

## Neurobehavioral and Psychological Health Outcomes Hearing Fitness for Duty and Return to Duty (RTD) Assessment and Validation

This study is performed by researchers at Creare Inc. and is managed by the Congressionally Directed Medical Research Program (CDMRP). The objective of this study is to develop and validate a military-specific hearing test that can be used as a part of a hearing fitness-for-duty (HFFD) and RTD assessment battery. The test will provide information on a Service Members' ability to recognize relevant sounds, the effect of hearing loss on this ability, and the effect of wearing hearing protection devices. The proposed effort will put HFFD and RTD tests in the hands of military audiologists within one to three years. These tests will be validated and vetted by military audiologists, Service Members, researchers, and fitness-for-duty experts. During FY16, the investigators completed manufacturing and initial assembly of 40 of the HFFD systems that will be used to carry out validation studies on normal hearing, non-military adults in collaboration with partners at the University of Connecticut. The technology produced under this award will provide military audiologists validated tools to evaluate functional hearing of Service Members.