Telemedicine in a Perfect Storm: COVID-19 and Chronic Disease

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Critical Shortage of Healthcare Providers
Need for More Access to Care
High Demand/Limited Supply
Patient-Centered Medical Home (PCMH)
Blending Physical Health with Mental Health

A Time for Telemedicine

THE PERFECT STORM
COVID-19 Pandemic

- Sweeping the world
- USA now has highest number cases at 174,000 and increasing (NM:281)
- USA deaths at over 3,400 (NM:4)
- Highest risk, over 65 and with chronic disease underlying conditions
- Advised to stay home, social distancing, handwashing
- No vaccine, no proven cure
Meanwhile the Beat Goes On with Chronic Diseases

Patients Still Need Ongoing Evaluation and Management while Avoiding COVID-19 Exposure

- Heart Disease
- Asthma, COPD
- Obesity, Diabetes
- Renal Insufficiency
- Liver Disease
- Cancer
- Genetic Disorders
- Dementia
- Mental Illness
Chronic Disease and Prevention

Impact of Social Determinants of Health

Primary Prevention
Health promotion and addressing risk factors, social and genetic factors

Secondary Prevention
Screening of at risk individual, control of risk factors and early intervention.

Tertiary Prevention
Rehabilitation, preventing complications and improving quality of life.
Telehealth/Telemedicine Can Play a Role

- Prevention: primary, secondary, and tertiary.
- Virtual care
- “e-Consults” specialty to primary care
- Direct to Consumer/Patient evaluation and management
- Remote Patient Monitoring
- Education for Patients, Providers, and the General Public
Defining Telemedicine and Telehealth

1. “Tele-” comes from the Greek root word meaning “distant or remote” / “at a distance”.
   - Tele-phone
   - Tele-vision
   - Tele-graph
   - Tele-scope
   - Tele-Etc, etc, etc
   ➢ Tele-Psychiatry, Tele-Genetics, Tele-Cardiology
So What is Telehealth?

- The use of advanced telecommunications technologies to exchange health information and provide healthcare services across geographic, time, social and cultural barriers (J. Reid)

- Telehealth is more than just video-conferencing and encompasses health information exchange and a spectrum of health information technologies

- It is simply the delivery of health services at a distance (A. Darkins)
How is Telehealth used?

- **Clinical (“Telemedicine”)**: Consultation, Direct patient Care, Case Reviews, Remote Patient Monitoring
- **Educational**: Providers, Students, and Patients
- **Research**: Community-based Participatory, Outcomes driven
- **Administrative**: Strategic planning, Operations
- **Health Information Exchange**
- **Enhanced Disaster Response**
The Telehealth Checklist

- WHY?
- WHAT?
- HOW?
- WHEN?
WHY?

- Define Needs, Goals and Objectives in using Telemedicine
- Enhancing Access to Services/Avoid Unnecessary Travel and Exposures to Other Diseases (COVID-19)
- Improving Continuity of Care
- Enhance Chronic Disease Prevention and Management
WHAT?

- Develop a Multi-disciplinary Planning Team
- Determine “Originating” (Patient and PCP) and “Distant” Consultant sites
- Determine most appropriate Technologies
- Determine Adequacy of Connectivity
HOW?

- Workforce Delineation: Staff and Provider Needed at Consulting (Distant) and Originating Sites

- Workflow Determination: Scheduling, Documentation, Synchronous vs. Asynchronous

- Following Regulations and Legal Ramifications, Standards of Care
WHEN?

- Readiness Preparation and Timeline
- Business Plan/Financial Support
- Documentation of utilization and Metrics
- Ongoing Evaluation and CQI
“Back to the Future”
Telehealth Networks
Rural/Remote Health Providers Can Access Expert Medical Opinions, Knowledge, Education via Telehealth
Involving Patients of All Ages
Involving the Adolescent Patient
Reaching the Young Patient
Engaging the Younger Patient
Case Reviews and Consultation
### ECHO: Treatment Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>ECHO</th>
<th>UNMH</th>
<th>P-value</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>N=261</td>
<td>N=146</td>
<td></td>
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<tr>
<td>Minority</td>
<td>68%</td>
<td>49%</td>
<td>P&lt;0.01</td>
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<tr>
<td>SVR (Cure) Genotype 1/4</td>
<td>50%</td>
<td>46%</td>
<td>NS</td>
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<tr>
<td>SVR (Cure) Genotype 2/3</td>
<td>70%</td>
<td>71%</td>
<td>NS</td>
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SVR = sustained viral response

As an Example: Critical Gaps in Health Expertise and Services in New Mexico

- Mal-distribution of Providers
- Lack of Access to Health Services in Rural Communities

- Only 3/33 counties exceed the National average of physicians per 100,000 population
- 64% of physicians practice in 3/33 counties.
- These three counties comprise only 39% of New Mexico’s Population
- Even more profound for behavioral health services
Telehealth and Health Information Technologies are Part of the Solution in Transforming our Health System
Telehealth assistants at the school or child care center provide the link to examine the eyes, ears, throat, lungs and skin.

Videoconferencing provides the “face to face” interaction.

Getting providers to think of their desktop computer as an exam room is the trick.
The Navajo Nation
The Future and Next Steps
Realities of Using Telehealth In Communities, Hospitals, and Clinics

- Can you make the case for adoption and integration of telehealth?
- What’s the Value Proposition?
- How do you proceed? (“The Checklist”)
- How can this approach be sustained?
Addressing Standards of Care

- Allow patients to receive quality health care independent of geographical location, such as in rural settings
- Provide capacity to appropriately keep more patients locally
- Decrease risk and avoid expensive medical malpractice lawsuits ("Failure to use Telemedicine" cases)
Making the Business Proposition

- Develop a business plan that provides ROI and sustainability
- Determine the metrics that will demonstrate the benefits of integrating telemedicine
- Collect and analyze the data that show value to the stakeholders;
  - Hospital Leadership ("C-Suite"), Board of Directors, Staff, Providers, Payers, Community Leaders, and Government Representatives (Legislators, Governor, Agencies and Departments of Health & Human Services)
Hitting the Targets: “The Triple Aim”
(“The Quadruple Aim”)

Improve the Patient/Caregiver Experience:
- Access
- Support

Improve Health Outcomes

Reduce Costs

Improve the Provider Experience

Telehealth
Provider and Consumer Engagement and Adoption

➢ Diffusion of Innovations Theory
➢ Criteria for successful adoption
  ▪ Perceived relative advantage
  ▪ Compatibility
  ▪ Complexity
  ▪ Trialability
  ▪ Observability

Legal and Regulatory Ramifications

- HIPAA/HITECH
- FDA/FCC
- Liability and malpractice insurance/risk reduction
- Standards of care
- Credentialing/privileging and licensure
Health Information Exchange (HIE) and Telemedicine: Complementary Pieces of the Puzzle
Challenges & Barriers:

- Reimbursement
- Interstate licensure
- Credentialing and privileging
- Affordable broadband
- Integrating as part of our healthcare system
- Broadening use; urban and rural
- Not restricting sites; home, schools, SNFs
- Improved coordination of federal programs
Other Resources
http://www.telehealthresourcecenter.org/
https://www.telehealthresourcecenter.org/gpTRAC/?Center=gpTRAC
American Telemedicine Association

http://www.americantelemed.org
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

http://www.nmtelehealth.org/AboutUs/
New Mexico Telehealth Act
Passed and Signed into Law
2004

Introduced by:
Rep. Danice Picraux (D)

Supported by
Sen. Susan Wilson-Beffort (R)

HOUSE BILL 581
46TH LEGISLATURE - STATE OF NEW MEXICO

Insurance Coverage for Telemedicine Services
Passed and Signed into Law
2013 and 2019

Introduced 2013 by:
Sen. Jerry Ortiz y Pino (D)
and
Rep. Stephen Easley (D)

SENATE BILL 69
HOUSE BILL 171

2019 Senate Bill 354
Health Coverage via Telemedicine
Promoting Adoption of Telehealth and Overcoming Barriers

- It takes a transdisciplinary team and collaboration
- Create “Virtual Specialty Centers of Excellence”
- Belief in the value
- Demonstrating the value
- Dedication
- Persistence
International Telemedicine and eHealth: Transforming Systems of Care in the Global Community

Reasons to do International Telehealth

*Most health issues are global!*
Distributed Medical Intelligence

- Knowledge Sharing Networks/Just in Time/On Demand
- Best Practices
- Evidence based
THE EARTH IS BUT ONE COUNTRY

And Mankind Its Citizens

JOHN HUDDESTON
Conclusions

Together we have opportunities to integrate Telehealth in a manner that can provide platforms for greater continuity in collaborative efforts within our country and between countries:

- Clinical service and consultation
- Public Health
- Education and training
- Research

“Think Globally but Act Locally”
Working Together
We Can Make a Difference
It’s About People, Not Technology
Questions?