Telehealth / Telemedicine

e-Enabling our Health System

UBCM Annual General Meeting
2014
Dr. Robert Halpenny, CEO Interior Health Authority

Overview

- Definitions
- Patient Event - Telemedicine
- Health System Requirements
- Examples of Success
- Continued Innovation
- mHealth
- Summary
Definitions

TeleMedicine
- is the use of information and communication technology to support the provider and patient in the provision of care across distances.

TeleHealth
- is the use of technology in the broader delivery of health care services, information, and education across distances.

More Definitions

Synchronous
- the telehealth event occurs with a live, real-time connection
- e.g. Post Surgery follow-up between patient and physician using video conferencing

Asynchronous
- information capture and response/analysis happen at different times
- e.g. Tele Wound Care – home care nurse examines patient and records wound status for review by a Wound Specialist at a later time.
More Definitions

EHR (Electronic Health Record)
- A longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting (HIMSS)

EMR (Electronic Medical Record)
- An electronic record of patient health information, but more limited to what is created, captured, and used within a physician office / clinic setting.

EHRs and EMRs by themselves do not equal Telehealth, rather they are tools used to support Telehealth.

Patient Event

Typical health care encounter:
- Patient arrives at clinic,
- someone greets/assists patient (nurse/clerk),
- Physician sees patient,
- encounter is recorded in chart.
Patient Event – with Telemedicine

A real-time telemedicine encounter:
- Patient arrives at remote clinic,
- someone greets/assists patient at remote end,
- Physician connects to patient using technology, completes patient visit
- encounter is recorded in chart.

Requirements – Health System Level

A telemedicine encounter requires:
- Staff at remote sites
- Coordinated scheduling: provider, patient, remote site
- Hardware for connecting: Video-conference unit, iPad, other
- Hardware for analysis: camera, stethoscope, weigh scale, imaging equipment, other
- Secure and integrated networks
Requirements...

Provincial Network
- Over 880 Telehealth end-points across 119 communities

BCTDC collaboration
- BC Telehealth Development Committee
- Standards
- Quality
- Advocacy
- Education

Examples – IH TeleThoracic

- Real-time video conference
Examples – IH TeleWound

- Store-and-forward software solution

Example – IH TeleHomeCare
Example – PHSA Telehealth Enabled Auditory Brainstem Response

Example - Island Health TeleOphthalmology
Retinopathy is a complication of diabetes that, when detected through retinal screening and treated, can prevent blindness in up to 90% of those affected.
Example – TeleUltrasound (High Risk Pregnancy)

Example – IH TelePacer Clinic
Example – BC Operational Stress Injury Clinic

OSI Provincial Utilization
2011 – 2013 n = 683 events

Example - BC Cancer Agency TeleOncology

Dr Ed Hardy, Medical Oncologist, BCCA Centre for the Southern Interior
Dr. Kong Khoo, Medical Oncologist, Professional Practice Leader, TeleOncology, BCCA Centre for the Southern Interior
Primary Care in Takla Lake

- Remote northern First Nations community
- Physician (Dr. Pawlovich) lives in Abbotsford, but visits Takla for 1 week/month
- Available through telehealth for the rest of the month
- Key success factor: building relationships with community members

Continued Innovation – iPad TeleStroke

Mobility Benefits
- Light weight, carry anywhere
- Access over in-house or 3G networks
- High quality video
- Remote access to EHR
- Immediate connectivity

Areas for improvement
- Integration and scalability at the Health System level
Continued Innovation – Private Providers

mHealth – Personal Health Solutions

FitBit

Fooducate

iHealth
In summary Telehealth/TeleMedicine…

- Is an investment at the health system level and a savings or enhancement of service at the patient level.
- Assists local (rural) physicians and patients with remote access to specialized resources, otherwise not available.
- Reduces travel time, increases physician-patient time, and enables access to a physician in a more timely manner.
- Is not a solution for all types of care, often for parts of the care process (diagnosis, follow-up, treatment cycle, etc.).
- Offers tremendous advantages with more untapped potential.

Thank you!