are linked to structured training and support programs (Heisler M, *Fam Prac* 27, 2010)

- Two Cochrane reviews called for the need for high-quality evaluations of peer support models (Dale, *Cochrane Review* 2008; Doull, *Cochrane Review*, 2005)
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
Peers: Assist with Care Coordination

- Conduct outreach and case finding
- Help patients navigate the health care system
- Bridge cultural and language barriers between patients and health care
- Coordinate care/services
- Provide translation
- Assist with applications and referrals for insurance or other services
Peers: Assist with Individualized Assessment & Tailored Management

- Assess needs of patients
- Assess readiness to change, level of literacy, other life influences on their ability to self manage
- Individualize education and support
- Provide services in non-traditional settings, e.g., home visits
Peers: Collaborative Behavioral Goal-Setting & Problem Solving

- Help patients set and achieve specific behavioral goals
- Help problem solve to overcome barriers
Peers: Education and Skills for Managing a Chronic Disease

- Conduct outreach and recruitment for educational services
- Lead (or assist with) culturally appropriate and accessible self-management training and education
- Teach/reinforce self management skills
Peers: Assist with On-going Follow-up and Support

- Identify needed resources
- Develop relationships with community organizations
- Provide information and support to clients regarding available community resources
- Advocate for needed services
- Develop capacity within communities to support healthy behaviors
Peers: Facilitate Linkage to Community Resources

- Identify needed resources
- Develop relationships with community organizations
- Provide information and support to clients regarding available community resources
- Advocate for needed services
- Develop capacity within communities to support healthy behaviors
A More Intensive Peer Mentor Training Model
RCT in Ypsilanti and CHASS of 15 months of peer-led drop-in weekly groups and telephone outreach

Peer leaders are patients who completed diabetes SM training

24 hours of training in group facilitation and communication

Tang et al, Pat Ed Couns 79, 2010
Figure 1: Timeline for Peer Leader Training (PLT)

- **PLT Development**
  - CQI-1
  - CQI-2
  - CQI-3
  - CQI-4

- **PLT-Development**
  - PLT-Recruitment

- **PLT Implementation**
  - Formative Evaluation
  - Summative Evaluation

Timeline:
- 0
- 3
- 6
- 9
- 12
- 15
- 18
- 21
- 24

MONTH MONTH MONTH MONTH MONTH MONTH MONTH MONTH MONTH MONTH
Training Program Components

- **Knowledge acquisition**
  - ADA’s nine core diabetes education topics

- **Skills development**
  - Empowerment-based facilitation
  - Active listening
  - 5-step behavioral goal-setting process
  - Making an action plan

- **Experiential learning**
  - Facilitation simulations
  - Playing the role of “peer leaders”
Peer Mentor Teaching Approaches

- Group brainstorming
- Group sharing
- Skills building
- Role-plays
- Pair and share
- Lecturette
- Peer Leader simulations
- Paired Peer Leader facilitation simulations
- Self-graded Quizzes
Use of Technology to Extend Reach of Peer Supporters
Web and Email-based Peer Support Programs

- Internet-based support groups and discussion boards  (Zrebiec JF, *Diab Ed* 31, 2005)

- Internet versions of successful self-management programs  (Lorig K, *Med Care* 34, 2006)

- E-community (peer support) components to Internet-based interventions  (Richardson CR, *J Med Internet Res* 12, 2010)
A review of the use of mobile phone text messaging in clinical and healthy behaviour interventions

Jin Wei*, Ilene Hollin* and Stan Kachnow

*Healthcare Innovation and Technology Lab, New York, USA; †Indian Institute of Management, New Delhi, India

Summary
We reviewed the literature on the use of text messaging for clinical interventions. Studies were selected using keywords related to health and behaviour modification. Sixteen were randomized controlled trials, nine were randomized controlled pre-post comparison studies and three were feasibility studies. The frequency of messaging ranged from multiple messages daily to one per week. Significant improvement was noted with interventions and six reported significant improvement with interventions. The overall conclusion is that text messaging is an effective and feasible intervention. It is likely to be cost-effective, with high acceptance and adherence.

Evidence acquisition:
An electronic database search was conducted in March 2008. Studies were selected using keywords related to health and behaviour modification. The evidence synthesis was conducted using Cochrane Library search strategies. Of the 33 studies identified, 22 were randomized controlled trials, nine were randomized controlled pre-post comparison studies and three were feasibility studies. The frequency of messaging ranged from multiple messages daily to one per week. Significant improvement was noted with interventions and six reported significant improvement with interventions.

Evidence synthesis:
Of the 33 studies identified, 22 were randomized controlled trials, nine were randomized controlled pre-post comparison studies and three were feasibility studies. The frequency of messaging ranged from multiple messages daily to one per week. Significant improvement was noted with interventions and six reported significant improvement with interventions.

Conclusions:
This review suggests that text messaging is an effective and feasible intervention. It is likely to be cost-effective, with high acceptance and adherence.

Mobile phone-based interventions for smoking cessation (Review)

Whittaker R, Borland R, Bullen C, Lin RB, McRobbie H, Rodgers A
Recent References

**SGIM Workshop 2011 –Tips about Using Patient Navigators/Promotores**

**Barbara J Turner MD, Amelie Ramirez DrPH, Michelle Heisler MD**


**Selected Reviews**


