USING A TEAM APPROACH TO IMPROVING HEALTH OUTCOMES IN RURAL COMMUNITY HEALTH CENTERS

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FINGER LAKES COMMUNITY HEALTH

Team Care
The Modern Medical Team

TEAM·WORK (noun)
cooperative or combined effort of a group of persons working together as a team for a common cause
Teamwork divides the task and multiplies the success.
- Unknown
A NEW WAY OF LOOKING AT THINGS

Another Strategy For Today

Technology and Teams
Enable
Access (that)
Matters
Objectives

1. Discuss applications of telehealth in primary care
2. Demonstrate how technology can enhance the QUALITY of team-based patient centered care
3. Identify how multidisciplinary teams using telehealth can increase ACCESS to care
4. List ways in which telehealth has tangible and intangible cost benefits

Who We Are...

• Community/Migrant Health Center Program
• Migrant Voucher Program in 42 Counties
• Clinical Sites: 9 Health Center Sites
• Administrative Office: Penn Yan, NY
Where We Are…

What Special Populations We Serve
Challenges in Providing Health Care to Rural Poor

- Transportation barriers
- Language differences
- Cultural beliefs
- Cost of health care services
- Uninsured/Underinsured
- Lack of trust in health care system
- Poverty
- Migrant lifestyle

Telehealth Program Development
Funding Sources

USDA – Distance Learning and Telemedicine
HRSA – Rural Network Development
FINGER LAKES COMMUNITY HEALTH – HIT INFRASTRUCTURE DEVELOPMENT
Federal Communications Commission – Rural Healthcare Broadband Project
NYS DOH
Telehealth Programs at FLCH

Teledentistry
Telepsychiatry
TeleMental Health
TeleDiabetes
(Digital Retinopathy Screening)
TelePeds Neuro
(ADHD Clinic)
TelePedsMD
Neurology
TeleENT
TelePulmonology

TeleAC
TeleHCV
TeleRD
TeleChild Psychiatry
Project Echo Geriatric

In development:
TeleDerm
TeleOncology
TeleGeriatrics
TeleMCH
TeleEndocrinology
Home Monitoring

Distance Learning

- FLCH Board Training
- Staff Education
- Staff Meetings
- Management Trainings
- Grand Rounds/Case Presentation
- Case Conferencing
“Technology is nothing. What’s important is that you have a faith in people, that they’re basically good and smart, and if you give them tools, they’ll do wonderful things with them.”

- Steve Jobs

www.SM5andQUOTES.com

HISTORY OF TELEMEDICINE
Benefits of Telehealth

**Patients /Families**
- Reduced travel
- Timely appointments
- Services in their community
- Additional support

**Providers**
- Direct patient interaction
- Expanded Services
- Access to other experts
- Access to CME

**Health Care Systems**
- Improved access
- Improved outcomes
- Resources utilization
- Cost and Time efficient

AMERICAN TELEMEDICINE ASSOCIATION

Educating and engaging government, payers and the public about telemedicine
Providing a clearinghouse of information and services for both newcomers and experienced professionals
Fostering networking and collaboration among allied interests in medicine and technology
Promoting research, innovation and education
Developing and disseminating policies and standards
Ensuring a strong financial basis for the association to support operations
Creating consumer awareness and support

[http://www.americantelemed.org](http://www.americantelemed.org)
MORE RESOURCES

http://www.americantelemed.org/home
http://www.telehealthresourcecenter.org
http://telehealthtechnology.org/home
http://ctel.org

PUBLIC POLICY UPDATE

In New York State.....
Governor Cuomo signed legislation that will authorize Medicaid and other insurance reimbursement for telemedicine & teledentistry care....effective Jan 2016

In Delaware......
### Telehealth Modalities

<table>
<thead>
<tr>
<th>Store &amp; Forward (Asynchronous)</th>
<th>Real Time Live Video (synchronous)</th>
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<tbody>
<tr>
<td><img src="image1" alt="Store &amp; Forward" /></td>
<td><img src="image2" alt="Real Time Live Video" /></td>
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### Telehealth Modalities

<table>
<thead>
<tr>
<th>Remote Patient Monitoring (RPM)</th>
<th>mHealth</th>
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<tbody>
<tr>
<td><img src="image3" alt="Remote Patient Monitoring" /></td>
<td><img src="image4" alt="mHealth" /></td>
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*Image credits: Finger Lakes Community Health*
TYPICAL TELEMEDICINE SYSTEM IN OUR HEALTH CENTERS

- Stethoscope
- Dental Intraoral Camera
- ENT Scope
- Video Codec with LCD Monitor
- General Exam Camera

LET’S MEET RUBY......
It’s Not About the Gadgets, It’s About the Care

A NEW WAY OF LOOKING AT THINGS

Another Strategy For Today
Technology and Teams
Enable
Access (that)
Matters
TECHNICAL SPECIFICATIONS

* Bandwidth > 384 kbps
* Audio 7 kHz with echo cancel/mute

* High Definition
* Camera Control
* Gaze Angle

* Encryption

* ISDN vs. LAN/WAN vs. broadband internet vs. satellite

* Point to Point vs. Multipoint

* Lighting
* Room Color/Set up
* Decrease distraction

IT Team Member

OTHER THINGS TO CONSIDER...

Licensure and Portability
Malpractice
Contracts
Credentialing
Reimbursement
Patient Rights/Consents
Encrypted Connectivity
Workflow at Remote Site
Care Coordination
Ongoing Quality Improvement

Administrative Team Member
PROGRAM PLANNING

- Remote office is specialty provider office
- Document clinical workflow
- Always do a pilot – start small, think big
- Manage by FACTS: Data-Data-Data
- Pause Points: What is working? What is not working? What could be done better?
- Identify and Deal with Fears/Concerns
- Keep Decision Makers in the Loop
- Keep Process Moving Down the Track
- Give Feedback (timelines, performance measures)

**KEEP A SENSE OF HUMOR!!**

**CELEBRATE VICTORIES!!!**

Project Manager Team Member

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**Care Coordination**

* Scheduling
* Pre-Visit Planning
* Concurrent Chart Review
* Performance Measures
* Coordinate with PCMH Team/Specialty Team
* Quality Assurance Reports
* Lead Case Conferences
* Quality Improvement PDSA

The Telehealth Clinical Care Coordinator Team Member
### Create a Registry

<table>
<thead>
<tr>
<th>MR #</th>
<th>Last visit</th>
<th>A1C Date</th>
<th>Result</th>
<th>B/P Date</th>
<th>Result Date</th>
<th>LDL Date</th>
<th>Malb Result Date</th>
<th>DR Result Date</th>
<th>Foot Exam</th>
<th>Smoker</th>
<th>Notes</th>
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<tr>
<td>A07362500</td>
<td>10/20/11</td>
<td>10/20/11</td>
<td>7.3</td>
<td>10/20/79</td>
<td>124/79</td>
<td>11/1/11</td>
<td>7/2/11 &lt;6</td>
<td>7/26/11 mild NPO</td>
<td>6/21/11</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>10002</td>
<td>12/06/11</td>
<td>12/6/11</td>
<td>6.4</td>
<td>12/6/11</td>
<td>126/62</td>
<td>12/6/11</td>
<td>12/6/11 ACE-I</td>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
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</table>

### Telehealth Quality Team Member

### Train Telepresenter

Telepresenter Team Member
Actively Decrease Barriers to Care

- Outreach
- Insurance Access
- Transportation
- Language/Cultural Interpretation
- Motivational Interviewing/Pt Centered Goals
- Education

Relationships = Trust

CHW/Case Manager Team Member

Everyone Else on Both Sides!

Primary Care Provider
Specialty Care Provider
Front Desk
Nursing
Patient Navigators
Social Workers/Counselors
Registered Dietitian
Pharmacist/Treatment Adherence Counselor
Health Educators
Facilitated Enrollers
Community Based Organizations (CBO)

Other Team Members
The Finished Product...

Here are some examples......

TeleENT

- Finger Lakes Community Health
- Private MD/ENT Practice
Case Study

• 51 yo uninsured white female referred to our health center after seeking care in ED for vertigo. She worked in a convenience store and could not function (she kept falling when bending over) despite treatment with meclazine. We arranged for ENT consult. The ENT specialist mentored the NP telepresenter in an Epley maneuver which resulted in immediate relief of symptoms. Patient was able to return to work and remained asymptomatic.
The most important thing about a technology is how it changes people.

Jaron Lanier

meetville.com

TelePeds Neurology

Finger Lakes Community Health

URMC Child Neurology
TelePeds Neurology

Site Visit – Create Remote Office – Registry – Care Coordination – IT Connectivity – Train PA in Neuro Exam – Use PCMH Team – Leverage HIT – Case Conference – Monitor Outcomes – Ongoing QI

2013 Pilot Outcomes:

*** Decreased time to treatment (38d vs 60d)
*** Exceeded national averages on NCQA performance measures
*** 75% had changes or additions to their med regimens
*** 87.5% diagnosed with mental health co-morbidity
*** 100% referred to behavioral health
*** 63% showed improvement in function at school and home
*** High provider and patient satisfaction

CASE STUDY

7 year old Hispanic male dx with ADHD at age 5. Had persistent functional difficulties at home, in school, and in community exhibited by aggression with siblings and peers, poor sleep, anxiety, hyperactivity, and poor school performance. Consult with PNP from tertiary center ADHD clinic in Jan 2014. Med changes have been made (change to long acting stimulant with addition of guanfacine, SSRI (fluoxetine), and risperdal with dosing titrations.

Referrals were made to psychiatry and mental health counselors but child unable to access as no providers in area, long waiting lists, and providers did not accept his insurance. Mother also had difficulty taking time off of work to make appointments.

The most significant intervention was PNP phone calls and letters to the school district to request psychological testing- this spring child was placed in 8:1:1 classroom and began regular sessions with school counselor.

Last tele-consult in Aug 2015 demonstrated a happier, more content and focused child; plan is to begin weaning risperdal.
Finger Lakes Community Health

Eastman Institute for Oral Health

EARLY CHILDHOOD CARIES IN MIGRANT CHILDREN

- Early onset & increased severity due to cultural feeding practices
- Prevalence:
  Migrant > Underserved urban > US general population
**FLCH mobile dental teams and primary prevention strategy has decreased rate from 60% to 22%**

For those requiring treatment for advanced decay...

15% COMPLETION RATE
Intraoral Camera
Digital Images
Real Time Images

Bilingual/Bicultural Community Health Workers

Outreach
Insurance Access
Transportation
Language/Cultural Interpretation
Pediatric Dentistry Access
Education

Relationships = Trust
TeleDentistry Outcomes

4/10 – 7/15
N = 430 consults

- Triaged Correctly = 80%
- Decreased travel costs
- Decrease in lost work time
- Improved access to care
- Decreased time to treatment
- Decrease no show rates
- Increased interaction between dental providers

93% COMPLETION RATE

52% require treatment under general anesthesia

CASE STUDY

- 4 ½ year old female seen by mobile dental program in Headstart. Exam revealed caries on all baby teeth and two abscesses. She was referred to the teledental program and given an appointment within 2 weeks, but family no-showed teledental consult with pediatric dentist. Patient navigator worked with family to reschedule and addressed barriers to care (transportation and child care). The consult was completed with a plan for treatment under general anesthesia.
- Family initially resistant to this idea and would not return phone calls. Case was discussed at monthly teledental team meeting. Subsequent phone calls and home visits helped to establish trust. Pt Navigators (PN) assisted in scheduling OR appointment, preop physical, and reinforced instructions.
- Arrangements were made for Medicaid transport, but this fell through. Our CHW provided transportation as a last minute alternative. Treatment was completed and child attended first postop hygiene and fluoride treatment appointment.
- Appointments were made by PN for oral health care for other children in family.
- 39 encounters were done with this family
TeleAC (HIV/AIDS Care)

TeleAC (HIV/AIDS Care) Pilot Program Clinical Measures

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Goal</th>
<th>Baseline 7/1/13</th>
<th>End Pilot 6/30/14</th>
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<tbody>
<tr>
<td>Appointment Adherence</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PCP</td>
<td>85%</td>
<td>57%</td>
<td>91%</td>
</tr>
<tr>
<td>AC</td>
<td>85%</td>
<td>66%</td>
<td>100%</td>
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<tr>
<td>HIV Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD4 &gt; 500</td>
<td>50%</td>
<td>29%</td>
<td>64%</td>
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<tr>
<td>CD4 &gt; 200</td>
<td>85%</td>
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<td>91%</td>
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<tr>
<td>Negative viral load</td>
<td>50%</td>
<td>29%</td>
<td>67%</td>
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<tr>
<td>HAART &gt; 95%</td>
<td>85%</td>
<td>71%</td>
<td>73%</td>
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<tr>
<td>OI PCP if indicated</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Prevention Screening</td>
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<tr>
<td>TB Testing</td>
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<td>86%</td>
<td>92%</td>
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<tr>
<td>HCV Screening</td>
<td>85%</td>
<td>86%</td>
<td>100%</td>
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<tr>
<td>Cervical PAP</td>
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<td>66%</td>
<td>100%</td>
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<tr>
<td>Anus PAP</td>
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<td>0%</td>
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<td>Colon cancer screening</td>
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<td>86%</td>
<td>50%</td>
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<tr>
<td>Annual lipid screen</td>
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<td>Annual urinalysis</td>
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<td>60%</td>
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<tr>
<td>A1C</td>
<td>85%</td>
<td>71%</td>
<td>100%</td>
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<tr>
<td>STD Screen</td>
<td>85%</td>
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</tr>
<tr>
<td>PHQ 9</td>
<td>85%</td>
<td>29%</td>
<td>80%</td>
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</table>
CASE STUDY

28 year old African American female with Intellectual Disability diagnosed with HIV in 2009 during pregnancy. She has case manager through county ARC. She established with us in fall of 2014 and had her first teleconsult with HIV specialist within 6 weeks. Baseline CD4 402.

We work with her case manager to ensure adherence to appointments every months. She is >95% compliant with her meds and has met 75% of all HIV and prevention quality measures.

This summer her CD4 count was 1028
"New technology always provides new opportunities for us to connect with our audiences."

Eric Feldman

TeleDiabetes

Fundus Photography in Primary Care
Sodus Community Health Retinopathy Pilot Screening Results

SODUS COMMUNITY HEALTH DIABETES QUALITY INDICATORS

National Committee on Quality Assurance (NCQA)

> 40% >25% >36% >80% >80% >60%

FLCMH 1.2012
CASE STUDY

51 year old Spanish speaking who works at local racetrack presented as walk in on 5/12/14 with toe ulcer with osteomyelitis that required subsequent amputation by vascular surgeon. His A1C was 13% - he was started on glargine insulin. He was referred to our facilitated enroller, dietitian, a CDE, and endocrinologist. Enabling services (transportation and interpretation) were done by CHW. The CHWs and Patient Navigator worked closely with podiatry to get him an off loading boot as a new ulcer was forming on the sole of the foot. In July 2014, he had DRS done at primary care follow-up visit. The images were read within 48 hours and revealed severe non-proliferative retinopathy. Within one week, our patient navigators made an appointment at retinal specialist. Pt began series of q3month retinal injections for one year in order to preserve vision. CHW accompanied him to every visit and also assisted with unemployment application and charity care applications for medical bills incurred while he was initially uninsured. His visit in July of this year demonstrated return to work with healed foot wounds, continued follow-up at ophthalmology to monitor stabilized retinopathy, and an A1C of 6.3. There were a total of 170 phone and in-person encounters done by our staff during this one year period.
CHOOSE WISELY

It is not what technology does to us, it is what we do to technology. Get smart with technology, choose wisely and use it in a way that benefits both you and those around you.

headspace.com

IN CONCLUSION.....

If I can do it, you can do it.....
It is a bit freaky with this wireless technology.
A STRATEGY FOR OUR TIMES

Another Strategy For Today

Technology & Teams
Enabling
Access (that)
Matters

TODAY’S STRATEGY

TEAM
TOGETHER
EVERYONE
ACHIEVES
MORE
TEAMWORK

NEVER DOUBT THAT A SMALL GROUP OF THOUGHTFUL, COMMITTED PEOPLE CAN CHANGE THE WORLD. INDEED, IT IS THE ONLY THING THAT EVER HAS.

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PEOPLE WHO ARE CRAZY ENOUGH TO THINK THEY CAN CHANGE THE WORLD ARE THE ONES WHO DO.

Steve Jobs | http://www.apple.com
THANK YOU!

For more information:
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