1. Lack of clinical research in rural environments and limited participation of rural patients in clinical trials

Clinical and population-based research conducted in urban environments is not necessarily relevant to rural environments. Rural patients, especially those who are low-income, less educated or African-American, are less likely to participate in clinical trials than urban patients (Baquetet al, 2006). In addition to lack of information about clinical trials, additional factors influencing rural patients’ decisions to participate in clinical trials include location of the treatment facility, recommendation or discouragement from primary care physicians and oncologists, disease status, side effects of the treatment, perceived effectiveness of treatment and monetary burden (Coyne et al, 2004; Virani et al, 2008).

Potential Strategies to Address this Issue:

• AHRQ should work with NIH and HRSA, ORHP to ensure that academic medical centers conducting clinical trials work with community partners to improve recruitment of rural subjects for clinical research. Examples of specific strategies to accomplish this include providing rural health care professionals and patients with easily accessible information about clinical trials and patient eligibility, and facilitating rural subject access to clinical trials by establishing satellite or mobile facilities in rural areas in partnership with rural hospitals and medical practice.

• NIH, the Centers for Disease Control and other federal and state health agencies that fund medical registries for tracking patients with specific diseases or medical conditions should ensure that rural patients are represented in the medical registries.

• AHRQ should work with HRSA, ORHP to provide targeted grant support and technical assistance for rural providers to participate in primary care practice based research networks.

2. Implementation of practice guidelines in rural settings often lags behind urban settings. Practice guidelines frequently fail to take into account the potential impact of health system factors that influence their rural relevance and make implementation more challenging in rural settings.

The implementation of evidence-based practice guidelines that translate comparative effectiveness research findings into practice has the potential to improve the quality of health care in rural as well as urban settings. However, practice guidelines have generally been developed by specialty professional associations and tested in urban environments, particularly in large academic medical centers. Their effective implementation in rural settings must consider the impact of health system factors such as practice organization, provider specialty, scope of practice, patient volume, the availability of health information technology and payment mode. Practice guidelines need to take into account the resources available in rural settings, including the lack of specialists, and address circumstances in which rural patients are stabilized in a rural hospital and then transferred to a larger facility for care.

Potential Strategies to Address this Issue:

• HRSA, ORHP should partner with AHRQ to fund studies and demonstration projects that examine the impact of health system factors such as practice organization, provider specialty, scope of practice, patient volume, the availability of health information technology, and payment mode on the rural relevance of practice guidelines and their implementation in rural settings.
settings. The demonstration projects should address linkages between rural providers and tertiary care facilities.

- AHRQ and CMS should work with HRSA, ORHP to support efforts to expand beyond condition specific guidelines and quality measures to address care of patients with multiple chronic conditions and those whose care is shared among providers. The National Quality Forum’s work on Preferred Practices and Performance Measures in Care Coordination is an example of one such effort. These efforts are important for all patients with chronic conditions, but are especially important for rural patients.

- AHRQ should work with HRSA, ORHP to incorporate information about the rural relevance of practice guidelines in the National Guideline Clearinghouse.

- AHRQ should work with HRSA, ORHP to support rural practices and small rural hospitals in implementing the health information technology infrastructure needed to incorporate clinical reminders, prompts and alerts that facilitate implementation of guidelines into clinical practice.

- CMS should work with HRSA, ORHP to fund Quality Improvement Organizations (QIOs) to work with small rural hospitals, clinics and medical practices on implementation of rural relevant guidelines.

**Potential Strategies to Address this Issue:**

- NIH should require that medical research institutions funded through the Clinical and Translational Science Award (CTSA) Program include outreach to rural providers in their own states, as well as in nearby rural states without funded medical research institutions.

- NIH and AHRQ should work with HRSA, ORHP to expand dissemination efforts to make rural consumers/patients aware of existing resources such as the National Library of Medicine’s Medline Plus web site.

- Expand the AHRQ Effective Health Care Program, which is compiling research results, translating them into a variety of useful formats for clinicians and consumers, and disseminating the information. Work with HRSA, ORHP to include a special focus on rural clinicians and consumers.

- AHRQ and the National Library of Medicine should work with HRSA, ORHP to fund demonstration projects for health sciences libraries in states with significant rural populations to work with public libraries in rural communities to provide online access to a core set of clinical information resources to rural health professionals and rural patients.

**3. Rural health professionals may have limited access to current evidence-based information, and many rural consumers/patients have difficulty obtaining the appropriate information they need to make health care decisions.**

Health care professionals in small rural medical practices or hospitals may have difficulty accessing the latest evidence-based information to support quality care because they do not have access to a medical library; can not afford online access to clinical information resources; or have limited access to high-speed internet connections.

On average, rural populations are older and have more chronic health conditions than urban populations, increasing their need for health care information. However, low health literacy is a problem in many rural areas, where residents tend to have lower educational status.

**Additional Information**

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