Key Environmental Health Competencies for Rural Primary Care Providers

Cynthia Armstrong Persily, PhD; Johnna S. Beane, BA; Mary Glenn Rice, BS

West Virginia Rural Health Research Center
West Virginia University, Morgantown, WV

Support for this report was provided by the Office of Rural Health Policy, Health Resources and Services Administration, PHS Grant No. 1 U1CRH10664-01-00.

Additional Information
Please visit our website: http://wvrhrc.hsc.wvu.edu
INTRODUCTION

Providing health care that considers environmental determinants of health, environmental impact on health, and outcomes attributed to environmental issues is complex due to the need for providers to be competent not only in social and health sciences, but also in environmental health concepts. Primary health care providers in rural communities must be able to assess community environmental needs, perform problem analysis, program planning and implementation, and develop evaluation strategies. However, few primary health care providers are trained in environmental health conditions and history taking, even though poor environmental quality is estimated to be directly responsible for a proportion of preventable ill health in the world. The integration of environmental health competencies into current and future entry level and professional continuing education programs for rural primary care providers is an essential policy direction. National organizations which delineate basic practice competencies should specifically include environmental health competencies in entry level rural primary care education programs.

COMPETENCY GUIDE DEVELOPMENT

The development of key environmental health competencies for rural primary care providers was undertaken systematically, first through a review of discipline specific competencies developed by a variety of entities including departments of environmental and public health, professional organizations, education organizations, and others. Numerous sources were obtained through searches in a variety of databases. Investigators reviewed all existing competencies from the health care disciplines including medicine, nursing, epidemiology, environmental and occupational medicine, and public health.

In March of 2009, our Center facilitated an expert consensus conference in Washington, D.C. with 10 key experts from environmental health, public health, rural health, and specific key primary care disciplines to develop the Key Environmental Health Competencies for Rural Primary Care Providers guide. Invitees represented various organizations in rural health, environmental health, and primary care practice and education.
Experts agreed that their vision was “rural primary care providers are competent partners in helping to heal the Earth and its people” and that their mission was “to develop a draft set of environmental health competencies for rural primary care providers” for future testing. A framework for organization of competencies, based on a primary care framework, was adopted by the group to organize the competencies. The experts agreed upon some common definitions (compiled from a number of sources) of terms to guide their work. A draft of the competency guide emerged at the end of this consensus conference.

The competency guide items developed by the experts were tested for clarity, content validity and applicability. We used a web based survey process to validate the competency guide. Working with national organizations and associations, we released a survey to stakeholders using email blasts, newsletters, our website, and social networking media. The survey was available online from August 2009 through January 2010. The survey provided background on the study, the definitions developed through the consensus process, and the competency document. Each competency was able to be viewed in the document and respondents were asked to respond to questions about item clarity, content validity and applicability. The refined guide was then reviewed by the experts from Phase One of the study prior to dissemination. The final competency guide can be viewed at http://wvrhrc.hsc.wvu.edu/projects/2009/persily/.

**POLICY IMPLICATIONS**

- Integration of these competencies into current and future entry level and professional continuing education programs for rural primary care providers should be a priority.
- National organizations which delineate basic practice competencies should adopt the results of this work for inclusion in entry level rural primary care education programs.
- Bodies that provide accreditation to programs preparing rural primary care providers should reflect these competencies as essential elements of those training programs.
- Professional organizations that support rural primary care can contribute to the development of these competencies in the workforce through integration of the competencies into future professional education programs.
- Funding priorities for development of training programs to support the development of these competencies in the rural primary care workforce should be developed.
- Funding mechanisms to evaluate the impact of the development of these competencies in rural primary care providers on the health of the people and communities they serve should be developed.

**Organizations Participating in the Expert Consensus Conference**

- American Academy of Family Physicians
- American Academy of Nurse Practitioners
- American Academy of Physician Assistants
- American Association of Colleges of Nursing
- Centers for Disease Control and Prevention/Agency for Toxic Substances & Disease Registry
- Centers for Disease Control and Prevention/National Center for Environmental Health/Environmental Services Branch
- Centers for Disease Control and Prevention/National Center for Health Statistics
- National Association of Local Boards of Health
- National Environmental Health Association
- National Rural Health Association
CONCLUSION

The competency guide that has emerged provides a basis for knowledge and competency development for rural primary care providers. While the degree of involvement of the rural primary care provider in environmental health issues is recognized to depend on the local community, the severity of the environmental issue, and their degree of expertise and investment, the purpose of this study was to develop a set of basic environmental health competencies that are needed by all rural primary care providers. By developing these competencies in pre- and post-professional education, the rural primary care provider becomes involved in health promoting activities, disease prevention, promotion of wellness, and health protection as they relate to environmental health, contributing to a healthier rural population.
Additional Information
See the Full Report that corresponds to this Brief for more detailed methods and findings from this study at:  http://wvrhrc.hsc.wvu.edu/projects/2009/persily/