Helping Predict, Prevent, and Respond

For more than two decades, ManTech has provided epidemiological, statistical, and administrative support for the Walter Reed Army Institute of Research (WRAIR) Statistics and Epidemiology Branch, the Accession Medical Standards Analysis and Research Activity (AMSARA) and the Disability Evaluation System Analysis and Research (DESAR).

ManTech’s epidemiologists, biostatisticians, and data manager at WRAIR provide Tri-Service epidemiologic research and surveillance; and descriptive, diagnostic, and predictive analytics for use in informing medical standards and optimizing recruitment, deployment, and retention. Our mission is to provide evidence-based analyses and results and integrate relevant operational, clinical, and economic considerations into policy recommendations for medical standards and disability. Our work provides critical information and knowledge to assist decisions by DoD-level stakeholders and policy makers. We know the subject matter, we know the data, and we understand the mission; through our methods, processes, and tools, we can help predict, prevent, and respond.

AMSARA/DESAR examines relationships and measures the impact of disease, injury, and health indicators throughout the entirety of military service, for all branches from application to end-of-service, to provide evidence-based support that aids in improving the efficiency of accession, retention, deployment and disability processes.

Our Impact and Productivity

Results and cost-benefit analyses from our research predicting which sub-populations may successfully complete military service translated into actionable recommendations/solutions, and has been instrumental in several policy changes for accession medical standards and annual savings across the program. Additionally our recent research on occupational exposure to blast overpressure contributed to modifications of the U.S. Army’s hearing conservation policy.

ANNUAL COST SAVINGS DUE TO DISCONTINUATION OF SYPHILIS SCREENING

$2M

ANNUAL COST SAVINGS DUE TO DISCONTINUATION OF PANORAPHS, ELECTROCARDIOGRAM, HEMATOCRIT AND HEMOGLOBIN SCREENING TESTS FOR ACCESSION

$0.5M

APPROXIMATE INCREASE IN QUALIFIED APPLICANTS TO THE MILITARY SERVICES DUE TO RECOMMENDED CHANGES IN THE MILITARY ENTRY MEDICAL STANDARDS FOR ASTHMA AND ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

3,000

ANNUAL SAVINGS IN RECRUITING COSTS

$15M
Our Expertise

Our research expertise includes, but is not limited, to the following areas:

**Service-Related Outcomes/Risk Factors**
- Accession medical disqualifications and waivers
- Attrition, discharges for medical conditions Existing Prior to Service (EPTS), disability discharges and retirements, and successful completion of service or tour of duty
- Deployment, Military Occupational Specialty (MOS), occupational blast exposure
- Resiliency

**Health Outcomes/Risk Factors**
- Chronic and acute disease
- Injuries
- Psychiatric disorders
- Biomarkers
- Ear/hearing & vision disorders
- Fitness/weight/BMI/obesity

Using our military health data expertise, we navigate health and administrative databases, perform complex data manipulation and modeling, interpret complex findings, provide informative evidence-based alternatives, and present actionable solutions. Our team of epidemiologists, biostatisticians, and data scientists design, conduct, analyze, report, and publish innovative health research. We have experience and expertise in:

- Epidemiology, preventive medicine, public health, biostatistics and research methods
- Data science, analytics, and visualization
- Military personnel, medical, and disability systems and procedures
- Identification of funding and partnering opportunities, grant proposal writing, and study protocol development
- Engagement with key, military, clinical, and health policy experts
- Advanced statistical approaches and processes to include:
  - Descriptive, cross-sectional, case-control, cohort, and longitudinal studies involving synthesizing and analyzing data from DoD databases

- Risk, trend, population, and economic analyses
- Model optimization
- Descriptive, diagnostic, and predictive analytics

- Manipulating raw data into analytic formats including:
  - Data discovery, cleansing, and transformation
  - Data mining techniques, validation, harmonization, and standardization

- Data from agencies including:
  - US Military Entrance Processing Command (USMEPCOM)
  - All Service accession medical waiver authorities (Army, Navy, Air Force, and Marines)
  - Basic training centers
  - All Service disability agencies
  - Defense Health Agency (DHA)
  - Defense Manpower Data Center (DMDC)

- Providing results in interpretable and impactful formats including:
  - Report writing, manuscript publication, and conference/meeting presentations

Our team of experienced and knowledgeable staff prepare regulatory documents such as protocols, provide statistical and epidemiological support, develop research projects from concept to publication, and produce annual reports, presentations and technical papers.

**ManTech Team Contributions**

- 60+ articles in peer-reviewed medical journals
- 13+ annual reports
- 80+ high-priority Requests for Information (RFI) from other high-level agencies
- 30+ system reviews for the Accession Medical Standards Working Group (AMSWG)
- 7+ pre-proposals/proposals for outside funding opportunities