



VA/DoD CLINICAL PRACTICE GUIDELINE FOR REHABILITATION OF INDIVIDUALS WITH LOWER LIMB AMPUTATION

Department of Veterans Affairs

Department of Defense

Pocket Card

QUALIFYING STATEMENTS

The Department of Veterans Affairs and the Department of Defense guidelines are based upon the best information available at the time of publication. They are designed to provide information and assist decision making. They are not intended to define a standard of care and should not be construed as one. Neither should they be interpreted as prescribing an exclusive course of management.

This Clinical Practice Guideline is based on a systematic review of both clinical and epidemiological evidence. Developed by a panel of multidisciplinary experts, it provides a clear explanation of the logical relationships between various care options and health outcomes while rating both the quality of the evidence and the strength of the recommendation.

Variations in practice will inevitably and appropriately occur when clinicians take into account the needs of individual patients, available resources, and limitations unique to an institution or type of practice. Every healthcare professional making use of these guidelines is responsible for evaluating the appropriateness of applying them in the setting of any particular clinical situation.

These guidelines are not intended to represent TRICARE policy. Further, inclusion of recommendations for specific testing and/or therapeutic interventions within these guidelines does not guarantee coverage of civilian sector care. Additional information on current TRICARE benefits may be found at www.tricare.mil or by contacting your regional TRICARE Managed Care Support Contractor.

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Summary of Recommendations

Recommendations were made using a systematic approach considering multiple domains: the confidence in the quality of the evidence, balance of desirable and undesirable outcomes, patient or provider values and preferences, and other implications, as appropriate (e.g., resource use, equity, acceptability).

All Phases of Amputation Rehabilitation

We recommend:

- Providers consider the patient’s birth sex and self-identified gender identity in developing individualized treatment plans.

We suggest:

- Patient education be provided by the rehabilitation care team throughout all phases of amputation rehabilitation.
- An assessment of behavioral health and psychosocial functioning at every phase of amputation management and rehabilitation.
- Measurement of the intensity of pain and interference with function should be separately assessed for each pain type and location using standardized tools.
- Offering a multi-modal, transdisciplinary individualized approach to pain management including transition to a non-narcotic pharmacological regimen combined with physical, psychological, and mechanical modalities throughout the rehabilitation process (For the treatment of chronic pain, the 2017 VA/DoD CPG for the Management of Opioid Therapy for Chronic Pain recommends alternatives to opioid therapy such as self-management strategies, other non-pharmacological treatments, and non-opioids over opioids [see the 2017 VA/DoD OT CPG¹]).
- Offering peer support interventions, including visitation by a certified peer visitor, as early as feasible and throughout the rehabilitation process.

Perioperative Phase

We recommend:

- Instituting rehabilitation training interventions, using both open and closed chain exercises and progressive resistance to improve gait, mobility, strength, cardiovascular fitness and activities of daily living performance in order to maximize function.

We suggest:

- Prior to surgery, rehabilitation goals, outcomes, and other implications be included in shared decision making about residual limb length and amputation level.
- The use of a rigid or semi-rigid dressing to promote healing and early prosthetic use as soon as feasible post-amputation in transtibial amputation. Rigid post-operative dressings are preferred in situations where limb protection is a priority.
- Performing cognitive screening prior to establishing rehabilitation goals, to assess the patient’s ability and suitability for appropriate prosthetic technology.
- In the perioperative phase following amputation, patients receive physical rehabilitation and appropriate durable medical equipment/assistive technology.

¹ See the VA/DoD Clinical Practice Guideline for the Management of Opioid Therapy for Chronic Pain. Available at: <http://www.healthquality.va.gov/guidelines/Pain/cot/>

- When applicable following amputation, treatment in an acute inpatient rehabilitation program over a skilled nursing facility.
- The initiation of mobility training as soon as feasible post-amputation. In appropriate patients, this may include ipsilateral side weight-bearing ambulation with a pylon to improve physical function and gait parameters.

There is insufficient evidence to recommend for or against:

- One surgical amputation procedure over another.
 - The surgical procedure chosen should be determined after a conversation between the surgeon and the patient, involving other members of the rehabilitation care team, including pre-operative consultation with an experienced physiatrist or prosthetist as appropriate, to better align expected surgical outcomes with expected rehabilitation outcomes.

Pre-Prosthetic Phase

We suggest:

- Offering microprocessor knee units over non-microprocessor knee units for ambulation to reduce risk of falls and maximize patient satisfaction. There is insufficient evidence to recommend for or against any particular socket design, prosthetic foot categories, and suspensions and interfaces.
 - Therefore, individual patient attributes and goals should be considered by the transdisciplinary amputation care team when formulating the prosthetic prescription.

Prosthetic Training Phase

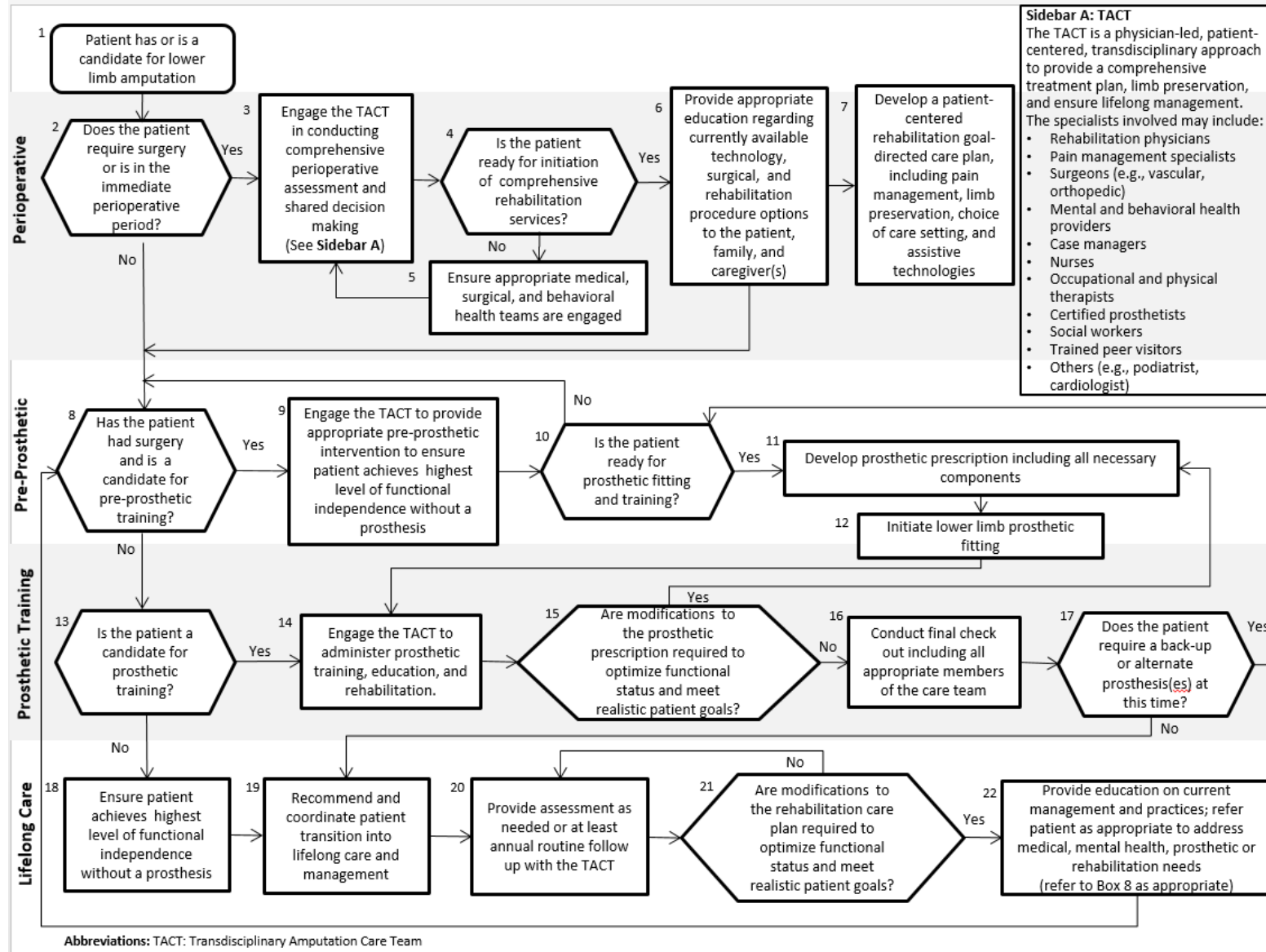
We recommend:

- The use of valid, reliable, and responsive functional outcome measures, including, but not limited to, the Comprehensive High-level Activity Mobility Predictor, Amputee Mobility Predictor, 10-meter walk test, and 6-minute walk test.
- Offering further evaluation and interventions for factors that are associated with poorer outcomes such as smoking, comorbidities, psychosocial functioning, and pain.

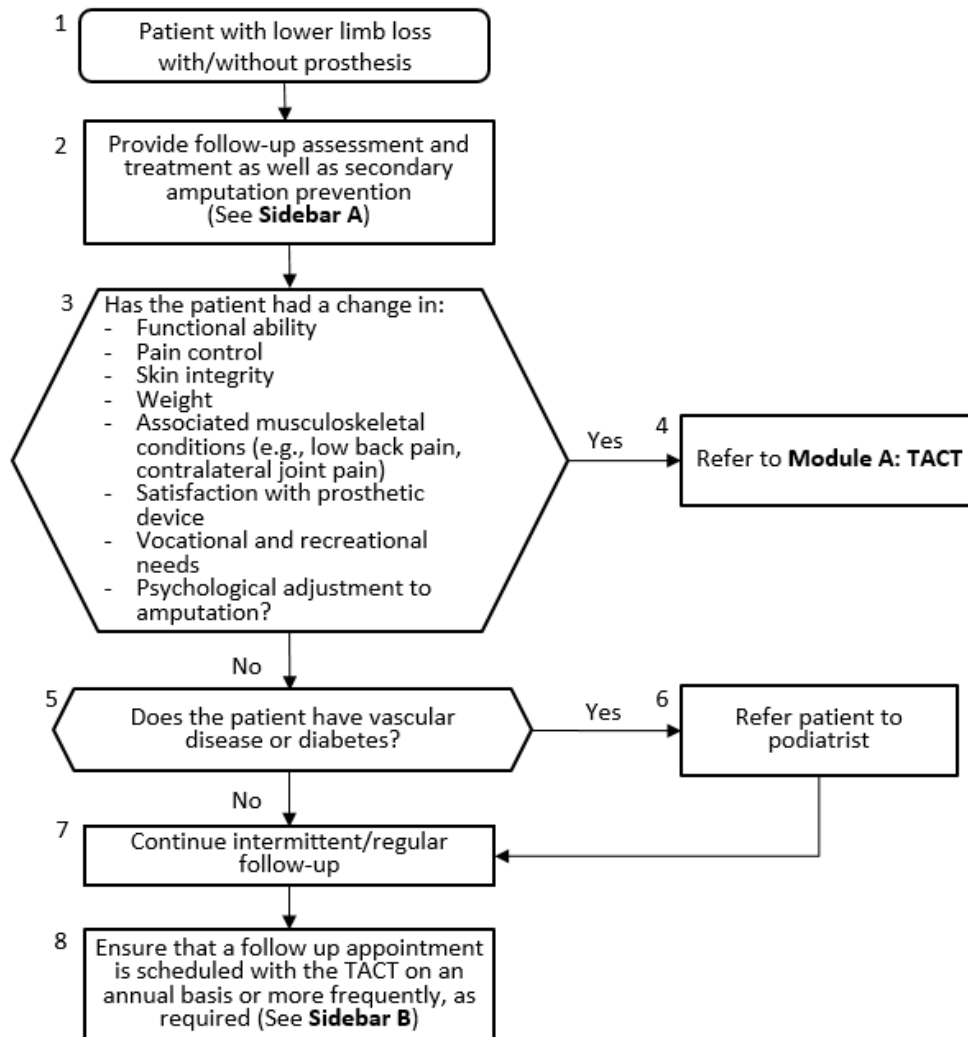
We suggest:

- The use of a combination of measures with acceptable psychometric properties to assess functional outcomes.

Module A: Transdisciplinary Amputation Care Team Approach (TACT)



Module B: Primary Care Follow-up and Lifelong Care



Sidebar A: Lower Limb Loss Assessment and Secondary Amputation Prevention

- Assessment of risk factors
- Lower limb/foot preservation care
- Patient education for lifestyle modification (Encourage exercise and cardiovascular fitness, weight management, nutrition, and smoking cessation)
- Diabetes control (see VA/DoD Diabetes CPG)
- Mental health
- Monitor for:
 - Pain control (see VA/DoD Opioid Therapy CPG)
 - Skin integrity
 - Associated musculoskeletal conditions

Sidebar B: TACT

The TACT is a physician-led, patient-centered, transdisciplinary approach to provide a comprehensive treatment plan, limb preservation, and ensure lifelong management. The specialists involved may include:

- Rehabilitation physicians
- Pain management specialists
- Surgeons (e.g., vascular, orthopedic)
- Mental and behavioral health providers
- Case managers
- Nurses
- Occupational and physical therapists
- Certified prosthetists
- Social workers
- Trained peer visitors
- Others (e.g., podiatrist, cardiologist)

Abbreviations: TACT: Transdisciplinary Amputation Care Team; VA/DoD Diabetes CPG: VA/DoD Clinical Practice Guideline for Management of Diabetes Mellitus in Primary Care; VA/DoD Opioid Therapy CPG: VA/DoD Clinical Practice Guideline for Opioid Therapy for Chronic Pain