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# Medical Fitness and Resilience

## A Review of Relevant Constructs, Measures, and Links to Well-Being

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## Summary

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Medical fitness can be defined as medical readiness to perform duties under all conditions without excessive loss of quality of life, excessive loss of duty time or separation from duty, aggravation of existing medical conditions, or endangering the health of others. Being medically fit is important, because if an individual has a chronic medical condition or is otherwise physically or medically compromised, he or she may not be able to effectively cope with a stressor. Measures of medical fitness can be grouped into four broad categories: preventive care; the presence and management of injuries; the presence and management of common chronic conditions, including obesity, diabetes, and asthma; and facilitators of and barriers to accessing quality health care.

Engaging in preventive screenings, such as regular dental, hearing, and vision exams, as well as receiving immunizations and cancer screenings, has been shown to reduce the risk for and severity of such diseases as cancer, cardiovascular disease, obesity, infectious diseases, metabolic and endocrine conditions, and obstetric and gynecologic conditions.

Traumatic injury to the body and brain and injury-related chronic pain are debilitating and can seriously compromise resilience. These conditions are related to discharge from the military, long-term loss of productivity, psychological symptoms, increased drug and alcohol use, lower general health, lower quality of life, and risk for suicide. The use of measures to screen for and detect injuries and to assess ability to cope with pain, and the proper medical management of symptoms in combination with supportive therapy and social support systems, are key to mitigating the effects of injuries on military readiness.

The presence of common chronic conditions, such as obesity, cardiovascular conditions, diabetes, and asthma, has been linked to loss of productivity, psychological symptoms, substance use, suicide ideation/attempts, and risk for other medical conditions, such as stroke, hypertension, arthritis, chronic pain, respiratory conditions, and cancer. The presence of conditions is measured by a physician's diagnosis, by self-reports, or through administrative data. The effective management of medical conditions is often assessed via the Healthcare Effectiveness Data and Information Set (HEDIS) and patient experiences are measured by the Agency for Healthcare Research and Quality's Consumer Assessment of Healthcare Providers and Systems program. Preventing these chronic conditions through behavior modification and properly treating them are all ways to improve medical fitness. Once a diagnosis has been received, adherence to treatment regimens specific to each condition is paramount to reducing both the severity of the condition and the effect on readiness.

Of course, each component of medical fitness outlined above falls within a greater context of access to quality health care. Facilitators of accessing health care include having health insurance, having a usual source of care, and patient perception of the need for services. Although service members and their families have equal access to health care, barriers to seeking health care remain, because of such factors as the perceived stigma of using health care services and low social support.

Interventions that promote regular preventive care, encourage positive health behaviors, and curb negative health behaviors may be particularly effective at staving off medical conditions that can compromise resiliency and military readiness. Given technological advances and the burden of traveling in person to Health and Wellness Centers, recent research on the administration of these interventions through telephone, mobile text messaging, the Internet, and worksite health and wellness programs (HWPs) has shown strong promise in terms of feasibility and efficacy.