

3D PRINTING AT VHA

[3D Printing](#) enables care teams to account for the whole Veteran and create 1:1 customized solutions that respect the Veteran's unique anatomy, preferences, values, and treatment goals.

“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



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 reimaging 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.

