Limb Loss Rehabilitation During the Pandemic: Stakeholder Perspectives on Barriers & Telemedicine
Part 1 of 2 – Patient, Prosthetist and Physician

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ACRM PANDEMIC SERIES
MAY 7TH 2020
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Disclaimer

- No financial conflicts of interest for this presentation
- Non-financial conflicts may relate to employment and professional organization affiliations
Needs statement

- Rehabilitation services affect outcomes following limb loss
  - Infrastructure
  - Stakeholders

- Additional barriers are created by the COVID pandemic
  - COVID population
  - Post-COVID population

- Address barriers by novel solutions and stakeholder coordination
Goals

1. Highlight the pandemic-related barriers to care for limb loss rehabilitation

2. Discuss emerging solutions such as telemedicine to address these barriers
Learning objectives

1. Understand the patient’s rehabilitation journey after limb loss
2. Understand the infrastructural requirements and stakeholder roles in usual care
3. Describe barriers created by the pandemic for infrastructure and stakeholders
4. Present how telemedicine may be able to integrate stakeholders and infrastructure to continue to provide care
5. Enable participants to adapt this information to their local context
The Journey with Limb Loss / Difference
The patient’s journey with limb loss / difference

- Discovery
- Medical care
- Rehabilitation + DME
- Receive & learn to use mobility and activity devices
- Community function – A new normal
The clinician perspective on the journey

<table>
<thead>
<tr>
<th>Phase</th>
<th>Hallmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperative</td>
<td>Assess body condition, patient education, surgical level discussion, postoperative prosthetic plans</td>
</tr>
<tr>
<td>Amputation Surgery/Reconstruction</td>
<td>Length, myoplastics closure, soft tissue coverage, nerve, handling, rigid dressing</td>
</tr>
<tr>
<td>Acute Post surgical</td>
<td>Wound healing, pain control, proximal body motion, emotional support</td>
</tr>
<tr>
<td>Pre prosthetic</td>
<td>Shaping, shrinking, increase muscle strength, restore patient locus of control</td>
</tr>
<tr>
<td>Prosthetic Prescription</td>
<td>Team consensus on prosthetic prescription and fabrication</td>
</tr>
<tr>
<td>Prosthetic Training</td>
<td>Increase prosthetic wearing and functional utilization</td>
</tr>
<tr>
<td>Community Integration</td>
<td>Resumption of roles in family and community activities. Emotional equilibrium and healthy coping strategies. Recreational activities.</td>
</tr>
<tr>
<td>Vocational Rehabilitation</td>
<td>Assess and plan vocational activities for future. May need further education, training or job modification.</td>
</tr>
<tr>
<td>Follow-up</td>
<td>Life long prosthetic, functional, medical assessment and emotional support</td>
</tr>
</tbody>
</table>

Modified from Esquenazi and Meier.  
The journey through the health system

Outpatient limb care
ED
OR
ICU/floor
IRF/SNF
Outpatient prosthetic candidacy & risk factor minimization
IRF/SNF
Outpatient prosthetic / limb care
Outpatient limb care / DME
Stakeholders - The care teams

- Acute care physician
- Advocacy & social support
- Psychology
- Prosthetist
- Work, driving & recreation
- Therapy
- Insurance & Regulatory bodies
- Post-acute care physician

Medical specialties
Clinicians
Non-clinicians
Pre-COVID 19 barriers to care – patient perspective


Expectations of rehabilitation following lower limb amputation: a qualitative study.

Ostler C1, Ellis-Hill C, Donovan-Hall M.

PURPOSE: To explore the expectations of patients about to undergo prosthetic rehabilitation following a lower limb amputation.

METHOD: DESIGN: Qualitative study using semi structured interviews.

SETTING: Interviews were conducted at two district general hospitals.

PARTICIPANTS: Eight patients who had undergone a major lower limb amputation due to vascular insufficiency were interviewed within two weeks of their amputation. All patients had been referred for prosthetic rehabilitation.

RESULTS: Five key themes emerged from the interviews: uncertainty, expectations in relation to the rehabilitation service, personal challenges, the prosthesis and returning to normality. These findings illustrate how participants faced uncertainty both pre- and postoperatively and often looked towards established amputees for the provision of accurate information.
Pre-COVID 19 barriers to care – Integrating patient and care team interaction within the health system
Disruption of the health system during the COVID pandemic

Outpatient limb care
ED
OR
ICU/floor
IRF/SNF
Outpatient prosthetic candidacy & risk factor minimization
IRF/SNF
Outpatient prosthetic / limb care
Outpatient limb care / DME
Novel solutions during the COVID pandemic
A brief background on telehealth regulations during the pandemic
COVID-19 and HIPAA

We are empowering medical providers to serve patients wherever they are during this national public health emergency. We are especially concerned about reaching those most at risk, including older persons and persons with disabilities. – Roger Severino, OCR Director.

Telehealth services may be provided, for example, through audio, text messaging, or video communication technology, including videoconferencing.

OCR will issue a notice to the public when it is no longer exercising its enforcement discretion based upon the latest facts and circumstances.

https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/index.html
Who is covered?

Under the Health Insurance Portability and Accountability Act (HIPAA), a “health care provider” is a provider of medical or health services and any other person or organization who furnishes, bills, or is paid for health care in the normal course of business. Health care providers include, for example, physicians, nurses, clinics, hospitals, home health aides, therapists, other mental health professionals, dentists, pharmacists, laboratories, and any other person or entity that provides health care.

https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/index.html
What is covered?

All services that a covered health care provider, in their professional judgement, believes can be provided through telehealth in the given circumstances of the current emergency are covered by this Notification.

This includes diagnosis or treatment of **COVID-19 related conditions**, such as taking a patient’s temperature or other vitals remotely, and diagnosis or treatment of **non-COVID-19 related conditions**, such as review of physical therapy practices, mental health counseling, or adjustment of prescriptions, among many others.

https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/index.html
Who pays?

EXPANSION OF TELEHEALTH WITH 1135 WAIVER: Under this new waiver, Medicare can pay for office, hospital, and other visits furnished via telehealth across the country and including in patient’s places of residence starting March 6, 2020. A range of providers, such as doctors, nurse practitioners, clinical psychologists, and licensed clinical social workers, will be able to offer telehealth to their patients.

Which platforms are acceptable?

Public-facing products such as TikTok, Facebook Live, Twitch, or a public chat room are not acceptable forms of remote communication for telehealth because they are designed to be open to the public or allow wide or indiscriminate access to the communication.

Non-public facing remote communication products would include, for example, platforms such as Apple FaceTime, Facebook Messenger video chat, Google Hangouts video, Whatsapp video chat, Zoom, or Skype. Such products also would include commonly used texting applications such as Signal, Jabber, Facebook Messenger, Google Hangouts, Whatsapp, or iMessage. Typically, these platforms employ end-to-end encryption, which allows only an individual and the person with whom the individual is communicating to see what is transmitted.
What is the protection for providers?

Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency

Under this Notice, however, OCR will not impose penalties against covered health care providers for the lack of a BAA with video communication vendors or any other noncompliance with the HIPAA Rules that relates to the good faith provision of telehealth services during the COVID-19 nationwide public health emergency.

The patient perspective

Denise Hoffman RN
Mental Health

- Social isolation is a Pre-COVID issue
- Home restriction limits participation
- Support group meetings cancelled or virtual
- Peer mentorship at a standstill
- Limited technologic proficiency among elderly creates more isolation
Prosthesis abandonment is a Pre-COVID issue
Home restriction limits prosthesis use
Home restriction limits physical activity
Home restriction limits limb care
Virtual therapy does not substitute completely for in-person therapy
Barriers to care

Medical care
- Not visiting clinic
- Limited “elective” surgery

Prosthetic care
- Not visiting clinic
- Delayed limb-related appointments

Therapy
- In-person clinics cancelled
- Virtual therapy has limited utility
Navigating a Telehealth Appointment

Requirements:

- For elective reasons only, call 911 for emergency
- Verify coverage with insurance
- Sign consent
- Email address, or SMS Text number
- Adequate internet capabilities
- Device: smartphone, tablet, laptop, desktop computer with audio/video
- Provider telehealth platform - Knowledge and access
- Assistance with technology
- Optional: Headphones with built-in microphone

Write it Down:

- Reason for appointment
- Have questions ready
- Prior health history
- List of current medications and allergies
- Pharmacy and pharmacy phone number
Navigating a Telehealth Appointment

**SET IT UP**
- Quiet space
- Privacy - use headphones with built in microphones
- Pretest video and audio
- Block out appointment time and dedicate device for receiving call
- Ensure good charge on device
- Have pertinent medical equipment handy for visit – Examples include thermometer, blood pressure machine, peak flow meter, Glucometer (blood sugar test) ready

**DURING THE APPOINTMENT**
- Write down the important information your provider is sharing with you.
- If you do not understand the information, ask for clarification.
- Double check your pre written questions, and make sure they have been answered.
- Double check that you understand the prescribed plan and treatment including next appointment.
The physician perspective
The surgical perspective
John Felder MD

- Delay in care
- Timing of surgery
- Telemedicine?
The PM&R perspective

- Consults
- Preprosthetic rehabilitation
- Prosthetic prescription
- Prosthetic rehabilitation
- Prosthetic follow-up
<table>
<thead>
<tr>
<th>TYPE OF SERVICE</th>
<th>WHAT IS THE SERVICE?</th>
<th>HCPCS/CPT CODE</th>
<th>Patient Relationship with Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEDICARE TELEHEALTH VISITS</strong></td>
<td>A visit with a provider that uses telecommunication systems between a provider and a patient. Common telehealth services include: • 99201-99215 (Office or other outpatient visits) • G0425-G0427 (Telehealth consultations, emergency department or initial inpatient) • G0406-G0408 (Follow-up inpatient telehealth consultations furnished to beneficiaries in hospitals or SNFs) For a complete list: <a href="https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes">https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes</a></td>
<td>For new* or established patients.</td>
<td>*To the extent the 1135 waiver requires an established relationship, HHS will not conduct audits to ensure that such a prior relationship existed for claims submitted during this public health emergency</td>
</tr>
<tr>
<td><strong>VIRTUAL CHECK-IN</strong></td>
<td>A brief (5-10 minutes) check in with your practitioner via telephone or other telecommunications device to decide whether an office visit or other service is needed. A remote evaluation of recorded video and/or images submitted by an established patient.</td>
<td>• HCPCS code G2012 • HCPCS code G2010</td>
<td>For established patients.</td>
</tr>
<tr>
<td><strong>E-VISITS</strong></td>
<td>A communication between a patient and their provider through an online patient portal.</td>
<td>• 99421 • 99422 • 99423 • G2061 • G2062 • G2063</td>
<td>For established patients.</td>
</tr>
</tbody>
</table>
Resident training during the pandemic
Tawnee Sparling MD

Three roles

1. Diverted to acute care

2. Working on inpatient IRF services/consults

3. Working from home

Residents by Specialty

- Anesthesia: 4%
- Emergency Medicine: 6%
- Internal Medicine: 20%
- Other: 69%

Data obtained from the 2019 AAMC Resident Report
Bedside training is disrupted

- Inpatient service or consult rotations are seeing a more acute patient population

- Decreased number of amputation admissions to IRFs
  - People are staying inside - fewer traumatic events
  - Admissions from home for prosthetic gait training are on hold

- Limb loss patients are often a smaller inpatient population compared to stroke, SCI, TBI, etc.

There is a need for additional education during this pandemic so residents don’t miss out on an already limited field during normal residency
Using telehealth for bedside training

- Involvement with telehealth
  - Get us involved as early as possible!
  - Spend time with us beforehand to briefly discuss the case and expectations
  - Send us private messages during patient visit with recommendations or requests for additional exam or history
  - Helpful to debrief afterwards with clinical pearls.
  - May send along articles of interest pertaining to case
Solution - Virtual resident education

- **Structured didactics**
  - It is hard to stare at a screen for a half day of didactics so keep in mind that more breaks for our eyes and stretching may be necessary.
  - If it is engaging, we will pay attention! Ask us to turn on our videos and ask questions rather than straight lecturing.
  - Case studies are always a good option.

- **Self-directed learning**
  - Can be overwhelming to figure out what to do with all our time so some sort of structure is appreciated.
  - Help guide us with articles and book chapters.
The prosthetist perspective
Kirk Pils, CP
Clinic manager, Hanger Clinic, St Louis

Hanger Patient Care Clinics

OVER 800 LOCATIONS NATIONWIDE
## Managing the limb loss clinic
### Patient management procedures

<table>
<thead>
<tr>
<th>Prosthetic appointment type</th>
<th>Prior to COVID-19</th>
<th>After COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remote consultation appointment</td>
<td>In clinic appointment</td>
</tr>
<tr>
<td>Adjustment</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Evaluation</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Cast &amp; measure</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Check socket fitting</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Definitive fitting</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Follow up appointments</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Provision of supplies</td>
<td>N</td>
<td>Y (X2, Evaluation &amp; Delivery)</td>
</tr>
</tbody>
</table>
Coordinating Prosthetic Prescription
Pre-COVID-19

Physiatrist & Prosthetist attend clinic with amputee

Patient evaluation by Physiatrist & case is discussed with patient, PM&R, & Prosthetist

Appointment concluded and treatment plan established

Prosthetist arranges future appointment

Patient needs are fulfilled
Coordinating Prosthetic Prescription Post-COVID-19 barriers

- **Barriers to accessing health care**
  - People with disability may also be disproportionately impacted by the outbreak because of serious disruptions to the services they rely on.*
  - The barriers experienced by people with disability can be reduced if key stakeholders take appropriate action.*
  - Actions need to be taken to ensure that people with a disability can always access the health-care services and public health information they require, including during the COVID-19 outbreak.*

- **Neglecting comorbidities may complicate other medical conditions**
  - *Prosthetic services are an essential care for individuals living with limb loss*

* Reference: World Health Organization March 26, 2020
Coordinating Prosthetic Prescription
Post-COVID-19 Solutions

Physiatrist shares next week's clinic schedule with Prosthetist

Prosthetist schedules appointment with patient

Patient evaluation by Physiatrist
Prosthetist is present

Appointment concluded and treatment plan established

Prosthetist arranges future appointment

Patient needs are fulfilled

Physiatrist shares next week's clinic schedule with Prosthetist

Prosthetist shares prosthetic history of each patient

Patient evaluation by Physiatrist

Appointment is concluded

Physiatrist & Prosthetist discuss plan

Prosthetist arranges future appointment

Patient needs are fulfilled
1.) Patient has expressed a desire to ambulate with a prosthesis
2.) Current functional level
3.) Expected functional level
   If current and expected K-levels differ, the reason for the difference must be explained)
4.) Physician agreement of the prosthetic plan of care
5.) Are there any comorbid conditions that will affect ambulation or the patient’s ability to use the prosthesis? Explain
CMS

- The focus is to allow a lower bar of documentation requirements for devices that are lost, stolen or irreparably damaged (often due to an event like a hurricane)
- No specific guidance from the DME MACs on how they will implement changed requirements.
- 3rd party payers have demonstrated their willingness to assist in providing patients with their devices
  - Insurance coverage and process may be different during a pandemic and are generally easier to work with.

Insurance

- The amount of time for the authorization process has been reasonable
- Insurance providers are more understanding and desire to meet the needs of the individuals we are all caring for.

References:
- Stafford Act
- National Emergencies Act
- AOPA Publication
- DME MACs Information
- Section 1135 and Section 1812 of the Social Security Act: Waiver authority and Coronavirus Preparedness and Response Supplemental Appropriations Act
- MLN Matters SE20011, March 18, 2020
Limb Loss Rehabilitation During the Pandemic: Stakeholder Perspectives on Barriers & Telemedicine
Part 2 of 2 – Therapy, Institutions and Associations

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ACRM PANDEMIC SERIES
JUNE 2ND 2020
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- Jim Weber and Ashlie White, American Orthotic and Prosthetic Association
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Together, we go far