IOM Report – Quality Through Collaboration: The Future of Rural Health

Mary Wakefield, Ph.D., R.N., F.A.A.N.
Associate Dean for Rural Health and Director

http://www.nap.edu
The IOM Committee on the Future of Rural Health Care was asked to:

“Undertake an independent unbiased assessment of the condition of health and health care in rural America, and formulate an action plan for quality-focused rural community health systems.”

Important differences between rural and urban areas that affect health care service delivery

- demographics
- income, education, insurance status
- health behaviors
- population density
- healthcare availability
- volume, case and service mix
Addressing the Quality Challenge in a Rural Context

Although the evidence pertaining specifically to rural areas is sparse, what does exist corroborates the general finding that, as documented for the nation overall in the *Quality Chasm* report, the level of quality falls far short of what it should be.

**Quality Chasm: Six Aims for Quality Improvement**

1. Safety – avoid injuries
2. Effectiveness – evidence based care
3. Patient – centeredness
4. Timeliness – avoid harmful delays
5. Efficiency – avoid waste
6. Equity – prevent quality differences
Basic Principles and Assumptions

- Greater attention to integrating population and personal health.
- Services based on the population health needs and preferences of the local community.
- When care cannot be delivered locally, links should be established to services in other locales.
- Well-trained health care clinicians, managers, and leaders working together.

Basic Principles and Assumptions

- Financing should explicitly address the special circumstances of rural areas.
- National and local health information technology infrastructure development should focus specific attention on rural communities.
The IOM Report also Notes:

- Access to and quality of EMS
- Care is a concern and has direct consequences for morbidity and mortality

Rural health care systems and communities – laboratories for design, implementation and testing of alternative strategies.
5-Part Strategy to Address Quality Challenges in Rural Communities:

1. Adopt an integrated, prioritized approach to addressing personal and population health needs at the community-level.

2. Establish a stronger quality improvement support structure to assist rural health systems and professionals.

5-Part Strategy (continued):

3. Enhance human resource capacity of rural communities -
   ▪ health care professionals

4. Monitor and assure that rural health care systems are financially stable.

5. Invest in building an information and communications technology (ICT) infrastructure.
Addressing Personal and Population Health Needs

“Rural communities must re-orient their quality improvement strategies from an exclusively patient or provider-centered approach to one that also addresses the problems and needs of rural communities and populations.”

(IOM, Quality Through Collaboration)
# 1

- Congress should provide resources to the DHHS to support comprehensive health system reform demonstrations in five rural communities.
- Demonstrations should evaluate alternative models for achieving greater integration of personal and population health services and innovative approaches to the financing and delivery of health services, with the goal of meeting the six quality aims.

Establishing a Quality Improvement Support Structure
Establish a Rural Quality Initiative in HHS to coordinate and accelerate efforts to measure and improve the quality of personal and population health care programs in rural areas..

Key Elements of the Strategy

- Increased knowledge of science of quality and safety improvement
- Access to clinical knowledge and tools
- Standardized performance measures
- Quality improvement processes and resources
Key Strategies

- Bolster the rural health professional workforce.
- Create networks of Critical Access Hospitals.
- Adopt Electronic Health Records that can talk to one another.
- Create ambulatory delivery systems that pursue and embrace quality in every dimension.
- Rural-relevant and valid performance measurement.

Strengthening Human Resources
### # 3

- Congress should provide resources to HRSA to expand experientially based workforce training programs in rural areas to ensure that all health care professionals master core competencies.

### # 4

- Schools of medicine, dentistry, nursing, allied health, public health, and programs in mental and behavior health should:
  - Work collaboratively to establish outreach programs to rural areas to attract applicants.
  - Locate a meaningful portion of the educational experience in rural communities.
# 4 (continued)

The federal government should provide financial incentives for residency training programs to pursue rural tracks by linking some portion of graduate medical education payments under Medicare to achieve of this goal.

Providing Adequate and Targeted Financial Resources
# 5

- CMS should establish 5-year pay-for performance demonstration projects in five rural communities starting 2006.

# 6

- ARHQ should assess the impact of changes in the Medicare program, state Medicaid programs, private health plans and insurance coverage on the financial stability of rural health care providers.
HRSA and SAMHSA should conduct a comprehensive assessment of the availability and quality of mental health and substance abuse services in rural areas.

This assessment should include:

- Review insurance and programs in the public and private sectors that support mental health and substance abuse services, and the populations served by these payers and programs.
- Evaluate current funding adequacy and analyze alternative options for better aligning funding sources and programs to improve access and quality of services.
- Identify and analyze options designed to encourage collaboration between primary care and specialty settings.
Utilizing Information and Communications Technology

Strategy to Include Rural Communities

1) Include a rural component in the National Coordinator for Health Information Technology (NCHIT) plan,
2) Provide all rural communities with high-speed access to the Internet,
3) Eliminate regulatory barriers to the use of telemedicine,
Strategy (continued)

4) Financial assistance to rural providers for investments in EHRs and ICT,
5) Foster ICT collaborations and demonstrations in rural areas
6) Provide ongoing educational and technical assistance to rural communities to maximize the use of ICT.

# 8

The Office of the National Coordinator for Health Information Technology should incorporate a rural focus, including frontier areas, into planning and development activities:
# 9

Congress should ensure that rural communities are able to use the Internet for the full range of health-related applications. Consideration should be given to:

- Expand and coordinate federal agency efforts to extend broadband networks into rural areas.
- Prohibit LATAs from imposing surcharges for the transfer of health messages across regions.
- Expand the USF’s Rural Health Care Program to allow all rural providers to participate, and increase the subsidy amount.

# 10

Congress should provide financial resources to assist rural providers in converting to EHR’s.

- IHS should transition all of its provider sites from paper to e-health records.
# 10 (continued)

- HRSA should assist CHCs, RHCs, CAHs and other rural providers from paper to e-health records.

- CMS and state governments should consider providing financial rewards to providers participating in Medicare and Medicaid programs that invest in EHR.

# 11

- AHRQ’s Health Information Technology Program should be expanded.

- Resources should be provided to AHRQ to sponsor development programs for ICT in rural areas. The five-year developmental programs should begin 2006 and establish state-of-the-art ICT infrastructure, accessible to all providers and consumers in those communities.
# 12

- NLM, with the NCHIT and AHRQ, should establish regional ICT/telehealth resource centers interconnected with the National Network of Libraries of Medicine.

---

The Past and Future of Care: Emerging Vision

**Past**
- Acute & episodic
- Patient passive
- Culture of deference
- Personal memory-based
- Little systems awareness
- Heavy focus on the individual seeking care

**Future**
- Chronic & acute
- Patient active
- Accountable/evidence driven
- Protocol/process supported
- IT & team-based
- Personal & population (community/region)

D. Detmer, 2003
As the IOM Report Notes

- Evidence-based standards and procedures
- Systems approach to functions and operations
- Implementation of cutting-edge information and communication technology
- Telemedicine systems to supplement care
- Clearly defined methods for measuring quality and outcomes

Rural America can lead in testing strategies for improving population health and personal health care delivery.
Objectives

- Briefly describe the national quality agenda
- IOM roadmap for applying quality agenda in rural areas:

Quality Through Collaboration: The Future of Rural Health

(IOM)
Studies Documenting the “Quality Gap”

- Literature reviews conducted by RAND
  - Over 70 studies documenting quality shortcomings
- Large gaps between the care people should receive and the care they do receive
  - true for preventive, acute and chronic
  - across all health care settings
  - all age groups and geographic areas

(Schuster et.al., MMFQ, 1998; updated 2000)

American Health Care System is Confronting a Crisis

- Safety – Tens of thousands die due to errors (IOM, 99)
- Effectiveness- 50/50 chance of getting appropriate care (McGlynn, 03)
- Uninsured – Over 40 million people (IOM, 03)
- Racial and ethnic disparities
- Workforce shortages and turnover
- Rapidly rising costs

(IOM)
Major Forces Influencing Health Care

- Expanding Knowledge Base
  - 1996 – 100 RCT publications
  - 1998 - over 10,000 RCT publications

- Chronic Care Needs
  - 40% of population
  - 2/3 of health expenditures

More than Half of People with Serious Chronic Conditions Have Three or More Different Physicians

- Eighty-one percent of people with serious chronic conditions see two or more different physicians.

Number of Different Physicians Seen By People with Serious Chronic Conditions

- 1 Physician: 16%
- 2 Physicians: 26%
- 3 Physicians: 23%
- 4 Physicians: 15%
- 5 Physicians: 6%
- 6+ Physicians: 11%
- No Doctors: 3%

(Source: Gallup Serious Chronic Illness Survey 2002)
The Problem

“The American health care system is the poster child for underachievement... The largest limiting factor is not lack of money, technology, information, or even people but rather lack of an organizing principle that can link money, people, technology, and ideas into a system...”

(Shortell and Schmitt, 2004)

Factors Underlying System Failures

- Poorly organized delivery system
- Lack information technology infrastructure
- Inadequate workforce
- Toxic payment system

(IOM)
EHR Adoption Gap: The United States Versus Others

(Source: "European Physicians Especially in Sweden, Netherlands, and Denmark, Lead U.S. in Use of Electronic Medical Records." Harris Interactive Health Care News 2(16).)
PHYSICIANS WITH IT SUPPORT BY PRACTICE SETTING

<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>Access Guidelines</th>
<th>Share Clinical Data</th>
<th>Access Patient Notes</th>
<th>Reminders</th>
<th>Prescribing</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRADITIONAL (69%)</td>
<td>50%</td>
<td>32</td>
<td>29</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td>HOSPITAL STAFF (16%)</td>
<td>55</td>
<td>49</td>
<td>41</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>LARGE GROUP (3%)</td>
<td>57</td>
<td>63</td>
<td>58</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>MEDICAL SCHOOL (8%)</td>
<td>66</td>
<td>72</td>
<td>66</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>STAFF/GROUP HMO (4%)</td>
<td>76</td>
<td>75</td>
<td>83</td>
<td>59</td>
<td>38</td>
</tr>
</tbody>
</table>

(Source: Center for Studying Health System Change, 2004)

Workforce Lacks Key Competencies

- To Provide Patient-Centered Care
- Work in Interdisciplinary Teams
- Employ Evidence-Based Practice
- Apply Quality Improvement
- Utilize Informatics

(IOM, 2002)
Toxic Payment Systems

FFS pays for specific services (i.e., visits, hospital episodes and procedures)

- Not for many types of patient supports
- Not for quality or outcomes

ROI in systems (e.g., IT) is high but does not flow to those who make the investments

(IOM)

Toxic Payment Systems

Siloed payment systems

- Lack of accountability for care transitions and care coordination
- Focus on narrow slice of patient experience, not outcomes

(IOM)
Fostering Rapid Advances in Health Care

IOM
Committee on Rapid Advance Demonstration Projects

To order: www.nap.edu

Building Block Approach to Health Reform

- 2005 – 1st generation of 21st century community health systems
- 2010 – broader health system change well underway
IOM Definition of Quality

“The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

(IOM, 1990)

Optimizing Population and Personal Health

- Comprehensive Health System Reform Demonstrations in Five Rural Communities
  - Evaluate potential interventions to achieve the IOM 6 Aims
  - Collaborative community-wide programs to enhance population health
  - Build a population health focus into decision-making within the health care sector

(IOM)
Examples of Excellence

- **Minnesota** – Biggest improvement in State rank for mammogram testing rates
- **Maryland** – Biggest improvement in State rank for administering beta blockers
- **Alabama** – Only State to significantly increase rates of colorectal cancer screening
- **North Dakota** – Best overall performance for adult diabetic HbA1c testing


Rural Quality Initiative Agenda

- Application of Evidence to Practice
- Standardized Measure Set for Rural Communities
- Public Reporting
- Community-based Technical Assistance
- Data Repository

(IOM)
Health Literacy

- Nearly half of Americans –90 million people—have difficulty understanding and acting upon health information. (Kirsch, 2001)

- Literacy levels are lower among the elderly, the poor, minority populations, those with lower educational levels, and groups with limited English proficiency. (IOM, 2004)

Health Literacy

Evidence shows that patients with limited health literacy have
- less knowledge of illness management
- decreased ability to share in decision-making about prostate cancer
- lower adherence to anticoagulation therapy,
- higher likelihood of poor glycemic control; and
- lower self-reported health status.

(IOM, 2004)
Mobilize Community Resources

Take action to:
- Improve health behaviors
- Strengthen self-care and family caregiver capacity
- Raise health literacy
- Expand access to health information and supports

Aligning Payment: Lots of Experimentation

- CMS
  - Chronic Care Demonstrations
  - Coordinated Care Demonstrations
  - Medical Group Demonstrations
- Over 80 Private Sector Programs
  - PacifiCare Quality Index
  - Empire Blue Cross and Blue Shield
  - PBGHs
Aligning Payment: Lots of Experimentation

- Survey of 37 programs (36 private sector)
  - By Rosenthal et al., Health Affairs, 2004

- P4P Programs Sponsored by
  - BCBS (12 states)
  - Aetna, Cigna, PacifiCare, etc.
  - Business Coalitions

Aligning Payment: Lots of Experimentation

Physicians – combination of
- HEDIS process measures
- structural measures (e.g., registry)
- patient experience

Hospital – combination of
- Outcomes (readmissions, complications)
- Structure (Leapfrog leaps)
- Process

(IOM)
Rewards

- Physicians  1-10 % of total payments
- Hospitals   1- 4% of total payments

- 56% of programs based on relative performance
- Non-competitive programs focused on achievement of benchmark or threshold.

IOM Recommendation

CMS should establish 5-year pay-for-performance demonstrations in five rural communities.
AHRQ should assess the impact of changes in public and private insurance programs and in insurance coverage on the financial stability of rural providers.

Focus special attention on mental health and substance abuse:

- HRSA and SAMSHA play key roles
- Assess availability and quality of services
- Evaluate adequacy of current funding
- Recommend ways to better align funding
- Encourage collaboration between primary care and specialty settings
Rural health care in the digital age

- The development of an information and communications infrastructure (ICT) is critical
- Such a strategy will include:
  - Access to health information
  - Communications within the system
  - Managing chronic conditions

Building Blocks of an ICT Infrastructure

- National data standards
- Electronic health records
- Patient-maintained health records
- Secure information exchange network

(IOM)
IOM Recommendations

- Rural focus in the NHII Plan
  - ORHP should play lead role in providing input to ONCHIT

- High-speed access to Internet
  - Extend broadband networks
  - Prohibit LAN surcharges
  - Expand Universal Service Fund’s Rural Program

(IOM)

IOM Recommendations

- Congress should provide financial resources to assist rural providers convert to EHRs.
  - Indian Health Service should transition its providers
  - HRSA should assist CHCs, RHCs, CAHs and other rural providers
  - CMS should establish a financial reward system

(IOM)
IOM Recommendations

- AHRQ should sponsor developmental programs for ICT in 5 rural communities.
- NLM should assume lead role in establishing regional telehealth resource centers.

(IOM)