

Report of QUERI Working Group “Step C” on 5 Clinical Areas



G. Reiber, May 19, 2004

Where to Start?

- What are the highest priority areas of variation in upper and lower limb traumatic / amputee care?
- Is there **no** evidence on surgical management of amputation? amputee dressings strategies? Comparison of rehabilitation strategies? Mental health strategies? Pain management strategies?
There is some evidence!
- **We need to find and systematically review it.**

What was the missing questions?

Surgical Issues

- **Limb salvage or amputation – when?**
- **Is one surgical procedure superior to another in terms of improved patient function/ satisfaction and decreased pain?**
- **How to determine the optimum amputation level?**
- **Post-operative dressing strategies (IPOP, rigid dressing, gauze and kerlix)**

1. Access to VA Health Care and Resources



- **Uncertainty exists in best practices for managing amputees. Prior VA document on pathways for amputee management was sidelined as “not evidence based”**
- **What global amputation guidelines, pathways and standards of care can be identified for traumatic/ all amputees?**
- **Once guidelines exist, care can be measured. Quality improvement possible!**

1. Access to VA Health Care and Resources Cont.

- What are the specific functions that comprise optimal VISN level amputee care?
- When is the optimal time to transition traumatic amputees from DoD to VA?

2. Prosthetic Prescriptions

- To what extent will VA telehealth prescribing of prosthesis, (involving the veteran and a local provider), improve amputee care, function and satisfaction and decrease costs?
- What efficiencies could be gained (time, patient satisfaction and cost savings) by providing prosthetics in house rather than outsourcing?

2. Prosthetic Prescriptions Cont.

- What were the strengths and limitations of prostheses manufactured using the CAD CAM systems?
- What were the associated cost-savings?
- What were the patient satisfaction issues?

2. Prosthetic Prescriptions Cont.

- How closely aligned are Medicare classifications/criteria (K-levels) and clinically meaningful indications for each prostheses?
- What are the criteria for providing multiple prostheses?
- What is the evidence for prosthetic use/disuse long term? Prosthetic use-vs-wheel chair use? Reasons for patient conversion to wheelchair, including satisfaction and dissatisfaction.

2. Prosthetic Prescriptions Cont.

Compare the effectiveness of various upper and lower level prosthetic components:

(For example knee components or prosthetic suspension e.g. Vacuum Assisted Suspension (VAS) Harmony, pelite liners/strap or roll-on liners/locking pin)

Function | Comfort | Satisfaction | Cost

Component 1

Component 2

Component 3

Component 4

3. Prosthetic Fitting

- Compare sockets also by patient skin complications and aesthetics.
- How frequent should follow-up be for amputees with prostheses...By the MD? By the prosthetist?
- What measurement tools are available to quantify optimal prosthetic fit?

4. Amputee Rehabilitation

- What is the evidence that select prostheses are superior for amputees engaging in specific activities? (e.g. running)
- What is the best way to prevent deconditioning in amputees? Initially? Over time?
- What is the optimal time to begin select activities in amputees, e.g. walking, running, swimming.
- What environmental strategies enhance safety and prevent falls in amputees?

4. Amputee Rehabilitation Cont.

- What are the best methods to measure and manage all types of pain in amputees?
- What prosthetic strategies implemented now will decrease arthritis, back pain and related co-morbidity in the future?
- What PT and OT strategies are most effective in restoring function? At what time intervals?
- What is the best strategy by VISN for providing quality rehabilitation care? (Inpatient care, contract care, outpatient care?)

4. Amputee Rehabilitation Cont.

- What are the best measurement tools to quantify upper and lower limb amputee progress in these areas:
 - Physical Function
 - Psychological Function
 - Pain
 - Quality of life
 - Patient Satisfaction

5. Co morbidities, Complications and Psychosocial Issues

- How should addition of co morbidities changes K levels / indications for select components?
- What are successes and failures of Viet Nam veterans in terms of evaluation of prosthetics and satisfaction with care? [In addition, systematically offer these veterans the benefit of indicated state-of the-art prosthetics]
- What vocational programs been successful in improving patient function and QOL? How widely available are these to amputees?

5. Co morbidities, Complications and Psychosocial Issues

- How can we best empower amputees to influence their prosthetic and rehabilitation goals?
- What are the most effective strategies for delaying or preventing PTSD in amputees?
- What is the optimal strategy for managing amputees with depression? Does this differ from non amputees?

Secondary Data Analysis

- What data is available to answer these questions from Austin, National Prosthetics Data Base, HERC cost data?
- Can resources be made available to support good secondary data analysis?
- Utilization and cost studies needed