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Agency Social Workers Could Monitor Hypertension in the Community

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Abstract

Uncontrolled hypertension is highly prevalent, presents without symptoms, and constitutes a major risk factor for atherosclerosis, heart disease, stroke, and diabetes. Several factors impede individuals from adhering to treatment, while others work against physician monitoring and medication adjustment as the condition changes. As family counselors and leaders of self-help and mutual aid groups, social workers are among the best positioned professionals to help individuals, couples, and families improve psychosocial dynamics associated with hypertension, secure support, and overcome barriers to lifestyle changes or medication adherence. An important case is made for training social workers from community social service agencies to engage and guide their clients in accurate self-screenings for hypertension and to refer those with elevated blood pressure for follow-up care.

Keywords

hypertension; screening; community; social work; public health

The lack of visible psychological or psychiatric symptoms in hypertension results in the neglect of this life-threatening physiological stress condition. In this article, I will argue that the efforts by social workers in community agencies to reduce stress and improve coping in their clients should be expanded to the screening and prevention of hypertension. In so doing, social workers will address a widely prevalent biological stressor that reduces the resilience of the person, their family, and the community at large to debilitating and life-threatening conditions. Although the focus here is on the American system, the issues and concerns translate to other Western, developed nations, to nations with Westernized lifestyles, and across private and public health care systems.

Hypertension as a Health Care Quality Issue

The Hidden Public Health Epidemic of Uncontrolled Hypertension

Blood pressure screenings identify specific persons who have high blood pressure that, if lowered, would decrease the risk of developing related health challenges such as heart disease, hardening of the arteries, diabetes, and stroke. Indeed, consistent findings across a number of

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epidemiologic studies and clinical trials support the effectiveness of both prevention and treatment for hypertension, which may eliminate half the future episodes of congestive heart failure, more than a third of strokes (35% to 40%), and at least a fifth of heart attacks (20% to 25%; Neal, MacMahon, & Chapman, 2000).

Unfortunately, despite decades of public health education, uncontrolled hypertension remains a silent, yet major, public health epidemic (Peterson, 2008). Blood pressure screening and the ongoing treatment and control of high blood pressure—with appropriate medication as well as changes in lifestyle, such as weight loss, stress reduction, improved nutrition, and physical activity regimens—are essential components in addressing this epidemic.

We should consider implications at both the individual and population levels. First, on an individual level, blood pressure screenings identify specific people for whom lowering high blood pressure would *lower the risk* of other, related health challenges such as heart disease, hardening of the arteries, diabetes, and stroke. Although these disabling (and potentially deadly) conditions may *not* actually occur in an individual with untreated high blood pressure, it should be noted that at the *population* level, even if a small percentage of those at risk could actually avoid developing these life-threatening conditions, our health care system would accrue billions of dollars in savings.

If these savings were funneled back into the health care system and attracted continuous media attention regarding how the savings had been accomplished, many new opportunities for health promotion conceivably could be harnessed by expanding and giving momentum to public knowledge of, and participation in, this beneficial development. Increasingly, as people witness this phenomenon, they may be more likely to seek out adequate blood pressure control as they grow older, both in the face of ever-expanding evidence for its effectiveness and because they have learned to associate it with better health care funding.

Self-Management Programs for Diet, Lifestyle, and Medication Changes

Although lifestyle changes involving increased exercise and improved diet (presumably with commensurate weight loss) have been associated with significant decrease in hypertension even without use of the medications that have been proven effective (Vogt, 2005), it is important to observe the difficulty most people experience in *sustaining* the level of improved lifestyle that would be necessary to keep hypertension at bay without medication. A recent study found that the DASH (Dietary Approaches to Stop Hypertension) diet—which had been widely touted as decreasing hypertension under experimental conditions—actually was not effective in real-world conditions because patients with high blood pressure were not able to follow it (Mellen, Gao, Vitolins, & Goff, Jr., 2008).

Another consideration involves recognition of a "fact" of aging: in general, arteries harden with advancing age—and it is likely that medication dosage adjustments (or substitution or addition of different medications, alone or in combination) still will be needed as adults grow older—even when lifestyle changes (diet, exercise, eliminating smoking) are enacted (Vogt, 2005).

In light of these challenges, it is essential to find interventions that are actually efficacious. One promising area of focus would involve steering patients toward "self-management programs" in which they self-monitor blood pressure (and thus actively participate in decision making for the management of high blood pressure and/or the conditions associated with it). Such programs showed efficacy for patients with diabetes (based on 12 studies that evaluated control of blood glucose levels) and hypertension (based on 14 studies that evaluated control of systolic and diastolic blood pressures) in separate meta-analyses of randomized controlled trials (Chodosh et al., 2005).

Such efficacious self-management programs can help social workers and health providers move the community toward urgently needed improvement in our health care systems. It is reported that only two-thirds of Americans with hypertension know they have the condition, and that only 58% of those who have it are actively being treated (Natarajan & Nietert, 2003; Rosamond et al., 2007). Furthermore, adequate control over high blood pressure is attained in only 31% of those who have the condition (Rosamond et al., 2007; Hajjar & Kotchen, 2003). As underscored by Vogt (2005), the actual statistics for awareness, treatment, and control of the disease are not much better now than they were in 1979, despite an increased prevalence of hypertension, a general improvement in screening rates, an expanding wealth of available pharmaceutical treatments, and many years of health education efforts and media attention.

Problems in Blood Pressure Screening, Monitoring, and Management

A process evaluation of when and how we measured blood pressure would yield a surprising finding: in the American health care system, according to Vogt (2005), we conduct blood pressure screening considerably *in excess* of the standard recommended by the Joint National Committee (JNC) on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure [based on seven sequential expert panels convened by the National Institutes of Health (National High Blood Pressure Education Program, 1997)]. One study (Vogt & Stevens, 2003) revealed that an average adult health maintenance organization (HMO) member with no history of hypertension or cardiovascular disease received 13 blood pressure readings over a 5-year period of medical office visits, or 2.6 readings per year—more than *five times* the frequency recommended by JNC, which supports screening only once every two years [more frequent screening is recommended only for individuals whose pressure was higher than 130 over 85 (National High Blood Pressure Education Program, 1997)].

A process evaluation would raise the question not only of when blood pressure screenings are conducted, but also *how*. We need to reexamine and compensate for less-than-optimal procedures in medical offices, where blood pressure measurements are often conducted too quickly—and with inadequate quality control [sustained high blood pressure over at least three separate periods is necessary to confirm a diagnosis of hypertension; within each period, it is necessary to obtain multiple measurements with slow deflation of the blood pressure cuff after each measurement (Vogt, 2005)]. When the process is harried and unmonitored, measured pressures can result that are higher—or lower—than the actual level, and the inaccuracy may precipitate either unnecessary treatment or a failure to prescribe necessary treatment. Thomas Vogt has charged:

The U.S. medical culture views blood pressure as a vital sign (that is, we need to take it every time we encounter a patient), but the accuracy of the blood pressure is regarded as irrelevant, and there is a widespread perspective that clinical personnel don't have the time to do it properly. Although proper blood pressure assessment techniques were developed for clinical trials more than 30 years ago, health providers have never been held accountable for applying these standards, and clinical blood pressure techniques have hardly changed in 50 years. We have digital devices and ambulatory devices, but, like mercury sphygmomanometers, they are rarely checked for accuracy, incorrect cuff sizes are frequently used, and the technique is nearly always hasty and inaccurate. (Vogt, 2005, p. 156)

Earlier, Vogt, Aickin, Ahmed, Schmidt, and Hornbrook (2001) had posited that if healthy people were screened properly just once every two years, as recommended by the JNC, savings of \$7.66 per person per year would accrue (based on 1996 dollars), or nationally, about \$2 billion per year.

Of course, an equally important concern involves the question of what happens when patients are not monitored as *often* as they need to be, particularly after they are started on medications for high blood pressure. Patients may continue to have hypertension when they are on medication [this is true, in fact, of nearly a third of patients (Rosamond et al., 2007)]—or conversely, it may be overtreated, but in the absence of adequate follow-up monitoring for blood pressure, their physicians may not detect the ongoing problem and thus may not be able to fix it [i.e., by adjusting dosage or by augmenting or substituting the drug therapy with any of the other myriad possibilities for single medications or for safe combinations of two or three medications (Ho et al. 2008)].

One caveat is that adequate follow-up monitoring may be less beneficial for individuals who smoke, because there is consistent evidence that hypertension medications are less effective in preventing stroke among smokers (National High Blood Pressure Education Program, 2003). Thus, community agencies considering any new programs for follow-up medication monitoring in clients they already serve should seek to target non-smokers, at least initially, in order to build evidence for cost-effectiveness to support formal program development.

Many patients do not adhere to their treatment regimen, especially when it involves stronger doses or multiple medications—neglecting either to refill prescriptions or follow them (e.g., by not taking the medication every day as prescribed, or by taking less than the prescribed amount), and this is complicated by inadequate physician monitoring of hypertension control to detect under-medication *and* overtreatment (determining adherence, adjusting dosages, or adding or substituting medications as necessary; Ho et al., 2008). Interactions of these patient and physician factors constitute important dynamics of hypertension mismanagement.

Problems in shifting to effective and efficient care for hypertension, worsened by a failure of appropriate monitoring, will only be exacerbated by mounting health system management challenges: an increasingly understaffed workforce, slashed funding in connection with the current economic crisis, and an ever-increasing number of older adults entering the already strained system. An additional challenge for hypertension treatment is the lack of health insurance or unaffordable copayments for many individuals. Financial burden may be harder to detect in older adults (Francoeur, 2007), and, therefore, merits particular attention in this difficult economic climate by social workers in community agencies.

Hypertension Management: Opportunities for Social Workers in Community Agencies

Community social workers and social service agencies are uniquely positioned to play important roles in screening for hypertension and in health promotion that could redress some of the dysfunctions of the current health care system and that could increasingly work toward encouraging gradual changes in local health care systems. The social work profession has the opportunity to show that hypertension interventions can be effective, and cost-effective, over time for individuals already being seen by community social workers—who would now screen for hypertension, make referrals to community physicians or nurse practitioners, and provide individual, family, and group counseling for medication adherence and lifestyle changes.

Social Workers, Blood Pressure Self-Screening, and Follow-up Assessment

For *accurate* readings, social workers should learn how to use an approved digital self-monitoring blood pressure device through face-to-face training with selected pharmacists, nurse practitioners, or physicians who follow the procedures in the JNC recommendations. Documented formal training sessions will serve to protect agencies and social workers from ethics charges of misfeasance, or the use of an intervention with inadequate training or lack of

skill (Reamer, 2006). Training sessions for social workers should provide them with opportunities to conduct, read, and record their own blood pressures, and provide instructions, monitoring, and correction to each other. However, in order for social workers and the agency to avoid professional liabilities that stem from physical contact with clients, social workers should not be trained to apply and inflate the blood pressure cuff on clients, but rather to provide clients, or family members, with step-by-step instructions, monitoring, and correction in order to do so themselves. Reminders for social workers and their clients should be posted on any stand that holds a blood pressure device and in agency locations where blood pressures are commonly screened. These large print notes should request that clients: refrain from smoking, drinking coffee, or physical exertion for thirty minutes prior to screening; rest for five minutes prior to screening; not need to go to the bathroom; be seated with the back supported and feet flat on the floor; and be silent during the screening (e.g., Greiver, 2008). The co-participation and development of mastery by clients and family members may be self-empowering, encouraging them to perform multiple blood pressure readings over time, accept social worker referrals to health providers when blood pressures remain elevated, or even purchase a device for use at home.

The most recent blood pressure devices are equipped with memory that can store values and calculate an average from sequential blood pressure readings taken at one- or two-minute intervals at the touch of a button (Pickering & White, 2008); in addition, devices should be equipped with electrical inflation of cuffs and oscillometric detection (Verberk, Kroon, Kessels, & de Leeuw, 2005). Devices with all of these features are considered to provide the most reliable, accurate, and useful data and thus can be recommended for social workers to use with their clients. Only clinically validated devices should be used (for listings, see www.dableeducational.org, www.hypertension.ca/appareilsBP_va.html, and www.bhsoc.org/default.stm). (These devices are certified to be accurate by the Association for the Advancement of Medical Instrumentation, the British Hypertension Society, or the International Protocol for the Validation of Automated Blood Pressure Measuring Devices.) Recommendations for specific models are not appropriate here, especially because no single device has been shown to provide reliable readings across all individuals or types of conditions (e.g., conditions such as atrial fibrillation, and rigid arteries in dialysis patients, may distort accuracy of readings). For most agency populations served by social workers, there are likely to be multiple options that would be appropriate for effective screening. Pharmacists, in particular, can recommend certified devices that would be best for the types of clients seen by the social worker, as well as whether more than one cuff and bladder assembly (small, adult, large adult) should be purchased. Pharmacists and other health professionals can also advise social service agencies how often social work clients should be screened since screening at every visit or encounter may be excessive.

Opportunities for program development may be related to the extent that social service agencies can devote planning and administrative resources to identify and establish mutually beneficial referral networks among community social workers, pharmacists, nurse practitioners, and physicians, as well as dieticians, nurses, and psychiatrists (e.g., Gardner, 2007; Lewanczuk, 2006). Social workers can record average blood pressures on occasions clients are seen, and refer those clients with consistently elevated pressures to nurse practitioners, physicians, and pharmacists for follow-up care. It should be noted that these health providers face built-in incentives to train social workers as pipelines for new streams of health insurance reimbursement for ambulatory visits—as well as hypertension medication prescriptions—on behalf of patients who would not otherwise be seen. These health providers could instruct social workers when to make referrals based on the magnitude and consistency of blood pressure readings, and they could monitor the quality of blood pressure self-screenings by social work clients by conducting follow-up assessments in select clients. Social workers could refer uninsured individuals initially to pharmacists, as well as those who cannot afford copayments

for physician or clinic visits. (In addition, social workers can refer clients who own devices to pharmacists, nurse practitioners, and physicians who can test their devices and monitor their technique to ensure they are accurately self-screening at home.)

The costs of self-monitoring devices are not usually reimbursed (Pickering et al., 2008); however, office-based medical practices, neighborhood health centers, and pharmacies within the social work referral network stand to gain significant numbers of new, reimbursable referrals, or prescription sales, that would not otherwise be realized. The cost-effectiveness of the financial investment by medical practices, pharmacies, health centers, health insurers, and philanthropies in digital blood pressure devices at social service agencies will be especially pronounced since each device will be used to screen hypertension in considerable numbers of social work clients over time. (Of course, the cost-effectiveness to society, taxpayers, health insurers, and employers will be quite pronounced as well given the averted inpatient costs for heart attacks, strokes, and other vascular-related conditions that will be prevented or delayed.) Therefore, social service agencies could negotiate with each medical practice, pharmacy, and health center within the referral network to pay a share towards the cost of each self-monitoring device [ranging from \$80-\$100; a non-standard large adult cuff will be extra (Pickering et al., 2008)].

The share should also factor in a portion of the opportunity costs that agency social workers will assume in taking on this new screening role (i.e., the costs of diverting a portion of the time available for social worker—client interaction into blood pressure measurement as well as the provision and monitoring of follow-up referrals to health providers). Social service agencies will need to think critically and creatively about how to link blood pressure screening with other aspects of service provision in ways that reduce opportunity costs and improve care outcomes, as well as how to balance this demand on social workers, possibly through flexibility in compensation or scheduling. Health insurers and local philanthropies could be approached as well to help cover costs of self-monitoring devices and opportunity costs borne by social workers and the agency.

It is also important to consider that the extent to which blood pressure screening can be "bundled" with other concrete or problem-solving functions performed by agency social workers (such as behavioral case management or screening and assessment of psychosocial problems) may be directly associated with decreased opportunity costs. Potential effects of high blood pressure outcomes on social work objectives and goals for the client should be considered. For instance, even as sustained, elevated blood pressure readings for a particular client could be due solely to an untreated medical condition—and the social worker must confront the client with this real possibility to encourage follow up with a health providerthey might also be fueled by reactions to other stressors, such as frustration intolerance or an aggressive or violent temperament. Thus, even elevated readings that are not related to an untreated medical condition may be useful: the social worker is cued to prompt the client to disclose hidden issues that may be interfering with meeting intermediate psychosocial objectives (e.g., learning how to cope better with caregiving or workplace stress) that are critical to achieve ultimate goals (such as coping well with family caregiving demands, or ceasing to act emotionally abusive toward a partner as a strategy for coping with work difficulties). In addition, teaching family caregivers to monitor their blood pressure earlier in the family member's illness may foster trust in the social worker, increasing the receptivity of caregivers and other family members to grief and bereavement interventions should the illness condition progress, become life-threatening, or result in death.

Social workers in community agencies can instruct and monitor clients in screening their blood pressure at the agency, during home visits, and at neighborhood settings that are already served by their agencies, such as local senior centers and retirement communities. Over 600,000 social

workers, comprising by far the single largest mental health profession (Lynch, 2003; Compton & Galaway, 1999; Gibelman, 1998), are employed across a wide range of agencies and institutions including, for instance, day treatment programs that serve clients with severe mental illness; schools; residential treatment programs for juvenile delinquents; substance abuse agencies; child, marital, and family counseling agencies; senior centers; crisis centers; domestic violence shelters; court systems; prisons; homeless shelters; home health care and hospice agencies; and employee-assistance programs. Many social work clients are coping with past traumas, violence, and/or multiple and chronic stressors—factors that predispose them to the onset or progression of hypertension (Rozanski, Blumenthal, & Kaplan, 1999).

Specific risk factors are especially salient for specific groups of social work clients. Hypertension is more common in both victims and perpetrators of intimate-partner violence (Coker et al., 2002). Alcohol and drug abuse are risk factors that lead to hypertension (National High Blood Pressure Education Program, 2003); in detoxification programs, blood pressure screenings could be compelling tools for showing clients the negative health effects of their addiction, which might encourage improved long-term sobriety in certain individuals. Side effects of anti-psychotic medications eventually precipitate excess weight and diabetes in clients coping with severe mental illness; given shared risk factors for diabetes and hypertension, these clients eventually develop co-occurring hypertension (Which atypical antipsychotic, 2004; Marder et al., 2004). Moreover, higher rates of smoking and dyslipidemia in individuals with severe mental illness also contribute to the fact that these individuals face double the risk of dying from coronary heart disease than the rest of the population (de Leon & Diaz, 2005; Hansen, Jacobsen, & Arensen, 2001; Osborn, Nazareth, & King, 2006). The obesity epidemic in children and adolescents predisposes them to early onset diabetes and hypertension; issues regarding parental or caregiver permission need to be addressed before social workers should consider screening non-adult or cognitively impaired populations that cannot give informed consent. Finally, family caregivers of individuals with disabilities, or with physical or mental health conditions, may neglect their own health as they experience sustained periods of pronounced strain from caregiving. In addition to serving as an indicator that there may be a need to adopt strategies to improve coping with the stresses of caregiving, blood pressure self-monitoring may alert caregivers that unresolved health needs of their own may need to be addressed both for their own well-being and to support their capacity to continue in the caregiving role.

The limitations of blood pressure screenings supervised by social workers need to be acknowledged through reminders that screening values are not necessarily accurate when a single self-monitoring blood pressure device is used across a variety of clients, and it must be emphasized that these screenings should be followed up by referrals to health providers. The blood pressure readings by social workers should provide physicians and nurse practitioners with valuable initial readings as a basis for follow-up assessment by these health providers, which may include confirmational readings using an automated office sphygmomanometer [validated versions are the Omron 907 (White & Anwar, 2001) and the BpTRU (Wright et al., 2001; Myers & Valdivieso, 2003; Beckett & Godwin, 2005)], more intensive morning and evening home blood pressure monitoring over a one-week period (Pickering et al., 2008), and/ or the gold standard of 24-hour monitoring using an ambulatory recording device (Myers et al. 2005). Of course, when clients are already receiving medical or psychiatric treatment, social workers (and clients, when capable) should solicit input and care coordination with current providers (who may not be part of the referral network); plans for program development should carefully consider the resources and protocols for this component. Finally, as part of the training of social workers to instruct and monitor clients and family members as they conduct blood pressure readings, it is imperative to emphasize that it is unethical for social workers to offer medical advice to clients or family members about the causes of their particular elevated blood

pressure readings. Medical advice, even when correct, is outside social work's professional domain of competency and exposes the social worker and agency to legal liability.

Social workers and pharmacists in a referral network should safeguard quality by seeking to ensure that digital and ambulatory devices used by the physicians and nurse practitioners in the network are periodically checked to be accurate; appropriate cuff sizes are always used; and blood pressures are conducted correctly and without rushing. But even more basic than this will be the need to overcome an entrenched tendency to continue using mercury sphygmomanometers (which do not adjust for white-coat hypertension that results in inflated readings), in contrast to automated sphygmomanometers such as the BpTRU, which takes multiple (and averaged) readings over a five minute period when the health provider is deliberately *not* present. Myers (2008) declares that "(t)here will be considerable resistance to abandoning manual BP measurement by physicians and other health professionals" (p. 356). Therefore, social workers should be especially careful in the initial selection of health providers for referrals; programs should build in a mechanism to solicit client impressions in order to provide useful feedback for ongoing quality control.

Informed Consent for the Blood Pressure Assessment Program

As another component of quality assurance, agencies and social workers will need to address various aspects of informed consent for blood pressure assessment programs. Some considerations for informed consent were already introduced in the preceding section; it should also be noted that a strong case can be made for the use of a separate form for informed consent that explains to clients the purpose and limitations of the social worker–directed program of blood pressure monitoring and follow-up referrals to a health provider. This separate form would be used in place of amending the generic informed consent form that covers more conventional social work interventions at the agency. In this section, we discuss five important considerations in the use of a separate informed consent form.

First, the establishment of a trusting relationship between the social worker and client, and the agreement between them about the major focus of their work together, are likely to be viewed as important achievements before social workers would feel comfortable asking any client to participate in the blood pressure monitoring program as a client goal for care. An informed consent form for these contracted goals for care is typically presented in one of the initial sessions or meetings. Therefore, incorporating additional items into the informed consent form that apply to the blood pressure assessment program would be mistimed and confusing. In many cases, the social worker may need additional time to consider how the blood pressure monitoring program could be integrated as a meaningful objective to help the client achieve their personal goals with the social worker; the client may need time to fully appreciate this relationship, and only then may they be sufficiently motivated to participate.

Second, the need for clients to understand the two distinct components of the blood pressure assessment program (i.e., blood pressure self-screening, directed by the social worker, followed by confirmation of the readings by a health provider) is important enough to merit a separate informed consent form. The client or family member should agree to both parts of the assessment if the social worker decides that both are warranted. That is, the client or family member should agree to (1) perform a series of self-conducted blood pressure readings under the instruction, guidance, and correction of the social worker and (2) attend an appointment with a health provider for re-assessment when blood pressure readings are elevated. Clients, and when appropriate, family members should attest that they (1) understand that it is their responsibility to follow up with their current health provider or the health provider offered as a referral and (2) will not hold the agency and social worker liable if they fail to do so.

Third, the informed consent form should make clients aware that while the risk of physical or bodily injury in conducting digital blood pressure measurements is low, clients or family members will not hold the agency and social worker liable should physical injury occur, or if they experience anxiety or other distress as a result of conducting the readings or interpreting the results.

Fourth, the informed consent form should stress that the social worker will have access to the blood pressure readings from the client self-screenings and will keep them confidential—except when readings are considered sufficiently high as to be dangerous or life threatening in which case the agency would immediately arrange an ambulance with paramedics to transport the client for emergency medical care. (Note that lower thresholds for systolic and diastolic readings should be established for this purpose and specified.) Moreover, it should be explained that if the client refuses to accept such care, the ambulance paramedic or other health provider will provide them with information about the risks in refusing or delaying blood pressure reassessment by a health provider and medical treatment. Again, it is clearly important that the informed consent process has explicitly included the client's attestation that they would not hold the agency liable for their own personal decisions in these circumstances.

Fifth, the consent form should inform clients and family members that high blood pressure is only one of several risk factors for heart attack or stroke. Therefore, clients with normal blood pressures may still remain at risk. It should be stressed that social workers are not medical providers and do not have the knowledge base to interpret how the client's medical status and medications influence high blood pressure. For some clients with certain medical conditions (e.g., a history of stroke) or who are taking medications, the healthy range of systolic and diastolic blood pressures may actually be *lower* than the range typically considered to be normal. The informed consent form should emphasize that (1) the program is not designed to identify when these clients are at risk should their blood pressures fall within the prototypical normal range and (2) the client or family member must remain solely responsible for informing the social worker about any differences in the range of healthy systolic and diastolic blood pressures that apply to their circumstances. If a network health provider is scheduled to visit the social service agency on a periodic basis, a program component option discussed in the next section, these clients and their family members should also be encouraged to set up individual appointments.

Social Workers and Health Promotion Interventions

Social workers can also provide health promotional interventions, including couple and family counseling and self-help and mutual aid groups, to encourage lifestyle changes in amenable clients. These social work interventions may be critical components when low-income clients with high blood pressure are referred for follow-up care. In one study, a pharmacy-based intervention was ineffective in lowering blood pressure, and led to worse mental health, in low-income participants (Côté, Moisan, Chabot, & Grégoire, 2005). The authors interpret these findings to mean that low-income participants became anxious when their elevated blood pressure remained unchanged. These results underscore the need for transdisciplinary care involving networks of social workers, pharmacists, and other health providers.

Social service agencies may negotiate that in exchange for new referrals from social workers, one or more health providers from the referral network, such as a nurse practitioner or nurse, will be available on an as-needed basis to consult with social workers for clients with dangerously elevated readings, and to re-assess and refer clients who may need emergency medical treatment. It might also be established that this health provider will also visit the agency on a periodic basis (e.g., monthly; and at different times and days of the week over the calendar year to accommodate client availability)—to provide follow-up assessment and confirmation of blood pressures, medical advice, and arrangements for medical appointments to clients who

have not attended follow-up medical appointments, including referrals arranged by the social worker, or who remain anxious about their blood pressure. This program component could be designed to provide client access to at least one meeting with a health care provider, thereby further reducing liability risks to the agency and individual social workers.

Some may ask why it is not more feasible to assign nurse case managers to perform the initial blood pressure screening for all agency clients since they are already trained to perform blood pressure screenings, experienced in coordinating medical care, and connected to networks of nurse practitioners, physicians, and pharmacists. However, hiring a nurse case manager to conduct screenings with all clients at a specified time would not usually be possible, and even if it were possible, it would not be as cost-effective as coordinating screenings into the schedules of social workers, whose client appointments occur throughout the day. Furthermore, social work clients may avoid or delay initial contact with health providers until they become aware that they have a condition that requires medical treatment; this resistance may be related to factors such as illness denial, fear of medical providers, and financial or health insurance concerns. The coupling of blood pressure monitoring within the context of trusting relationships between social workers and clients, in which stressful psychosocial, familial, and illness dynamics of their lives can be integrated and meaningfully addressed, may encourage clients to conduct their own blood pressure screenings, under the direction of social workers. Clients with sustained elevated readings may then be more willing to follow through on medical referrals arranged by social workers or provided by a health provider on the premises of social service agencies. This programmatic design reflects features of transdisciplinary care that are valued by grant funders and the medical community: in the absence of a preferred provider, other professionals may address client issues to the extent that their own professional training allows, while referring the client to the preferred provider for more comprehensive and thorough follow-up care.

Social work interventions can be tailored to address important concerns of particular groups of clients and family members that remain unaddressed by other health providers. To go beyond the well-publicized findings about heightened risk for life-threatening heart attacks and strokes that may or may not actually occur with uncontrolled hypertension, social workers may be well-positioned to present other research findings—for example, if a social worker explains the linkage of high blood pressure to cognitive decline in older adults (Obisesan et al., 2008)—this might be particularly effective in challenging denial and motivating older adults and their adult children to improve adherence to hypertension medication regimens and lifestyle changes.

Such research findings could inform critical programming components that social workers should incorporate into individual, couple, family, and group interventions for hypertension screening, motivational interviewing (a counseling intervention to encourage exploration and resolve ambivalence), stress reduction, behavior modification, psychoeducation, and illness self-management. [Motivational interviewing, for instance, has been shown to improve blood pressure among persons anticipating coronary artery bypass surgery (McHugh et al., 2001)]. The demonstrated efficacy of self-management programs (Chodosh et al., 2005) discussed earlier suggests that "assisted-management" programs (i.e., with social workers engaging clients who cannot follow self-management programs on their own) could also be efficacious, and moreover, that assisted-management programs may be a means through which agency-based social workers serving numerous clients can move the community toward urgently needed improvement in our health care system. Some programming components may need to be targeted to specific populations—such as heavy smokers, those with co-occurring diabetes, frail elders with multiple illness conditions, or individuals diagnosed with severe mental illness—while others may serve broader populations simultaneously.

Untapped Potential for Program Development and Community Social Work

Program planners need to be vigilant in anticipating barriers that prevent social workers and social service agencies from developing, adopting, correctly implementing, maintaining, and retaining hypertension programs found to be effective or cost-effective. Social service funders, both private and public, have yet to express a willingness to broaden reimbursement beyond mental health services based on clinical diagnoses (Mizrahi & Rizzo, 2008). Therefore, initial efforts in program development may need to seek grant funding for incremental demonstration projects in targeted populations in order to begin convincing funders of their cost-effectiveness.

For instance, hypertension screening and control in individuals with diabetes is so cost-effective in preventing or delaying diabetes complications [up to seventy-five percent of specific types of complications are attributed to hypertension (Sowers, Epstein, & Frohlich, 2001)] that it results in cost savings (CDC Diabetes Cost-Effectiveness Group, 2002). Further, because the major risk factors for hypertension and for diabetes strongly overlap, many individuals with just one of these conditions eventually develop the other condition. Indeed, self-monitoring of hypertension at home by individuals with diabetes has been recommended (Working Party of the International Diabetes Federation (European Region), 2003; Pickering et al., 2008). Thus, a strong argument can be made that demonstration projects, and early stages of program development, should be funded that target hypertension screening by social workers to populations at pronounced risk for diabetes or who are already coping with the condition, such as obese individuals or those receiving anti-psychotic medication.

Routine blood pressure self-monitoring at home is also recommended for individuals with coronary heart disease, chronic kidney disease, or suspected nonadherence (Pickering et al., 2008), and demonstration projects of social work hypertension screening in these groups are also warranted. Hypertension screening by social workers and other health providers may provide the only access to blood pressure self-monitoring devices by those who are poor, uninsured, isolated, or frail, and by disadvantaged minority and other underserved populations. Contributing factors are that some individuals will not adhere to using home devices as intended, and the general lack of reimbursement to individuals who purchase home blood pressure devices (Pickering et al., 2008).

In the current economic crisis, hypertension control and management is bound to deteriorate, especially given the rapidly growing population of employed and unemployed workers without health insurance. It may seem paradoxical, but given this new economic reality, there may now be greater receptivity among public and private funders that community social service agencies should be involved in screening, managing, and triaging clients with uncontrolled hypertension in order to avert much more expensive acute medical events requiring hospitalization. The involvement of social service agencies in screening and self-management programs would serve to integrate them more strongly into the referral network of neighborhood health centers, physician offices, and general hospitals, resulting in greater systems efficiencies as well. A critical component of demonstration projects for personalizing and tailoring social work interventions and referrals consists of asking participants a set of questions about their readiness to change and perceived barriers to change, as Mjelde-Mossey (2005) suggested for community stroke prevention screening in older adults.

Engagement by social workers in community program development should generate valuable opportunities to reconsider and renew social work interventions with individuals, couples, families, groups, and the community at large, and to forge expanded roles in "public health social work." In particular, the involvement of social workers in blood pressure screenings and in health promotion efforts would deepen the social work profession's involvement in the more biological aspects of biopsychosocial assessments, and biological assessments by social

workers would in turn be uniquely informed by more traditional social work strengths in psychosocial aspects of assessment and social service interventions. The efforts by social work to address trauma, reduce stress, and improve coping in clients should be expanded to screen and prevent hypertension as a widely prevalent biological or bodily stress that reduces the resilience of the person to debilitating and life-threatening conditions (especially because it often presents with no *psychological* symptoms). As a field, social work is understandably preoccupied with stress, trauma, and stress disorders linked to more immediate suffering, but the lack of visible psychological or psychiatric symptoms in hypertension results in neglect of this life-threatening physiological stress condition. Social work and related mental health disciplines need to reinterpret theories of stress, trauma, coping, and resilience to better reflect these biological realities, a task that will be facilitated as a wider variety of social service agencies become more fully integrated into referral networks that support the health care system.

Social workers are arguably among the best positioned professionals to assess and intervene "upstream" within the intrapsychic and psychosocial dynamics of individuals, couples, and family systems that precipitate and sustain high blood pressure, work against lasting lifestyle changes, and prevent adherence to hypertension medication regimens. Social workers attend as well to more conventional "downstream" barriers by serving as health educators and providing task-oriented and behavioral interventions, which could also include instructing clients in blood pressure self-screening and providing health care referrals for confirmation and follow-up care. There is untapped scope for social workers to integrate "upstream" and "downstream" approaches for more effective care. The locations of social workers throughout the community, in settings not considered to be part of the traditional health care system, should become attractive to public health advocates and to health insurers who have not considered the unique relationships of social workers with populations at heightened risk for more progressed cerebral, coronary, endocrine, and vascular conditions that stem from hypertension.

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