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The Guide to Community Preventive Services and Disability Inclusion

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Abstract

Introduction—Approximately 40 million people in the U.S. identify as having a serious disability, and people with disabilities experience many health disparities compared with the general population. The Guide to Community Preventive Services (The Community Guide) identifies evidence-based programs and policies recommended by the Community Preventive Services Task Force (Task Force) to promote health and prevent disease. The Community Guide was assessed to answer the questions: are Community Guide public health intervention recommendations applicable to people with disabilities, and are adaptations required?

Methods—An assessment of 91 recommendations from The Community Guide was conducted for 15 health topics by qualitative analysis involving three data approaches: an integrative literature review (years 1980–2011), key informant interviews, and focus group discussion during 2011.

Results—Twenty-six recommended interventions would not need any adaptation to be of benefit to people with disabilities. Forty-one recommended interventions could benefit from adaptations in communication and technology; 33 could benefit from training adaptations; 31 from physical accessibility adaptations; and 16 could benefit from other adaptations, such as written policy changes and creation of peer support networks. Thirty-eight recommended interventions could benefit from one or more adaptations to enhance disability inclusion.

Conclusions—As public health and healthcare systems implement Task Force recommendations, identifying and addressing barriers to full participation for people with disabilities is important so that interventions reach the entire population. With appropriate adaptations, implementation of recommendations from The Community Guide could be successfully expanded to address the needs of people with disabilities.

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INTRODUCTION

In 2014, approximately 40 million people identified as having a disability on the basis of serious difficulty with vision, hearing, ambulation, cognition, or any difficulty in self-care or independent living, and many others experience less-severe difficulties with everyday activities. Many people with disabilities die prematurely and report poor health. More people with disabilities than the general population use tobacco, do not engage in recommended levels of physical activity, are overweight and obese, and are subjected to intimate partner violence. Compared with people without disabilities, a disproportionate percentage of people with disabilities live in poverty and have lower educational attainment, which are social determinants of poor health.

Federal legislation has addressed systemic exclusion of people with disabilities, with wideranging implications for access to health care and health promotion. Section 504 of the 1973 Rehabilitation Act mandates accessible services for people with disabilities provided by agencies and organizations that receive federal funding. Section 508 of the 1973 Rehabilitation Act requires federal agencies, and any private organizations receiving federal funds, to make electronic and information technology accessible to people with disabilities, including healthcare providers and communicators (www.section508.gov). The Americans with Disabilities Act of 1990, the Americans with Disabilities Amendments Act of 2008, and Section 4302 in the Patient Affordability and Care Act, designate disability as a demographic subgroup that experiences health disparities, providing context for disability inclusion in health care and health promotion. Under the Americans with Disabilities Act of 1990, healthcare services, facilities, and equipment must be accessible for people with disabilities. Despite disability legislation, accessibility is still lacking in healthcare facilities and services across the country. 10–15

Evidence-based interventions for community health, public health practitioners, and decision makers have a gold standard in the Guide to Community Preventive Services (The Community Guide). The Community Guide includes rigorous systematic reviews of scientific and practice-based evidence 16,17 on the effectiveness of population-level interventions, along with associated recommendations made by the nonfederal, independent Community Preventive Services Task Force (Task Force) about evidence-based programs and policies in areas of health promotion and disease prevention. The Community Guide promotes effective community-level interventions, identifies barriers to health interventions, and provides a strong evidence base. Health departments, health plans, and others use interventions described in the Community Guide to select and implement strategies intended to address public health issues in specific community settings. However, many of these strategies may be difficult to engage in for people with disabilities, whether they are cognitive or mobility limitations or sensory disabilities. Considering ways to adapt interventions for people with disabilities is important in order to achieve inclusive outreach for public health strategies identified in the Community Guide.

Community Guide methods recognize that interventions may be contingent on environments, broadly defined, which include biologic, physical, and sociocultural features. ¹⁶ Because of the health disparities experienced by people with disabilities, the

historical exclusion of people with disabilities in health promotion efforts and federal legislation that mandates inclusion, it is critical that adequate guidance be provided on how each of the recommendations applies to the population with disabilities. This paper presents an assessment of select Task Force—recommended interventions for their application to people with disabilities and explores opportunities to improve access to community-level public health intervention for people with disabilities. This assessment addressed two research questions: are Community Guide public health intervention recommendations applicable to people with disabilities? And what are general considerations to modify recommendations that would lead to successful, inclusive community interventions?

METHODS

Study Sample

The Center on Disability at the Public Health Institute in Oakland, California (www.centerondisability.org/) examined the 15 Community Guide health topics that existed in 2011, the year of the assessment. The Center on Disability evaluated the 91 Community Guide interventions that reached the "recommended" level. "Recommended" indicates that strong or sufficient evidence that the intervention is effective exists. Strong and sufficient reflect the degree of confidence according to study design, number of studies, and consistency of effect across studies⁹ (Appendix available online).

Measures

A qualitative approach of triangulation of three data sources—literature review, key informant interviews, and focus groups—was used. ¹⁹ The literature (between years 1980 and 2011) was searched for studies on interventions for people with disabilities and a comprehensive bibliography was compiled (search terms and articles supplied in the Appendix, available online). Studies were tabulated by study design, disability type, participant characteristics, intervention type, intervention design, and study finding. The literature was evaluated by an integrative review. ²⁰

Key informant interviews related to each health topic and associated recommendations were conducted. 21 Key informants were identified from the literature reviews as frequent or significant authors, representatives from nationally recognized programs in the health topic, or were referred by other informants. In addition, an expert in the ADA was interviewed for legal issues pertaining to the recommended community interventions. Each interview had two note takers and was also recorded. Notes from each interview were reviewed, integrated by health topic, and summarized using recordings for verification when necessary.

A focus group of people with different disability types met over three 2-hour sessions to review Community Guide health topics and Task Force–recommended interventions for application to people with disabilities and to solicit strategies to help people with disabilities benefit from recommendations (Table 1).²² In each session, focus group participants reviewed, on average, 30 Task Force recommendations. Focus group participants were encouraged to talk about strategies that helped them and suggest other strategies that would be helpful to people with disabilities.

Data Analysis

Public health practice adaptations were summarized for each health topic by recommendation, and by data source (literature review, key informant interviews, and focus group). The terms "adaptation" or "adapt" are used to cover approaches that can use any modification ranging from legislatively mandated accommodations to "points for consideration" (e.g., increasing provider knowledge and training, enhancing disability awareness and sensitivity, developing inclusive communication and messaging, and improving system level or physical accessibility). They were reviewed by members of the evaluation team and sorted by whether the proposed adaptations were found in all three data sources, two data sources, or one source. No one data source was given propriety weight over another. The sorting gave a measure to the strength of each adaptation. Consensus was reached through a collaborative, iterative process to establish key findings.

RESULTS

The search of the literature, interviews with key informants, and focus groups demonstrated that Task Force-recommended interventions from The Community Guide were applicable to people with disabilities. The literature did not yield evidence-based interventions in the form of RCTs. There were case studies of interventions, non-intervention studies, and clinical reports with recommendations pertaining to Community Guide strategies. Recommendations for adaptations from the literature were compiled and grouped broadly—accessibility, accommodations, need for alternate communication formats, message content, cultural awareness and sensitivity, and need for training of service providers—and were addressed specifically by key informant interviews and focus groups.

The interviews and focus groups, taken in context with the findings from the literature review, assessed each Task Force–recommended intervention for adaptations needed to be disability-inclusive. Recommendations could be considered either disability-inclusive "as is," in that no adaptation was required to make it accessible or usable by people with disabilities. Or, the recommended intervention could benefit from one or more adaptations to improve accessibility for people with disabilities. Possible adaptations were grouped into effective communication, training of staff and providers, physical accessibility, and other considerations (Table 2).

Policy recommendations, such as adjusting alcohol and tobacco taxes, did not require adaptation in order to be of benefit to a person with disabilities. Likewise, bodily interventions (e.g., vaccines), where the human body does not respond differently whether one had a disability or not, did not require adaptation for people with disabilities. Overall, 26 of the 91 reviewed Task Force –recommended interventions fell in a policy category (Appendix Table 1, available online): six of the alcohol recommendations (e.g., taxes, dram shop liability, limiting days and hours of sales, regulating outlet density), one of the cancer recommendations (reducing out-of-pocket costs), laws regarding blood alcohol levels and use of ignition interlocks, community water fluoridation, seven of the tobacco recommendations (e.g., taxes, smoking bans), seven of the vaccine recommendations, and one on transfer of juveniles to the adult justice system.

The assessment identified 41 recommended interventions to be adapted for effective communication. These possible adaptations involved having accessible communication formats, or using images of people with disabilities. For the Task Force–recommended interventions that used small groups, focus group participants felt these might be of most benefit if delivered in small groups of similar disabilities, particularly for adolescents.

Staff attitudes, misunderstandings, or other general lack of awareness can often undermine the successful use of a program by a person with a disability. Thirty-six recommended interventions had considerations for training for people who would have reason to interact with people with disabilities. Task Force-recommended interventions, depending on the evidence, could be directed towards healthcare providers, teachers, other service providers, and law enforcement. Examples of trainings could include: disability awareness, customer service for people with disabilities, and understanding responsibilities concerning service animals.

Thirty-three recommended interventions would necessitate assuring physical accessibility. These include transportation, easier accessibility of buildings and equipment, or lighting.

Other general considerations arose out of key informant interviews and focus group discussions. For instance, including people with disabilities in discussions about community-level interventions can give insights into barriers and possible strategies to improve accessibility. People with disabilities who have low income may benefit from specific types of adaptations to reduce financial barriers. Organizations could have written policies in place that are inclusive of people with disabilities, and be alert for existing policies that might exclude people with disabilities. People with disabilities benefit from a supportive peer network; using peer groups of people with like disabilities could be another consideration to adapting recommendations that use social support and group events.

DISCUSSION

People with disabilities constitute a population group that experiences health disparities for chronic conditions^{5,8,23,24} and other ameliorable health interventions that are addressed in The Community Guide. In answer to the primary research evaluation question—*Are Community Guide public health intervention recommendations applicable to people with disabilities?*—the answer is *yes.* Regarding the second question—*What adaptations are needed?*—interventions could benefit from adaptations to be inclusive of people with disabilities.

As the gold standard on evidence-based community interventions, exploring how Task Force–recommended interventions from The Community Guide can be implemented to be disability-inclusive provides an opportunity to reduce health disparities experienced by this population. Exclusion of people with disabilities from participating in community wellness programs is often not directly intended, it may be the result of inaccessible environments; lack of alternative transportation options; non-representative recruitment materials; or any number of other physical, social, or economic obstacles and failures to provide environmental accommodations. Anyone who is interested in improving community-level

health and disease prevention can use The Community Guide to learn what has worked well in other communities. As shown in the framework, many Task Force—recommended interventions in the Community Guide would benefit people with disabilities without the need for adaptations. For example, in a community trying to reduce alcohol consumption, laws regulating days and hours of sale, regulations on alcohol outlet density, and increasing alcohol taxes are effective community-level interventions that do not require adaptations.

If a community was interested in promoting physical fitness for adults and children, the framework shows that this strategy would benefit from adaptations to communication, training, and physical accessibility. Messaging could include images of people with disabilities, be written in plain language, or be available in formats for people with vision impairment. There may be a need to offer training for school educators or health coaches to adapt physical education curriculum. Physical accessibility includes playgrounds and parks with wheelchair-accessible pathways and surfaces, curb cut-outs, and wheelchair chargers. Inside lighting can be adjusted to provide visibility for people with low vision.

The framework presented in Appendix Table 1 (available online) raises awareness about the types of adaptations needed to make Task Force–recommended interventions from The Community Guide disability-inclusive. However, the other considerations raised by key informants and focus group participants are critical elements to successful implementation of disability-inclusive interventions. Involve people with disabilities in the planning of community-level interventions. Bring them in at the early planning, integrate them into mainstream programs, and use peer groups. In interpreting the findings, discriminatory and stigmatizing attitudes could constitute a significant barrier to participation of people with disabilities in society. Trainings can promote awareness of federal legislation, the barriers encountered by people with disabilities, and potential solutions, but the early inclusion of the people in the community who stand to benefit is a first step toward promoting a successful implementation.

This assessment reveals opportunities and the need for developing and evaluating public health interventions for the disability population. When deciding to implement a public health intervention, include people with disabilities in design and evaluation of interventions, programs, and activities at all stages of implementation. Task Force recommendations are based on the systematic review of published literature. The literature search conducted for this study did not find evidence-based interventions for people with disabilities. Future reports from the current study are expected. This project is an example of the type of action that could be taken to expand current evidence-based recommendations and make them "evidence-informed," using current standards for systematic review, coupled with expert opinion, with the addition of input from the people who will benefit from creating inclusive public health interventions. This evidence-informed approach effectively expands evidence for health promotion strategies to subsets of the entire population who may not otherwise benefit from these public health interventions, and is consistent with the way The Community Guide presents the recommendations—as menus of effective options that user audiences can review to see which might fit (or might be adapted to fit) their specific needs, constraints, and available resources. ¹⁶ The approach taken in the study has been used in recent efforts that bring together evidence review, expert opinion, focus groups

with persons with disabilities, and national consensus to provide guidance on how to develop more inclusive programs.²⁵ The Guidelines, Recommendations, Adaptations, Including Disabilities model employs this technique and has been used to develop recommendations on community-level interventions.²⁶

Investigators from this project were able to share some of their findings with the Task Force during one of its regular meetings. As a direct result of the Task Force's interest in this project, Community Guide methods were adjusted to specify that Community Guide systematic review teams should consider disability as one of the population characteristics for which they should seek information in the literature when determining the applicability of an intervention to different settings and populations. Moreover, the Task Force has identified addressing disparities in health status, including disabilities, as a priority area for future Task Force reviews.²⁷

Limitations

Every project has strengths and limitations. This project's main strength lies in its commitment to being inclusive of people with disabilities. People with disabilities were actively recruited to serve on a focus group and discuss The Community Guide recommendations. The focus group sessions were short, however, with a large amount of material presented in any one of the three sessions. The ability to probe into particular issues of interest might have been limited. Although many disabilities were represented, richer data might have been obtained by having disability-specific groups. The assessment was conducted in the Oakland/San Francisco area. The considerations that emerged from these discussions may not necessarily be applicable to other parts of the U.S. A major strength is that this study actually involved people with disabilities to talk about recommendations, what worked for them, and what might be improved. It is an approach that is being continued in the development of other guidelines.

CONCLUSIONS

The work presented in this paper represents a comprehensive overview of considerations related to issues and topics that emerged during discussions with key informants and the focus group. Future work involves elaborating on the Community Guide topics covered in this assessment and promoting opportunities to develop and disseminate these evidence-informed public health recommendations. A large number of people in the U.S. have a disability and, as the population ages, an increasing number of people will acquire functional limitations that will place them in the disability experience. To improve the health of the nation as a whole, it is essential that public health systems consider and address barriers to participation in proven health promotion and prevention programs so that people with disabilities have equal opportunities to experience benefits of interventions as do people without functional limitations. The Community Guide provides recommendations for effective public health interventions across the U.S. population. People with disabilities, however, constitute a population with high levels of health disparities for which targeted adaptations need to be employed for successful and broader reach of Task Force—recommended interventions.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1Distribution of Focus Group Participants by Disability Type

Disability	Session 1	Session 2	Session 3
Mobility limitations	1	4	4
Visual impairment	1	1	1
Hearing impairment	1	1	2
Cognitive disability	1	2	2
Mental illness	1	2	2

Note: Values are n. The same pool of focus group members was used for each session.

Table 2

Major Categories and Subcategories of Adaptations Derived From Key Informant Interviews, Focus Groups, and Literature Review

Categories and subcategories of adaptations		
Communication and technology: Accessible and inclusive materials and communication		
Accessible materials and communication (i.e., 508 compliance)		
Include images of people with disabilities		
Use small groups		
Include information relevant to people with disabilities		
Choose marketing channels to reach people with disabilities		
Include information on available accommodations		
Consider technology needs of people with disabilities		
Training: Knowledgeable and experienced support network		
Educate caregivers		
Train professionals (medical, paramedical, teachers, law enforcement)		
Accessibility: Physical accessibility		
Transportation limitations		
Accessibility of building and equipment		
Other considerations: Inclusion and other policy and practice considerations		
Include people with disabilities in planning		
Consider income level of people with disabilities		
Include people with disabilities in mainstream programs		
Plan for accommodations		
Have inclusive policies and procedures in place		
Be aware that some policies exclude people with disabilities		
Utilize peers		