

Applying the Planned Care Model To Intimate Partner Violence

Implementing what was formerly called the Chronic Care Model can improve an organization's response to this widespread problem

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ABSTRACT

Purpose: This article presents the steps for organizing a health organization's response to intimate partner violence (IPV) according to the Planned Care Model (PCM). IPV is common and costly and results in poor physical and mental health outcomes for victims and their families. Because most care is not acute, a planned approach that crosses systems may result in more comprehensive and higher quality care. Community collaboration with IPV agencies is especially critical. The health care organization must make IPV a priority and set policies and systems to identify and manage patients, train staff, and measure, monitor, and provide feedback on outcomes. Other key PCM components include: practice design — design

systems to identify and track victims, stratify risk, and coordinate care; evidence-based decision support — choose validated IPV screening questions and guidelines for identification, management, and referral and make them available in a systematic way with ongoing assessment and feedback to providers and other members of the health care team; patient self-management — self-management materials should be selected and disseminated to those working with IPV victims; and data information systems — these should support a confidential patient registry and efforts to audit and provide feedback about identification and referral efforts. Process and outcome measures based on the management guidelines and protocols should be developed and monitored, and the results disseminated.

Conclusion: Adapting PCM for the management of IPV stretches the traditional acute approach to IPV of screen-identify-refer. It expands the PCM into new realms, including embracing new partners, trying innovative ways to measure return on investment, grappling with ethical dilemmas, and designing a multifactorial evaluation across systems.

Key words: domestic violence, intimate partner violence, chronic care model, planned care model.

INTRODUCTION

Intimate partner violence (IPV) is a common and costly problem (Tjaden, 1998; Wisner, 1999; Ulrich, 2003; CDC, 2003). In medical offices and clinics, 14% of female patients have reported physical abuse by an intimate partner in the past 12-months and 37% disclosed lifetime prevalence. Departmental rates of IPV in the past year in female patients: 17% in the ED, 13% in OB/Gyn, 9% in primary care, 8% in pediatrics, and 36% in addiction/recovery (McCloskey, 2005). IPV is more common than many diseases for which health plans routinely screen: breast cancer, cervical cancer, and diabetes.

Nationally, IPV costs exceed \$8.3 billion, which includes \$460 million for rape, \$6.2 billion for physical assault, \$461 million for stalking, and \$1.2 billion in the value of lost lives (Max et al. 2004). Female victims at an HMO cost \$1,775 (1995 dollars) more than nonvictims. This included hospitalization, general clinic and mental health services, and out-of-plan referrals (Wisner, 1999). Another HMO study reported that victims' costs were 2.3 times the costs of nonvictims (Ulrich, 2003). A study of Medicaid expenditures found that the expenditures of victims of severe IPV, 12% of the sample, were double

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that of nonvictims, or a mean of \$6,262 (1997 dollars). These victims had triple the physician costs, double the physician claims, double the hospital costs and one third more pharmaceutical costs than nonvictims (Coker, 2004).

IPV also affects work productivity. Victims of severe IPV lose nearly 8 million days of paid work — the equivalent of more than 32,000 full-time jobs — and almost 5.6 million days of household productivity each year (CDC, 2003).

Victims have poorer physical health than people who are not abused, and they are commonly seen for such chronic conditions as headache, irritable bowel syndrome, and chronic pain (Campbell, 2002a; Coker, 2002; Campbell 2002b). Mental health conditions are also more common among IPV victims. Symptoms of post-traumatic stress disorder occur five times as often in IPV victims as in the general population; depression (two to four times); alcohol dependence and abuse (up to three times); anxiety (three times); and suicide ideation and attempts (up to four times) (Golding, 1999). IPV during pregnancy results in poorer outcomes for both the mother and infant (Jasinski, 2004).

Recognizing the prevalence and morbidity of IPV, medical organizations encourage clinicians to ask patients about IPV (ACOG, 1999; ACP, 1986; AMA, 1992, AAP, 1998). To date, much of the provider training about IPV has focused on screening, identifying, and referring (FVPE, 2002). However, in many medical settings, especially ambulatory clinics, care of the IPV victim is a process; it takes time for the victim to come to terms with the abusive relationship and to decide how to respond. This requires ongoing management by the provider, demanding many of the skills and supports needed for managing chronic illnesses (Zink, 2004a).

Since IPV may often be a chronic problem, much of the care can be

planned as nonemergent care (Chamberlain, 2005; AMA, 2005; Campbell, 2003; Sharps, 2001). Identifying and managing IPV is viewed as a quality-of-care issue because failing to identify abuse and make the appropriate referrals can lead to extensive medical workups and costs as well as poor care (Lachs, 2004; Rhodes, 2003; Ferris, 2004). As a result, the Joint Commission on Healthcare Organization Accreditation has standards that address IPV victim identification and management (JCAHO, 1992). Qualitative studies overwhelmingly conclude that IPV victims want to be asked about IPV, even if they do not disclose a history of IPV, and they want IPV resources available in the health care setting (Gerbert, 1999; Nicolaidis, 2002; Rodriguez, 1996; McCauley, 1998; Zink, 2004b; Zink, 2003). However, evidence reviews, including the U.S. Preventive Services Task Force, are equivocal about the effectiveness of IPV screening within health care (Nelson, 2004; Ramsay, 2002; Wathen, 2003). These reviews do cite some positive outcomes, so routine screening for IPV remains controversial (Holt, 2003; McFarlane, 2001; Sullivan, 1999; McCaw, 2002; Short, 2002). Further research and evaluation is needed to augment the current evidence base for screening and intervention programs.

Clinicians and policymakers currently rely on best clinical practice to guide implementation of many, if not most, systems of care (Feinstein, 1997). The Planned Care Model (PCM), formerly called the Chronic Care Model, is one popular approach that reorganizes the system of care to improve the management of a variety of chronic illnesses, including both evidence-based and best practices. PCM improves patient outcomes and reduces health care costs (Bodenheimer, 2002). Funding organizations encourage the use of the PCM for research initiatives, for prevention efforts, and for addressing chronic dis-

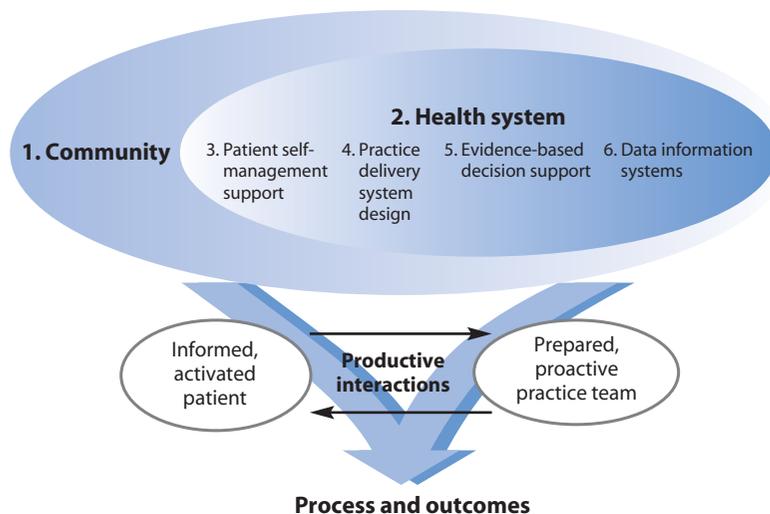
eases in the clinical setting (Stanton, 2005; AAFP, 2005; Glasgow, 2001; IHCI, 2005). While IPV is not a disease, the PCM may be useful for managing this condition (Nicolaidis, 2006). The Institute of Medicine report on family violence called for the use of systems-change models to move beyond education to behavior and practice change (IOM, 2002). The purpose of this paper is to examine how PCM might be applied to IPV.

There are two important differences in applying PCM applications to IPV, compared to chronic illness conditions such as congestive heart failure or asthma. First, the IPV patient does not have control of the abuser's behavior. Taking steps to create safety, especially ending the relationship with the abuser, is the most dangerous time, and the victim is at the greatest risk of being murdered (Campbell, 2003). The victim/patient can choose her/his responses to the abuse — for example, tolerate it, call the police, attend a support group, or seek a protection order, but unlike elements of self-care in chronic disease, there are some elements that the victim cannot control. Secondly, IPV does not lend itself to the randomized controlled trials that are the gold standard for evidence-based approaches, and as a result, IPV research is often based on other research designs (Lachs, 2004; Nelson, 2004; Ramsay, 2002; Wathen, 2003).

COMPONENTS OF THE PLANNED CARE MODEL AND THE CARE OF IPV VICTIMS

Figure 1 on page 56 illustrates an adaptation of Wagner's Chronic Care Model for IPV (Wagner, 2001). The community component is particularly critical to IPV, since social service and advocacy agencies often provide many services for a family living with IPV (the victim, the perpetrator, and the exposed children). Health care organizations may collaborate with these agencies as well as with

FIGURE 1
Overview of the Planned Care Model



Source: Wagner EH. Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness? *Effective Clinical Practice* 1998;1:2-4.
 «<http://www.improvingchroniccare.org/change/model/components.html>» Verified 2/5/2007

worksites. For example, some domestic violence agencies provide onsite services in emergency departments, or a health plan may work with an employer to launch IPV awareness for employees that lists local resources.

The health organization's role is to make IPV a priority by setting policies and systems to identify and track IPV; train staff; and measure, monitor, and provide feedback on outcomes (See Table 1). We discuss each of the components of PCM in light of IPV.

PRACTICE DESIGN

Designing policies and systems within the health care system to support the planned and ongoing efforts of a health care team managing the patient is essential to PCM. With IPV, systems designed to identify victims, stratify risk, and coordinate care are needed. Adopting a policy that encourages adolescent or adult patients to be seen alone for some part of the visit will create the privacy needed for inquiring about IPV or other sensitive concerns. This saves the provider the time of asking the par-

ent, spouse or friend to leave the room. At present, less than 10% of clinicians routinely ask about IPV. Training, feedback, and system support do improve clinicians' identification rates (Waelen, 2000; Thompson, 2000a).

Efforts to improve and sustain clinician identification are important, but given the high occurrence of IPV, other methods of identifying victims are important. Employing validated screening tools at every opportunity will help to assess the extent of the problem.

For example, health plan staff members could screen during phone support services for such issues/conditions as health risk assessments, pregnancy care, and disease management programs (e.g., high utilization, chemical dependency, chronic pain, or asthma). Victims are usually high utilizers of health care resources and may already be targeted for medical management interventions. If IPV has not been identified, then a factor contributing to the condition is not being addressed.

Risk stratification is needed to characterize unique risks and to pri-

oritize safety and care plans. Some victims live with low-level verbal abuse that takes an emotional toll. Others are threatened with physical attack and are at risk for serious injuries. Many victims minimize the abuse as a way of coping, which can make it difficult to assess the level of risk (Campbell, 2004).

The PCM approach may be unnecessary for some victims (Nicolaidis, 2006). Case management may be appropriate for patients who disclose the abuse and want help. This might include victims with physical injuries and those who are high utilizers of health care resources.

After case identification, developing and maintaining a patient registry in a confidential manner is needed for long-term follow-up. Asking about abuse is not harmful; the patient decides how to respond. The management of the response, however, is critical. Therefore, the registry needs to be protected with the same layers of security that protect patients with HIV, mental health diagnoses, or sexual issues.

EVIDENCE-BASED DECISION SUPPORT

Easy access to the expertise necessary to care for patients is essential to the PCM. With IPV, validated screening questions, modes of assessment (computer vs. spoken vs. written tools), and guidelines for identification and referral have been developed (Brown, 1996; Sherin, 1998; McFarlane, 1991; Zink, 2006; Feldhaus, 1997; Furbee, 1998; Rhodes, 2006; ICSI, 2006; Dienemann, 2003; FVPE, 2002; AMA, 2006). Despite the availability of comprehensive systems for IPV, only 10% of managed care plans have them, and only 28% have screening policies or guidelines (FVPE, 1999).

Research shows that on-site advocacy services in clinics and hospitals increase identification rates and referrals (McCaw, 2002; Short, 2002). Other educational interventions have

TABLE 1**Health care organization's role in planned care model for victims of intimate partner violence**

Overview	Set policy, identify leadership, provide training opportunities for clinicians and staff members. Reinforce these with support materials, reminders, incentives, and feedback.
Practice design	Design systems to identify patients, stratify risk and coordinate care Patients identified by multiple methods: <ul style="list-style-type: none"> • Standardized screening questions and tools (spoken, written, electronic) in primary care, urgent care, emergency department, hospital, behavioral health • Electronic medical record algorithms • Nurse line and care/disease management screening • Health claim algorithms Patients stratified by risk: low/moderate/high Standardized referral tools and processes for primary care providers, hospitals, emergency and urgent care centers, behavioral health care providers Coordination of services across clinical specialties, health care organization divisions and departments, and with collaborative community agencies
Evidence-based decision support	Select appropriate best practice guidelines for IPV. Create critical pathways with management and referral options. Train clinicians and staff members and create reminders and incentives so guidelines are implemented and sustained.
Patient self-management education	Adapt educational materials and resource guides so that they are appropriate for victims of IPV. Assist clinicians and staff in respecting the victim/patient's unique situation and time line.
Data information systems	Create a confidential IPV registry so that patients can be tracked. Set up systems for clinician and staff audits. Create data systems for generating reports to monitor progress: <ul style="list-style-type: none"> • Reports to clinicians and staff about identification and referral • Confidential data sharing for collaborating agencies • Quarterly reports to employers

resulted in better process of care such as increased rates of provider inquiry, increased patient satisfaction with being asked, and increased case finding (Waalén, 2000; Thompson, 2000a).

Making these decision supports available to clinicians in a systematic way with ongoing feedback has proven successful in PCM approaches for smoking cessation and mammography screening (Glasgow, 2001). Health organizations will need to identify appropriate evidence-based guidelines, develop performance standards, and provide ongoing assessment, feedback, and evaluation of what works and what does not.

PATIENT SELF-MANAGEMENT EDUCATION

An essential part of PCM is having materials that can be distributed to patients to enhance their self-efficacy. Many of the tools that have been created for IPV victims, such as safety assessments, safety planning, and referrals to domestic violence services, are "self management," but providers may be less familiar with them than they are with tools like the food pyramid or lifestyle changes for hypertension. Research demonstrates the effectiveness of using some of these tools as interventions. Discussing safety behaviors with a nurse helped women to adopt more of the behav-

iors (McFarlane, 2001). Helping victims obtain orders of protection decreased the occurrences of abusive incidents (Holt, 2003). Post-shelter advocacy and counseling improved quality of life, social supports, and increased depression and self-esteem scores for women as well as elevated self-worth scores for children (Sullivan, 1999). Health organizations will need to decide which approaches to implement, which services to provide in house, and which to refer to community agencies.

A variety of self-management materials already exists for patients with conditions such as depression, irritable bowel syndrome, and chronic

pain, conditions frequently associated with IPV (Campbell, 2002b; Nicolaidis, 2006). These educational materials will need to be adapted and evaluated so that they meet the needs of victims. Also, it is imperative to identify the unique barriers for each patient, such as fear of losing children, cultural mores, and financial challenges. Assistance must honor the patient's unique situation (Davies, 1998).

DATA INFORMATION SYSTEMS

Clinical data systems that provide timely, useful data about individual patients and populations of patients are a critical component of PCM. IPV data systems should support a confidential patient registry and efforts to audit and provide feedback about identification and referral efforts. Feedback might include rates of inquiry about IPV, missed screening opportunities (e.g., a patient with chronic headaches not asked about IPV), and assessment of the thoroughness of documentation of a patient's injuries or situation and the completeness of the safety assessment. Data needs should be planned from the onset: outcome measures and data for internal and external reports.

PROCESS AND OUTCOME MEASURES

Process and outcome measures to evaluate management of the targeted condition are essential to PCM. Measures based on management protocols for IPV might include the percent of patients who receive a defined intervention and the percent of patients screened for IPV in various settings, such as primary care, behavioral health, and urgent care/emergency department.

Patient satisfaction with the efforts to identify and manage IPV should be measured. During the last two years, Kaiser reports that patient satisfaction with overall care is linked to Kaiser's efforts to assess patients for

IPV (McCaw, 2002; McCaw, 2005). Other data measures might include baseline direct health care costs per member and indirect costs per member, including lost productivity, days missed from work, and days of disability.

Outcome measures and management will need to be tailored to the patient. Leaving the abuser may not be an option, and leaving does not mean that the abuse will stop. Other outcomes might include adopting safety behaviors, securing an order of protection, decreasing the number of pain medications, improving scores on depression scales, making fewer emergency department visits, and making fewer primary care visits. Setting clinical and financial goals based on the current state of knowledge is important. Ongoing evaluation can guide readjustment of strategies and goals as experience and knowledge grow.

DISCUSSION

Employing the PCM to manage IPV moves beyond the current acute care approach — screen, identify, and refer. Since most patients with IPV present with chronic health problems (Campbell, 2002a; Coker, 2002; Campbell, 2002b; Golding, 1999; Chamberlain, 2005), quality of care may be maximized by coordinating care across the health organization and collaborating with community agencies and worksites. This will stretch the limits of what is already done, create new partnerships, demand financial innovation and the examination of ethical issues, and present a number of research opportunities.

NEW PARTNERSHIPS

Current staff members may not have the skills to manage IPV, and it may not make sense to add new tasks. Advocates at the local domestic violence agencies are skilled in helping victims address their individual hurdles, are less expensive, and have

more time and interest.

Some clinical settings have added advocates from a local domestic violence agency, with grant funding. When the grant ended, the advocate was added to the clinical payroll because of the benefit of on-site services for both victims and clinicians (McKibben, 2000). The health organization should take the first step in reaching out to community agencies.

These partnerships will present challenges: 1) If advocates implement a health organization's interventions, then a method for assuring consistency of services needs to be in place. 2) Confidential ways to communicate and share data between the advocates and the health organization will need to be explored. 3) Mandatory reporting issues will need to be clarified. Health care providers have mandatory reporting obligations for elder abuse and child abuse in all states, but most states do not have mandatory reporting for domestic partner violence (Ramsey, 2001; AMA, 1987; Zink, 2004c; FVPPF, 2002).

FINANCIAL IMPLICATIONS

Financially, this is a largely uncharted area, and the return on investment analysis will need to be innovative. Like depression, both direct and indirect costs and savings should be examined (Rost, 2001; Rost, 2005; Katzelnick, 2000; Nutting, 2002; Wells, 2000). Direct costs means the cost of medical services covered by insurance. Indirect costs refers to the costs of changes in employment productivity, such as a decrease in missed workdays, greater job retention, and career advancement.

As with initiatives such as breast cancer screening and smoking cessation, costs may increase initially because of pent up demand and/or impeded access to care (Thompson, 1994; Wagner, 1995). But the PCM should result in more appropriate health care. For example, treating mi-

grains without identifying IPV may result in less benefit to the overall health and function of patients. Treating headaches and discussing safety is more comprehensive.

It may be worthwhile to examine the costs borne by the family unit, rather than calculating only the individual IPV victim's costs. The literature shows that IPV hurts entire families (Kitzmann, 2003; Coben, 2002). It is possible that aggregated health claim costs for the family may be affected by an IPV PCM approach.

Some of the services necessary for managing victims and their families are largely uncovered by health insurance and are funded by the public sector (e.g., victims' advocacy services, support groups, batterers' programs, programs for children exposed to IPV) or directly by the patient. Health organizations do not need to assume these costs, but will need to work with local agencies to ensure that appropriate services are available for IPV victims and their families.

ETHICAL DILEMMAS

The PCM approach raises a spectrum of ethical issues that will need to be addressed. These include:

- How is confidentiality assured for the victim when the perpetrator is the guarantor?
- What are the mandated reporting obligations for IPV, the overlap between witnessing IPV and child abuse/neglect, and the uncertain boundaries between elder abuse/neglect and IPV?
- When the patient refuses assistance and chooses to live with the abuse, especially if there are safety concerns for the victim or children, what are a clinician's or a health care organization's obligations?

EVALUATING INTERVENTIONS AND RESEARCH

Multifactorial and multilevel ap-

proaches that preserve confidentiality, increase safety, and ensure follow-up are needed (Nelson, 2004; Ramsay, 2002; Wathen, 2003; Thompson, 2002b). Evaluation will require outcomes measures that cross systems. Lessons from using these outcomes will provide the opportunity to figure out what works and what does not and can lead to adjustments with the ultimate goal of improved quality of care. This will require the creative planning and problem solving that has been necessary for constructing management programs for depression (Rost, 2001; Rost, 2005; Katzelnick, 2000; Nutting, 2002; Wells, 2000).

There will be many opportunities for research, such as what are the most effective curriculums and methods for training clinicians and staff that result in behavior change (e.g., inquire about IPV) (IOM, 2002); and what is the effectiveness of interventions for victims in terms of improved lifetime health status, health utilization, health costs, and the preservation of safety and security (AMA, 2005).

This type of research probably will not be individual randomized control trials (Lachs, 2004; Zink, 2005). Experts point out that sometimes randomization is not feasible or ethical in population-based research and that other study designs are necessary (Lachs, 2004; Briss, 2000). Randomized trials are encouraged, where they can be done, and they may examine various interventional components, but the emphasis should be on longitudinal evaluation of the multifactorial and multilevel interventions that integrate care.

Despite the challenges of approaching IPV victims with a PCM, quality of care may be greatly improved and resources better utilized with a care team approach across systems that involves both community agencies and worksite initiatives. It probably makes sense to start with a demonstration project in one depart-

ment, make adjustments from the lessons learned, and then continue with a slow rollout. Adapting a PCM for IPV victims will require the sustained commitment of a few health care organizations to work through the challenges. However, these efforts can move the field forward and provide improved care with better utilization of resources that taps the expertise of community partners in addressing this grave social problem.

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