What is New England VERC?

New England VERC uses a systems based engineering approach to support Veterans Health Administration (VHA) to efficiently, effectively, and reliably provide exceptional care to veterans. VERC supports collaboration between researchers, academics, clinicians, and engineers to improve healthcare delivery and to understand factors that enable or inhibit the spread of engineering solutions. The New England region of the VA provides comprehensive medical services (including primary care, mental health, specialty care, and hospital based care) to 235,000 Veterans.

Why Healthcare Needs Engineers?

Health care is one of the fastest growing industries today. As the workforce increases, industrial engineers are in higher demand to act in management positions and in informed quality positions.

Systems and industrial engineering methods have transformed other large-scale and complex industries such as: telecommunications, transportation, and manufacturing systems. Healthcare systems contain components of all these industries while adding new complexities that have yet to be explored.

Why Department of Veterans Affairs?

Department of Veterans Affairs (VA) is the largest integrated healthcare system in the U.S. and employees more than 207,000 employees within more than 163 hospitals. The New England region of the VA provides comprehensive medical services (including primary care, mental health, specialty care, and hospital based care) to 235,000 Veterans.

Summer Student Opportunities

Program Structure
1. Learn to apply industrial and systems engineering techniques to the improvement of health systems and pilot a test of change.
2. Be immersed in the healthcare setting through shadowing clinicians, leadership, and senior engineering staff.
3. Participate in Lean events, such as Rapid Process Improvement Workshops or Green Belt Training.

Example Projects
- Clinician tools and dashboards - designing a surgical site infection tracker.
- Patient and procedure room layout optimization - provide recommendations to change workflow and room use to improve efficiency and increase patient satisfaction.
- Discrete event simulation - multi-state patient transportation system so route and resource changes can be made without negatively affecting patients.

Application Details
- Must be U.S. Citizens and currently enrolled at an accredited university
- Send your resume and unofficial transcripts to stephanie.triplett@va.gov
- Applications accepted on a rolling basis until positions are filled
- Positions available May – August with flexible start and end dates

“More than 98,000 Americans die and more than one million patients suffer injuries each year as a result of broken health care processes and system failures. Only half of U.S. patients receive “best practice” treatment for their illnesses and less than half of physician practices use recommended processes for care. An estimated thirty to forty cents of every dollar spent on health care, or more than a half-trillion dollars per year, is spent on costs associated with ‘overuse, underuse, misuse, duplication, system failures, unnecessary repetition, poor communication and inefficiency.’” – Building a Better Delivery System: A New Engineering / Health Care Partnership

Contact Stephanie Triplett at Stephanie.Triplett@va.gov with questions, application materials, or for further information.