

Telemedicine as Part of Your Service Line Strategy

Howard J. Gershon, FACHE
Principal, New Heights Group
March 2011



Session objectives

- *Understand the concept of telemedicine/telemedicine and how it is being used in healthcare today.*
- *Identify opportunities and challenges in using telemedicine for your service line.*
- *Outline critical steps for implementing telemedicine within a service line.*



Agenda

- *Some background*
- *How can telemedicine fit into your service line strategy?*
- *Obstacles and challenges*



Background



Three categories of telemedicine services

- **Remote monitoring**

- Also known as self-monitoring or testing
- Primarily used for managing chronic diseases or specific conditions, such as heart disease, diabetes mellitus, or asthma.
- Shown to provide comparable health outcomes to traditional in-person patient encounters, supply greater satisfaction to patients, and can be cost-effective.

- **Store-and-forward**

- Involves acquiring medical data (like medical images, biosignals etc) and then transmitting this data to a doctor or medical specialist at a convenient time for assessment offline.
- Does not require the presence of both parties at the same time.



Three categories of telemedicine (cont'd)

- ***Interactive services***

- Real-time interactions between patient and provider, to include phone conversations, online communication and home visits.
- Many activities such as history review, physical examination, psychiatric evaluations and ophthalmology assessments can be conducted comparably to those done in traditional face-to-face visits.
- In addition, “clinician-interactive” telemedicine services may be less costly than in-person clinical visits.



Delivery mechanisms

- ***Networked programs***
 - Link tertiary care hospitals and clinics with outlying clinics and community health centers in rural or suburban areas.
- ***Point-to-point connections***
 - Private high speed networks that deliver services directly or outsource specialty services to independent medical service providers.
 - May include radiology, stroke assessment, mental health and intensive care services.
- ***Monitoring center***
 - Links are used for cardiac, pulmonary or fetal monitoring, home care and related services that provide care to patients in the home.
- ***Web-based e-health patient service sites***
 - Provide direct consumer outreach and services over the Internet.



Current utilization

- *In the 2011 HealthLeaders Media Industry Survey of technology leaders, 46% of respondents said they have one or more telemedicine programs in place.*
 - Another 41% say they will have one in place in one to five years.



Healthcare Intelligence Network Survey, Sept 2010

- **111 respondents**

- About 70% use telemedicine for clinical and non-clinical purposes
 - Email and health assessments are top tools used
- More than a third — 37% — employ telemedicine for all populations.
- Funding sources:
 - 46% private payors
 - 37% public payors.
- Too soon to determine ROI – 64%
- Of respondents with no telemedicine programs, more than a third - 37.5% - plan to launch telemedicine services within the next year.
- Reimbursement is biggest barrier to developing/expanding programs



HIN Survey, 2010

- **Applications**
 - 80% use land lines
 - 55% advice lines
 - 51% EHRs as non-clinical application
- **Remote monitoring**
 - 67% use it
 - Patient base: 71% heart failure, 74% diabetes
 - What measured: 80% weight, 77% vital signs



HIN Survey (cont'd)

- ***Benefits of telemedicine***
 - 68% saw increase in patient compliance
 - 44% saw decrease in complications
 - Decreased readmissions (61%) and hospitalizations (60%)
 - 81% increased access
 - 70% increased efficiency



Is Telemedicine a Service Line?

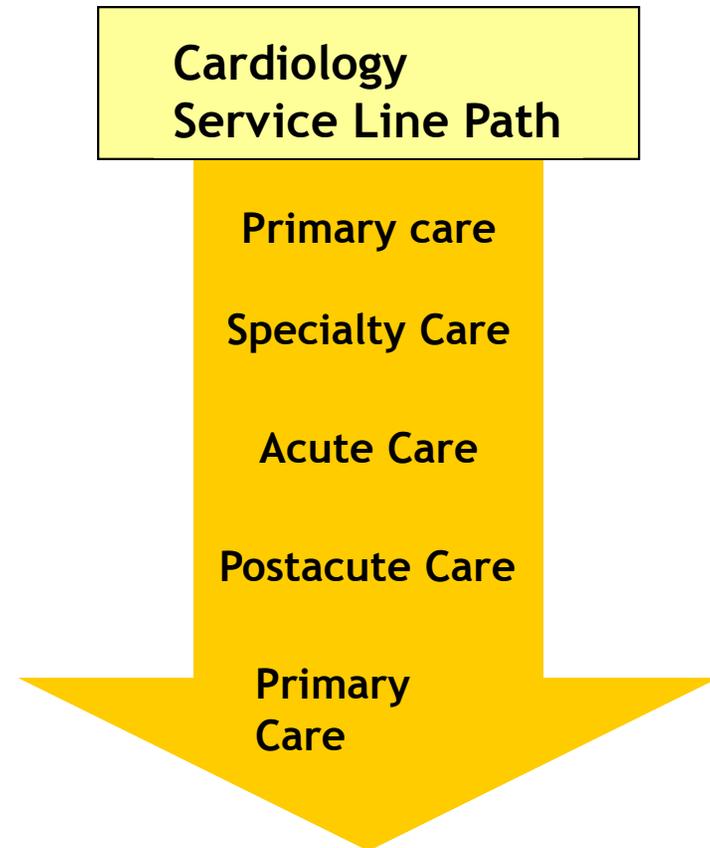


What is a service line?

A service line is an organizational model that better aligns operations with the customer/patients base

A service line is comprised of a diagnostic grouping of like patients, covering all or part of the care continuum.

With this definition, telemedicine is an enabler like finance or planning.



Is Telemedicine Right for Your Service Line?



How can telemedicine enhance your service line?

- *Improved access; better relationships with outlying communities/referral sources*
 - Reach larger geographic market area/bring healthcare services to patients in distant locations
 - Communication between general practitioners and specialists housed at a remote location.
- *Better management of chronic diseases - improved quality*
 - Avoid unnecessary trips to the ER and hospital admissions via better outpatient management
 - Fewer or shorter hospital stays
 - Better manage patients with very long (outlier) length of stays and high readmission rates



How can telemedicine enhance your service line? *(cont'd)*

- ***Increased patient satisfaction***
 - Improved access
 - Specialists not otherwise available
 - Receive care in comfort of own home
 - No transportation required (especially helpful for poor and rural communities)
 - No travel time
 - No in-office “wait time”
- ***Potential for cost efficiencies***
 - Reduce travel time for clinicians
 - Leverage clinician time



Example-Reducing NICU LOS

- *NICU is one of the most expensive services in a hospital, often costing several thousand dollars a day*
 - Sickest infants often stay over a month
 - Many infants in the NICU have limited insurance coverage and/or Medicaid
- *Use of a telecardiology system can reduce NICU length of stay for some*
 - Technology can provide immediate turnaround of neonatal echocardiograms, including video during cardiology case consultations.
- *Results: Telemedicine has been shown to reduce NICU stay by **over 17%***



Example - Better managing complex patients and expanding specialty care

- ***Critical care telemedicine or the "virtual ICU."***
 - Developed to address shortage of intensivists, critical care nurses
 - Intensivist-led care teams provide off site 24/7 coverage of ICU
 - Ability to monitor heart rates, blood pressure, respiration, other vitals, thereby intervening earlier, before complications occur
- ***eICU currently in place in approximately 40 health systems serving more than 200 hospitals in 28 states.***
 - As of 2008, the eICU program was monitoring 300,000 ICU patients per year or approximately 10 percent of the adult ICU patient population.



Example-Improving access to specialty care

- *Telemedicine network linking a regional burn center to hospitals 300+ miles away*
 - University of Utah Health Center telemedicine program to evaluate acute burns
 - Network links burn center to three hospitals located 298 to 350 air miles away.
 - Telemedicine consults for acutely burned patients admitted to their emergency departments.
 - Results:
 - Acute evaluation of burn patients can be performed accurately by telemedicine and can reduce undertriage or overtriage for air transport, improve resource utilization, and both enhance and extend burn center expertise to many rural communities at low cost.



Rating telemedicine strategies

Goal	Store and forward	Remote monitoring	Interactive	
Increase volume	\$\$	\$\$\$	\$\$\$	Keep pt in system
Customer satisfaction		😊😊😊😊	😊😊😊😊	
Expand region /market reach	\$\$\$	\$\$\$\$	\$\$\$	Connect with outlying providers
Better patient management	😊😊😊	😊😊😊😊	😊😊😊😊	Broadens scope of services
Teaching tool	🏛️🏛️🏛️	🏛️🏛️	🏛️🏛️🏛️	
Leverages clinical staff	👤👤👤👤		👤👤👤👤	Leverages scarce resources



Example - Cardiology

- ***Store and forward***
 - CT, EKG, lab tests for TPA determination
- ***Remote monitoring***
 - Manage key indicators (cholesterol, BP, etc.) within own homes
 - E-icu for critical care quality monitoring
- ***Interactive***
 - Cardiologist: primary consult for better patient management
 - Cardiologist: surgeon consult for surgical determination
 - Cardiology patient visit for patient management



Example - Psychiatry

- *Store and forward*
- *Remote monitoring*
 - Assist area emergency rooms
 - Manage patient compliance
- *Interactive*
 - Psychiatrist:primary consult
 - Psychiatrist: emergency room consult
 - Psychiatrist: mental health provider consult
 - Psychiatrist:patient visit



Obstacles and challenges (across all service lines)

- *Keeping up with changes in technology*
- *Educating and training clinicians on both sides of technology*
 - Compliance among patient communities
- *Investment in equipment and training*
- *Credentialing/licensing (especially across state lines)*
- *Other*
 - Who maintains patient records?
 - Accessing patient histories?
 - Different state regulations for ordering tests, prescriptions?



Reimbursement

- *Reimbursement for telemedicine is slowly growing, but not widespread or standardized.*
- *Currently, 32 state Medicare programs provide at least some reimbursement for telemedicine services.*
 - 11 states have enacted laws requiring that private insurers reimburse telemedicine services if the same service would be reimbursed when provided in person.
 - Only six of 11 states with reimbursement laws have specifically addressed the manner in which physicians should be reimbursed
- *CMS says that starting this year it will expand Medicaid coverage for remote healthcare services, including chronic disease management tools.*



Reimbursement

- *Some states reimburse for both the provider at the consultation site and the provider at the referring or home site for an office visit.*
- *States can also reimburse any additional costs so long as the payment is “consistent with the requirements of efficiency, economy, and quality of care,” according to CMS.*
 - These add-on costs can be incorporated into the fee-for-service rates or separately reimbursed as an administrative cost by the state.



Licensing/Credentialing

- *In May 2010, CMS proposed regulations designed to make it easier for hospitals to credential physicians who provide telemedicine services at their facilities.*
- *Final rule anticipated March 2011.*



If you are thinking about telemedicine for your service lines

1. *Be clear on goals- what are you trying to achieve through telemedicine? Are your goals measurable?*

- Is the organizational leadership behind the effort?
- Do you understand the organizational commitment you are making?

2. *Identify telemedicine team*

- Administrative champion
- Physician champion
- Marketing reps to capture “recipients”
- Training team



If you are thinking about telemedicine for your service lines

3. *Determine how the telemedicine service will fit into the service line organizational structure*
 - Clarify reporting relationships of telemedicine staff across service line
 - Communicate to all involved or affected by initiative
4. *Develop plan for educating & training all on telemedicine technology*
 - Off site recipients
 - On site providers
 - Patients and care givers
5. *Continually educate senior leadership, board and medical staff on performance and advances to maintain commitment to plan*



Why invest in telemedicine as part of a service line strategy

1. *Establishes a foothold in emerging and growing markets*
2. *Improves customer satisfaction and awareness*
3. *Leverages new technologies; potential differentiator*
4. *Greater opportunity to improve population health*
5. *Supports comprehensive service line strategies*
6. *Enhances opportunities to partner with physicians and communities*
7. *Generates referrals*
8. *Opportunity to enhance the overall bottom-line*



Contact

Howard J. Gershon, FACHE

Principal

New Heights Group, LLC

505 986 1570

howard@reach-newheights.com

www.reach-newheights.com

