



Robert Wood Johnson
Foundation

Health Behavior Assessments Lacking in Primary Care Settings

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Research Highlight

POLICY PERSPECTIVE

THE NEED FOR A MORE PREVENTION-ORIENTED HEALTH CARE SYSTEM IS INCREASINGLY URGENT AS HEALTH CARE COSTS RISE AND LIFESTYLE BEHAVIORS CONTRIBUTE TO THE GROWING BURDEN OF CHRONIC DISEASE. EQUIPPING PRIMARY CARE WORKERS WITH PRACTICAL MEASURES THEY CAN USE TO IDENTIFY PATIENTS WHO COULD BENEFIT FROM HEALTH BEHAVIOR CHANGE IS CRITICAL FOR THE PREVENTION AND MANAGEMENT OF CHRONIC DISEASE. THE AUTHORS' RECOMMENDATIONS CAN HELP ADVANCE POLICIES REQUIRING THAT HEALTH BEHAVIOR MEASURES BE INCLUDED IN STANDARD OUTPATIENT QUALITY MEASUREMENT SETS. THESE SETS COULD THEN BE USED IN PERFORMANCE MEASUREMENT EFFORTS THAT DRIVE NATIONAL PRIMARY CARE QUALITY IMPROVEMENT EFFORTS.

The Problem

Education and counseling in primary care settings holds promise as a powerful tool for decreasing the morbidity and mortality that result from high risk health behaviors. Of the many questionnaires available to physicians for assessing health behaviors, few are designed for an office visit with a primary care worker. Assessments that are brief yet valid, broadly applicable, self-administrable, age and culture appropriate and consistent with national public health goals need further development. Better assessment tools can help to improve the delivery, feasibility and reach of behavior change counseling in the primary care setting.

Criteria Used to Select Health Behavior Change Assessments

| Primary | Secondary |
|--|--|
| <ul style="list-style-type: none"> ■ Sensitivity to detect improvements resulting from effective interventions ■ Practicality ■ Relationship to Clinical/Public Health Goals (ex. <i>Healthy People 2010</i> goals¹) ■ Validity ■ Relation to behavioral interventions | <ul style="list-style-type: none"> ■ Cultural and literacy issues ■ Norms and breadth of use ■ Age appropriateness ■ Test-retest reliability ■ Usability for feedback and interventions |

In 2004, a study conducted by Glasgow and colleagues and funded by the Robert Wood Johnson Foundation provided a starting point to change the lack of practical health behavior questionnaires that can be used in a primary care context.² Researchers drew from literature reviews, the suggestions of a panel of health care experts and instruments used in the first phase of the health-promotion program *Prescription for Health* to identify and prioritize questions for health behavior assessment in the primary care setting. Using a set of primary and secondary criteria, they assembled questions for evaluating patient behavior change in terms of physical activity, risky drinking, cigarette smoking and eating patterns. Collectively, those four behaviors accounted for the leading causes of death in the nation in 2000.³ The researchers' recommendations form the basis of a solid starting point from which more accurate and valid health behavior assessments can be developed and tested for primary care use in children, adolescents and adults.

Key Findings

- **Although health behavior questionnaires exist, few have been designed for use in primary care settings.** Primary care settings present unique challenges that disqualify the use of established, validated behavior change questionnaires in their entirety. Challenges include the brevity of the office visit, absence of sophisticated evaluation equipment, need for tests to be broadly applicable and need for culturally appropriate and age appropriate measures.

- **It is seldom possible to include entire behavior change assessments.** Questions on existing behavior change assessments are often not sensitive enough to detect improvements resulting from effective interventions or lack other criteria such as cultural appropriateness. Therefore, they are supplemented with informal input from leading researchers' subjective estimates.
- **Twenty-two items are recommended as the minimum assessment for adults across all four behaviors, 16 items for adolescents age 12 to 17 and 12 items for children under 12.** In addition, separate recommendations are made for adults because child and adolescent risk behaviors differ in frequency and nature from that of adults. Performance of this set of 22 items is currently being tested in Round 2 of *Prescription for Health* by 10 primary care practice-based research networks across the nation. While these 22 items take only a few minutes to answer and can be self-administered, there is a need for even briefer assessments.
- **Validated assessments for adolescents and especially children are scarce.** There are no questions that fit the researchers' criteria in the areas of physical activity and risky drinking for young children, thus they could make no recommendations in this area. In the areas of smoking and eating patterns, researchers did find assessments that fit their criteria and contained items consistent with *Healthy People 2010* goals.

—Melanie Napier

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Resources

Healthy People 2010 Goals: <http://www.healthypeople.gov/About/goals.htm>.

Supplemental Figures Outlining Recommendations:

<http://www.annfamned.org/cgi/content/full/3/1/73/DC1>.

Glasgow RE, Bull SS, Piette JD and Steiner JF. “Interactive behavior change technology. A partial solution to the competing demands of primary care.” *American Journal of Preventive Medicine*, 27(2 Suppl): 80-7, 2004.

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Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA, Nathan DM, et al. “Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin.” *New England Journal of Medicine*, 346: 393–403, 2002.

<http://content.nejm.org/cgi/content/abstract/346/6/393>.

Whitlock EP, Orleans CT, Pender N and Allan J. “Evaluating primary care behavioral counseling interventions: an evidence-based approach.” *American Journal of Preventive Medicine*, 22: 267–284, 2002.

For more information on the Robert Wood Johnson Foundation program *Prescription for Health*:

Prescription for Health Web site: <http://www.prescriptionforhealth.org/>.

Prescription for Health evaluation:

<http://www.rwjf.org/research/researchdetail.jsp?id=2150&ia=142>.

Annals of Family Medicine Supplement on Prescription for Health:

http://www.annfamned.org/content/vol3/suppl_2/index.shtml.

- 1 U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. Washington, DC: Government Printing Office, 2000.
- 2 Glasgow RE, Ory MG, Klesges LM, Cifuentes M, Fernald DH and Green LA. “Practical and Relevant Self-Report Measures of Patient Health Behaviors for Primary Care Research.” *Annals of Family Medicine*, 3(1): 73-81, 2005.
- 3 Mokdad AH, Marks JS, Stroup DE and Gerberding JL. “Actual Causes of Death in the United States, 2000.” *Journal of the American Medical Association*, 291(10): 1238-45, 2004.