How to Build a Comprehensive CLI Program

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Limb Salvage Initiative

- Identify the Need within the Surrounding Community
- Reduce Major Amputations
- Improve Patient Outcomes (Quality of Life)
- Reduce Procedure Costs (Educate Administration on Costs)
- Reduce Re Admission
- Reduce Length of Stay
Model Components of Limb Salvage Institute

- Advanced CLI Interventionist(s)
- Multi disciplinary cooperation (Administration)
- Branding and establishing a “Limb Salvage Institute”
- Comprehensive marketing campaign including PAD Awareness
- Multi Disciplinary Wound Care Center with Hyperbaric medicine
- Limb Salvage Coordinator
- Aggressive CLI Screening program
- Aggressive Surveillance Program
- Protocols and algorithms that funnel ER patients and in house (Hospitalists) patients to LSI
- Protocols and algorithms that funnel patients from facilities with high risk patients (dialysis centers, nursing homes, home health, satellite WCC’s etc)
- Data collection capabilities
Limb Salvage Initiative

Our Keys to Success

1. Physician Education (Self and Referring)
   1. Attend courses, stay up to date with developing technologies and treatment therapy

2. PAD/CLI awareness (High Risk Patients)

3. Algorithm that Focuses on a Multi Disciplinary Approach

4. Hyper Focus on Wound Care/HBO
Key to Success: CLI Endovascular Specialist

An Advanced CLI Endovascular Specialist demonstrates the commitment to Education, Time and the following skill sets:

- Successful Advanced CTO crossing techniques (BTK, BTA)
- Uses Angiosome Guided Therapy
- Tibiopedal access
- Treating Severely Calcified Vessels
- Wound Care affiliation/Understanding of WC

- Pre requisites: demonstration of efficient use of US, efficiency in antegrade approaches, ability and proficiency of high success in crossing complex and long CTO's ATK.
- Attend as many courses as you can, the negatives you learn are just as valuable as the positives.
Key to Success - Multidisciplinary Team Approach

- Endovascular Specialist and Team
- Podiatry
- Infectious Disease
- Wound Care Specialist
- ARNP/PA
- HBO
Multidisciplinary Team Approach

- Primary care physician
- CLI Interventionalist
- Ancillary specialties
  - Physical therapist
  - Nutritionist & Diabetes Educators
- The Patient
- Wound care team
  - Podiatrist, infectious disease, surgeons
- Nurses
  - Inpatient & Outpatient Home Care
Key to Success—Educate Diagnosing Physicians, ARNP, PA

- Education for Physicians who treat High Risk Patients: Podiatry, Wound Care, Nephrology, Hospitalists and, ER (PHYSICIAN EXTENDERS- PA, ARNP)

- Demonstrate Results (wound healing outcomes, radiographic examples of successful revascularization.)
  - Case Studies
  - Treatment Algorithm (Limb Salvage/Wound Care)
  - Follow Up
Screening High Risk Patient Population

- High Risk Facilities
  - Dialysis Centers
  - Nursing Homes
  - Home Health
  - Satellite Wound Care Centers

- Educated Community
  - Podiatry
  - Endocrinology
Key to Success: Having Protocols and Algorithms

- Patient referred to Martin Health Systems

  - Patient Assessed by Endovascular Specialist and Wound Care (Rutherford 5,6)
  - Office Visit to Include: Physical Exam, Wound Assessment, Arrange Arterial Duplex for endovascular mapping and Angiography

- Angiography/Intervention performed and limb revascularized, endovascular specialist communicated with Multidisciplinary Care Team

- 2 Weeks Post Revascularization-Ongoing weekly assessment and treatment by Wound Care and Multidisciplinary Care Team

- 3 Month Revascularization-Physical Assessment, Tibial Duplex Performed

- 9 Month Revascularization-Physical Assessment, Wound Assessment, Rutherford Classification

- 12 Month Revascularization-Physical Assessment, Duplex Performed
**Lower Extremity Wound**

**Diabetes Mellitus/ABI**

- **No**
  - **PVExam/ABI**
    - + Pulses Normal ABI
      - Woundcare
        - Heal
          - Yes
          - No
            - Re-Eval DX
            - Infection
    - - Pulses Abnormal ABI
      - Arterial Duplex
      - Endovascular Consult/Angiogram
        - Yes
        - No
          - Wagner 3.4 T-Comp HBO
          - Wound Care
  - Arterial Duplex
    - +
      - Endovascular Consult/Angiogram
    - -
      - Wound Care
        - Heals
          - Yes
          - No
Key to Success—Educate Patients

- Educate patients on PAD risk factors: Initial evaluation includes definition, pathophysiology and treatment modalities of PAD/CLI.

- Bi-Annual Foot Screening (Nephrology), Patient Daily screening, Footwear Selection (Podiatry)

- Proper Diabetes and Diet management

- Compliant Wound Care

http://www.hrsa.gov/hansensdisease/leap/
Keys to Success: Aggressive Surveillance Program

- Immediate follow up with referring physician
- Weekly wound Care for Rutherford 5-6
- Protocol and Algorithm for patient follow up
- Duplex
- Wound Care
Results at Martin Memorial Medical Center

“Impact of Angiograms, Endovascular Procedures on Major Amputations”, Julio Sanguily III, Martin Memorial Hospital, Stuart, FL

- Incidence of major amputation fell 78% with increased use of angiography

Conclusion

- A multidisciplinary approach to PAD that includes an endovascular specialist, with support from a vascular surgeon, podiatry, infectious disease specialists and wound care, can significantly reduce the number of amputations in your community.

THANK YOU