Rural health care in the digital age

The rural population has less access to and lower usage of electronic technologies than its urban counterpart. There is a great need for digital healthcare tools in the rural setting.

Some of the healthcare tools needed include—
- Computerized patient data
- Email communication between clinicians and patients
- Remote language and cultural interpreting
- Telemedicine
- Remote monitoring of patients in homes
- Intensive care units and other locations
- Robotic surgery

A digital divide
In recent times more and more Americans are using the Internet and other technologies for information exchange, socializing, health care, commerce and entertainment. Unprecedented proportions of the population reportedly have personal computers with an Internet connection.

Even though the use of technology by community-dwelling seniors is common, there are significant differences between rural and urban elderly in patterns of use. Rural usage of the Internet is lower compared to urban usage, and fewer adults in rural America are online at home. Discrepancies between urban rural usage of technology are causing a digital divide.

Rural communication
In most rural areas, communication between patients and clinicians is limited to face-to-face visits or telephone calls. Critical patient’s information is recorded in handwritten medical records; it does not travel with patients.

Thus the current health system makes only minimal use of computer-based decision support tools to assist clinicians and patients in applying knowledge safely and effectively.

Computer-aided decisions
Due to expanding medical knowledge and drug discoveries, it is no longer advisable for a clinician to rely entirely on the unaided human mind.

Computer-aided decision supports are needed to translate knowledge effectively into practice and to safely utilize the many drugs and devices currently available.

The better the information clinicians have, the better they can:
- diagnose illness
- identify health improvement opportunities
- discuss treatment options with patients
- implement interventions and achieve the desired outcomes

Telepsychiatry
Telepsychiatry presents an innovative and cost-effective strategy for the provision of improved local access to quality mental health services for the underserved rural elderly. Telepsychiatry has demonstrated the potential to improve access to mental health services, provide those services in an affordable and cost-effective manner and deliver those services at a quality nearly equal to that of traditional face-to-face services.

REFERENCES

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