

CONCLUSIONS AND RECOMMENDATIONS

The number of controlled studies evaluating the effectiveness of Health Risk Appraisal (HRA) is limited and the quality of this evidence varies widely across studies. Keeping these limitations in mind, conclusions and recommendations based on the evidence were formulated by RAND and its panel of experts.

1. Effective HRA programs have demonstrated beneficial effects on behavior (particularly exercise), physiological variables (particularly diastolic blood pressure and weight), and general health status. More research would be useful to understand the effectiveness of HRA on other health parameters, such as clinical screening and psychological distress.
2. Interventions that combine HRA feedback with the provision of health promotion programs are the interventions most likely to show beneficial effects. Such studies have reported short to medium term effects on a variety of health behavior and physiologic outcomes. It is not known if these effects persist over the long term.
3. HRA questionnaires must be coupled with follow-up interventions (e.g., information, support and referrals) to be effective. The HRA questionnaire alone or with one-time feedback is not an effective health promotion strategy.
4. Evidence from which to draw conclusions regarding the effectiveness of HRA for older adults is limited, yet encouraging. Several randomized controlled trials of programs that included HRA found initial beneficial effects on some health parameters.
5. Current literature is insufficient to accurately estimate the cost effectiveness of programs using HRA. Limited evidence suggests that a carefully designed program that uses a systematic approach to implement HRA and subsequent disease prevention/health promotion interventions has the potential to be cost-beneficial. Considerable effort is needed to optimize program design, implementation, and evaluation.
6. All controlled research studies for which outcome data were collected used paper-and-pencil administration of the HRA, sometimes with telephone follow-up. Therefore, the potential impact of

new modes of administration (personal computer, Internet) on the effectiveness and cost-effectiveness of programs that included HRA cannot be evaluated at this time.

7. No studies evaluated the effectiveness of HRA on specific racial and ethnic populations. Several senior HRAs are available in Spanish. Asian-language HRAs in the United States could not be located.

Given these conclusions, the following recommendations are made:

8. As HRAs have the potential to improve the health of seniors in a cost-effective manner, a Medicare demonstration to assess the effectiveness and cost-effectiveness of the HRA approach in comprehensively and systematically improving or maintaining health should be conducted.
9. A demonstration project should use regular, ongoing follow-up rather than one-time feedback or counseling, as this approach appears to be more effective. The level of intensity required in follow-up interventions is a question the demonstration will need to answer.
10. A demonstration project should explore the feasibility of linking beneficiaries to community-based services.
11. A demonstration project should compare different modes of HRA administration and follow-up (e.g., Internet, phone, mail) to learn more about their impact on costs and outcomes.
12. A demonstration project should explore how to translate the HRA approach into a benefit that might be incorporated within the Medicare program.

