"3D printing is a great method to address unique Veteran needs through innovative rapid prototyping and custom solutions, both quickly and in a cost-effective manner."

Kaila Grenier
Clinical rehabilitation engineer
Eastern Colorado VA Health Care System

3D Printing at VHA

The Problem

- An imbalance between care spending and care success articulates the urgent need for U.S. health care to evolve past its “one-size-fits-all” model.
- The VA sought to evaluate the value of its 3D Printing program to ensure the continuation of reimagining personalized care delivery and providing patient-specific solutions to Veterans.

The Resources

- Using the VA-DiMe value-driven framework for evaluating healthcare innovations, the VA were able to show that 3D Printing improves access to timely care solutions, provides more effective care through personalization, and improves care team efficiency.
- Its potential avenues for enterprise-wide benefits—such as cost-avoidance, licensing, and commercialization potential—will enable self-sustainment and enterprise-wide implementation.

The Impact

- Improves access to custom healthcare solutions by providing patient-matched products that do not exist commercially or have an extended lead time for production.
- Improves effectiveness of care by delivering targeted solutions that match the individual Veteran’s anatomy, needs, and preferences.
- Improves efficiency through reduced production throughput time, limited recurring maintenance, and improved product efficacy; efficiency gains may also be captured through providers’ time savings in appointment lengths and pre-surgical planning.
- Improves equity by increasing the availability and distribution of healthcare solutions that were previously unavailable or difficult to obtain.