El Camino Hospital is a nonprofit organization with campuses in Mountain View and Los Gatos, California. The Mountain View campus is a 420-bed hospital offering acute care and comprehensive healthcare services.

### The Team
- Tej M. Singh MD, MBA
  - Clinical Director, Vascular Services
- Amy Maher, MS
  - Executive Director Heart and Vascular Institute
- Marsha McRorie, Data Manager, ECH VQI
- Caroline Dudley, PA-C

## Background – Community Hospital Perspectives
El Camino Hospital is located in Silicon Valley, a highly competitive hospital region serving an affluent, well-educated community.

- **El Camino Hospital:**
  - Serves as a community hospital in an area that is PPO/HMO and Medicare insurance dominant
  - Features independent physicians and a large multispecialty medical group
  - Competes in the healthcare marketplace with large academic hospitals

## Problem Statement and Hypothesis
**Problem Statement**
Vascular procedures at El Camino Hospital are performed by Interventional Cardiology, Radiology, and Vascular Surgery. The hospital sought to progress beyond the fragmented care that was a legacy of earlier vascular quality issues and conflicts that included:
- AAA EVAR Complications
- Coverage issues and complications

**Hypothesis**
National peripheral vascular registry participation will create transparency on provider volumes and quality indicators that will improve vascular care, drive physician behavioral change, and result in improved patient safety, quality of care, and cost control.

## VQI Implementation
After 2 years of discussion, El Camino Hospital implemented VQI on April 2014 with the full commitment and support of hospital administration. The implementation focused on vascular quality and patient care in four modules: CEA, CAS, EVAR, and PVI.

Key activities that supported implementation were:
- Monthly group reporting at Vascular meetings
- Clinical support for registry completion
- NorCAL Study Group participation
- Clinical review of data trends
- Identification of opportunities for process improvement
- Creation of EVAR, Carotid, Vascular Call, and PVI subcommittees

## Results: Rate of Ultrasound Guidance
VQI was a catalyst for quality improvement as reflected by increasing rates of ultrasound guidance. El Camino set a goal of 90% for the rate of ultrasound guidance and they reached the goal in 2015.

## Communication of Results
### Internal
- Monthly “Vascular Hour” presentation to all vascular providers and administrators
- Weekly review of complications and cases and discussions

### External
- Collaboration and leadership of the Northern California Vascular Study Group

## Lessons Learned

- Preplanning avoided false starts
- Administration support from C-Suite
- Focusing on quality and costs
- Participation of the Heart and Vascular Institute staff
- Physician leadership and engagement
- Physician transparency making change possible
- The Mirror Test

## Success Factors
- VQI was a catalyst for decreasing EVAR LOS while maintaining high quality vascular care.
- VQI helped identify quality issues and opportunities for improvement locally.
- VQI’s objective dataset supported accountability and transparency.
- VQI exposed the positive and negative details of the hospital program.
- VQI can be used to drive physician behavior changes and improved vascular care.
- VQI provided data to support reduced LOS and decreased cost per case.

## Conclusions on the Use of VQI

- VQI is not just a research registry, but a key tool in the focus of patient care, quality, and safety.
- VQI helped identify quality issues and opportunities for improvement locally.
- VQI’s objective dataset supported accountability and transparency.
- VQI exposed the positive and negative details of the hospital program.
- VQI can be used to drive physician behavior changes and improved vascular care.
- VQI provided data to support reduced LOS and decreased cost per case.

## Plans for the Future
ECH Vascular Report Cards are planned for 2017.

- A physician-specific report will detail:
  - Provider volumes of procedures
  - Provider VQI results
  - Cost per case
  - Benchmark provider results

Longer term goal – Incorporate cost-of-care measures.