PARTNERS *in* HEALTH

How public health and primary care can work together in prevention


I'm Irish

THE TIME IS RIPE FOR COLLABORATION

In spite of having many common objectives related to overall improvement of community health, the primary medical care and public health systems largely function independently.

However, due to a variety of factors, medicine and public health are becoming increasingly dependent on one another in achieving their missions.[1] Primary care is becoming increasingly complex; health care resources are becoming gradually more constrained; prevention is difficult to carry out in the current reimbursement system; and chronic care management is becoming increasingly crucial to carry out effectively. Combined, these trends argue for primary care medical practices to reach out and partner with other health resources available in most communities.

From the public health perspective, an aging population and success at controlling many infectious diseases have made prevention and management of chronic disease the pre-eminent concerns of public health.

Partnerships between medicine and public health are particularly attractive for managing chronic illnesses, providing preventive healthcare, and improving overall population health, given the mix of health-related skills and resources maintained by each type of organization.[2] Models of such cooperation already exist; by engaging in various types of collaborative relationships, some primary care and public health organizations have implemented joint strategies to effectively address chronic disease and preventive health behaviors.

MODELS OF PARTNERSHIPS

Areas in which some public health departments and primary care practices have already collaborated include:

- Coordination of clinical care with health education, case management, and/or social services;
- Quality improvement initiatives (e.g., diabetes care collaboratives);
- Use of clinical practices as sentinels to identify community health problems (e.g., influenza);
- Community campaigns (e.g., health fairs);
- Provision of counseling and other preventive care services by health department personnel to patients referred by physicians; and
- Patient referral agreements from health departments to physician offices for ongoing care.

SHARED GOALS BETWEEN PUBLIC HEALTH AND MEDICINE

Public health agencies and primary care physicians share many common goals, so promotion of partnerships between these two traditional "silos" can enhance the mission of each.

Reasons why such partnerships are desirable include:

- Both disciplines are concerned about the direction of the health care system;
- Both are under increasing pressure to demonstrate that their activities improve health outcomes;
- Both are under increasing economic constraints; and
- Both are becoming increasingly interdependent because of shifts in populations, clinical services, and financing streams.

ABOUT THIS MANUAL

The purpose of this manual is to provide public health departments with guidance on developing successful collaborations with primary care physicians.

Public health departments are organized at the state and county level in all states; their activities vary, but their overall goal is to preserve and improve the general health of the population. Assuring primary care and preventive services for indigent persons, women and children, and older persons is the area of their mission in which they share the greatest common interests with primary care physicians.

Primary care physicians include family physicians, general internists and general pediatricians. These generalist physicians practice in a number of settings, most prominent of which are a) for-profit private practices, which can range from small offices with as few as one provider to large multispecialty groups; b) not-for-profit community health centers, federal or state-supported clinics that tend to target poor and traditionally underserved populations; and c) settings affiliated with hospitals or other providers of inpatient care, which can be either proprietary or not-for-profit.

Today, many primary care physicians employ and/or work collaboratively with nurse practitioners and/or physician assistants and have multiple staff to provide nursing and administrative support. Thus, this manual addresses *primary care medical practices* and not just primary care physicians.

This manual is meant to be an evolving resource that will reside at **www.partnersinhealth.unc.edu** and be updated periodically.

PREVENTIVE HEALTH BEHAVIORS:

A PARTICULARLY OPPORTUNE AREA FOR COLLABORATION

Public health and primary care share a common goal to improve health. Preventable behaviors, including tobacco use, poor diet, risky alcohol use and physical inactivity account for two-thirds of all deaths in the United States (US).[3] Patients with these behavioral risk factors are ubiquitous in the community and present to primary care offices every day. Jointly addressing preventable health behaviors has the potential to make a significant impact.

The chronic care model,[4] originally developed as a strategy to manage chronic disease, has been more recently identified[5, 6] and adapted to prevention.[5, 6, 7] Some potential areas of synergism between public health and primary care include the chronic care model areas encompassing self management support and community resources.[4] With public health's focus on health promotion and disease prevention and primary care's shortage in these two areas of the chronic care model, the time is ideal for collaboration.

At the primary care level, brief clinical interventions (e.g., counseling patients to quit smoking) have demonstrated benefits.[8] The best evidence for health effects from dietary change involve persons who have other risk factors or suffer from heart disease, hypertension, hyperlipidemia, diabetes or obesity.[9] Risky drinkers are at high risk for adverse effects and are often amenable to behavior change.[10] Reduced alcohol consumption in this group has been shown to decrease emergency room visits, health care expenses and legal problems.[11] All people benefit from moderate activity.[12] Priority populations, who may particularly

benefit from activity include people with obesity, hypertension, diabetes and pre-diabetes.[13]

At the public health level telephone support is effective for helping tobacco users quit.[14] There is strong evidence for individually adapted health behavior change programs for physical activity.[15] Public health promotion activities, such as a tobacco quitline and physical activity and nutrition programs, are examples of applying the current evidence. A typical primary care office visits last only 15-20 minutes, and there is often not enough time to address preventive behaviors.[16] Primary care physicians are encouraged to use community resources to supplement their health behavior change advice; however, mechanisms to facilitate this are lacking.[1] Tools that facilitate referral to external resources could potentially help clinicians focus health behavior change efforts on identifying individuals at risk, and providing a brief motivational message and could ultimately decrease the amount of time that clinicians spend on health behavior advice.[17] A coordinated approach between public health and primary care provides a synergistic opportunity to address these behaviors.

"My interest is in trying to keep my patients healthy, but also looking at the overall health of the community, and trying to look and see why things are happening. Our affiliation with the health department helps that."

Dr. Joe Fesperman, Wilkes County Family Health Center

STRATEGIES FOR PARTNERING WITH PRIMARY CARE PRACTICES:

HOW TO MAKE IT WORK

The 10 Rules of Successful Partnerships

1. Identify a major community need.
Effective partnerships are often formed in response to a community need. This may begin with a community assessment designed to identify and address local health needs, or it may take the form of a readily apparent community health crisis, such as high rates of childhood obesity or unintentional prescription drug overdoses. Regular review of local health statistics can help identify areas of need and guide the formation of effective partnerships.

2. Agree on a shared mission that is in line with the interests of both partners.
A shared mission, vision, values and goals are the foundation of successful partnerships. Both public health and primary care have a similar goal of improving health, with public health addressing this goal more at a population level and primary care addressing it more at an individual level. At the beginning of the partnership, it's important to identify a mission that is a win-win for both partners.

"The shared mission is really the health of the public. That's what both groups care about and that's what both groups are working towards. Partnerships are most efficient when both sides understand what each is able to bring to the table."

Dr. Marcus Plescia, North Carolina Division of Public Health

3. Communicate efficiently and effectively.
Effective communication is essential to developing and sustaining any successful partnership. Key points include using multiple methods of communication, establishing effective methods from the beginning and having regular communication that does not create time pressures.

At first, face-to-face meetings are essential to build trust and to be sure that everyone agrees on the mission, goals and structure of the partnership. Occasional face-to-face meetings throughout the partnership help maintain these connections. Routine communication, however, should be in whatever manner is most efficient and typically is electronic (email, phone or fax).


WE KNOW IT'S HARD TO QUIT SMOKING.
WHEN YOU'RE READY TO TRY, WE'RE HERE TO HELP.
UNC
Stop
With
it's easier
you think!
Duke Stop Smoking Clinic
Skin Patch

Physicians often need to be educated about what public health has to offer. Researchers have recommended that physicians use community-based resources, including health education classes, support group meetings, and information sources such as interactive web sites, to support health behavior change among patients.[17] Patients expect primary care physicians to direct them to such resources. However, many practicing physicians are unaware of available resources to which their patients can be referred. Clinicians may also lack the means to efficiently direct patients to community resources.

By marketing their services through phone, email, flyers, informational packets, face-to-face meetings and informal communication, public health professionals can make it easier for physicians to become aware of and understand how their services could benefit their practice and their patients.

Determine modes of communication up front. When working with a busy physician's office, it's important to identify the most effective means of communication at the beginning of the partnership and develop an understanding of the physician's preferred method of regular communication. This will make communication more efficient and increase the likelihood of keeping physicians and their practice staff informed and engaged. Modes of communication may include written communication (e.g., email), telephone or individual or group meetings. Communication can be formal (e.g., official letters, written documentation) or informal (e.g., a quick phone call).

"Partnering with local physicians is a challenge because I think that in respect for the physician's time, folks like me sometimes will err on the side of saying, well, they're too busy. They've got busy practices; they don't really have time for us. But actually we have to communicate proactively – I find myself having to push myself out of my comfort zone, take a deep breath, give them a call, walk up to them at church or in the community or on the greenway and talk about these public health initiatives and just remind them about public health and their role in its success."

Beth Lovette,
Wilkes County
Health Director

Communicate regularly. You should maintain constant communication among partners, using both informal and formal methods to anticipate challenges, solve problems, resolve conflicts and assess progress. A good approach includes a combination of periodic meetings where all stakeholders come together, augmented by conference phone calls, email and faxes. Such an approach provides an opportunity for constant and consistent communication while also accommodating busy schedules.

4. Define roles and responsibilities.
In order for a partnership to work smoothly, it is helpful to have clear roles and responsibilities for each member. It minimizes confusion and ensures that the day-to-day functions of the partnership are carried out effectively if all participants know what is expected of them.

If an activity does not have someone responsible, determine how the work will get done. If there is more than one person responsible, determine how they will both work together.

Formalize your partnership with a memorandum of understanding. A memorandum of understanding is an agreement between two parties in the form of a legal document. It is not fully binding in the way that a contract is, but it is stronger and more formal than a verbal agreement.

5. Evaluate from the beginning.
By evaluating your program both in terms of how well you carry it out (process) and how well it works (outcomes), you'll be able to make the necessary changes over time to improve your program activities and maximize its effectiveness. You should plan for evaluation when you first begin designing the partnership, rather than waiting until the middle or the end. Plan to assess the success of the partnership and the program activities, as well as the impact of the program on preventive health behaviors. Integrate evaluation into your program using the following strategies:

- Make sure there is adequate funding for the evaluation;
- Link all program activities to desired outcomes, so the program's intervention and impact can be assessed;
- Determine up front what data (i.e., indicators) and data sources are needed so that you get the information needed to answer your evaluation questions. Common short-term indicators of impact include knowledge, skills, behaviors and attitudes, and more long-term measures include changes in morbidity and mortality. Indicators may also include system level changes, such as policy changes that can influence public health;
- Collect baseline data. This will allow you to measure change due to partnership implementation. One example of the framework is the RE-AIM model (see Resources).[18] You need to know where you started to know what has changed;
- Continue to evaluate, if feasible, after the project's completion to show evidence of impact over time; and
- Share the successes of your program to ensure sustainability. Start by identifying the audience with whom you wish to share program successes (e.g., funders, potential funders and partners, program managers, program participants, community members, policy makers, media). Reassess target audience at periodic intervals throughout the life of the partnership.

6. Build solid relationships.

Successful relationships are the building blocks of all sustainable partnerships. Building person-to-person relationships establishes respect, trust and facilitates conflict resolutions. Often relationships must be built before anything else gets done on a project. It's essential to build relationships with people one-to-one if you want them to become involved in your partnership.

When you plan a project, you need to include the time it takes to build relationships into your plan. It's also important to establish relationships before you need them. This puts you in a better position when you are ready to approach someone about participation in a partnership and makes others more willing to respond to your ideas.

Relationship building can occur during meetings, but also in other informal ways.

How do you build relationships?

Here are some basic tips for getting your relationships off the ground.

1. *Build relationships one at a time.* There are no short cuts. Sending out a newsletter or email helps you keep in touch with many people, but it's no substitute for getting to know a real person.

2. *Be friendly and make a connection*. This may seem self-evident, but a friendly word or smile can make someone's day. Try to find something in common.

3. *Ask people questions*. People usually enjoy talking about themselves and sharing their opinions. Ask people about themselves and then take the time to listen attentively.

4. *Tell people about yourself*. People won't trust you unless you are willing to trust them. Tell them what you genuinely care about and what you think.

5. *Go places and do things*. To build relationships, you have to go where the people are: picnics, conferences, events, fundraisers, parties, playgrounds, little league games, greenways, etc.

6. *Accept people the way they are*. You don't have to agree with them all the time in order to form a relationship with them.

7. *Overcome your fear of rejection*. Most people suffer from a fear of rejection. If you want to form relationships, plan on being rejected some of the time. You will be rewarded the rest of the time with the new relationships you have made.

8. *Be persistent*. It can take a while to win trust. You can almost always form a relationship if you stick with it.

9. *Invite people to get involved*. People want to become part of something bigger than themselves. Many people are looking for an opportunity to meet other people who share common goals.

10. *Build multiple relationships within and across organizations*. Staff turnover is a reality in every organization. Often, we cultivate a relationship with one person, and if they leave the organization, we have to start over. Ensure that this doesn't happen by forming strong relationships with multiple individuals within and across organizations.

11. *Celebrate your successes*. Finding time to meet with your partners informally to celebrate successes, no matter how small, will help cultivate relationships and motivation.

Adapted from the Community Toolbox. For more information on relationship building, visit The Community Toolbox at http://ctb.ku.edu/en/.

7. Identify a leader on both sides.
Having a leader or local champion in both the public health and primary care sides is a lynchpin of successful partnerships. These leaders can speak positively about the partnership to others in their organization. In a medical practice, the leader may be a staff member who is invested and passionate about prevention. This person, or someone designated by that person, can be the "point person" for community resource referrals.

Effective collaborations require at least one "champion" or leader in both the health department and the primary care practice. Champions help to secure the leadership, resources, visibility, buy-in, commitment and shared mission of all partners. An effective leader can reside at any level within the health department or physician's office, but needs to be passionate about the project topic. If the champion is not in a leadership position, he/she will also need supportive "buy-in" from supervisors.

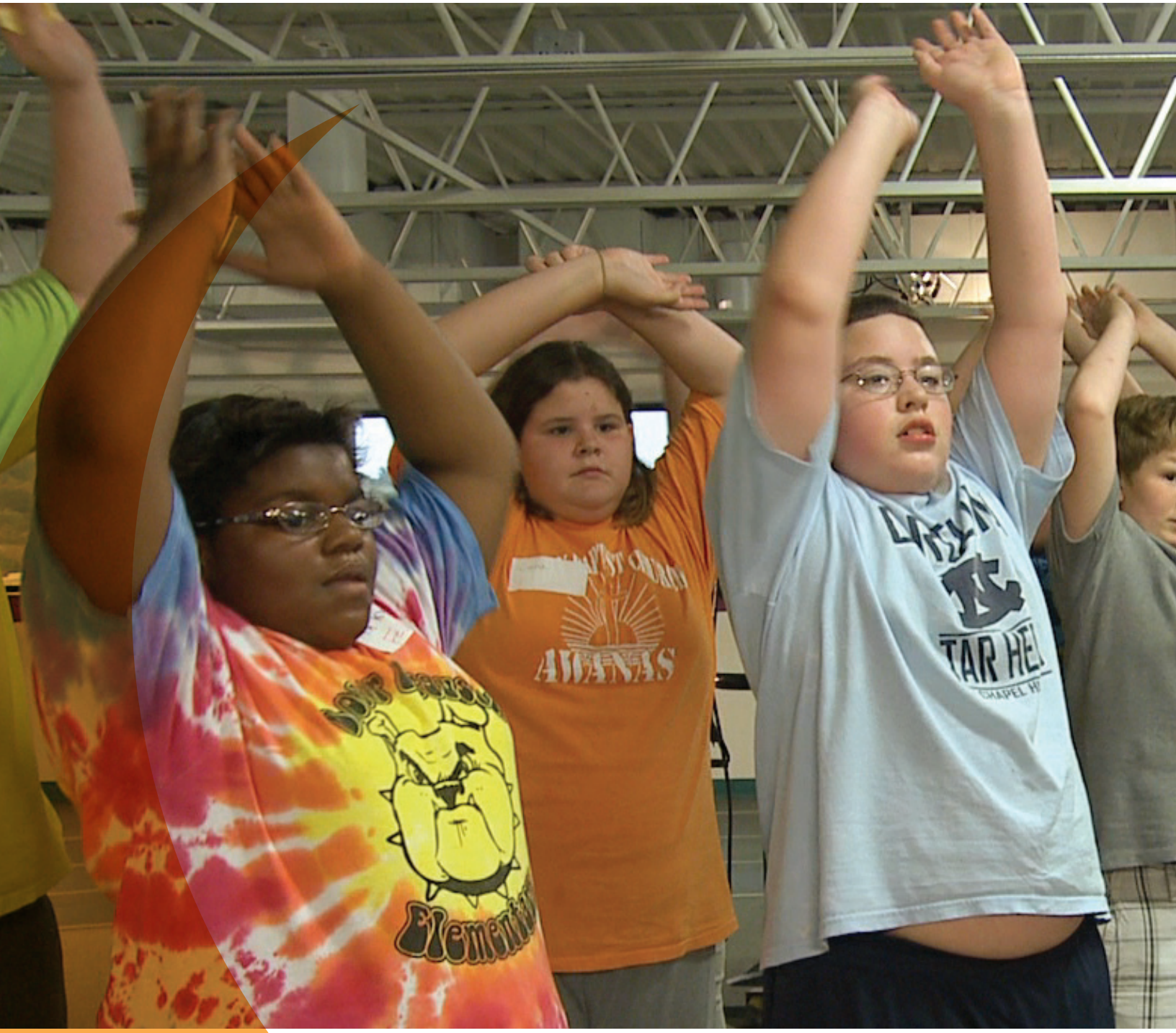
The leader will be responsible for maintaining the group's focus and effectiveness. They may either take on a part time/full time permanent role or transfer responsibilities to a new leader or group of leaders once the project is underway. The leader should sustain the group's interest and momentum and clearly demonstrate the need for communication and coordination. Where relationships have not fully developed, the leader may need to make additional efforts to ensure commitment and participation from the full range of partners. An effective leader is someone who can provide enthusiasm, support and inspire action from everyone involved.

8. Program implementation.
A partnership should build a realistic plan of action that meets community needs. Developing an action plan for creating and carrying out the planned activities will help all parties adhere to the partnership's goals and objectives of the partnership. An action plan also provides a tool for measuring the progress of the project in comparison with the original program design and recognizing potential problems as they arise. Monitor the implementation process as part of the overall evaluation to identify and help resolve problems, provide feedback to partners and ensure that programs are being implemented in line with their original intent.

9. Make it easy.
Making partnerships appealing, easy, and efficient for busy physicians and their staff is often the best way to foster collaboration. Be organized and prepared, provide the necessary tools and training so that the practice staff can easily carry out their role in the partnership. Make sure they understand how the partnership can benefit them, and let them know what resources will be available throughout the life of the partnership. Offer to make presentations to staff or provide information on other successful collaborations.

"You have to look for local champions from both sides of the partnership. Good partnerships are about good leadership. When you have physician leaders who see the importance of looking outside of the walls of their clinic, that makes a huge difference."

Dr. Marcus Plescia


AWANAS
TAR HEI

10. Plan for sustainability.

Some degree of ongoing financial support is needed to initiate and sustain partnerships. Occasionally, funders will encourage collaboration between public health and primary care; this brings these groups with similar goals together to work on an issue. Financial incentives can also bring primary care clinics to the table.

Financial limitations are often responsible for the break-up of successful partnerships. Therefore, it is critical that you make sustainability a high priority from the early stages of the partnership, well before new funding is needed. Revisit the partnership's mission and consider broadening the focus, if appropriate, to take advantage of additional funding opportunities and engage new stakeholders. Remember to keep the focus on the needs of the community and continually assess how your partnership can best meet those needs.

"Hopefully, when the grant money runs out, we'll have enough of a motivated community to figure out how to keep offering this important service for the kids that are at risk."

Beth Lovette

COMMON PITFALLS

- Failing to find time to meet, time to share resources or time to provide to services.
- Budget and financial challenges. There is limited funding for paying or being reimbursed for preventive care services which can create a disincentive for partnership.
- Staff turnover. When key participants on the public health or primary care side leave their positions; this disruption threatens the momentum of the collaborative relationship.
- Poor communication strategies.
- Lack of buy in or motivation from one group.
- Inability to demonstrate evidence of program effectiveness through lack of proper evaluation.

NORTH CAROLINA CASE STUDIES:

MAKING THE CONNECTION

Studies find favorable attitudes toward referring patients to exercise classes, quitlines.[19, 20, 21]

Throughout North Carolina, multiple collaborative partnerships have been formed to address chronic disease and preventive health behaviors. Some examples of local and state level partnerships include:

ENERGIZE! PROGRAM

Location: Wilkes County, NC
Purpose: To identify youth aged 10-18 who are at risk for type 2 diabetes. The ENERGIZE! Program is designed to provide children and their families with an evidence-based program to establish a good foundation for healthy choices.
Activities: A twelve week program with regularly scheduled workouts with instructors at the local YMCA, and six nutrition classes for both children and their parents.
How started: BMI studies in Wilkes County revealed that over 50% of sixth graders were overweight or at risk for being overweight.
How supported: Grant funded.
Role of health department: Intake of referrals, set up schedule and coordinates program.
Role of primary care physician: Refer patients, children, who are at risk for type 2 diabetes.
Additional partners: Wilkes County YMCA.

WILKES COUNTY CHRONIC PAIN INITIATIVE

Location: Wilkes County, NC
Purpose: To address high rate of unintentional prescription drug overdose deaths in Wilkes County (4 times the state average), many of which are rooted in chronic pain.
Activities: Development of a chronic pain toolkit, training for local physicians and other community partners in the identification and management of chronic pain and prescription drug use.
How started: Through Community Care Network of North Carolina.
Role of health department: Develop chronic pain toolkit, provide on-site training to local physicians treating chronic pain and educate community members on the dangers of prescription drug abuse.
Role of primary care physician: To provide patient assessment and support through use of the chronic pain management toolkit and training.
Additional partners: Community Care Network of NC, faith community, local school system, civic groups, local hospitals and pharmacists.

"This is the first generation of kids that will likely not live as long as our generation because of the problems with childhood obesity. The ENERGIZE! Program is an evidence-based, multi-disciplinary approach and it's proven to work."

- Beth Lovette, on the ENERGIZE! Program

NORTH CAROLINA TOBACCO USE QUITLINE (1-800- QUIT NOW)

Location: North Carolina (statewide)
Purpose: To assist North Carolinians in tobacco use cessation.
Activities: Free statewide telephone-based coaching service to support smokers in quitting tobacco use.
How supported: Jointly funded by the NC Health and Wellness Trust Fund and the NC Department of Health and Human Services, Tobacco Prevention and Control Branch, and the Centers for Disease Control.
Role of health department: Assist with promotion and management of Quitline and provide physicians with fax referral and other cessation resources.
Role of primary care physician: Assess patient readiness to quit smoke and send fax referral form to Quitline if appropriate.

To learn more about the North Carolina PIH Case Studies, please view the video online at

WWW.PARTNERSINHEALTH.UNC.EDU

EXAMPLES OF PARTNERSHIP:

APPROACHES TO IMPROVING PREVENTION

- Physically locating a public health professional, paid by the health department, in a physician's practice to carry out clinical, public health, and care coordination services.[22]

- Development of tools and databases for primary care physicians to facilitate an increase in proportion of patients referred to community agencies for assistance with health education and health promotion counseling, either by an academic group[17] or as part of a planning process in Australia[23] or by a health department, or by a coalition of agencies and specialty societies.[24]

- Public health detailing: Having public health staff conduct short, unscheduled visits to primary care offices to distribute educational materials ("action kits" containing provider information, patient education materials, and samples of nicotine replacement products) as part of a campaign dedicated to smoking cessation.[25]

- Donation of volunteer time by practicing physicians to a free clinic, health fair, adolescent clinic, community-wide immunization program, or other activity sponsored by a public health agency to improve access to care to underserved and/or uninsured persons.[24]

- Formation of a partnership between a nonprofit family health clinic and a county health department whereby the two agreed to operate primary care and traditional public health clinics jointly, with staff working side-by-side but under separate governance. The two agencies provided patients with a one-stop health and human services center and a commonly shared case management system.[24]

- Implementation of a television or radio series designed to disseminate a public health message about the community's leading health risks through interviews with and/or presentations by practicing physicians and/or academic physicians.[24]

- Disease surveillance through use of primary care practices as sentinels to identify and report electronically incident cases, and to in return receive informational updates and data summaries from the health departments. This has been especially effectively implemented in influenza surveillance. [26]

- Development of walking trails and/or other health education programs by health departments in concert with primary care physicians, with physicians being provided with specialized prescription pads to refer patients to those resources. [26]

- Screening by primary care physicians to identify high-risk patients, who are then referred to public health agencies for counseling. One example is a pediatric practice that, upon identifying a child as above the 95th percentile for weight, obtained consent from the parent to refer the child (and parents) for nutrition and activity counseling. [26]

- Implementation of regional community health networks by a state Medicaid program, in which community physicians, hospitals, health departments and departments of social services work together to achieve long-term quality, cost, access and utilization objectives in the management of care for Medicaid recipients. Case managers are provided, who target the highest service utilizers in target areas such as high risk maternity care and diabetes. [27]

RESOURCES

Effective Clinical Partnerships between Primary Care Medical Practices and Public Health Agencies
www.ama-assn.org/ama/pub/category/4642.html

Workgroup to Evaluate and Enhance the Reach and Dissemination of Health Promotion Interventions
www.re-aim.org

The Chronic Care Model
www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2

The Robert Wood Johnson Foundation Prescription for Health
www.prescriptionforhealth.org

The Community Toolbox
http://ctb.ku.edu/en/

Contributing writers:

- Katrina E. Donahue, MD, MPH
- Julea Steiner, MPH
- Philip D.Sloane, MD, MPH
- Kathryn Kramer, PhD

Partners in Health is a project of the University of North Carolina Department of Family Medicine.

Acknowledgements:

Support for this publication was provided by a grant from the Robert Wood Johnson Foundation®. This work developed from The North Carolina (NC) Prevention Collaborative. This collaborative was formed as part of the RWJF Prescription for Health: Promoting Healthy Behaviors in Primary Care Research Networks.[28] This program promotes screening, counseling, community resource use and behavior change in primary care patients by targeting physical inactivity, smoking, unhealthy diet and risky drinking in adults and adolescents. As part of the NC Prevention Collaborative, practices were linked to the state health department and local cooperative extension agency for community resources. This program provided one of the first opportunities for the practices to work with local county health department health promotion leaders and/or cooperative extension agents. A nurse consultant, employed by the NC Division of Public Health, helped facilitate these connections.

In addition, we especially want to acknowledge:

- American Medical Association
- Cecil G. Sheps Center for Health Services Research, Chapel Hill, NC
- North Carolina Division of Public Health, Chronic Disease and Injury Section
- Wilkes County Health Department
- Wilkes County Express YMCA
- Wilkes Family Health Center
- The Splinter Group
- Figure 8 Films

REFERENCES

1. Lasker RD. Medicine & Public Health: the power of collaboration. New York: New York Academy of Medicine; 1997.

2. Halverson PK, Mays GP, Kaluzny AD. Working together? Organizational and market determinants of collaboration between public health and medical care providers. Am J Public Health. Dec 2000;90(12):1913-1916.

3. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA. Mar 10 2004;291(10):1238-1245.

4. Wagner EH. Chronic disease management: what will it take to improve care for chronic illness? Eff Clin Pract. Aug-Sep 1998;1(1):2-4.

5. Glasgow RE, Orleans CT, Wagner EH. Does the chronic care model serve also as a template for improving prevention? Milbank Q. 2001;79(4):579-612, iv-v.

6. Barr VJ, Robinson S, Marin-Link B, et al. The expanded Chronic Care Model: an integration of concepts and strategies from population health promotion and the Chronic Care Model. Hosp Q. 2003;7(1):73-82.

7. Green LA, Cifuentes M, Glasgow RE, Stange KC. Redesigning primary care practice to incorporate health behavior change: prescription for health round-2 results. Am J Prev Med. Nov 2008;35(5 Suppl):S347-349.

8. U.S. Preventive Services Task Force. Counseling to Prevent Tobacco Use and Tobacco-Related Diseases: Recommendation Statement. November 2003. Agency for Healthcare Research and Quality, Rockville, MD. www.ahrq.gov/clinic/3rduspstf/tobacccoun/tobcounrs.htm

9. Behavioral counseling in primary care to promote a healthy diet: recommendations and rationale. Am J Prev Med. Jan 2003;24(1):93-100.

10. Fleming MF, Mundt MP, French MT, Manwell LB, Stauffacher EA, Barry KL. Benefit-cost analysis of brief physician advice with problem drinkers in primary care settings. Med Care. Jan 2000;38(1):7-18.

11. Fleming MF, Barry KL, Manwell LB, Johnson K, London R. Brief physician advice for problem alcohol drinkers. A randomized controlled trial in community-based primary care practices. JAMA. Apr 2 1997;277(13):1039-1045.

12. U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. www.health.gov/paguidelines (accessed January 2009).

13. Rollnick S. Behaviour change in practice: targeting individuals. Int J Obes Relat Metab Disord. Feb 1996;20 Suppl 1:S22-26.

14. Strategies for Reducing Exposure to Environmental Tobacco Smoke, Increasing Tobacco-Use Cessation, and Reducing Initiation in Communities and Health-Care Systems www.cdc.gov/mmwr/preview/mmwrhtml/rr4912a1.htm"

15. Guide to Community Preventive Services: Promoting Physical Activity www.thecommunityguide.org/pa/pa.pdf

16. Zyzanski SJ, Stange KC, Langa D, Flocke SA. Trade-offs in high-volume primary care practice. J Fam Pract. May 1998;46(5):397-402.

17. Flocke SA, Gordon LE, Pomiecko GL. Evaluation of a community health promotion resource for primary care practices. Am J Prev Med. Mar 2006;30(3):243-251.

18. www.re-aim.org (Accessed December 2008).

19. Ackermann RT, Deyo RA, LoGerfo JP. Prompting primary providers to increase community exercise referrals for older adults: a randomized trial. J Am Geriatr Soc. Feb 2005;53(2):283-289.

20. Bull FC, Schipper EC, Jamrozik K, Blanksby BA. How can and do Australian doctors promote physical activity? Prev Med. Nov-Dec 1997;26(6):866-873.

21. McEwen A, West R, Owen L, Raw M. General practitioners' views on and referral to NHS smoking cessation services. Public Health. 2005;119:262-268.

22. Burton OM. Community-level child health: a decade of progress. Pediatrics. Apr 2005;115(4 Suppl):1139-1141.

23. Harris MF, Hobbs C, Powell Davies G, Simpson S, Bernard D, Stubbs A. Implementation of a SNAP intervention in two divisions of general practice: a feasibility study. Med J Aust. Nov 21 2005;183(10 Suppl):S54-58.

24. Lasker R, Abramson D, Freedman G. Pocket guide to cases of Medicine and public health collaboration. New York: Center for Advancement of Collaborative Strategies in Health, New York Academy of Medicine; 1998.

25. Larson K, Levy J, Rome MG, Matte TD, Silver LD, Frieden TR. Public health detailing: a strategy to improve the delivery of clinical preventive services in New York City. Public Health Rep. May-Jun 2006;121(3):228-234.

26. Sloane PD, Bates J, Donahue KE, Irmiter C, Gadon M. Effective Clinical Partnerships between Primary Care Medical Practices and Public Health Agencies. www.ama-assn.org/ama/pub/category/4642.html

27. Steiner BD, Denham AC, Ashkin E, Newton WP, Wroth T, Dobson LA, Jr. Community care of North Carolina: improving care through community health networks. Ann Fam Med. Jul-Aug 2008;6 (4):361-367.

28. www.prescriptionforhealth.org/ (Accessed December 2008).


www.partnersinhealth.unc.edu