Advanced Technology in Caring for Cancer Patients Remotely

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Objectives

I have no disclosures

• Definition & History of Telehealth
• Spectrum Health MedNow Overview
• Spectrum Health TeleOncology
• Legislature

What is Telehealth?

“The use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status”.
Telehealth comes in many forms

- Two-way video
- Email
- Smart phones
- Wireless tools
The History of Telemedicine

1800s – 1900s

Exercise
Mid-1900s to 2000

- In 1972, there was a key emphasis on telemedicine so much so that the Department of Health, Education and Welfare in the United States approved funding for seven telemedicine projects across different states. This funding was renewed and two further projects were funded the following year.
- Although the excitement of telehealth and telemedicine remained, enthusiasm waned in the 1980s. This put a halt on various projects and reduced opportunities for funding. As a result, this period of telehealth history is called the “maturation” stage and made way for sustainable growth.
- The combination of sustained growth and the advent of the internet spurred the revival or “renaissance” of telehealth into the early 2000s and onwards.

2000s and onward

- The early 2000s were characterized by accelerated development in both science and technology. The early adoption of technology in society made way for widespread adoption in society. The diffusion of portable devices like laptops and mobile devices in everyday life made ideas surrounding telehealth more plausible. This continuing trend of better and innovative technology in homes, schools and organizations is contributing to the growing research in telehealth.
- Telehealth is no longer bound within the realms of telemedicine but has expanded itself to promotion, prevention and education.
Overview of Spectrum Health

- Spectrum Health is a not-for-profit health system, based in West Michigan and West Michigan’s largest employer with 24,900 employees
- Spectrum Health is the only health system in Michigan to be named one of the nation’s 15 Top Health Systems® by Truven Health Analytics for 2015. This is the sixth time the organization has received this recognition.

Health Plan: Priority Health ~790,000 members
Spectrum Health Medical Group: ~1500 physicians & APPS
Spectrum Health Hospitals 12 hospitals ~3400 physicians & APPs

- Inpatient and outpatient rehabilitation
- Hospice
- Home Care (VNA, medical home)
- Ambulatory Services, Surgery Centers and Urgent Care ~200 sites

The Spectrum Health Cancer Center

- Provides comprehensive services and a robust clinical research program; only BMT program in West Michigan
- Affiliated with MSU School of Medicine and Van Andel Research Institute
- Leading edge programs & technology

- ~ 4000 analytic cases
- ~ 30% of patients on trials
- >15 sites of service
- Leader in Tele Oncology
What is MedNow®?

- Telehealth program at Spectrum Health that is a fast, convenient and affordable way for patients to receive care using technology to bridge the distance between patient and providers.
- Three areas of focus
  - Direct to Consumer (Direct to Patient)
  - Specialty Care
  - Remote Patient Monitoring
- Two core tools
  - Video visits
  - E visits

Why?

- Consumer Demand
- Technological Advancements & Competition
- Value Based Care
- Cost Savings
Consumer Demand - What Matters Most?

- Low Cost
- On Demand Access
- Convenience
- Local
- High Quality

Remove Geographical Barriers to Care

- Excessive testing
- 5-hour Visit
- 20% need follow-up
- 40 min. wait
- 3-hour visit
- Time to appt @ home

Reduce Cost

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
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<tbody>
<tr>
<td>ER</td>
<td>$370*</td>
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<tr>
<td>Urgent Care</td>
<td>$150*</td>
</tr>
<tr>
<td>Office Visit</td>
<td>$100*</td>
</tr>
<tr>
<td>Video Visit</td>
<td>$45</td>
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<tr>
<td>eVisit</td>
<td>$25</td>
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Value Based Care

Transitioning from volume to value

“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change”
- Charles Darwin

Requires a New Care Model

Requires a New Care Model

Primary Care Office
Low Acuity
ED
Emergency Department
High Acuity

Helps us remain competitive

Virtual Visits Will Become a Common and Central Component of Patient Care

<table>
<thead>
<tr>
<th>Year</th>
<th>Virtual Visits (estimated)</th>
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<tr>
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<td>2020</td>
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</table>

Source: Mehrota A et al, “Visits To Retail Clinics Grew Fourfold From 2007 To 2009, Although Their Share Of Overall Outpatient Visits Remains Low,” Health Affairs, August 2012; Health Care Advisory Board interviews and analysis.

Helps us remain competitive
If We Don’t, Someone Else Will…

MDLIVE
The Future of Healthcare

CVS Health

Walgreens
In the service of HAPPY & HEALTHY
What is MedNow?

Direct to Consumer MedNow
Care is available for low acuity primary care conditions using video visits or eVisits. The patient and clinician are in different physical locations.

Specialty MedNow
Allows patients with more serious conditions to have a consultation with a Grand Rapids-based Spectrum Health specialist via a secure video connection from remote clinics and hospitals.

Remote Patient Monitoring
Remote monitoring of chronic conditions by way of technology.

Some Patient Testimonials

We saw a patient today for a video visit; she initially had trouble connecting but we walked her through the steps to connect. She was excited about this awesome service. She said “I would have known it would be like this! I wouldn’t have gotten out of my pajamas!” She also explained how difficult it would have been for her to get to the primary care office to see the physician because she is widowed and isn’t very comfortable driving. She also has her daughter who is disabled living with her, and she cannot drive either.

The patient presented in the Emergency Department at Holy Family hospital complaining of shortness of breath. The ED physician was not completely comfortable with the situation and needed a cardiologist to consult with the patient. Since a virtual cardiology consultation was available, the patient remained at Holy Family and avoided being transferred to Grand Rapids. During the encounter, the patient volunteered that not only was she unemployed but did not have a car. If she had been transferred to Grand Rapids, she would have had to ask friends or family to take her to the Major Heart Center. The virtual encounter positively impacted the patient: the patient’s loved ones, the cardiologist, and the Emergency Department physician.
Spectrum Health MedNow...

Direct to Consumer MedNow
- MedNow at Home
- MedNow at Work
- MedNow in Retail
- MedNow at School
- MedNow in Community

Specialty MedNow
- Behavioral Health
- Cardiology
- Infectious disease
- Oncology
- Pediatrics
- Wound
- Vascular

Remote Patient Monitoring
- Congestive Heart Failure
- Diabetes
- COPD

Symptoms - Direct to Consumer
- Allergies
- Back Pain
- Bites & stings
- Cough, cold & flu
- Diarrhea
- Ear ache
- Fever
- Headache
- Heart burn
- Pink eye
- Rash/hives
- Sinus infection
- Sore throat
- Sprains & Strains
- Smoking cessation
- Urinary problems

Remote Patient Monitoring
- CHF
- COPD
- Diabetes

Goals:
- Reduce hospital readmissions
- Improve QOL
Specialty MedNow℠

Allows patients with more serious conditions to have a consultation with a Spectrum Health specialist via a secure video connection from remote Spectrum Health clinics and hospitals.

Over 24 specialties and 90+ Use Cases

- Oncology
- Bariatrics
- Behavioral Health
- Cardiology
- Diabetes
- Infectious Disease
- Ob/Gyn/NICU
- Orthopedics
- Pediatrics/PICU
- Pulmonary/Sleep
- Vascular
- Wound Care

Care Settings:
- ED
- Inpatient
- Outpatient
- Home
Let’s Talk Tele Oncology – Why

- Open up Access
- Physician Satisfaction
- Patient Satisfaction
- Decrease the Overall Cost of Care

Access

- ASCO published its report *The State of Cancer Care in America: 2016*, which detailed a potential workforce shortage of oncologists over the next decade just as the demand for oncology services will be surging.
- Telemedicine or tele-oncology will definitely help mitigate the problem of a physician workforce shortage.
- In addition, the technology allows other populations of physicians, such as retired, disabled, or stay-at-home moms and dads, to continue to use their medical expertise by practicing medicine as virtual consultants as long as they maintain their board certification and keep current through CME courses.

Increase Rural Access

2012 report by the Institute of Medicine for the National Academies, entitled *The Role of Telehealth in an Evolving Health Care Environment* (DOI: 10.17226/13466), found that telehealth drives volume, increases quality of care, and reduces costs by reducing readmissions and unnecessary emergency department visits for rural communities. Through telemedicine, rural hospitals can serve rural patients at better costs and help cut down on the time it takes rural patients to receive care, particularly specialty care.
Tele Oncology – Current Outcomes

- 35, 81 and now 156 YTD
- Slow but now steady growth
- Patient satisfaction – top box currently 91%
- Provider satisfaction – top box currently 91% and 6% neutral
  - No difference for either group by age or indication
  - In Oncology, physicians are now actively searching for opportunities
  - After exposure to the technology, believe in the potential
  - Physical exam remains a barrier despite available tools

Tele Oncology at Spectrum Health

- Areas of focus determined by:
  - Alignment with strategic plan and areas of growth
  - Potential market
  - Community need
  - Financial feasibility
  - Physician interest/ readiness

Tele Oncology - Model

- Specialty based pre visit reviews are performed by the program coordinator
  - Eligibility for the program
  - Results of imaging
- Originating site is the regional cancer center
  - Schedule patient for a tele oncology visit at both originating and central locations
  - Patient registered and roomed at originating site
  - Originating site bills the technical (facility) fee
Tele Oncology - Model

- Visit begun by physician after the patient is in the room
- Visit performed
- Follow up appointments are made based on physician recommendations
- Physician bills the professional component

Tele Oncology – Areas of Focus

- Psych Oncology
  - Universal distress scale across all sites
  - Consult to onco-psychiatrist triggered when distress 7-10
  - Tele oncology used for non suicidal high distress regional patients
- Lung Program
  - Lung Nodule follow up appointments
  - Lung Cancer Screening counseling and follow up
  - New patient evaluation for lung nodules
  - Routine follow up from the Lung Cancer multispecialty clinic

Tele Oncology – Areas of Focus

- Heme/BMT
  - Routine follow up with normal testing
  - Low risk BMT patients at this point
  - Benign Heme
- General Cancer Center Initiatives
  - Cancer Smoking Cessation counseling and follow up
  - Survivorship
- Medical Genetics consultations – Two studies in 2014 reported in Journal of Clinical Oncology indicate that telephone-based education or counseling initiatives can be successful in educating individuals at familial or genetic risk of cancer and in inducing these at-risk individuals to undergo recommended screening (J Clin Oncol 2014; DOI: 10.1200/JCO.2013.51.6765, J Clin Oncol 2014; DOI: 10.1200/JCO.2013.51.3236).
### Innovation - Knock Out Cancer

Our first “Knock Out Cancer” session was held on November 30, 2016. As of February 28, 2017, 17 guests have been served with an average visit length of 21 minutes. Nine participants were female and eight male. The main topics discussed included:

- Exercise/Physical activity
- Diet/Nutrition
- Family cancer history
- Smoking cessation
- Cancer screening recommendations based on age and gender

### Results!!

- One guest was connected to a genetic counselor based on their visit.
- Another guest had questions about a family member’s battle with lung cancer, which provided an opportunity to discuss lung cancer screening and smoking cessation.
- All 17 guests verbalized their visit and the information provided was helpful.
- Over 50% verbally indicated they would make a change in their current lifestyle or health behaviors.

### Tele Oncology – Opportunities

- Melanoma
  - Skin Lesion screening: Dermatology is not yet a believer in the technology, despite the high resolution tools, and are worried about risk
  - Melanoma multispecialty team: concerned about whole body screens and the need for physical exams in active cancer patients
- Survivorship programs/ evaluations upcoming
- Partnering with our community resources to provide cancer prevention and education to our underserved areas
Patient Lives in Marquette, MI
Patient's Household Income is $37,355

Patient's Appointment is with Specialist in Grand Rapids, MI
Patient Must Take Time Off of Work to Attend Appointment

6 Hours & 34 Minutes - Patient travels to Grand Rapids (if traffic, construction, or weather allow)

14.5 Hours

Traditional Model

Patient Costs
Food Expense: $16.00
Total Gas Expense: $434.16
Wages Lost: $161.64
Total Patient Costs Excluding Any Medical Expenses: $611.80

Patient Impact

BMT

Total Time: 14.5 Hours

Tele Oncology

Patient Costs
Food Expense: N/A
Total Gas Expense: $1.43
Wages Lost: $12.57
Total Patient Costs Excluding Any Medical Expenses: $14.00

Patient Impact

Lung

Traditional Model

Patient Costs
Food Expense: $8.65
Total Gas Expense: $5.79
Wages Lost: $56.41
Total Patient Costs Excluding Any Medical Expenses: $99.27
Patient Impact

Lung

Tele Oncology

Patient Costs
Food Expense: $3.35
Miles: 18

Total Patient Costs Excluding Any Medical Expenses: $11.94

Payer Impact

Year 1 Adoption
Year 2 Adoption
Year 3 Adoption

8,500
18,000
30,000

PH Savings associated with in-person volumes projected to shift to MedNow (DTC)

$403,835
$855,180
$1,425,300

System Impact

Simple access 844.322.7374 available 24/7/365

- 1100 new patients from video & e visits
- > 99,000 patient miles saved
- > $35,000 saved in fuel costs
- > 900 avoided ED or UC visits
- 34 transfers avoided
Medicare & Medicaid

Medicare Part B covers visits and consultations that are provided using an interactive two-way telecommunications system (with real-time audio and video) by a doctor or certain other health care provider who isn’t at your location.

However, there are restrictions. Services in rural areas are covered under certain conditions and only if located at one of these places: doctor’s office; hospital; critical access hospital; rural health clinic; federally qualified health center; hospital-based or critical access hospital-based dialysis facility; skilled nursing facility; and community mental health center.

Medicaid

Telehealth is not considered part of Medicaid’s entitlement definition, but is often reimbursed by states under the umbrella of telemedicine services (Telemedicine, Medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/DeliverySystems/Telemedicine.htm). Currently, 48 state Medicaid programs have some type of coverage for telemedicine (American Telemedicine Association, www.americantelemed.org/policy/state-policy-resource-center.ListViewXlrlvY).
Coding & Billing

- Medicare added several billable codes for telehealth in 2015, and is adding 6 more in 2016. This expands Medicare’s financial support for chronic disease management in particular.
- The Medicare Payment Advisory Commission (MedPAC) support for rulemaking has sparked more discussion in Congress.

Coding & Billing - GT Modifier

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<th>Payer</th>
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<td>United Healthcare</td>
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</tbody>
</table>

CPT G0296 with GT Modifier Payable for Telemedicine

- G0296 is payable with GT modifier if considered medically necessary. See clinical bulletin 0380: it is considered medically necessary for current or former smokers ages 55 to 80 years with a 30 pack-year or more smoking history, and, if a former smoker, for quit within the past 15 years.

- BCN: G0296 is payable with GT modifier. It is considered medical, the patient’s liability will fall under their medical benefits.

- BCBS: G0296 is payable with GT modifier. It is considered medical; the patient’s liability will fall under their medical benefits.

- Cigna: The GT modifier will not alter how G0296 will be reimbursed; charge will be paid in full as long as the criteria are met for G0296 to be billed.

- Priority Health: No, not payable with GT modifier per Priority Health coding department.

- United Healthcare: No, not payable with GT modifier per UHC Telemedicine Policy.

Coding & Billing – Rules may vary

- Telephone visit codes billable by PCP only:
  - 99441, Telephone evaluation and management service by a physician or other qualified health care professional who may report E&M services provided by an established patient, parent or guardian (not originating from a related assessment and management service in procedure within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or sooner) available appointment 0-15 minutes of medical discussion.
  - 99442, Telephone services (see above), 15-20 minutes of medical discussion.
  - 99443, Telephone services (see above), 20-30 minutes of medical discussion.
  - 99444, Telephone services (see above), 30 minutes or more of medical discussion.
  - All the nonphysician QHP telephone visit under the participating PCP.
  - A participating PCP needs to be available to the QHP at the time of the telephone visit. “Available” can mean face-to-face, by phone, or by fax.
  - QHPs may only contact patients within the scope of their licensure.
  - When the patient initiates the call and the PCP or QHP returns the patient’s call, it should be documented that way in the medical record.
  - SLPs/OTs/PTs will not use these codes.
Billing codes available, considerations

Online medical evaluations (e-visit) billable by PCP only
- 99444: Online evaluation and management services provided by a physician or other qualified health care professional who may report evaluation and management services provided to an established patient or guardian, not originating from a related E&M service provided within the previous 7 days, using the Internet or similar electronic communications network.
- Do not report 99444 when using 95239-95245, 95274-95289 for the same communication or for anticoagulation management when reporting 90533, 90534.
- 99451: Online assessment and management services provided by a qualified non-physician health care professional to an established patient, guardian, or health care provider not originating from a related assessment and management service provided within the previous 7 days, using the Internet or similar electronic communications network.
- You must use encrypted or authenticated email for online medical evaluation visits. Unsecured email is not acceptable, since it is not secure, has no “terms of use” or legal disclosures in place to protect providers, and can easily expose patient PHI including email addresses to unintended third parties.

Legislative Overview

- More than 200 telehealth bills were introduced in state legislatures last year. Many of these bills removed restrictions like geographic or distance requirements that made it difficult to get paid for virtual care.
- The Telehealth Innovation and Improvement Act, was introduced in December 215 and looks to require the Center for Medicare and Medicaid Innovation (CMMI) to test the effects of telehealth on cost and clinical efficacy.

Summary

- Feasible
  - Patient and physician satisfaction high
  - Financially sustainable to date
  - Broad number of indications in addition to traditional remote monitoring & primary care uses
- Tele Oncology
  - Can expand market and exposure of subspecialists across broad geography and into rural areas
  - Optimizes patient time and resources
  - Potential not fully realized at this time
SPECTRUM HEALTH CANCER CENTER
1.855.SHICANCER
Request a consultation, second opinion, or refer a patient