The Vascular Access RAND Appropriateness Study: Current Status. Future Plans

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Disclosures
• None
• VAPS Mobile App
  – Initially free
  – Future commercialization?

NKF-DOQI Guidelines Fistula First Breakthrough Initiative
• Vascular access outcome improvements have stalled
  – NKF-KDOQI push for fistulas deemphasized in latest update
• Approach moving forward?

Focus on Surgical Technique
• Hypothesis
  – Surgeons don’t know how to do the procedure
• Solution
  – Training programs by experts
  – Vascular access certification
• Barriers
  – Resistance from organizations and surgeons
  – Cost
  – Will it work?

Focus on Patient Selection
• Hypothesis
  – Patient factors drive AVF outcomes.
• Solution
  – Base procedure selection on those factors
  – Standardize procedure selection

Vascular Access Procedure Selection

- Dialysis Status
- Age
- Frailty
- Co-Morbidities
- Timing of Referral
- Social situation
- Institutional Resources
- Surgeon Experience
- Failed Accesses
- Patient Acuity
- K-DOQI
- Fistula First
RAND/UCLA Appropriateness Method

- Consensus process like K-DOQI
- Combines evidence with expert opinion
- RCTs not feasible
- Provides patient-specific recommendations—generated nearly 3700 clinical scenarios
- Standardized technique
- High re-test reliability, predictive validity

UCLA/RAND Appropriateness Method Team

Expert Panelists
- Michael Allon MD
- Eric Chemla MD
- Tom Huber MD
- Jeff Lawson MD
- Erik Peden MD
- Anton Sidawy MD
- Christopher Carsten MD
- Mitch Henry MD
- Tip Jennings MD
- Charmaine Lok MD
- Larry Scher MD

Vascular Access Procedure Selection Mobile App

- Input patient characteristics
- Generate panelists’ ratings
  - Appropriate
  - Indeterminate
  - Inappropriate

VAPS Mobile App

Functional status is an assessment of an individual’s dependence on help for medical functions

- Facility
  - Dependent (Home)
- ESRD
  - Normal
- Age
  - Young
  - Older

CONTINUE
PREVIOUS
VAPS Mobile App

VAPS Tool Validation Study

- Retrospective study 201 consecutive patients
- VAPS mobile app recommended AVF as “most appropriate” in 85% of patients
- Maturation rate for AVF recommended by VAPS mobile app was 78%

VAPS Mobile App: Current Status

- Fully functional. Launch date will coincide with KDOQI update
- Included in the latest KDOQI algorithm as a resource
- An iterative tool that will improve with use/research. Changes will be approved by KDOQI