Telemedicine and the Medical Home: Transforming Systems of Care in a Perfect Storm
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http://hsc.unm.edu/som/telehealth
Health Care Reform
Economic Downturn
Need for more Access to Care
An Aging Population/Baby Boomers
Critical Shortage of Healthcare Providers
EHR Adoption/HIE
Emerging Enabling Information Communication Technologies

A Time for Telemedicine

THE PERFECT STORM
A Patient-Centered Medical Home is a team-based model of care usually led by a personal physician who provides, comprehensive, continuous and coordinated care throughout a patient's lifetime to maximize health outcomes.
The “Team” can consist of a spectrum of health care providers that are addressing the patient’s health care needs: Community Health Workers, Mid-Levels, Counselors, Therapists, Pharmacists, Oral Health providers, Behavioral Health Providers, Primary Care Providers, Specialists
Telehealth, Health Information Exchange and Remote Monitoring can all be integrated into this concept of a Patient-Centered Medical Home to provide improved continuity of care and coordination through secure sharing of healthcare information, diagnosis, treatment and care management.
Patient-Centered Medical Home

- Not only can care be better coordinated, but **Telemedicine and e-Health** can incorporate evidence-based best practices, decision support, earlier detection of a problem, and earlier intervention.
- Improving Access
- Improving Outcomes
- Reducing Costs
Patient-Centered Medical Home

- Decreasing Unnecessary Variations in Care: The Need to Test the Patient-Centered Medical Home.
  Michael Barr, JAMA, August 20, 2008—Vol 300, No. 7

- The Cost Conundrum: What a Texas town can teach us about health care.
  by Atul Gawande, The New Yorker, June 1, 2009
Telehealth and Health Information Technologies are Part of the Solution in Creating the Medical Home
Case Reviews or Consultation
Direct Patient Care

Maternal Fetal Medicine-High Risk Pregnancy
“Store and Forward”

- Capturing an image and *storing* it to then be *forwarded* for review by a medical specialists
- Examples include teleradiology, telepathology, teledermatology, retinal images

*Teleradiology and Image Transfer Web-Based Portals*
Video Phone or “VOIP” with video
Family Visitation
School Based Health Centers
Trauma Triage

Consulting Questions

Step A: Before reviewing the case with the supporting information

Question 1: Based on your current knowledge would you have accepted this patient for transport?
Answer:  

Step B: After reviewing the case with the supporting information

Question 2: Did you accept the patient for transport?
Answer:  

Question 3: Did your management recommendations change?
Answer:  

Comments:

Ready to submit advice?
IRA HAYES Project – PTSD/TBI
Telehealth Toolkit

Videophone (H.324)

Software IP Based (H.323)

Desktop IP Based (H.323)

Small Conference Room IP Based (H.323)

Skype
Hand Held Devices- “mHealth”

BlackBerry

Treo/Palm

iPhone
Remote Monitoring

The “Smart Band-Aid”
Center for Telehealth and Cybermedicine Research

The Center for Telehealth at UNM Health Sciences Center: Developing New Programs
The New Mexico Telehealth Alliance

Telehealth Alliance “Networks of Networks”

- Represents a consortium of public and private health care stakeholders: “Neutral Territory” (501c3)

- Reflects the diversity of our health care delivery system in New Mexico

- Enables collaboration
The Four Corners Telehealth Consortium was formed between Arizona, Colorado, New Mexico, and Utah to serve as a model for regional telehealth collaboration in the United States unconstrained by geographical or jurisdictional barriers. Representatives of the telehealth and health information initiatives in the four states have been developing specific collaborative initiatives including establishment of an interstate licensure process, coordination of a virtual “E-Health University” for distance learning, coordination of provision of telehealth clinical services representing best practices, and a process for interstate disaster response.

The 4 “C’s”
Cooperation
Coordination
Collaboration
Communication
SWTAG is a “Network of Networks”
Telehealth Nationally

- Using Information, Communication Technologies to:
  - Improve Continuity of Care; Creating the Medical Home
  - Share knowledge, experience and best practices
  - Decrease unnecessary variations in care
  - Allow more Efficient Distribution of Limited Resources
  - Increase Access to Care
  - Improve Health and Wellness: Results driven
  - Decrease costs
The Future of Telecommunications and Telehealth Technology

- Ubiquitous Wireless
- More Affordable Broadband
- Mobile devices; e.g. Smart Phones
- Bringing to the home, work, school
- Remote Monitoring
The Future of Telecommunications and Telehealth Technology

- High Definition Video
- Virtual Presence and 3-D Holograms
- International Collaboration and Connectivity
Telehealth
Going International
International Telemedicine and eHealth: Is Transforming Systems of Care in the Global Community

Reasons to do International Telehealth: *Most health issues are global!*
World braces for flu siege
Distributed Medical Intelligence

- Knowledge Sharing Networks/Just in Time/On Demand
- Best Practices
- Evidence based
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THE PERFECT STORM
Navigating the Perfect Storm

Use a broad spectrum of information communication technologies

Effective distribution of limited resources and expertise

Increasing Access to care

Bringing care to the patient; Aging in place

Decreasing unnecessary variations in care; evidence-based best practices

Improving continuity and coordination of care; The Patient Centered Medical Home

Avoiding unnecessary hospitalizations, and duplication of tests

Improving health outcomes

Reducing costs; avoiding more costly care and complications, decreasing travel
Questions?

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