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Integrating Physical Activity in Primary Care Practice

Running head: Guide to Physical Activity Counseling

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Abstract

Based on a collaborative symposium in 2014 hosted by the Society of Behavioral Medicine (SBM) and the American College of Sports Medicine (ACSM), this paper presents a model for physical activity counseling for primary care physicians (PCPs). Most United States adults do not meet national recommendations for physical activity levels. Socioecological factors drive differences in physical activity levels by geography, gender, age, and racial/ethnic group. The recent Patient Protection and Affordable Care Act (ACA) incentivizes PCPs to offer patients physical activity counseling. However, PCPs have reported socioecological barriers to physical activity counseling and also patient barriers to physical activity, spanning from the individual to the environmental (e.g., lack of safe spaces for physical activity), policy (e.g., reimbursement policies), and organizational (e.g., electronic medical record protocols, worksite norms/policies) levels. The aims of this paper are to: (1) discuss barriers to PCP counseling for physical activity; (2) provide evidence-based strategies and techniques to help PCPs address these counseling barriers; and (3) suggest practical steps for PCPs to counsel patients on physical activityusing strategies and supports from policy, the primary care team, and other support networks.

About half (49.6%) of US adults met the most recent (2008) Center for Disease Control and Prevention's (CDC) Physical Activity Guidelines of at least 150 minutes weekly of moderate or vigorous intensity aerobic physical activity.[1] Even fewer adults met the recommendations for strength training activities on two or more days of the week (23.6% in 2012), and fewer still fulfilled both recommendations (20.3% in 2012). Disparities in physical activity exist by socio-ecologic levels (i.e., individual, social, and environmental levels of influence on behavior), including; geography, gender, age, and racial/ethnic group. Physical activity rates are disproportionately lower among rural vs urban residents, residents of the southwestern region of the U.S. vs other regions, women vs men, older vs younger, and racial and ethnic minorities vs non-Hispanic whites.[2,3] These disparities in physical activity underscore the importance of incorporating patient socio-ecologic contexts, including their families, work, health care systems, and neighborhoods, in physical activity counseling.[3,4]

The recent Patient Protection and Affordable Care Act (ACA) has incentivized physical activity counseling by primary care physicians (PCPs).[5] Physical activity can be promoted at multiple levels as described above. Given the inherent trust that patients have in their PCPs, the PCP can play a central role in delivering effective physical activity interventions. In 2015, an editorial by Berra et.al,[6] has reiterated the overall message from a 2004 editorial by Blair, et.al,[7] which declared, "…Just as weight is addressed in some manner at nearly every physician visit, so should attention be given to recommending the accumulation of 30 minutes a day of moderate intensity physical activity at least 5 days of the week." This paper will assist the role of PCPs in taking advantage of recent ACA incentives to promote physical activity by providing a step-by-

step guide to physical activity counseling that addresses socio-ecological barriers to the uptake of regular and sustained physical activity and leverages community resources that promote and support physical activity.

Despite evidence for the cost effectiveness of physical activity counseling in primary care,[8] only one-third of patients report the receipt of physical activity counseling by their PCPs.[9,10] PCPs face many barriers to counseling their patients on physical activity, primarily due to time limitations, especially when trying to address multiple or complex medical issues. PCPs address an average of three medical issues per patient visit, with slightly higher averages for elderly and diabetic patients.[11] However, PCPs are in a unique position to provide physical activity counseling because of their ability to reach a large segment of the overall population, their role as a trusted source of health information, and the range of other health professionals available within clinics.[12,13]

A multi-level socio-ecologic approach[14-17] to physical activity counseling can be centered in the primary care setting as the PCP could provide a “prescription” (or brief advice) for physical activity to help ready the patient for making changes in their current levels and/or type of physical activity.[18] The socio-ecologic approach can be integrated with the well-known physical activity counseling approach using the 5 As--assess, advise, agree, assist, and arrange-- a mnemonic that describes a sequence of counseling behaviors that are meant to engage the patient in developing a specific, safe, and realistic action plan for behavior change.[12] The 5 As have been used with success for tobacco cessation.[19]

Further, some evidence suggests that physical activity counseling is more effective when delivered by trained counselors, to whom the provider could refer.[10,20-22] The

PCP's time is also used more efficiently by connecting to resources within the practice, particularly among fellow primary care team members. This approach, combined with basic self-monitoring (e.g., wearable tracking devices or paper journals), community resources, and follow-up with the PCP, can enhance motivation and increase self-awareness.[23] External resources like these may be more likely to be accepted if they are suggested by the PCP, since patients tend to trust their PCPs the most for health information.[18] PCPs lack a practical approach to overcoming barriers to physical activity counseling, which may be available by leveraging clinical and community resources. The aims of this paper are to: (1) discuss barriers to PCP counseling for physical activity; (2) provide a multilevel approach using evidence-based strategies and techniques to help PCPs address counseling barriers; and (3) suggest practical steps for PCPs to counsel patients on physical activity.

Evidence for the effectiveness of physical activity interventions in primary care

Findings on the impact of physical activity interventions in primary care have been mixed, due to insufficient follow-up or a lack of clarity about intervention intensity.[24,25] Heath et.al (2012) examined systematic reviews of evidence-based physical activity interventions, which found that more effective interventions addressed multiple levels of change, including the individual, social, and environmental levels.[26] Given the power of a PCP's prescription for physical activity, and the importance of multiple levels of supportive resources, the integration of a multi-level approach to physical activity counseling within primary care has the potential to favorably impact patient physical activity levels.[26]

Barriers to implementing physical activitycounseling in primary care

PCPs face significant challenges to physical activity counseling. Major provider barriers to physical activity counseling include limited time, skills, reimbursement, reach, and routine screening for physical activity.

Lack of provider time

One of the primary barriers to physical activity counseling in primary practice is the lack of adequate time to effectively counsel patients. Patient visits are typically brief and often cover multiple health concerns.[27] A recent study on the effectiveness of using the 5 As for physical activity counseling reported a minimal impact on the overall length of visits (83% spent less than five to six minutes on physical activity counseling).[28] Further, the combination of initial brief counseling with the physician can be enhanced by referrals to other resources, as discussed in a later section, since effective physical activity counseling requires regular follow-up visits and/or contacts.[10]

Lack of provider skills

PCPs often lack the training and skills to provide effective physical activity counseling.[10,27] A recent study estimated that only 10 medical school programs provide training on physical activity, although program content is unstandardized.[9] Because patients tend to place the most trust in health information from their PCPs, and a PCP prescription for physical activity has been found effective in increasing patient exercise, PCPs initiating the conversation with patients may have great impact on their physical activity levels.[18]

Cost/lack of provider reimbursement

Despite the recent recommendation by the U.S. Preventive Services Task Force (USPSTF) for routine obesity screening, reimbursement still poses a significant obstacle

to routine primary care screening and counseling for obesity, of which physical inactivity is a major contributor. Although the Centers for Medicare and Medicaid Services (CMS) now offers coverage for obesity counseling, it must be provided on-site and by high-level primary care providers [i.e., physicians, nurse practitioners (NPs), or physician assistants]. This coverage excludes services provided by other trained health care professionals as well as services provided by phone or in a community setting. This exclusion applies despite evidence that patients have improved their physical activity levels with trained non-physician providers, sometimes with even greater results.[10,20-22] The lack of reimbursement for physical activity counseling for non-obese patients, who are not necessarily seeking weight loss, is a further challenge since physical activity is important regardless of weight status. Due to some ongoing challenges with reimbursement, it may be cost-effective to incorporate community referrals and other resources to supplement provider counseling.[8,29]

Lack of provider reach to at-risk patients

Primary care practices are considered an ideal location for preventive services such as physical activity counseling because of the providers' ability to potentially reach broad segments of the population through patient visits. With Accountable Care Organizations, providers are responsible for a panel of patients, both those seen in the office and those not. By integrating community resources into primary care physical activity counseling, providers are able to also potentially reach individuals who do not regularly seek primary care.

Lack of routine patient screening for physical activity in primary care practices

Physical activity screening is the first part of physical activity counseling, so incorporating routine physical activity screening in primary care would create an opportunity for PCPs to provide physical activity counseling. Moreover, the routinization of physical activity screening will help patients to then see how physical activity is an important indicator of health. The National physical activity Plan supports prioritizing the addition of physical activity as a vital sign, but routine physical activity screening is rare in actual practice.[30,31] Only a few organizations, such as Kaiser Permanente, currently screen all patients for their participation in physical activity.[32] The first A of the 5As counseling framework incorporates regular physical activity screening and charting, alongside the other vitals during the same office visit.

Patient barriers to physical activity

Counseling patients about physical activity may reveal a number of barriers to physical activity including limited time, fatigue, family obligations (especially for caregivers), or other competing priorities.[33] They may be hesitant to try to increase their physical activity if they think that it will be too much of a time commitment,[34,35] if they lack safe paths or open spaces for activity away from traffic or gangs,[36] or if gyms are too far to get to or costly.[12] Patients may also find it difficult to be active if they live in areas where they don't see others being active, feel self-conscious about being active, or do not enjoy physical activities alone.[33,35] The following section describes resources to help address each of these patient barriers to physical activity.

Multi-level approaches to overcome barriers to physical activity and physical activity counseling

Interventions at multiple levels of the socioecological framework can help to overcome many of the barriers described above, namely provider time and training. The PCP and the primary care team can serve as the hub for physical activity counseling, while resources at other levels (e.g., policy, organizations, community) can help patients to enact and sustain changes in physical activity. The following sections describe how providers might utilize these different resources (see Table 1) as well as how they might be incorporated into counseling (see Figure 1).

Primary care practice organizations

Within primary care practices, physical activity screening is the simplest way to begin a conversation about the importance of physical activity (regardless of weight status) by asking patients about their current physical activity levels. This is especially beneficial to providers who may not otherwise be comfortable initiating this conversation with the patient. Additionally, standardizing the inclusion of physical activity screening with each visit can help to emphasize the important relationship between physical activity and health for patients. The MOHR (My Own Health Record) project is an example of how to use routine physical activity screening in primary care to increase physical activity screening, goal setting, and patient perception of improvement.[37] Another example of how to implement practice-wide changes to increase patient physical activity levels is *Move More*, a multilevel physical activity intervention that combines clinic staff, participant group meetings, and health policy changes.[38] Kaiser Permanente's Rx2Move campaign notes that the screening process takes less than a minute (www.kpihp.org/rx2move/).

Primary care teams

Given the limited time that providers have with patients, the use of primary care teams may reduce individual burden and expand the range of expertise available to each patient for physical activity counseling. Depending on available resources, team members can leverage existing chronic disease management programs and well visits, especially with the increased use of patient-centered medical home approaches to patient care.[39] For example, PCPs may work in tandem with other primary care team members so that the NP may administer the routine physical activity screening, the PCP may write the prescription to exercise, the exercise physiologist or trainer may create an individualized exercise plan, and the behavioral counselor may follow-up with the patient and refer him/her to local physical activity resources, depending on patient readiness to exercise and preferred forms of physical activity.[10,22] PCP-based physical activity counseling may be more effective when combined with follow-up and community support; short-term benefits are seen when patients receive follow-up phone calls regarding progress and supplemental written materials.[22]

Individuals

PCPs may also want to discuss physical activity monitoring with patients, especially given the growing popularity of, and advances in, wearable technology.[40-42] Self-monitoring can help patients to assess their current level of physical activity and facilitate goal setting to increase their levels of physical activity. Physical activity self-monitoring tools range from basic pedometers to smartphone apps to wearable devices that can also monitor sleep and heart rate.[43,44] A reported 82% of Americans have a cell phone,[45] which provides multiple opportunities to communicate with others about physical activity, search for medical advice, and monitor personal health information.[46]

This can reduce the amount of face-to-face time required for patient monitoring[21] and facilitate patient-provider communication about physical activity. These devices also provide immediate feedback about patients' physical activitylevels, supporting their self-regulation of their physical activity behaviors,[47] and can also connect patients to online communities for support.

Support systems of Families, Friends, and Co-Workers and Others

As part of the physical activity counseling, the PCP can ask about the patient's support system and how that might impact any new physical activity habits. This support system (e.g., family, friends, co-workers, and others) might be supportive of new physical activity habits (e.g., joining the patient in new activities, providing childcare to give the patient time for exercise) or discouraging (e.g., complaining that physical activity takes away from family time).[48-50] For individuals without a local support system or with unsupportive friends and family, virtual support groups available through fitness websites, apps, and forums are increasingly popular.[51] These support systems enable the patient and his/her supports to challenge and motivate each other to make and adhere to physical activity -related goals.[52]

Local community resources

PCPs can identify relevant community resources for their patients via their local health department, local health-focused community organizations, as well as campaigns from national organizations such as ACSM's global initiative Exercise is Medicine (EIM) (www.exerciseismedicine.org) and Kaiser Permanente's Rx2Move (www.kpihp.org/rx2move/). Community-wide initiatives (e.g., walk-a-thons or weight loss challenges) have increased physical activity across entire communities.[53,54] In addition,

206 local parks, civic organizations, adult schools, community colleges or other community
207 groups (e.g., YMCAs, Silver Sneakers) may offer free or low-cost activities and classes
208 for adults, led by community members. A primary care team member, such as a medical
209 assistant, may be interested in compiling local resources for providers to then refer
210 patients. Community resources capitalize on existing social networks to support
211 individual health behavior changes[55] and may also address unique patient barriers,
212 such as the need for safe spaces or child care.[54,56,57] Provider endorsements can help
213 to lend legitimacy to these programs to increase patient uptake.

214 *Worksites*

215 PCPs may also suggest that patients use physical activity resources provided at
216 work. Adults in the U.S. now spend a large portion of their time at the workplace, so
217 workplace interventions may reduce time- or location-based barriers to increasing daily
218 physical activity. workplace resources may include: standing or treadmill desks, walking
219 meetings, brief activity breaks during long meetings, walking during lunch breaks,
220 workplace-sponsored activity classes (e.g., yoga) and prompts to use the stairs instead
221 of the elevator.[58] Some workplaces may allow extended lunch breaks or flexible work
222 hours or discounted gym memberships in order to facilitate their employees' abilities to
223 exercise before, during, or after work without adding extra transit time and/or expenses
224 associated with off-site gym memberships.[59-61]

225 *National health care organizations*

226 As mentioned earlier, EIM promotes a standardized approach to systematically
227 assess and prescribe physical activity to patients.[31,62] Early EIM pilot work has indicated
228 that physical activity screening is best used when integrated into the EMR system as a

required response.[63] In the U.S., anecdotal evidence suggests that EIM-involved PCPs have other team members assess patient physical activity, while PCPs in countries with longer office visits tend to assess the patients themselves. EIM has provided credentialed exercise professionals for community referrals, which could contribute to standard, higher quality physical activity care.

Health Policies

Policy-based interventions can support PCP efforts to counsel patients about physical activity. For example, the ACA requires employer-sponsored group health plans and private health insurance policies to cover preventive health services without cost sharing.[6] On a national level, Michelle Obama and the Partnership for a Healthier America have established *Let's Move!* to promote physical activity among children and their caregivers, which has led to branded physical activity challenges and informational videos that are easily accessible and shared through social media (e.g., YouTube).[64]

PCP approach to multi-level physical activity counseling using the 5 As

We have described various multi-level strategies and supports for patients to increase their physical activity. The PCP is key to this multi-level approach, using the 5 As to guide the conversation from the initial assessment of current physical activity levels through arranging follow-ups to assess physical activity (see Figure 1 for sample dialogue).[5] Studies indicate that most counseling sessions focus on the first two As (assess physical activity levels, advise about increasing physical activitywhile not addressing the last three As (agree on physical activity goals, assist with connecting patients with physical activity resources, arrange for follow-ups about physical activity).[65] This finding has been attributable primarily to the PCP and organizational

barriers previously mentioned. The multilevel approach to physical activity counseling as described in this paper could help to reduce these barriers (see Table 1).

Discussion and Conclusions

Despite the numerous barriers that patients face with increasing physical activity, and providers face with counseling patients about physical activity, taking a multilevel approach can help increase supports for routinizing physical activity among patients. CMS now provides some reimbursement for on-site physical activity counseling by physicians and other high-level providers. With system-wide structural supports, such as EMRs or routine physical activity screening, discussions about physical activity will be more easily integrated into patient visits. With increased PCP awareness of community resources for physical activity, patients can be referred to widely-available and exercise classes and support groups that are low cost for both patients and provider organizations. Worksites may provide wellness programs, social support for physical activity, and opportunities for physical activity throughout the day. Primary care teams can work together to integrate physical activity into routine care at the initial and follow-up visits. Patient supports, such as the use of self-monitoring devices or community resources, can help guide the patient-provider conversations about physical activity and how patients can increase their physical activity with the support of their family/friends and co-workers.

The PCP plays a central role in this multilevel approach to physical activity counseling, from helping patients to understand the importance of physical activity to connecting them with various resources for physical activity. Using the range of supports for physical activity available at each of these socio-ecological levels can help

to increase physical activity counseling in primary care, increase physical activity by patients, and sustain these positive behaviors.

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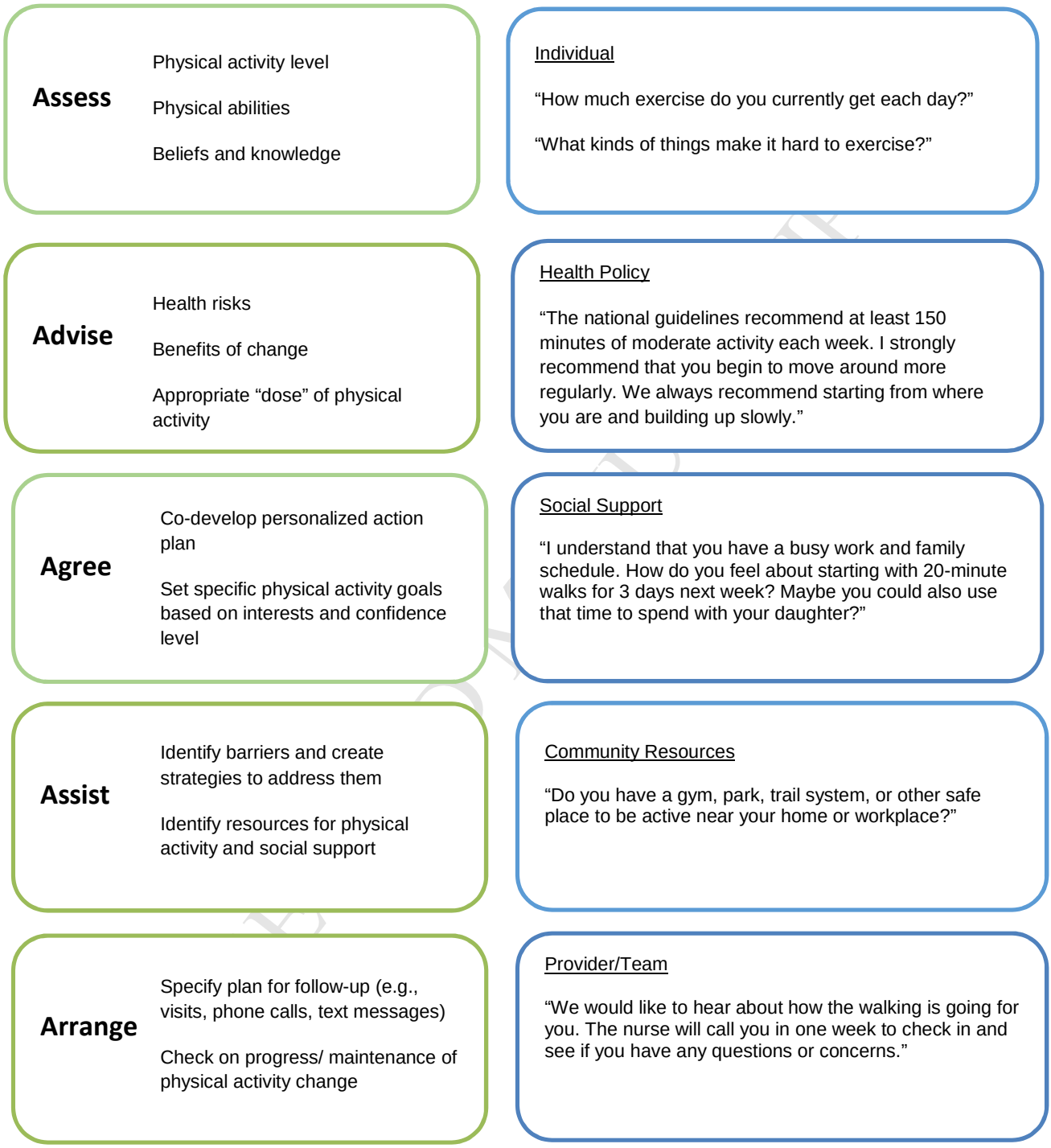
Table 1. Multi-level Supports to Address Barriers to Physical Activity Interventions

Barriers	Supports
Organizations	**Policy**
Primary care practices (insufficient cost/reimbursement for physical activity counseling)	PPACA (mandate for physical activity counseling) EIM (promote routine physical activity screening)
Community-based organizations and worksites (insufficient prioritizing of physical activity resources)	Let's Move (changing social norms) Rx2Move (resources for providers)
Provider	**Organizations**
Insufficient time	Team-based care Routine physical activity screening
Insufficient training	Team-based care Community referrals 5 As counseling
Patient	**Community**
Insufficient time Insufficient resources Insufficient social support	Resources (low-cost physical activity opportunities in the community, physical activity monitoring devices, etc.) Social support (community groups, online groups)

Figure 1. How To Use the 5As in Physical Activity Counseling



Integrating Physical Activity in Primary Care Practice

Clinical Highlights:

- There are high rates of physical inactivity in the general population.
- Disparities exist in physical activity rates by race/ethnicity, gender, age, and region.
- The primary care setting is ideal for physical activity counseling.
- A multi-level approach helps physicians to provide physical activity counseling.