

20 | Annual 18 | Report



Walter Reed
National Military
Medical Center

Moments *of* Care at WALTER REED BETHESDA

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+ 1 MIL
OUTPATIENT
VISITS


27,862
EMERGENCY
ROOM VISITS


12,289
ADMISSIONS


1,296
BIRTHS



2.4MILLION
SQ FT of CLINICAL SPACE

Our **PURPOSE**

We are America's academic health center and the global leader for military medical readiness, providing extraordinary care to those we are privileged to serve.

Our **VISION**

Walter Reed Bethesda leads the world by transforming the teaching and practice of military medicine.

Our **MISSION**

We are the premier military academic health center. We provide innovative patient-centered care and advance readiness, quality, education, and research.

Our **PRIORITY**

Our patient is at the center of everything we do.

A Message from the Director

WALTER REED NATIONAL MILITARY MEDICAL CENTER IS A REMARKABLE PLACE where we are privileged to provide safe, high-quality care to our nation's heroes, leaders and their families; innovative and cutting-edge research; and the best graduate medical education.

"Moments of Care at Walter Reed Bethesda" happen every day. Army Maj. Jeremy Haynes puts it this way: "Walter Reed National Military Medical Center is the place that my family and I came to know as 'the Miracle Factory.' Right now within these walls, a miracle is happening somewhere. For me, I'm happy to say, I am one of those miracles."

Haynes was severely injured and left paralyzed from the waist down following an enemy attack on Aug. 5, 2014 in Kabul, Afghanistan. He was brought to Walter Reed Bethesda for care not long after being injured, and now he can stand and walk with the aid of a cane. "The journey wasn't easy, but I had individuals in my corner who gave me the opportunity," he said during special observance this year at the medical center.

In 2018, we have fully reaccredited our medical center with The Joint Commission and had a very successful Clinical Learning Environment Survey in support of our American College of Graduate Medical Education programs. In addition, we were certified as an American Nurses Credentialing Center Pathway to Excellence facility, the first in the Military Health System to be recognized for creating a positive work environment where nurses can flourish, thereby bettering patient outcomes, quality of care and safety for our beneficiaries and staff.

The American Association of Blood Banks again accredited our Blood Services, and the American College of Surgeons reaccredited the National Capital Region Simulation Consortium, the single simulation program composed of the centers at Walter Reed National Military Medical Center (WRNMMC), Uniformed Services University (USU), Fort Belvoir Community Hospital (FBCH) and provisional member, Malcolm Grow Medical Clinics and Surgery Center (MGMSC) at Joint Base Andrews, Maryland.

In addition, we hosted multiple symposiums focusing on Precision Medicine, Substance Use Disorder, Creative Arts, and Research and Innovation. Our education and training team was also designated as a Train-the-Trainer site for Tactical Combat Casualty Care.

The Maryland Department of Health also recognized WRNMMC's distinction as a Baby-Friendly Designated Birth Facility by Baby Friendly USA along with the World Health Organization (WHO) and United Nations Children's Fund (UNICEF), making us the seventh healthcare facility in Maryland, and fourth military treatment facility (MTF), to obtain the prestigious international title.

Our John P. Murtha Cancer Center, the only Department of Defense Cancer Center of Excellence, received full accreditation for three years without deficiencies from the National Accreditation Program for Breast Cancers of the American College of Surgeons. We pledged to continue our valuable collaborations with other organizations by signing a collaborative efforts statement, multi-federal cancer initiative with USU, Department of Veterans Affairs, and National Institutes of Health's (NIH) National Cancer Institute, agreeing to optimize resources in the battle against cancer.

Also in 2018, we again graduated more than 300 healthcare and business administration professionals from National Capital Consortium programs in which we provide top-notch graduate medical education with USU, FBCH and MGMSC. In addition, leaders and representatives from WRNMMC, USU, FBCH and NIH signed a Unity of Effort Institutional Agreement for Institutional Review Board in 2018 to advance clinical research collaboration.

As we move forward, Walter Reed National Military Medical Center will continue the deliberate, rigorous and unrelenting focus needed to ensure safe, high-quality healthcare at every level. We will continue to keep the patient at the center of all that we do while maintaining readiness.

We are proud of our accomplishments and extremely honored to serve our nation, its leaders, heroes and their families.

Mark Kobelja, M.D.
CAPT MC USN
DIRECTOR, WRNMMC



Medical Center Facility History



During its **more than 75-year history**, Walter Reed National Military Medical Center has undergone several transformations.

ORIGINALLY CALLED THE NAVAL MEDICAL CENTER, the hospital was designed to hold 1,200 beds, but by its dedication on August 31, 1942, the number of casualties returning from battle during World War II was so numerous that makeshift wards were constructed to accommodate the injured receiving care. By the end of the war, several temporary buildings were added to the medical center for more than 2,400 wounded American Sailors and Marines.

Two major renovation and construction projects occurred in the 1960s and 70s replacing the temporary structures with permanent buildings. Two more buildings were constructed adding more than 880,000 square feet of space. This expansion made the medical center one of the largest medical facilities in the country.

The Base Realignment and Closure Act of 2005 resulted in the integration of Walter Reed Army Medical Center and National Naval Medical Center forming Walter Reed National Military Medical Center (WRNMMC). This phase added a new emergency and trauma center and the outpatient medical services wing.

Over the next several years, our medical center will undergo another significant transformation as we remove and replace outdated portions of the facility while remaining fully functional and

continuing to provide safe and quality care. The Medical Center Addition and Alteration (MCAA) Project is a multi-phased plan that involves demolishing nearly one-third of our medical center, and constructing two new buildings in its place featuring:

- patient-centered amenities
- family-centered patient rooms
- consolidated women's health services
- new four-MRI suite
- increased inpatient physical and occupational therapy treatment facilities
- and an expanded education and training space for our providers

The MCAA also involves significant renovations to two of our existing buildings, and new IT and telecommunications infrastructure.

We are the premier military academic health center. We align our strategic focus areas to the Military Health System (MHS) Quadruple Aim by focusing on better health, better care, improved readiness and lower costs.

Despite the ever changing landscape of health care, WRNMMC will remain focused on providing the best and safest care possible to all of our beneficiaries while continuing to focus on the readiness of our military members and medical teams supporting our warfighters and nation.



WRNMMC is the **world's largest joint military medical center**

7,000+ active duty military, civil service employees, contractors and volunteers

in **1 day**

3,916 outpatients

3,400 filled prescriptions

41 OR procedures

500 radiological studies

11,000 lab tests

Meet the Board of Directors (BoD)



CAPT Mark A. Kobelja, MC, USN
Director of WRNMMC



COL Rodney S. Gonzalez, MC, USA
Chief of Staff



CMDCM Sean L. Brown, USN
Senior Enlisted Leader



COL Jason L. Silvernail, SP, USA
Assistant Chief of Staff



CDR Dennis C. Tolentino, MSC, USN
Director for Administration



COL Wendi M. Waits, MC, USA
Director for Behavioral Health



CAPT Jason W. Schroeder, MC, USN
Director for Clinical Support



CDR Rasha H. Welch, DC, USN
Director for Dentistry



CDR Ruben Acosta, MC, USN
Director for Education, Training and Research



CDR Hasan Hobbs, MC, USN
Director for Healthcare Operations



CAPT Saira Aslam, MC, USN
Director for Medicine



CAPT Walter Greenhalgh, MC, USN
Director for NICOE



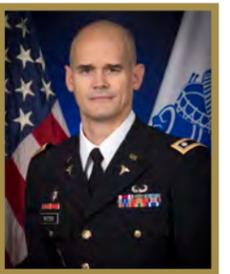
COL Lozay Fouts, AN, USA
Director for Nursing



Thomas Fitzpatrick, MD
Director for Quality Management



CDR Stephen Marty, MSC, USN
Director for Resource Management



LTC (P) Benjamin K. Potter, MC, USA
Director for Surgery





THE MISSION OF THE ASSISTANT CHIEF OF STAFF (ACoS) DIRECTORATE is to support WRNMMC, the medical center Director, the Chief of Staff and their offices; the medical center's governing bodies and hospital-wide programs; and provide administrative and programmatic oversight to all Special Assistant functions. ACoS applies stewardship and accountability practices while accomplishing its mission in support of the organization's Strategic Plan.

The ACoS directorate comprises of the departments of the Institutional Review Board, Healthcare Resolutions, Warrior and Family Coordination Cell, Legal, Executive & Legislative Affairs, Project Management, Privacy Compliance, Equal Employment Opportunity, Medical Staff Services, Organizational Development, Inspector General, Executive Secretariat, Office of Command Communications, Pastoral Care, and American Red Cross.

THE INSTITUTIONAL REVIEW BOARD (IRB) is an independent oversight body for WRNMMC which ensures the rights and welfare of human research subjects are protected. In 2018, the IRB increased the number of convened full Board meetings held and included members ranging from Neonatology, Investigational Pharmacy, the FDA (formerly), Gastroenterology, Nutrition, and Radiology to nonscientist members in social work, library sciences, and ethics.

IRB cut the review process time by at least 3 weeks.

HEALTHCARE RESOLUTIONS is a non-legal venue to resolve complex healthcare issues following unanticipated/adverse outcomes of care or quality of care concerns, offering equitable resolutions in a neutral setting for patients, providers and the health care organization. In 2018, Healthcare Resolutions launched a Peer Support Program in partnership with the

Executive Committee of the Medical Staff to be extended to GME providers in early 2019.

Invited to collaborate with the American College of Surgeons.

WARRIOR AND FAMILY COORDINATION CELL (WFCC) is the liaison and event planner for all the Wounded, Ill & Injured patients stationed at WRNMMC.

hosted **419** events | **\$352,863.60** gifts

THE LEGAL DEPARTMENT provides legal advice primarily in the areas of military justice, health law, labor law, fiscal/contract law, government ethics/standards of conduct, litigation, release of information, and legal assistance.

200 gifts of travel | **100** gifts worth \$300k
100 off-duty employment requests
200 agreements/contracts/MOU/MOA

EXECUTIVE AND LEGISLATIVE AFFAIRS educates the public about WRNMMC's world class health care delivery through the design, coordination and execution of strategies, executive interface and legislative affairs activities that serve our beneficiaries and build relationships.

160+ onsite delegation visits

40+ congressional inquiries/requests

support for personal, command and external partner ceremonies

Guests of note include Congressional and Executive Branch Leaders and international partners, military leaders, Chiefs and Vice Chiefs of Defense, and multiple DOD and international Senior Leader Spouse Delegations. Additionally, we have actively supported academic and research partnership developments with the Veterans Administration, myriad universities and post-graduate programs in diverse clinical arenas.

THE PROJECT MANAGEMENT OFFICE (PMO) provides best-practice guidance and framework for command-sponsored special projects and complex organizational initiatives for the purpose of maximizing effectiveness and efficiency in project outcomes. The PMO develops and advises on long-term change initiatives and organizational objectives. The PMO executes and facilitates programs such as the Unified Construction Coordination (UCC) Program and MCAA Lines of Effort, which include the construction and facilities outage processes, Facilities and Clinical Coordination (FCC) processes and tools, as well as communication networks and products. The PMO conceptualizes and assists with execution of command-level strategic communications platforms such as the monthly Town Halls.

26 Medical Services and Departments transitioned into temporary facilities

74 coordinated FCC outages

50+ construction communications

12+ coordinated Town Halls

48+ video vignettes



TOWN HALL
Clark Auditorium

An Overview of Our Directorates

THE PRIVACY COMPLIANCE DEPARTMENT (PCD) is responsible for WRNMMC's compliance of the HIPAA Privacy Rule, the Freedom of Information Act (FOIA), the Privacy Act of 1974 and the Civil Liberties Programs respectively. The PCD is responsible for processing all breaches of patient information including investigations, privacy concerns; expungments of patient(s) erroneous data; FOIA requests; and CLA concerns and compliance of the regulations for the aforementioned programs.

Investigated over 45 breaches and/or complaints of patient information, completed 52 expungments, closed 42 FOIA requests and launched the WRNMMC CLA program.

The PCD is responsible for tracking the HIPAA/Privacy Act Training compliance of WRNMMC's approximately 7,000 plus staff members. The HIPAA/Privacy Act Training compliance stands at 96%. The PCD is working closely with the Defense Health Agency (DHA) to standardize all practices. The PCD will continue the facilitation of the CLA program and educate all WRNMMC staff.

EQUAL EMPLOYMENT OPPORTUNITY (EEO) promotes a discrimination-free workplace where every civilian and applicant has the opportunity to reach his or her potential without regard to race, color, religion, sex (including pregnancy, gender identity, and sexual orientation), national origin, age (40 or older), disability or genetic information. The EEO program components consists of: Complaint Processing, Alternative Dispute Resolution (ADR), Reasonable Accommodations and EEO and Diversity Training. EEO is now in the early stages of implementing a robust training program to enhance workplace awareness of EEO programs to managers and employees.

THE MEDICAL STAFF SERVICES OFFICE manages all privileging and medical staff appointment processes as well as the credentialing process of all clinical support staff. Serves as a point of contact to privileged staff during initial application for medical staff appointment and for biennial re-appointments. Manage and update documents of evidence contained in the provider credentials file relevant to education, experience, licensure, certification, registration, and training to ensure accuracy and currency of information.

An Overview of the Directorates



THE DIRECTORATE OF ADMINISTRATION (DFA)

Departments: **Logistics, Patient Administration, Facilities Management, Nutrition Services and Information Management**

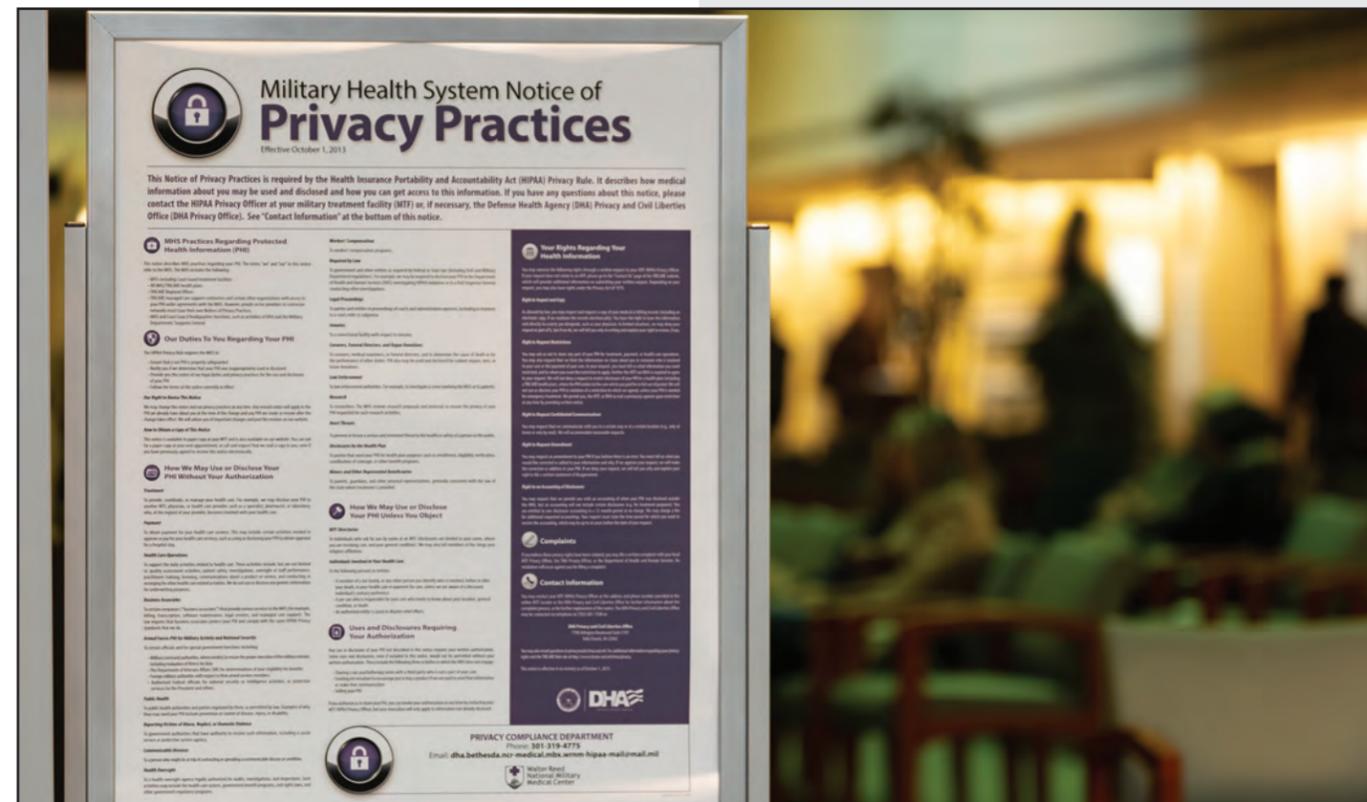
Logistics Customer Support works in direct contact with customers to inventory supplies, stock supplies, establish and purchase medical and non-medical supplies to meet the mission of each supported service. Facilities Management operates and maintains our facility systems in a reliable and resilient to support safe, quality patient care and outstanding patient experience. They are committed to improving the monitoring and control capability for existing utility systems, leading to earlier response times and enabling systems operation's predictive analysis. Our Nutrition Services leads military healthcare in providing highly efficient, accountable, and patient-friendly nutrition services for all. We provide nutritious, wholesome and tasty foods that enhance health and fitness. We maximize patient outcomes using evidence-based nutrition care to develop tomorrow's leaders in military medicine and pursue innovative research that advances nutrition practices. On the other hand, Information Management mandated all office information technology devices be migrated to Windows 10 and establish security platform on Cisco Identity Service Engine simplifying delivery of consistent, highly secure access control across wired and wireless connections.



THE DIRECTORATE OF BEHAVIORAL HEALTH (DBH)

Departments: **Acute and Outpatient Behavioral Health, Behavioral Health Consultation and Education, Social Work**

DBH comprises of 350 personnel, approximately 70 of whom are graduate medical trainees of various disciplines. The directorate has 13 individual services and eight training programs, including the largest psychiatry residency program in the Department of Defense (DoD). Our staff work in a number of clinical environments, including inpatient, outpatient, forensic, embedded, partial hospitalization and consultation-liaison settings. Beyond standard behavioral health interventions, our unique capabilities also include embedded consultation in various medical clinics, neuropsychological assessment, specialized forensic evaluations and expertise, alpha-stimulation, biofeedback, transcranial magnetic stimulation, electroconvulsive therapy, and inpatient neurobehavioral evaluation and management. In 2018, we committed to improving our ability to identify patients in need by prioritizing individual using defined criteria. Following a successful pilot, we are currently in the process of expanding behavioral health case management throughout the hospital along with establishing a Behavioral Health Scientific Review Committee in conjunction with the Departments of Psychiatry and Psychology at the Uniformed Services University (USU) to expedite and improve the quality of our research initiatives.





THE DIRECTORATE OF
CLINICAL SUPPORT (DCS)

Departments: **Pathology, Pharmacy, Radiology and Public Health**

The Department of Pathology successfully completed FDA inspection with zero deficiency noted with their Blood Services and the Core-Lab performed around 2.3 million laboratory tests. Ambulatory services decreased 40% pharmacy wait times by creating a staff beneficiary refill request site and adjusting hours of operation. Our pharmacists also initiated Naloxone in response to the Opioid Epidemic.

Known for a full spectrum of diagnostic and therapeutic services, the Radiology Department installed new camera systems to provide the most modern capabilities available for beneficiary support. In addition, Radiopharmacy continues to be certified as fully USP 797 compliant – the first in the military. Meanwhile, primary and secondary prevention has been the focus for the Department of Public Health. It was demonstrated by frequent and routine environmental surveillance and inspections, staff training, and prevention education. Public Health establishes and sustains key partnerships and open communication with other agency leaders and stakeholders to continuously improve.



DIRECTORATE OF
DENTISTRY (DDS)

Departments: **Primary Care Dentistry, Health Readiness, Hospital Dentistry, Oral Maxillofacial Surgery and Pentagon Dental Clinic**

The Directorate of Dentistry is a multidisciplinary specialty that treats some of the National Capital Region's (NCR) most complex cases to include wounded warriors, multidisciplinary surgical and maxillofacial cases, and special needs pediatric and adult populations.

In 2018, DDS committed itself to the goal of having zero percent service member's readiness medically indeterminate. Our directorate will continue to leverage partnerships to maximize readiness. We ensured medical readiness above the 85% benchmark and dental readiness above the 95% benchmark with five individual services and two training programs. We support medical and dental readiness across the NCR Market through its WRNMMC and Fort Meade Clinics.



DIRECTORATE OF
EDUCATION, TRAINING AND RESEARCH (ETR)

Departments: **Hospital Education and Training (HEAT), Simulation, Graduate Medical Education (GME), and Department of Research (DRP)**

Organized into two services (Staff and Faculty Development and Health Professions Education), HEAT consists of a subject matter expert health care team dedicated to train and educate our staff on current techniques and information in order to provide our patients with the greatest care possible.

The Department of Simulation is a founding member of the NCR Simulation Consortium. It is the only simulation program in the world to receive maximal accreditations in health care simulation from both the American College of Surgeons and the Society of Simulation in Healthcare.

WRNMMC has the largest and only tri-service platform for GME in the DoD. DRP's life-saving, dual mission is to promote military medical research and protect human subjects. Within the department, protocol analysts help researchers develop a protocol and navigate the online system while biostatisticians help design the studies, plan sample size, and analyze data.

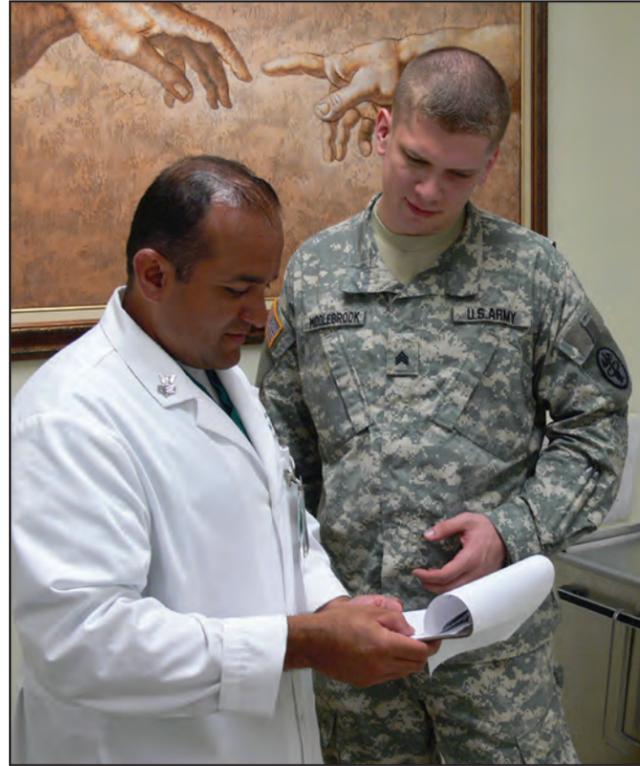


THE DIRECTORATE OF
HEALTHCARE OPERATIONS (DHO)

Departments: **Business Decision Support, Data Quality, External Partnership Referral Office (EPRO), Medical Management (Case Management, Disease Management, Referral Management, and Utilization Management), Member Services, and Virtual Health (VH)**

The key priorities for the DHO include improving data quality, access to care, and re-engineering clinic processes toward efficient business practices resulting in better clinical productivity and strengthening external regional partnerships to optimize inpatient and outpatient referrals for specialty care.

Data Quality team in collaboration with clinical and administrative directorates successfully achieved the 97% benchmark for end of day processing and inpatient record coding. Business Decision Support provided regional level support for analysis on the WRNMMC per member per month cost. Going into 2019, Member Services will provide assistance to beneficiaries during the first ever TRICARE open enrollment season. We look to leverage VH to improve beneficiary access to care for primary and specialty care across the NCR. Additionally, we anticipate further expansion of services to VA beneficiaries, therefore, pursuing a direct connection between the WRNMMC Radiology PACS and VA Capitol Health Care Network to provide improved service and resources for patients and providers.



THE DIRECTORATE FOR
MEDICINE (DMS)

Departments: **Allergy/Immunology, Cardiology, Dermatology, Emergency, Endocrinology, Executive Medicine, Gastroenterology, Hematology/Oncology, Infectious Disease, Internal Medicine, Nephrology, Neurology, Pediatrics, Pulmonary/Sleep Medicine, Rheumatology, Warrior Clinic**

The Directorate of Medicine is the largest Directorate at WRNMMC, with oversight of 1,300 personnel across 64 clinics in the Departments of Medicine, Pediatrics, Emergency Medicine and Neurology, with additional oversight of the University Family Health Clinic at USU. Our clinical services completed over 260,000 patient encounters over the past year. We ensure appropriate primary and specialty care access for our patients and focused on active duty access to align with our primary mission of support to the warfighter. In addition, we focus on creating a foundation for resourcing clinical care requirements, establishing a directorate level quality program, and moving forward with key strategic projects aligned with priorities above to ensure efficient delivery of high quality health care to our patients.



THE DIRECTORATE FOR THE
NATIONAL INTREPID CENTER OF EXCELLENCE (NICoE)

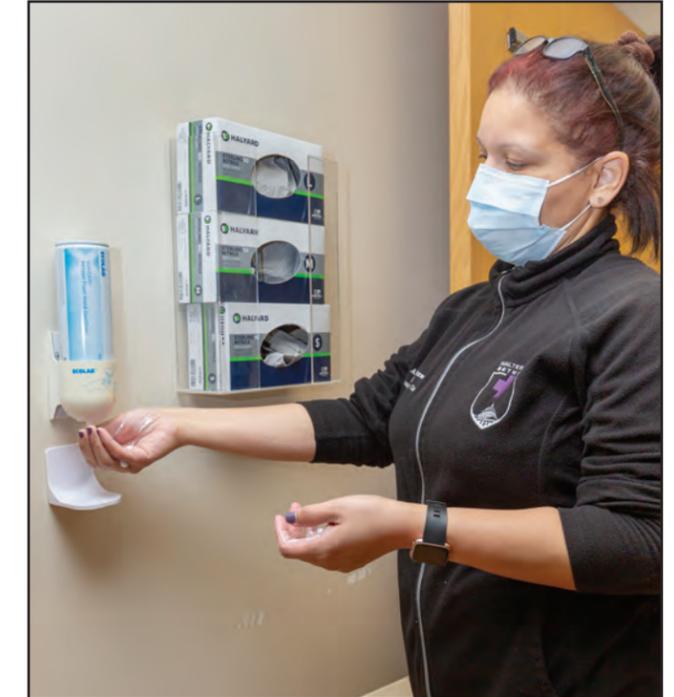
The NICoE is part of an Intrepid Spirit Center (ISC) Partnership Network (Network), a network of integrative health-focused traumatic brain injury (TBI) clinics at military treatment facilities across the country that work collaboratively to augment the effectiveness of TBI care delivered to patients and families. This network has grown to ten sites from the time of inception in 2010 and dedicated to improving the lives of patients and families through holistic, integrative health and conventional, interdisciplinary clinical care, research, and education in a collaborative effort with patients, families, referring providers, and researchers.



THE DIRECTORATE OF
NURSING SERVICES (DNS)

Departments: **Critical Care, Inpatient Clinical Education, Medical, Maternal, Nursing Administration, Psychiatric, Surgical**

The DNS has 15 inpatient units, PICC team, Nurse of the Day (NOD), Discharge Planning, Wound Care team and Clinical Nurse Transition Program. On May 9, 2018, we were the first DoD organization and the second facility in the state of Maryland to achieve the prestigious Pathway to Excellence designation by ANCC. This designation recognizes health care facilities that have created a positive work environment where nurses can flourish, thereby bettering patient outcomes, quality of care and safety. Our CNSCi is an Assistant Investigator on the grant "Accounts of Care Partnerships with Wounded, Ill or Injured Service Members." In addition to being an investigator, he is also collaborating with Dr. Marlon Saria and Mr. Melanie Goldfarb, from the Memorial Sloan Kettering - John Wayne Cancer Institute in Santa Monica California on a grant submitted titled "Addressing Gaps in Survivorship for Young Adult Cancer Survivors in the Military." Although this project is awaiting a funding decision, it represents the collaboration of Army, Navy, and Air Force nurse scientists coming together for one common goal. Our inpatient nursing units along with multiple support service departments began using the Vocera system. This wearable hands-free communication system allows our staff to stay in contact while on the go.



THE DIRECTORATE FOR
QUALITY (DOQ)

Departments: **Joint Commission, Patient Relations, Performance Improvement, Risk Management, Occupational Safety, Patient Safety, Lean Six Sigma**

The Directorate of Quality has six individual services. Patient Safety's goal focuses on eliminating all preventable harm complementing Safety's emphasis on Occupational Safety programs as well as safety across environment of care. To facilitate leadership Patient Safety Report (PSR) trend analysis and closure monitoring, the Patient Safety service developed a PSR dashboard that led to a demonstration to NCR-MD and Navy Medicine East. Our Process Improvement department aggregates data, identifies areas for quality improvement and facilitates the development of sustainable improvement practices. The Risk Management department monitors, analyzes and reports on organizational risk associated with incidents resulting in harm. The Joint Commission Readiness department works closely with the Process Improvement service to maintain a systematic approach to process improvement and ensure that Joint Commission standards are continuously met and exceeded. The Patient Relations department monitors and reports on patient experience via survey data with real time problem resolution via highly accessible phone services.



THE DIRECTORATE FOR **RESOURCE MANAGEMENT (DRM)**

Departments: **Budget Services, Accounting Services and Human Resources**

In accordance with NCR, Defense Health Agency (DHA), and DoD policy and guidance, the DRM has the authority to direct, manage, and coordinate budgeting, allocation, and execution of the command's Defense Health Program (DHP) funding. Additionally, the DRM has oversight of all Human Resources at WRNMMC encompassing more than 6,800 Active Duty, civilian and contract staff.

In 2018, DRM led the NCR in audit compliance prioritizing completeness and accuracy. DRM covered over 1,000 individual transactions tested encompassing multiple assessable units including civilian payroll, equipment, accounts receivable reimbursable collections, and supply receipt and acceptance. Our audit team also developed internal controls and test-of-design procedures for key areas of the command including travel, gift funds, and galley cash intake procedures. Human Resources implemented the SWFT system along with revamping updating in-processing procedures leading to a 30% reduction in the processing time of average security clearance. In addition, DRM saved the command approximately \$50,000 annually by streamlining the background investigations process reducing the time to process security staff security clearances.



THE DIRECTORATE OF **SURGICAL SERVICES (DSS)**

Departments: **Anesthesia, Obstetrics and Gynecology, Orthopaedics, Rehabilitation, Surgery and Perioperative Nursing**

The DSS provides premier inpatient and outpatient surgical care for warriors, active duty and their families, and retired beneficiaries in a patient and family-centered care environment. The DSS supports outstanding academic medicine with advanced research, fully accredited residencies and fellowships and destination referral surgical care for the most complex diagnoses and therapies.

DSS is leading the way with Planned Contract to General Schedule (GS) transitions for stabilization of workforce and cost savings and 36 actions have been approved to date with a projected \$1,245,384 estimated savings annually. This includes all departments except Anesthesia which is still undergoing optimization analysis. Surgery shared its learned lessons and best practices in a recent Review and Analysis event for executive staff.

The department of Surgery has the most complex and varied surgical capability within the DoD. The service includes 80 surgeons spanning a diverse array of disciplines as well as 31 optometrists and subspecialty audiologists and speech and language pathologists. Our surgeons provide inpatient and outpatient operative services at WRNMMC and Fort Belvoir Community Hospital (FBCH) along with outpatient surgical expertise at Kimbrough Ambulatory Care Center and Malcolm Grow Medical Center. Members of the team are nationally and internationally recognized in a broad array of specialties, with particular expertise in complex trauma management.



WALTER REED NATIONAL MILITARY MEDICAL CENTER sets high standards to deliver quality patient care, which cannot be achieved without transformational research and innovation. Our innovation allows us to learn, adapt and accomplish our mission. Each and every day, we strive to extend the continuum of care by improving outcomes and empowering our patients and providers. We work hard to increase continuity and interdisciplinary care. Our Department of Medicine, the National Intrepid Center of Excellence and the John P. Murtha Cancer Center align priorities to meet the needs of our deserving beneficiaries, while also solving many of the other challenges of modern military health care.

The Department of Medicine

The creativity and ingenuity of our clinical teams continues to bring world class care to our beneficiaries.

Modern Health Care Solutions

1. Open access colon cancer screening
2. Electronic consultation — bringing endocrinology expertise to our patients;
3. Mobile dermatology units;
4. Nighthawk Program to increase patient safety

Our collaborative services range from gastroenterology, dermatology and nephrology to even more specialized services such as Pediatric Infectious Diseases and Neurophysiology.

Gastroenterology provides state-of-the-art colon cancer screening to beneficiaries with high-definition optical colonoscopy or virtual CT scan colonography (VTC). We also offer

open-access screening where patients can fill out an online medical questionnaire and have a gastroenterologist review their health history. Our scheduling department then arranges appointments for the procedure during a phone consultation, sparing patients an office visit and allowing increased access to care for symptomatic patients.

In the past three years, we have screened more than 5,280 patients and performed more than 3,700 open-access colonoscopies.

In keeping up with the ever-expanding technological revolution, Endocrinology initiated the electronic consultation (eConsult) service to improve efficiency of care delivery, access to endocrine care and patient satisfaction. The eConsult Initiative allows us to take specialty care to remote areas of the region where there is a general lack of specialty access and reduces the inconvenience of our patients needing to travel a long distance to receive care. Coupled with our Secure Messaging service and in collaboration with our primary care colleagues,

Innovative Patient-Centered Care

this innovative service reduces the burden of unnecessary visits for our patients while allowing them to continue receiving the same high-quality care rendered remotely.

Dermatology continues to evolve in its practice of superior medicine through outreach missions and numerous innovations. Dr. Jeffrey Lackey and Dr. Jason Marquart expanded the regional dermatology presence through Mobile Dermatology Units (MDUs) that have taken enhanced care to FBCH, Kimbrough Ambulatory Care Center and Naval Health Clinic as well as the U.S. Capitol, the White House Medical Unit, Camp David and the Pentagon.

The Children's Center at the WRNMMC is the military health system's premier facility for comprehensive multidisciplinary primary and subspecialty pediatric care.

Inpatient Services

1. Inpatient Pediatric Ward
2. Outpatient Pediatric Sedation Unit
3. Level III Neonatal Intensive Care Unit
4. Pediatric Intensive Care Unit
5. Mother Infant Care Center

Our primary care services include our three Pediatric Primary Care Medical Home (PCMH) teams as well as our Adolescent and Young Adult PCMH team.

Serving the primary care needs of **more than 10,000 beneficiaries** as well as **almost 2,000 children and adolescents of our NATO partners.**

Subspecialty Services

1. Child Abuse and Forensic Pediatrics
2. Developmental and Behavioral Pediatrics
3. Genetics
4. Pediatric Cardiology
5. Pediatric Endocrinology

6. Pediatric Gastroenterology
7. Pediatric Hematology-Oncology
8. Pediatric Infectious Diseases
9. Pediatric Nephrology
10. Pediatric Pulmonology
11. Pediatric Rheumatology

Subspecialists do outreach at many of the military clinics in the NCR bringing specialty care closer to our patients' homes.

The Children's Center employs a patient and family centered care model that promotes team-based care in both our primary care and subspecialty settings. All the pediatric generalists and subspecialists work side by side providing seamless care. Our staff works to coordinate clinic visits, laboratory testing and radiology studies on the same day in one location. In addition our Children's Center pharmacy allows the same coordination between physicians and pharmacists. Our outpatient and inpatient teams are fully integrated and include Social Work, Nutrition, and Child Life services.

nearly **2700**
Pediatric Hematology/Oncology
service outpatient encounters
at WRNMMC and outreach clinics at
Fort Belvoir and Malcolm Grow



Our access is unrivaled. Wait times for pediatric subspecialty appointments are one-fourth of the national average. In addition to our satellite clinics throughout the NCR, we have expanded telemedicine services and virtual consultative services to address the needs of families stationed locally, nationally, and overseas.

Innovative Patient-Centered Care

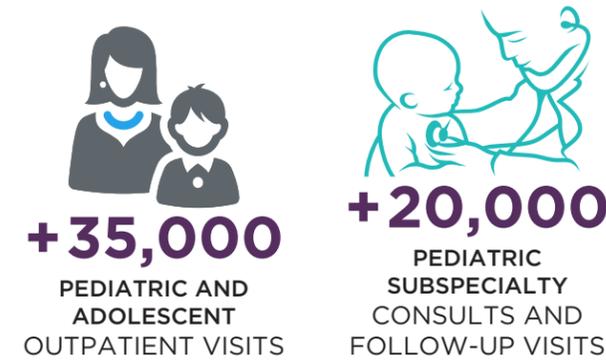
well child visit and working to engage as a pilot site for a DoD healthy steps program for at risk families.

The Emergency Department serves as the safety net for military beneficiaries in the NCR.

21 board certified Emergency Medicine physicians and physician assistants, 35 nurses, and 15 corpsmen/medics, medical support assistants, core administrative staff, patient transporters, and housekeeping deliver critical health care to over 30,000 patients annually

The department has dedicated resuscitation rooms for emergent treatment and is ready 24/7 to address a wide range of medical and surgical emergencies. Emergency Department personnel are the first responders in the event of a Chemical/Biological/Radiological/Nuclear Event (CBRNE) in the NCR. The Emergency Department continues to focus on improving and expanding trauma care. Having deployed to combat zones, many of the medical staff at WRNMMC bring trauma experience rarely seen in the civilian world. Throughout history, military medicine has been pivotal to the advances made in trauma medicine. This proud tradition continues as the military's joint trauma system continues to develop quality, evidence-based clinical practice guidelines that not only benefit uniformed personnel in combat, but also military beneficiaries and civilians in the United States. Our Department and the hospital have renewed their ACS's certification as a Level II Trauma Center and have partnered with the Maryland Institute for Emergency Medical Services System (MIEMSS) to further pave the way to bring trauma patients into our department. As the hospital looks to expand these capabilities, the Emergency Department will play a key role stabilizing these patients when they first arrive.

The medical center is working to expand its capabilities in other ways beyond trauma care. As WRNMMC pursues The Joint Commission (TJC) and Maryland certification as a stroke and ST Elevation Myocardial Infarction (STEMI) center, the Emergency Department once again will play a pivotal role in these hospital-wide initiatives. The Emergency Department already provides world class stroke and cardiac care in

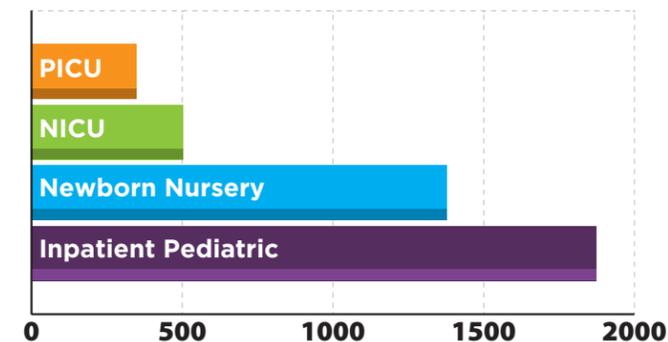


Nowhere are the strengths of the Children's Center more apparent than in our 25 pediatric multidisciplinary clinics. During these condition focused half day clinics, physicians and specialists will evaluate children with complex medical conditions allowing for quality coordinated care within a single office visit. Our approach both minimizes the number of appointments and trips to the hospital, thus decreasing time away from school and work.

A new, innovative clinic, established in 2018, is the Pediatric Latent Tuberculosis Telemedicine Clinic, which provides patient-centered care in a safe efficient manner. The Neonatology Fellowship Program was awarded a five-year NIH grant in September 2017 to investigate the impact of intermittent hypoxia and caffeine in infants born preterm.

The Pediatric Primary Care and Adolescent and Young Adult Medicine medical homes are working to improve our compliance with STI screening. This project involves all aspects of care delivery, with provider and staff education, improving system flow and obtaining labs in a confidential way and documentation. In addition, the PCMH is instituting a screening test for Adverse Childhood Events (ACE) with associated follow-up care at the four-year-old

INPATIENT SERVICES/ADMISSIONS



conjunction with the Departments of Neurology, Neurosurgery, and Cardiology. By working together to meet the requirements of TJC and MIEMSS, we will achieve new milestones that ensure WRNMMC's stroke and cardiac patients receive the latest innovations of care that have been shown to improve outcomes.

Every month, the Emergency Department invites outside speakers to present the latest advances in their specialties. At these sessions, the most current standards in care are reviewed and new technologies and ideas are adopted. Recent didactic sessions included updates on advanced pediatric care, atypical stroke presentations, and updates on sepsis. The Emergency Department has moved toward more team-based training and staff attends national conferences to stay abreast of all aspects of the ever changing world of emergency medical care.

New technologies are integrated to augment our health care delivery and benefit our patients. We use the latest bedside emergency ultrasound machines to assist in procedures such as peripheral and central venous access. Handheld carbon monoxide monitors assist our staff to screen for this occult poisoning. The latest patient monitors include end tidal carbon dioxide levels to assist us in procedural sedation and monitoring of critically ill patients requiring mechanical ventilation. Using patient simulators, we train staff on emergency procedures that are not frequently encountered to maintain these needed skills.

The Emergency Department recently partnered with the John Hopkins Applied Physics Laboratory to further improve all areas of emergency health care delivery. One large project from this partnership includes a revamping of our patient flow to include a "nurse first" triage system to immediately screen patients on arrival to the Emergency Department, consistent direct bedding when available, and team-based care delivery. Working with our inpatient colleagues, we have piloted a more efficient admission process to further optimize patient care.

Preparation for mass casualty (MASCAL) and CBRNE events are vital to our department. We conducted many regional and local MASCAL/CBRNE drills in 2018 with the partnership of Emergency Management. These vital drills



keep our staff well-prepared to address unexpected disaster events in the local region.

The Emergency Department first launched its "Fast Track" in 2015 and continues to be highly successful. By diverting lower acuity patients from the main Emergency Department, we are able to consistently deliver prompt care to our patients needing urgent care. Our full time pharmacist remains dedicated to help distribute discharge medications and providing vital medication education. We are currently expanding our pharmacy support with an additional clinical pharmacist. The Emergency Department team is committed to constantly improving the quality, efficiency and safety of emergent health care for each and every patient that needs us 24/7/365.

The Neurology Department offers numerous unique capabilities that support the warfighter and their family members not present elsewhere in the DoD. We have the only inpatient neurology ward service, inpatient adult and pediatric epilepsy monitoring unit, and the only autonomic testing laboratory in the DoD health care system.

We are the sole DoD medical center with fellowship-trained subspecialists in neuro-immunology, epilepsy, autonomic disorders, and neuro-oncology.

We also have sub-specialists trained in neuro-ophthalmology, movement disorders,

interventional neuroradiology, neurocritical care, neurophysiology, and behavioral neurology. We have a multi-disciplinary neuromuscular clinic with military-specific expertise in peripheral nerve injury. We support the Defense Veterans and Brain Injury Center/NICoE programs by providing neurological consultation on service-members with chronic effects of TBI. We have the largest botulinum toxin injection clinic in the DoD, and provide specialized procedural care therein to patients with chronic headache disorders, complex movement disorders, and sequelae of traumatic events such as muscle spasticity. We are the only DoD facility with multiple pediatric neurologists and we provide consultative services to WRNMMC, multiple other hospitals in the NCR and telephone consultative services to hospitals across the DoD.

The USU Neurology Department maintains strong ties with our department supporting medical student and resident education. The USU Department of Neurology has 5 local faculty who contribute to the clinical and educational missions across the NCR. USU medical students benefit from the expertise provided by the WRNMMC Neurology faculty during all phases of their training including the neuroscience curriculum and neurology clerkship. USU Neurology has several research programs including the Center for Neuroscience and Regenerative Medicine (CNRM). The CNRM is a collaborative program between USU, NIH, and WRNMMC to better understand, treat, and prevent TBI and its sequelae.

Over 9,500 patients were cared for in the adult neurology clinics and 1,300 children and adolescent dependents were cared for in the pediatric neurology clinic.

We are over 125% of our full time equivalent (FTE) goals over the last 8 months of FY2018.

Access for all appointment types was under 30 days
(for the majority of the fiscal year)
civilian wait time: >3 mos

We track stroke quality measures as recommended by TJC. Through 10 months of FY2018 our compliance with selected TJC measures was near 100% which improved

throughout the fiscal year, and reached 100% compliance across measures by August 2018.

Looking into the future, the department strives to expand acute stroke care as part of the Trauma/STEMI/Stroke initiative throughout the NCR. We plan to use this initiative as a springboard towards becoming a certified, acute stroke center. We plan to highlight our academic impact by hosting a military-wide neurology conference in the next fiscal year. Furthermore, our epilepsy service will continue to expand epilepsy surgery capabilities including evaluating patients for novel, surgically implanted treatment options for refractory epilepsy patients (e.g. NeuroPace).

Physical Therapy is committed to providing high quality health care with a wide spectrum of services for Wounded Warriors, active duty service members and other beneficiaries. We provide a patient centered program; emphasizing personal care and one-on-one rehabilitation using advanced technology and exceptional techniques. Our goal is to assist and educate patients through exemplary specialized wellness services and customized programs, setting the highest standards for our profession.

Occupational Therapy services to our patients promote the highest level of independence in daily living. We evaluate and treat beneficiaries with disabilities, diseases, injuries and/or disorders which impair their ability to carry out activities of daily living in a satisfactory manner. Services are rendered to all age groups from pediatric to geriatric, and to patients who have physical, cognitive, psychological, social, and/or mental impairments.

Computer Assisted Rehab Environment (CAREN) is one of only ten of its kind in the world, the CAREN provides a safe, controlled setting where patients can work on balance, coping with stress, using new prosthetics and other skills necessary to achieve functional real-life goals. Using specialized cameras and computers linked to sensors on their bodies, recovering service members interact with a virtual world projected onto a life-sized curved screen by shifting their weight on a motion platform with an embedded treadmill. More than 70 scenarios enable recovering service members to perform virtual activities such as

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 SCIENTIFIC REGISTRY OF TRANSPLANT RECIPIENTS



 Commission on Cancer®

 Accreditation Council for Graduate Medical Education



 THE COMMITTEE ON TRAUMA

 **CAP ACCREDITED**
COLLEGE of AMERICAN PATHOLOGISTS

 **NCQA**
Measuring quality. Improving health care.

 **NAPBC**
NATIONAL ACCREDITATION PROGRAM FOR BREAST CENTERS

steering a boat through buoys in a lake, running up and down trails in the woods, or walking through city streets, without fear of falling.

The Gait Lab of the Center for Performance and Clinical Research (CPCR)

uses sophisticated motion analysis equipment (27 infra-red cameras, reflective markers and six force plates) to quantify our patient's movement. The information gained through motion analysis helps providers to evaluate or modify physical therapy programs and prosthetic and orthotic components. Our ultimate goal is to facilitate improvement of functional tasks such as walking, running and jumping.

Transplant Rates

BETWEEN JULY 2016 AND JUNE 2018

20.9 OUT OF 100

people per year receive a transplant at this hospital

19.4 OUT OF 100

people per year receive a transplant nationally

Waiting List Mortality Rates

BETWEEN JULY 2016 AND JUNE 2018

3.6 OUT OF 100

people per year die waiting for a transplant at this hospital

5.3 OUT OF 100

people per year die waiting for a transplant nationally

The Organ Transplant Service at WRNMMC

is the only MHS transplant program. Organ Transplant performs kidney transplants, living donor nephrectomies, dialysis access, and liver and pancreas surgery. In 2017, Organ Transplant performed 55 kidney transplants, of which 24 were living donor procedure. This is the highest volume of transplants since the program's inception in 1970. The Transplant service has also developed the first minimally invasive liver surgery program in the MHS in concert with the John P. Murtha Cancer Center. Moreover, UNOS encourages patients with end-stage organ disease to dual-list, shortening patients' wait time for a kidney transplant. It gives them exclusive access to unique Military Share Program kidney pool. Our patients receive transplants much sooner than the national average. Fifty percent of our patients receive a kidney transplant in less than 30 months.

The National Intrepid Center of Excellence (NICoE)

has a vision of becoming a global leader in TBI care, research, and education. NICoE's interdisciplinary approach allows our patients to experience the full spectrum of

TBI care in a collaborative environment that promotes physical, psychological, and spiritual healing ranging from individual outpatient treatment, an intensive four-week program, inpatients consults, and several family-centered outpatient treatment modalities.

Established in 2010 as a center dedicated to advancing our nation's understanding of the "invisible wounds" from the wars in Iraq and Afghanistan; and after eight years of continuous excellence in patient care, the NICoE is now fully integrated to the WRNMMC. The new NICoE Directorate under WRNMMC was established in response to Assistant Secretary of Defense for Health Affairs (ASD/HA) Dr. Jonathan Woodson's policy memorandum dated September 17, 2014, directing the establishment of a cohesive TBI Pathway of Care for the MHS and the integration of the NICoE within WRNMMC, with the Defense and Veterans Brain Injury Center (DVBIC) acting as the MHS TBI Pathway of Care manager for clinical, research, education, and training activities. The integration was designed to provide a seamless pathway of care and gain efficiencies while continuing to provide patient and family-centered, cutting-edge care, research, and education to the full spectrum of TBI severities.



The NICoE Directorate is also a MHS asset -seen as a beacon of leadership and innovation supporting the maturation of a national network of Intrepid Spirit Centers (ISCs) - a network of integrative health-focused TBI clinics at military treatment facilities across the country that work collaboratively to augment the effectiveness of TBI care delivered to patients and families.



In 2018, the NICoE updated its Strategic Plan for 2018-2020, adding a new goal to strengthen network collaborations. This newest goal - "Codify an integrated, nationwide network of specialized treatment facilities that provides the highest standard of care to patients and families impacted by TBI and that contributes to the body of knowledge about effective clinical treatments"-with the support and concurrence of the ISCs and DVBIC allows us to further codify the NICoE and the ISCs Partnership Network and other TBI treatment facilities across the MHS TBI Pathway of Care (such as Joint Base Elmendorf-Richardson and Landstuhl Regional Medical Center), and to contribute to the continual research and improvement of effective clinical treatments.

In addition to strengthening our collaborations throughout the MHS, the NICoE made great progress to enhance the network's data capabilities during 2018. The NICoE-created TBI Portal became the approved enterprise-wide application available to TBI care facilities across the MHS Pathway of Care. This Defense Health Agency (DHA) system, nested within CarePoint, provides a consolidated view of TBI patient data, helping clinicians and researchers to better understand the complexity of each patient's case; and with a vision of using these insights to influence the future of TBI care.

Increased use of common informatics platforms, and increased collaboration among the network have helped standardize how we collect, analyze, and manage data and outcome metrics in support of the research and clinical operations for TBI care. These efforts not only

support the mission of driving innovation in TBI care, research, and education, but the readiness of our fighting force and the capacity and capability of TBI treatment in the MHS.

This past year, the NICoE's Clinical Operations team continued to develop and implement processes and tools to streamline access to care, improve accuracy in day-to-day care, and ensure continued excellence in patient experience. Additionally, our team fostered and leveraged strong working relationships with the NICoE's Research Department to investigate clinical questions through collaborative, scientific inquiry.

In 2018, more than 1,900 unique patients received care by our providers through 35,727 clinical encounters in either our 4 week Intensive Outpatient Program (IOP), or TBI Outpatient Services. Additionally, NICoE staff provided consultative TBI care to more than 90 WRNMMC inpatients through 350+ inpatient consult encounters.

During 2018, 229 patients received health services under our four week IOP. The NICoE IOP includes tailored treatment plans created with patient, family, and provider input, focusing on mind, body, and spiritual healing.

The NICoE recognizes that families are affected by a patient's duty and subsequent injury. Thus, families are incorporated into the patient's recovery process.

245 family members received services at the NICoE as part of our IOP, including children, spouses, family caregivers, and loved ones.

As a measure of program success and overall patient experience, the NICoE's IOP consistently reported high marks in satisfaction across the program spectrum. Our patients reported a 97.57 percent overall satisfaction during 2018, and 80 percent of IOP patients reported clinically significant improvement on a standardized self-report survey that addresses some of the more commonly occurring TBI symptoms.

Research at the NICoE is aligned with the National Research Action Plan (NRAP) which is the result of an Executive Order (EO) signed by President Barack Obama to improve access to mental health services for veterans, service members, and military families. The EO directs the DoD, VA, Health and Human Services (HHS), and Education, to develop the NRAP on posttraumatic stress disorder (PTSD), other mental health conditions, and TBI "to improve the coordination of agency research into these conditions and reduce the number of affected men and women through better prevention, diagnosis, and treatment." The EO also calls for the establishment of a comprehensive longitudinal study of 100,000 service members focused on PTSD, TBI, and related injuries, urging research agencies to improve data sharing and coordination with the ultimate goal to reduce the number of affected individuals.

To translate research into real outcomes for patients, researchers at the NICoE leverage the findings from longitudinal studies, treatment-based protocols, and data collection for future research. There are more than a dozen active, IRB-approved research protocols with a range of collaborators inclusive of federal agencies, nonprofit and private organizations, and academia.

Over the course of 2018, the NICoE has presented and published more than 57 research materials associated to IRB-approved protocols such as manuscripts, research panel presentations and scientific posters. NICoE researchers and affiliated partners participated in the 2018 MHS Research Symposium (MHSRS), the DoD's premier

scientific meeting that provides a collaborative environment for military medical care providers with deployment experience, DoD scientists, academia, and industry to exchange information on research and health care advancements within the areas of Combat Casualty Care, Military Operational Medicine, Clinical and Rehabilitative Medicine, and Military Infectious Disease Research programs.

The NICoE had the opportunity to present scientific posters, participate in podium presentations and media roundtables on cutting-edge topics related to TBI treatments and technologies. The NICoE-DVBIC poster titled "The Relationship Between Perceived Burden & Health-Related Quality of Life in Caregivers of Military Service Members & Veterans Following Traumatic Brain Injury" was chosen among the best of the 1,300 plus posters presented during the event.

In September, 2018, the NICoE's Research Department hosted a NICoE Research Fair that provided an opportunity for researchers to showcase their authored-work presented at the 2018 MHSRS, as well as other research-related work from the past year. The attendance and interest success allowed us to envision this as the first of many opportunities for the Research Department to share information in an interactive setting on an annual basis.

NICoE staff are active organizational ambassadors through their various contributions to the larger MHS, civilian, and academic communities.

56 new personnel with areas of specialty in rehabilitation, wellness, social work, medicine, research, informatics, administration, corpsmen, and more joined the NICoE family.

The NICoE is committed to engaging current and future TBI clinicians, researchers, health care professionals and staff members through numerous activities and programs during the course of the year. In 2018, the NICoE held 43 training, development and social opportunities, including staff engagement social activities. This was a year for new ideas to keep internal audiences engaged and informed at all organizational levels. Tea Time and Coffee Talk

sessions between the NICoE's leadership and staff members were put into place to promote an environment where employees were encouraged to speak about issues that impact the organization, and to discuss creative ideas to improve our patient-care.

Collaboration at the NICoE provides educational opportunities for medical professionals, students and staff, on promising and best practices that support TBI understanding and recovery.

Educating clinicians and researchers through hands-on experience allows the organization to influence care both within the MHS and civilian sectors, nationally and internationally.

Throughout 2018, NICoE's Education team successfully conducted weekly TBI Didactic Series events, and bi-monthly educational lectures in support of enhancing the knowledge of NICoE patients, families, staff, experiential learners, and the global community about TBI diagnosis and treatment best practices. Through the TBI Resident Didactics and Lecture presentations, more than 442 Continual Education credits were earned by providers from the MHS and partnering agencies.

Additionally, three new Training Affiliation Agreements or MOUs were initiated in 2018 with Lesley University, Frostburg University and University of North Carolina- Wilmington in the areas of expressive arts therapy and recreational therapy. These training agreements provide opportunities for students within the MHS, as well as students from the civilian sector to gain training in a military health care setting with a unique patient population. In 2018, 21 experiential learners received hands-on practice and were professionally mentored through internships, fellowships, and young professional programs.

The NICoE welcomes visitors, students and dignitaries year-round. The programs that support this knowledge sharing are a cornerstone to communicating the NICoE story.

62 distinguished visitors' tours hosted in 2018. International visitors represented more than 11 countries around the world.

These distinguished visitors embodied stakeholders across the military, federal government, academics, and international dignitaries and visitors. This effort solidifies NICoE's vision to be a global leader in TBI care, research, and education.



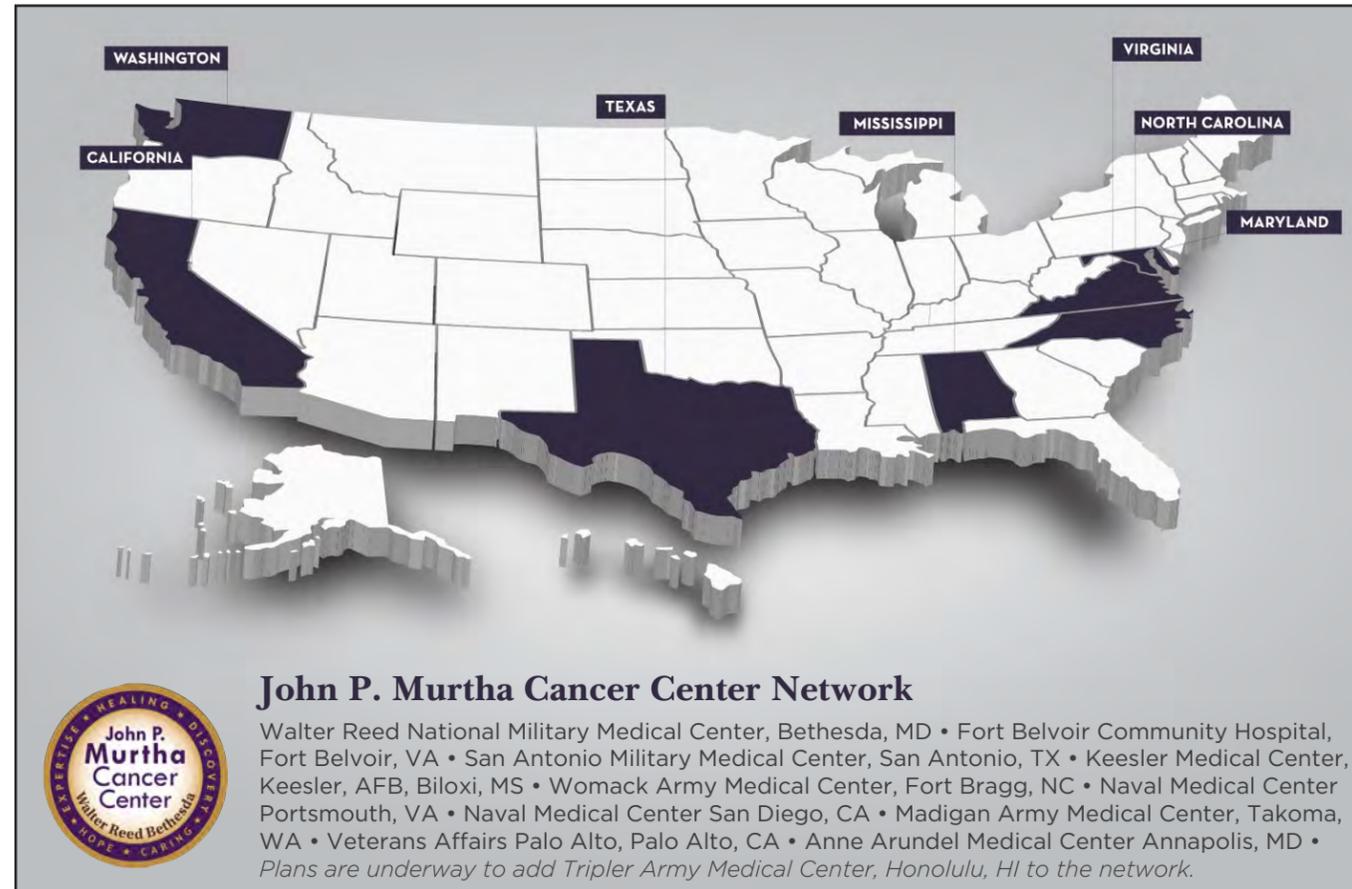
John P. Murtha Cancer Center (MCC) is the DoD's only MHS's designated Center of Excellence for Cancer Care. MCC's support of multidisciplinary translational cancer care and research includes programs at WRNMMC, USU, several MHS MTFs, National Cancer Institute (NCI), VA, and civilian cancer centers. The MCC supports the readiness of the Active Duty Force through screening, prevention, research, and treatment for cancer.

The MCC focuses on clinical care and research designed to address cancer prevention, screening, treatment, rehabilitation, and survivorship of service members, beneficiaries, and veterans who suffer from cancer.

Over 1,000 active duty service members are diagnosed with cancer every year.

MCC's program includes translating research and development into novel and innovative treatment and rehabilitation options. As indicated by the recent ASD (HA) Initial Capabilities Document for Cancer (approved by The Joint Staff in October 2017), the





ultimate goal of the MCC within the MHS is that cancer is prevented, screened for, detected, treated, cured, and rehabilitated, or impacts of cancer and cancer treatment are mitigated so service members are returned to duty, re-classified to a new duty position, or reintegrated into civilian life with highest possible quality of life. MCC's cancer educational and clinical research capabilities which include programs such as the Center for Prostate Disease Research (CPDR), Clinical Breast Care Project (CBCP), and Gynecology Cancer Center of Excellence are designed to enable the MHS to effectively and efficiently support a medically ready force and provide world-class cancer services.

The MCC program is executed through collaborations with other federal and civilian entities such as the NCI, Veterans Administration / VHA, civilian cancer centers, academic institutions and bioinformatics and pharmaceutical companies. These relationships enable the acceleration of discovery in cancer and translate findings into clinical care and strengthen and develop research cooperation.

They also allow for the collaborative use of state-of-the-art methods in proteogenomics and other technologies to characterize and compare tumors, develop a deeper understanding of cancer biology, identify potential therapeutic



targets, and identify pathways of cancer detection and intervention.

Expanded MCC Military Cancer Clinical Trials Network became fully operational. Eight MTFs, one VHA facility and a civilian hospital system have begun to consent patients and collect and ship research specimens to the MCC's central biorepository located in Windber, PA.

Research protocols for the Applied Proteogenomics Organizational Learning and Outcomes (APOLLO) network were submitted for approvals and research efforts set to begin. APOLLO network uses state-of-the-art methods in proteogenomics to provide precision oncology to advance personalized cancer care for active military, dependents, veterans, and civilians treated for cancer at WRNMMC and all our network sites.

- MCC is a member of the Oncology Research Information Exchange Network (ORIEN) which is a unique research partnership among 17 of North America's



top civilian cancer centers aiming to accelerate cancer discovery through collaborative learning and partnerships. It is currently the world's largest precision medicine collaboration to address cancer. MCC has achieved TIER 1 status among the 17 Comprehensive Cancer Centers.

- 971 patients to date consented to MCC/ ORIEN Protocol at WRNMMC
- MCC began participation in ORIEN Avatar Program and 93 samples to date shipped under the Avatar program
- The MCC Adolescent and Young Adult Program entered 106 new young adult patients bringing the total young adults supported to 150. The average age is 31.



WRNMMC Virtual Genetics program has evaluated and treated more than 100 patients to include patients at Womack Army Medical Center, Spangdahlem Air Force Base, Cannon Air Force Base and US Naval Hospital Guantanamo Bay since starting ten months ago.

The MCC's goal for 2019 is to accelerate the research and successfully expedite the translation of results to better patient outcomes. Likewise, the medical center also prioritizes on various research approaches to gain insight about efficacy and adverse effects of medical treatments and health prevention methods.





HIGH QUALITY MEDICAL CARE is built upon years of tireless effort by healthcare providers and their accessibility to latest research. Research improves the quality of life for our patients and their families by providing profound disease cures and treatment outcomes. Besides a dedicated department, we integrate research across most departments to facilitate public health interventions and understand disease trends and risk factors. Our researchers' dedication allows us to make better decisions regarding healthcare costs and patterns of care to deliver the best care for our patients.

Within the DRP, protocol analysts help researchers develop a protocol, navigate the online system, and biostatisticians help design the studies, plan sample size, and analyze data. Our Business Office steers researchers through grant writing, technology transfer, patents, and agreements with collaborators. IRB managers move protocols through board review to ensure ethical conduct of research and protection of human participants. After IRB approval, our compliance and quality assurance monitors visit research teams to ensure their practices match the rules and regulations that safeguard human subjects. On the other hand, Biomedical Research Laboratory offers investigators resources such as assays, DNA analysis, measurement of drugs and metabolites, and a skilled staff. Quality and performance improvement, or evidence-based practice, benefit from our Center for Nursing Science and Clinical Inquiry. Research Education team assists with training, hosts outreach events, and produces a monthly newsletter to communicate the latest research findings.

The Center for Rehabilitation Sciences Research and Department of Rehabilitation Medicine at USU and WRNMMC conducted pioneering osseointegration research, expanded its critically important TBI research portfolio, and continued to champion for the importance of continuing to integrate the latest medical research into clinical standard-of-care to better care for injured service members.

Cutting-edge molecular techniques now allow investigators to transform a patient's skin cells into cardiac cells, allowing the evaluation of cell physiology and its response to drugs. These cells, called inducible Pluripotent Stem Cell-derived cardiac myocytes (iPSC-CMs), are currently developed at NHLBI and studied at USU and prove that genetic abnormalities result in pathologic behavior of their associated proteins. Therefore, iPSC-CM allows the fulfillment of the promise of precision medicine, giving clinicians the ability to determine the impact of genetic variants on heart cell physiology without subjecting the patient to risky and invasive biopsies.

Collaboration among WRNMMC, USU and the NHLBI brings the promise of precision medicine to the treatment of patients with life-threatening arrhythmias and heart failure. The American Genome Center at USU provides researchers and clinicians with the entire genomic sequence of WRNMMC patients to identify previously unrecognized vulnerabilities as well as therapeutic opportunities. These sequences will be interpreted by Cardiology clinicians, led by department members, Drs. Haigney, Needleman and Flanagan, as well as members of WRNMMC Medical Genetics and the Division of Molecular Pathology.

Hematology/Oncology Service played a key role in creating the first US system to screen for genomic abnormalities to match tumor types to therapies. The APOLLO network will look at a patient's genes (genomic analysis) and the expression of those genes in the form of proteins (proteomic analysis) in order to create the nation's first system in which cancer patients are routinely screened for genomic abnormalities and proteomic information to match their tumor types to targeted therapies. Initially, we focused on a combined cohort of 8,000 cancer patients within the nation's two largest healthcare systems—the VA and DoD—with the aim of expanding the program to additional cancer types and making findings available to physicians across the country. We are addressing the pressing need of treating lung cancer which is pervasive and prevalent among veterans and service members.

Nephrology in collaboration with the USU divisions of Nephrology, Health Services Administration and Centers for Disease Control and Prevention established a kidney disease surveillance project to assess the scope and impact of kidney disease in the MHS. Data allows investigators to isolate and clarify the important factors in the development and progression of kidney disease among MHS populations. Among the questions to be considered are the distinguishing epidemiological features of populations with kidney disease; the factors leading to progression of established kidney disease (in particular progression to end stage renal disease), quality and safety outcomes in the care of kidney disease, and the economic impact of kidney disease on the MHS. Nephrology Fellowship 2018 Quality Improvement Project restructured the End

Stage Renal Disease (ESRD) Education program to promote autonomy and improve decision making for patients with advanced kidney disease.

The field of medicine is constantly advancing. Hospital and health system training and education programs are increasingly important to help employees improve their skillsets to positively impact patient care.

Our training programs are designed to be engaging and interactive to ensure they reflect changing skills and personalized to our military healthcare system.

We have the largest and only tri-service platform for GME in DoD, encompassing more than 700 physicians in training, 1,200 clinical faculty and 62 programs representing virtually every specialty in medicine with some recognized among the finest nationwide.

Our trainees are leaders in the health care system. Some of our trainees influence the health system at a national level on a variety of committees and projects. Furthermore, GME has been instrumental in teaching military and civilian health care providers while focusing on varied clinical training programs. These programs last anywhere from one to seven years and are supported by in-depth exposure to all major medical areas.

Staff and Faculty Development (SFD) provides and coordinates high quality education and training opportunities, referrals, and guidance to all identified personnel within the National Capital Area to meet the orientation, training, and staff development needs. Health Professions Education (HPE) leads the military health system in the provision of education and training to ensure nurses, medics, corpsmen and airmen possess the necessary clinical and technical skills to sustain the force and provide high quality health care in all environments.

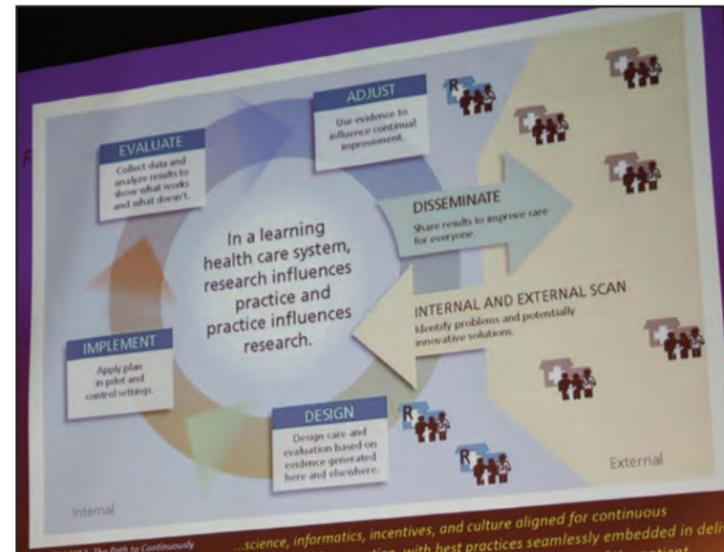
- Resuscitative Medicine training and certification for the entire NCR, The Pentagon, The White House, WRAIR, and USU, with over 3000 students annually.

- Emergency Medical Technician (EMT) Basic training and recertification, Tactical Combat Casualty Care training for pre-deployment, and Trauma Nursing Critical Care for all active duty throughout the NCR.
- Dialysis Specialty Course 300-68CM3: equips selected enlisted personnel with the knowledge and skills required to perform safe and effective hemodialysis treatments with emphasis on other renal replacement therapies including: peritoneal dialysis; continuous renal replacement therapies; renal transplant; and plasma exchange/ apheresis. The course has 480 hours of clinical practicum with emphasis on dialysis in the combat theater.
- The United States Army Practical Nurse Course is a 51 week program. Students begin in Phase I at the Academy of Health Sciences, Army Medical Department Center and School Fort Sam Houston, Texas, where they receive eleven weeks of didactic study. They transition to the Phase II site at WRNMMC, culminating in a total of 1,921 didactic hours and over 700 hours of clinical nursing preceptorship. **The current NCLEX-PN First Time Pass rate is 100%.**
- 66C Army Psychiatric/Behavioral Health Nursing Course provides didactic and clinical instruction to military nurse officers during their 16 week program. **The current Graduate pass rate is 100% and 100% obtain their ANCC Certification as a Psychiatric-Mental Health Nurse.**

Most of the interns, residents, and fellows are competitively selected from either the Health Professions Scholarship Program as graduates from some of the finest civilian medical schools in the country, as well as from USU. Likewise, the faculty, are chosen specifically for their teaching interests, clinical skills and diversity of experiences, and both faculty and residents are actively involved in medical research with extensive publications in major medical journals and academic presentations routinely performed both nationally and internationally. Our programs prepare participants not only for board eligibility and certification, but to be leaders in military medicine. The programs are all accredited by the Accreditation Council for Graduate Medical Education (ACGME) or by specialty-specific accrediting bodies.

GME programs find innovative ways to integrate the challenges of evolving medical education by prioritizing teaching quality improvement. With mentorship, our trainees participated in quality improvement projects. Dermatology program took the initiative to improve patient follow-up by streamlining the scheduling process for patients on isotretinoin therapy. This ensured excellent patient access to care and minimized therapeutic gaps.

Pediatric Hematology/Oncology fellowship established a process for off therapy follow-up and transition of care between pediatric and adult providers for our young adult patients and survivors of childhood cancer disseminated to other MTFs with pediatric hematology/ oncology patients. This process influences the practice of military and civilian health systems.



Endocrinology fellowship hosted a Thyroid Fine Needle Aspiration and Ultrasound Course for adult and pediatric Endocrinology fellows from our facility and regional academic medical centers. In addition, they successfully executed a Diabetes Technology Symposium for adult and pediatric Endocrine fellows at WRNMMC and NIH, along with nurse practitioners in the region.

Pain Medicine fellows and faculty executed the first annual Subspecialty Pain Skills Training in San Diego in May 2018 which educated attendees on the common and emerging interventional pain techniques.

The Department of Pediatrics hosted the 4th Annual Errol R Alden NCR Pediatric Symposium providing a full day of CME and CEUs for over 100 physicians and nurses from MTFs

throughout the NCR. Topics included updates on Pediatric Psychiatric Medications, Practical Otolaryngology Tip, Pediatric Sleep Problems, and Breastfeeding Basics. In addition, 4 residents and staff participated in the Naval Medical Center Portsmouth Quality Symposium giving platform presentations on completed Quality Initiatives including Implementation of a Transition Program in Cancer Survivorship Clinic, Improving Hearing Screen rates for preschool patients, and improvement in HPV Vaccination Rates.

The Department of Pediatrics has 6 tri-service training programs:

1. Pediatric Residency Program
2. Pediatric Endocrinology Fellowship
3. Gastroenterology Fellowship
4. Hematology-Oncology Fellowship
5. Infectious Diseases Fellowship
6. Neonatology Fellowship

They are currently supported by over 70 teaching faculty from WRNMMC and USU to prepare 33-35 residents and 16-20 fellows per year while incorporating a military-unique curriculum. Residents provide world-class care in our PCMH, engage in over 48 core pediatric and military-relevant learning modules, participate in international global health engagements and humanitarian assistance mission on the USNS COMFORT, and seek opportunities to attend courses such as: the neonatal STABLE course, Military Medical Humanitarian Assistance Course, Deployment and International Health Short Course, Global Medicine Course, Tropical Medicine Program, and the Combat Casualty Care Course.

Our fellowship trainees presented over two dozen abstracts and posters at national conferences and received of both regional and national research awards.

Pediatric Residency Program, have a distinguished track record of training pediatricians and subspecialists who have proven themselves capable of caring for children in any environment - in tertiary care hospitals, isolated duty-stations, and

the austere conditions of humanitarian and battlefield crises.

In 2018, core faculty published 20 pediatric research articles in adolescent medicine, allergy/immunology, infectious diseases, pediatric cancer, thoracic trauma, preterm birth, genomics, type 1 diabetes, and a novel ambulatory cardiac monitor.

Pediatric Endocrinology fellowship made screening for depression and eating disorders for all adolescents with Type 1 Diabetes standard of care at all routine diabetes outpatient visits. This screening resulted in improved detection of these disorders leading to their management and improved overall diabetes care.

During a time of antibiotic resistance, Allergy/ Immunology fellowship streamlined the process of penicillin allergy evaluations. Their work evaluated over 500 patients with a diagnosis of penicillin allergy resulted in the clearance of this diagnosis with a simple questionnaire and oral dose challenge in their clinic in all but four of these patients.

Additionally, our Pediatric Hematology Oncology Service offers Phase II and Phase III clinical trial enrollment for children, adolescents and young adults through the Children's Oncology Group. They held the first annual Pediatric Cancer Symposium to WRNMMC to provide innovative information in Oncofertility to over 120 attendees at WRNMMC, Naval Medical Center Portsmouth, and Womack Army Medical Center. They secured a 2 year grant through Tracy's Kids to provide an Art Therapist dedicated to our families fighting pediatric cancers, and we have furthered our transition of care programs to include sickle cell patients. They anticipate expanding opportunities for the knowledge development by increasing the availability of tissue banking protocols to our pediatric patients, and expanding the transition of care processes to other MTFs for standardization of care across the DoD.

Neuro-Immunology plans to initiate an academic, quarterly meeting including the programs at NIH and Georgetown as a forum to enhance faculty and resident education by collaborating on difficult cases. Recruitment to the adult neurology residency has never been stronger: all four Army applicants ranked WRNMMC as their #1 choice on the OML in 2018.

Our various interdisciplinary research opportunities and trainings allow for our staff to continue to accomplish numerous feats regionally and nationally. To implement our findings, we emphasize full recovery and quality patient care by prioritizing and collaborating with various services to provide patient-centered programs.

- The Department of Medicine had 128 peer reviewed publications and 86 presentations at National Meetings in 2018.
- Sleep Fellowship program participates in sleep research totaling more than 2 million dollars in funding. For the fifth consecutive year, a 2018 resident from the NCC psychiatry residency won the Society of Uniformed Services Psychiatrists' (SUSP) Colonel Al Glass Award for best manuscript from a military psychiatry trainee. An Infectious Disease fellow had his abstract on "Antiretroviral Effects on Liver Function in a HIV/HBV Co-infected African Cohort" accepted to the International 2018 AIDS Conference held in Amsterdam, Netherlands.
- In the last fiscal year, the Department of Neurology's core faculty had 15 peer reviewed publications, presented 15 abstracts at regional and national meetings, and gave 9 invited lectures at national conferences. Seventeen of our 18 residents presented a total of 17 abstracts at local, regional, and international conferences during 2018, and co-authored 8 peer reviewed publications. LT Woodson as a PGY3 neurology resident presented an abstract at the 2018 American Academy of Neurology that was selected as 1 of 24 'Distinguished Presentations' selected from more than 3,000 abstracts.
- A NCC Transitional intern was first author on a peer reviewed publication entitled, "Superiorly-based turnover skin flap: Pediatric tracheocutaneous fistula closure" and achieved the honor of first place in the 10th Annual NCR Research Competition.
- A NCC Female Pelvic Medicine and Reconstructive Surgical fellow won the best paper award for her thesis at the Society of Gynecologic Surgeons Annual meeting 2018.
- At the 2018 American Academy of Neurology Annual Meeting, a neurology resident gave a presentation on her work on TBI.
- Over the course of 2018, close to 200 interns, medical students, and nursing students rotate through the Emergency Department, to include enrollees of the USU and medical schools throughout the United States through the Health Professions Scholarship Program.
- The Department of Neurology's teaching faculty, MAJ Jonathan Smith was a recipient of the A.B. Baker teaching award at the 2018 American Academy of Neurology Meeting, and also served as co-chair of a symposium on Military Neurology at the same meeting. An Associate Residency PD served on the CDMRP 2018 Epilepsy Research Programmatic Panel and on the External Review Committee for the Neurology Centers of Excellence for the Department of Veterans Affairs.
- LTC Brett Theeler served on the CDMRP FY18 Neurofibromatosis Research Programmatic Panel and co-chaired an international workshop at the National Cancer Institute on Rare CNS Cancers.
- A resident from the combined Internal Medicine/Psychiatry residency was selected as Chair-Elect for the Organization of Resident Representatives (ORR) at the Association of American Medical Colleges.
- An NCC Infectious Disease fellow is the only WRNMMC GME representative serving as an IRB committee member and he was also selected for 2018 Junior Leadership Course.
- The WRNMMC General Practice Residency (GPR) program is now the first and only billet available for Army dentists interested in advanced dental education in hospital dentistry.
- Gastroenterology fellowship performed in the top 5 out of 128 for GI fellowships for GI Jeopardy and will compete in the final jeopardy at the American College of Gastroenterology Meeting in Philadelphia in October 2018.

ALONG WITH THE LATEST CLINICAL RESEARCH AND COLLABORATIVE TEAM-WORK, we ensure our patients receive holistic care to optimize their health and wellness. Our aim is not to merely just treat our patients but rather heal. Therefore, across the Directorates, we have developed patient-centered programs to gear towards more than just a diagnosis for our patients and help facilitate full recovery for their physical, emotional and spiritual well-being.



Inpatient Care Focus

Department of Medicine's inpatient teams average over 500 admissions per month on the inpatient Medicine, Cardiology, Hematology/Oncology, Pediatrics, Neurology, Medical Intensive Care Unit, Pediatric Intensive Care Unit, and the Neonatal Intensive Care Units. During a strategic offsite meeting with our inpatient care teams, we identified areas of focus to include establishment of geographic admissions process, making weekend discharge planning and social work services available, and establishing a directorate level quality committee to focus on patient safety and quality concerns identified at the service/department level. We have also partnered with the Safe and Reliable team to build a culture focused on patient safety and quality across both our inpatient outpatient units. Safe and Reliable has facilitated the installation of visual lens boards in our adult primary care clinic and the medical intensive care units to facilitate patient safety huddles.

Establishment of Sexual Assault Forensic Exam Program

As of last year, the only option for victims of sexual assault at WRNMMC who desired a Sexual Assault Forensic Exam (SAFE) were referred to Shady Grove Medical Center, Rockville, Maryland (SGMC) via a Memorandum of Agreement (MOA). WRNMMC had a limited number of personnel stationed at WRNMMC that have the necessary training to conduct a SAFE. However, the practice of referring all WRNMMC victims of sexual assault desiring a SAFE to SGMC was not in alignment with the DoDI 6495.02 (Change 3) which states that all 24/7 Military Treatment

Facilities (MTFs) shall offer the option for a SAFE exam to be completed by a DoD trained and/or certified forensic examiner within the facility. In conjunction with our Emergency Department, the Directorates for Surgery and Administration, DMS was able lead the way for WRNMMC's first SAFE capabilities ensuring we are fully supporting our Active Duty service members. During a recent unannounced drill by regional Navy Sexual Assault Prevention team, WRNMMC SAFE program received excellent ratings from the inspection team.

Hematology/Oncology Quality and Patient Experience Project

Patients with cancer often require hospitalization and coordination of complex, high-acuity, and multi-disciplinary care. Over the past year, leaders in the Directorate for Medicine and across the hospital heard from our oncology patients and staff that there were opportunities to improve the patient and staff experience. In response, in the fall of 2017 and a collaborative team of nurses, physicians, enlisted, pharmacists and project managers teamed together to develop an improvement plan, which included identifying a new Medical Director for the inpatient Oncology floor, and partnering with nursing and other caregivers to develop a structured improvement plan to improve patient and staff experience. Highlights include changes in the process for chemotherapy administration, which have resulted in improved quality metrics and reduction in error rates. Efforts to enhance patient experience included developing a "room ready" checklist to ensure each room had consistent supplies and operable facilities and Nutrition Department surveys of inpatients were conducted to gauge patient satisfaction

with the meal service. Nurse Leader and Medical Director Rounds and Multi-Disciplinary daily rounds are now incorporated into the daily rhythm of the unit which enhance the communication of team members caring for our patients. In addition, an Oncology unit Welcome Guide was developed to help our patients understand the unit and hospital processes. Finally, a Patient Activity room was created which offers a physical space on the unit for patients and their family members to engage in physical fitness activities, art therapy and play games.

Creative Arts Program

Established as an extension to the National Summit: Arts, Health and Well-Being held at WRNMMC (in collaboration with the National Initiative for Arts & Health in the Military), the Creative Arts Program has become a widely recognized form of therapy for interested patients and their families. Various self-expression art mediums including photography are used for this ongoing forum and allows those interested to demonstrate the strides they have made in their recovery. The response engagement for such creativity is a constant reminder that art can be healing.

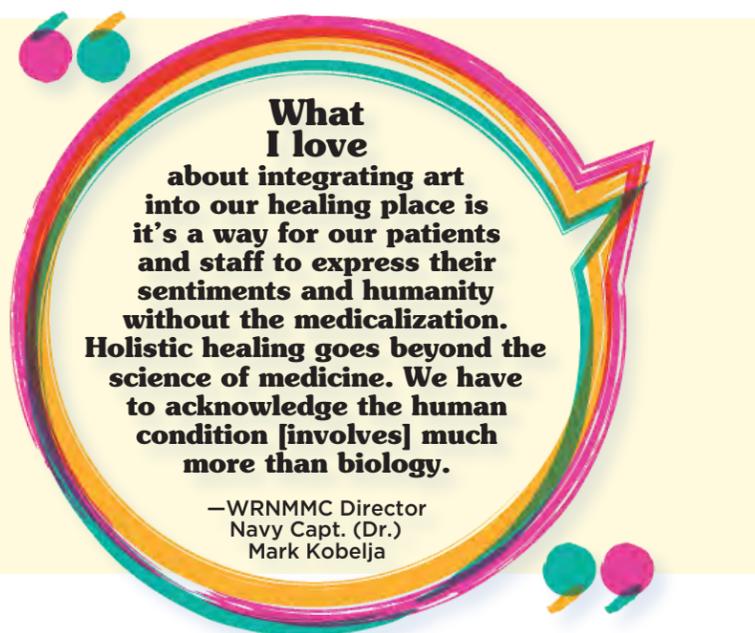
Palliative Medicine Service

In 2018, the Palliative Medicine Service was created and staffed by a robust interdisciplinary team. This new service provides consultation on complex pain and symptom management in the setting of chronic, serious illness, enhanced communication during complex medical decision making for decisions around goals of care and education, and symptom management in hospitalized patients who are actively dying. The team also provides an inter-professional approach to training by educating medical GME trainees, nurses, medical students on clinical practice in the context of loss and high stakes decision-making. Inpatient and outpatient services are now offered, which enhance the overall quality of care provided to our patients.

Primary and Specialty Care Access

DMS team has worked closely with leaders

from our PCMH clinics to ensure adequate staffing to maintain access. This has included transitioning 75 contract PCMH positions to more stable government service positions, to ensure availability of permanent high quality staff to provide primary care. In addition, we have worked to balance military and civilian physician staffing across our primary and specialty clinics to ensure appropriate staffing for our specialty care benefit delivery and also appropriate staffing for our Graduate Medical Education programs. We have also partnered with the NCR Integrated Referral and Appointing Center (IRMAC) to streamline the specialty appointing process.



Armed Services Blood Program

The ASBP is the official blood collection, manufacturing and transfusion program for the U.S. military. The mission of the ASBP is to provide quality blood products and services for all worldwide customers in both peace and war. As a tri-service organization, the ASBP represents all three services Army, Navy and Air Force and is tasked with the collection, processing, storage and distribution of blood and blood products to ill or injured service members, veterans and their families worldwide. The program manages blood requests from the five major combatant commands by directing available blood supplies when and where needed.

American Red Cross

During 2018, the Red Cross at WRNMMC provided almost 70,000 hours of volunteer time and provided nearly 44,000 items to patients. Over 600 volunteers provide support in clinics, the Department of Rehabilitation, via Comfort Carts that go through the inpatient wards every day of the year, including holidays and weekends, NICoE and many other places throughout the hospital. We have over 100 professional volunteers who continue to practice their specialty as volunteers, as well as an Animal Visitation team with 36 dogs and a Yoga team who provide weekly comfort to patients and staff.

Social Work

Our care extends beyond the hospital doors. To ensure comfort of support and valued patient care, we offer a plethora of Social Work services under the DBH. Our team of healthcare professionals are readily available to assist patients and their families with Inpatient Discharge Planning, Outpatient Intervention, First Line Family Resource and Support, as well as Medical Crisis Counseling and Bereavement Support. Additional services also include support groups, wellness classes, patient education, psychosocial programs, psychoeducational groups, and staff consultations.

In 2018, DBH implemented a new in-service program in the Department of Social Work to ensure all employees have the opportunity to meet their annual Continuing Education (CE) requirements. In addition, our inpatient social workers participated in a multi-disciplinary effort to consolidate case management services for medically complex inpatients. This initiative resulted in better decreased redundancy of services, improved efficiency, superior patient education, and a formal case management protocol for wounded service members.

Amputee Care/Military Advanced Training

Our Military Advanced Training Center (MATC) is a state-of-the-art facility where service members, retirees and family members use sophisticated prosthetics and cutting-edge athletic equipment to move from injury to independence. We use a Sports Medicine model which offers much of the same sports and exercise equipment found at the finest sports rehabilitation training rooms across the country. Many of the same fitness drills practiced by professional athletes are used to

work on core strength, balance and stability. The focus of MATC's expert staff is to match the drive and determination of our service members— build their strength, skills and confidence, and return them to the highest level of physical, emotional, and psychological functional ability. We enable service members to make their own choices and not allow their futures to be dictated by their injuries.

Recreational Therapy and Adaptive Sports

We recognize the importance of recreational and adaptive sports to well-being and recovery. The Recreational Therapy staff coordinates a community reintegration program that offers a wide variety of experiences outside the clinic setting, including trips to public venues such as shopping areas, movie theaters, restaurants and museums. The program provides adaptive sports activities such as scuba diving, therapeutic horseback riding, basketball, cycling, running and golf, which allow the patients to be challenged and helps provide meaning and purpose.

Pastoral Care

We are committed to supporting all of our patients' religious preferences to meet their spiritual needs. Thus, our Department of Pastoral Care (DPC) is available around the clock to provide a wide range of worship services and resiliency events to support those in need at seminal moments of their lives.

One of our major advances in 2018 was the kick off of training protocol for chaplain call-in support. As a result, there has been an increase in after-hours calls and requests. In addition, we have established a WRNMMC metric tracker, giving us the ability to describe the impact and chaplain involvement within the command, and track our approaches to training and care.

18,199 INPATIENT VISITS
15,658 HOURS
255 RESILIENCY EVENTS
67 CEREMONIES

Moving forward, DPC's goal is to better integrate and train medical providers to encourage a culture where everyone understands their role in healing not only the body and mind, but spirit as well.



QUALITY MANAGEMENT ensures our facilities adhere to our vision of patient-centric model. Quality allows for adapting standards and implementing processes to provide an integrated communication system between clinicians, support staff and patients. For us, quality is not confined within the boundaries of our Quality Directorate but rather integrated across our all departments.

The Quality Directorate maintains state of the art programs through attendance of national quality conferences including the Institute for Healthcare Improvement National Forum, monthly regional Quality Working Group Meetings and societal memberships associated with the quality disciplines. Safety Department staff routinely attend Occupational and Safety Health Administration and National Safety Council training obtaining certifications as well as continuing education credit. The Patient Safety Department achieved its' 2018 goal to close out 3000 Patient Safety Reports from 2017 with 92% of 2018 PSRs now closed and a 30 day closure rate approaching 70%. The Patient Safety Service is actively redesigning the PSR closure methodology incorporating reliable processes and defining key organizational roles with the goal of improved workflow, tracking and communication. To facilitate leadership PSR trend analyses and closure monitoring, the Patient Safety Service developed a PSR dashboard. The dashboard is so effective, word-of-mouth led to demonstration to both NCR-MD and Navy Medicine East.

During 2018, the Risk Management Department decreased the time period between case identification, subsequent Risk Management Committee review and entry into an electronic database via a novel Electronic voting process. The Risk Management Committee streamlined its case review process by identifying harm events caused by system problems that transcend individual accountability; these cases are now thoroughly vetted in the Patient Safety Committee eliminating excessive Risk Management reviews. To implement effective Performance Improvement via formal Lean Six Sigma classes, informal coaching and mentoring, teaching Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) and support of individual and unit level quality improvement projects, Process Improvement Department provides training on tools. As of November 2018, Process Improvement trained 263 in Yellow Belt LSS, 49 Green Belt and 6 Black Belts as well as completing 16 Green Belt and 4 Black Belt projects. Due to overwhelming positive feedback a Command wide initiative launched to provide Yellow Belt training at the unit level for all employees including military, civilian, contractors and graduate medical education students.

In 2018, the WRNNMC Safety re-designed five of twenty safety programs. This resulted in more reliable Air Quality processes, optimized hearing conservation monitoring for staff in high noise locations, a 30% increase in respirator program compliance and enhanced unit Safety Representative training. WRNNMC Safety is proactively engaging in the extensive ongoing construction processes ensuring associated hazards are continuously mitigated.

The clinical providers, graduate medical education trainees, and the entire clinical support teams in the Department of Medicine are passionate about quality improvement. As a unique example, the Allergy and Immunology Service (In collaboration with the Infectious Diseases Service) has made significant strides in addressing antimicrobial resistance at WRNNMC and in the NCR and the MHS. A significant impediment to the efficient function of these ASPs is the 10-20% of patients with a documented penicillin allergy. Since the inception of the WRNNMC ASP, Allergy and Immunology has piloted an inpatient penicillin allergy assessment program. Inpatient medicine teams identified and placed consults regarding penicillin-allergic patients; Allergy and Immunology also proactively screened and evaluated in-patients with a listed penicillin allergy. Testing has led to a 97% clearance rate of those patients.

Emergency Department actively engaged in process improvements to bring innovations in care and further increase the quality of care delivered. We introduced a triggered sepsis pathway to bring bundle care to our most critical patients. We have partnered with the Department of Pediatrics to bring essential resources to our younger patient population. Newly improved nurse-triggered order sets are being implemented to improve the efficiency of care for all patients presenting to the Department. Incorporating evidence-based medicine like the "HEART Score" into our daily care for chest pain patients introduces another initiative to improve quality for all of our patients. To further improve our processes, we hired a Public Health nurse to communicate laboratory results and coordinate care with our patients.

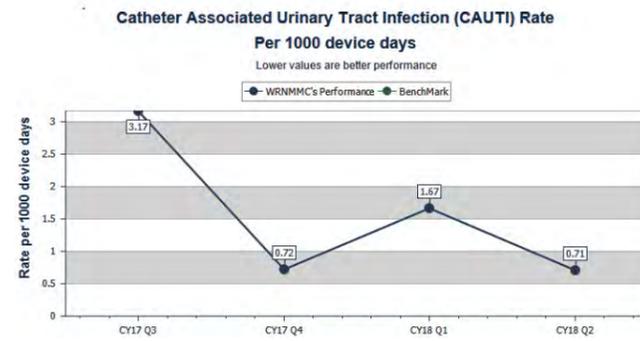
There are currently 40 active quality improvement projects in the Directorate of Medicine. Some additional highlights that illustrate the wide ranging focus of these

initiatives directed at improving the care of our patients include:

- Revamping admission flow to minimize Emergency Room dwell times for the patient.
- Improving pneumococcal vaccination rates in high risk populations (diabetics, smokers, asthmatics, etc.) throughout the NCR.
- The development of a valvular heart disease/anti-arrhythmic medication patient tracker in order to ensure surveillance echocardiograms/EKGs (respectively) are being conducted at appropriate intervals.
- Improving the notification process for patients undergoing cancer screening with fecal occult blood test.
- Multidisciplinary rounding with medical teams, nursing staff, social work, and discharge planning services to improve patient transitions from the hospital and length of stay.
- Implementing and tracking long-term cancer screening follow-up.
- Creation of an admission protocol for lower extremity wounds that reduces transaction costs of multidisciplinary consultations, decreases length of stay, decreases number of days on broad spectrum antibiotics, and reduces readmission rates.
- Establishment of an electronic medical record-based acute kidney injury (AKI) early warning system in the SICU+MICU and associated AKI care bundle.
- Establishment of an NCR Asthma database to track required follow ups and longitudinal care of asthmatic patients.
- Improving creation and submission of advanced directives, easily accessible to primary care managers and admitting teams, for the NCR.
- Developing of a database of all patients on biologic therapy to improve compliance with recommended immunizations.

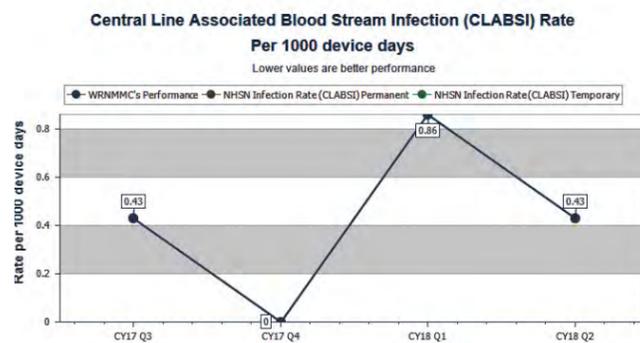
Patients develop urinary tract infections associated with insertion or maintenance of catheters leading to Catheter-Associated Urinary Tract Infections (CAUTI). We practice recommended techniques to maintain sterile

closed-drainage system and unobstructed urine flow, properly secure catheter movement, place collection bag below bladder level, and empty collection bag regularly.



We implemented several initiatives to lower our CAUTI rates by increasing staff awareness of evidence-based practices, addressing CAUTI prevention guides during nursing and physician orientations, improving documentation in EMR, increased audits of urinary catheter care and improved cleansing of insertion site.

Central Line-Associated Blood Stream Infections (CLABSI) can lead to serious complications. As preventative measure, we use a special dressing infused with antiseptic, chlorhexidine, on all central lines. Furthermore, we avoid placement of lines in legs, enforce hand hygiene protocols and use full-barrier precautions during the central line insertion.

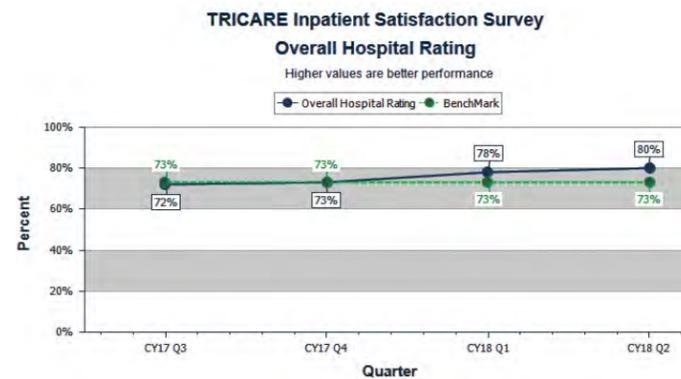


We constantly strive to improve our services and enhance our patients' experience.

Our improvement efforts are directed at more specific aspects of patient experiences while providing us vital information about internal quality improvement initiatives and impact of policy changes. The TRICARE Inpatient

Satisfaction Survey monitors and reports on the experience and satisfaction of patients who have been admitted to military and civilian hospitals. As part of the survey, there are two questions that encapsulate patients' perceptions of the care they receive:

1. How would you rate your overall hospital experience? (on a scale of 0 - worst possible experience- to 10- best possible experience)
2. Would you recommend this hospital to your friends and family? (on a scale of 0 - 10)



Safety and prevention are one of WRNMMC's top priorities.

Therefore, within WRNMMC's largest directorate (Medicine) is the Infectious Diseases Service to diagnose and treat bacterial, viral, parasitic and fungal occurrences. This service evaluation covers a variety of infections including methicillin-resistant Staphylococcus aureus (MRSA), malaria, tuberculosis, lyme disease and osteomyelitis. We also provide primary care for both active duty and DoD beneficiaries infected with the human immunodeficiency virus (HIV). Pre and post-travel evaluations are conducted as well.

Upon our staff compiling data, we found medications, medical procedures, equipment and unfamiliar environments increase your risk for falling and harm patients. We started a Falls Prevention program allows us to help prevent falls, educate patients about falls at home and target different types of prevention methods. We offer programs for both adults and pediatrics. Our pediatrics program is called Humpty Dumpty and it engages both children and parents to educate safety measures against falling in hospital and at home.

WRNMMC **PRIDES ITSELF** on a strategic commitment to raise community awareness and engage patients, families, health care providers, and the public to further ensure first-class quality care. Much of this success is owed to our valued partnerships across the NCR (and beyond) and is outlined as follows:

National Disaster Medical System (NDMS)

- Partnership between U.S. Departments of Homeland Security (DHS), HHS, DoD, and the VA. Supports areas impacted by disasters by providing patient care, patient movement, and definitive care; veterinary services; fatality management support; and other medical systems and response capabilities.
- WRNMMC is designated as a DoD Federal Coordinating Center (25 hospitals in DC and NOVA).



Maryland Institute for Emergency Medical Services Systems (MIEMSS)

- Coordinates all components of the statewide Emergency Medical Services (EMS) system.
- Joint partnership initiatives consist of State Wide Disaster Response, Trauma Physician Training, Patient Rehabilitation and Trauma Research.

Maryland Region V Emergency Preparedness Coalition Participant

- Coalition consists of Hospital Emergency Management leaders and planners representing five counties (Montgomery, Charles, Prince Georges, Calvert and Charles County).

Bethesda Hospitals' Emergency Preparedness Partnership (BHEPP)

- Includes Suburban Hospital, NIH Clinical Center, WRNMMC, and the National Library of Medicine.
- Leverages resources that provide both immediate and sustained responses to emergencies and disasters.
- Pioneered processes to improve hospital preparedness among diverse organizations and developed a model that can be used by other communities.



These community partnerships are essential to WRNMMC's unwavering mission of being the premier military academic health center. **At the forefront of it all is our patients.**

SOCIAL MEDIA ENGAGEMENT

People Are Talking

39,637
FOLLOWERS

2017 IMPRESSIONS

2018 IMPRESSIONS

0 50K 100K 150K 200K 250K 300K

 **5,296**
FOLLOWERS

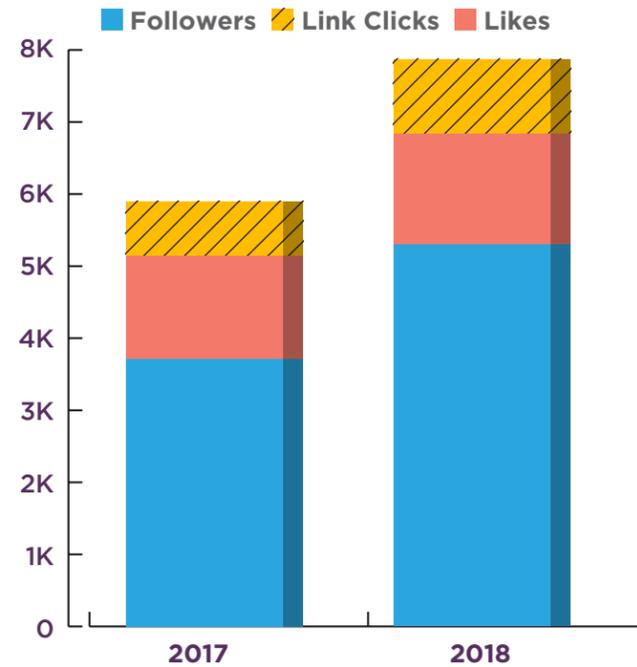


Walter Reed Bethesda @WRBethesda
We had a great time today with stars from the @WWE! @DanaWarriorWWE and @WWEGraves spent time with some of our little warriors, patients and staff and despite the weather outside there were nothing but bright smiles in the medical center. Thanks to @USOMetroDC for stopping by! pic.twitter.com/K7uZu530fA

Metric	Value
Impressions	10,834
Media views	3,086
Total engagements	727
Media engagements	960
Direct messages	104
Retweets	31
Replies	16
Links	11
Retweets	7



Walter Reed Bethesda @WRBethesda
You may want to turn the volume down for this... ICYMI: Today some of our Hospital Corpsmen took part in Tactical Combat Casualty Care, certifying them to care for patients in austere environments. pic.twitter.com/FHkPH5GEUZ



 **238**
FOLLOWERS

Actively Expanded in 2018



wrbethesda Some special physical therapy with the Washington @redskins and @usometrodc

Redskins Visit WRB!

150 views



WRB Welcomes New Facility Dog!



Stanley Cup Travels to WRB!

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- ✦ Walter Reed National Military Medical Center Accreditations
- ✦ American Association of Blood Banks
- ✦ American College of Radiology Breast Ultrasound
- ✦ American College of Radiology Core Biopsy
- ✦ American College of Radiology M.R.I Program
- ✦ American College of Radiology Mammography
- ✦ American College of Radiology Stereotactic Core Biopsy
- ✦ Army Dietetic Internship
- ✦ Baby Friendly Hospital Initiative (BFHI), Baby Friendly USA, 2017
- ✦ Behavioral Health and The Joint Commission, 2018
- ✦ Breast Care Center, National Accreditation Program for Breast Centers
- ✦ Breast Imaging Center of Excellence
- ✦ Clinical Learning Environment Review (CLER), Accreditation Council for Graduate Medical Education
- ✦ College of American Pathologist
- ✦ Comprehensive Breast Program, Department of Surgery
- ✦ Comprehensive Education Institute
- ✦ Dentistry General Practice Residency Program
- ✦ Diagnostic Ultrasound
- ✦ Food and Drug Administration
- ✦ Fundamentals of Endoscopic Surgery, American College of Surgeons
- ✦ Fundamentals of Laparoscopic Surgery Simulation, American College of Surgeons
- ✦ General Surgery Residency Program, Department of Surgery
- ✦ Graduate Medical Education Programs
- ✦ Gynecologic Oncology Fellowship Program, Murtha Cancer Center
- ✦ Hand and Microvascular Surgery Fellowship, Department of Surgery
- ✦ Hematology Oncology Autologous Stem Cell Transplant Program Service
- ✦ LEED Gold Certification for Building 19
- ✦ LEED Silver Certification for Building 9A
- ✦ Level II Trauma Center, American College of Surgeons
- ✦ Murtha Cancer Center Biorepository
- ✦ Murtha Cancer Center, Department of Defense Cancer Center of Excellence
- ✦ Navy Psychology Internship
- ✦ Neuro-optometry Residency Program, Department of Surgery
- ✦ Neurosurgery Residency Program, Department of Surgery
- ✦ Nutrition Graduate Program
- ✦ Ophthalmology Residency Program, Department of Surgery
- ✦ Ophthalmology Service's Refractive Surgery, Department of Surgery
- ✦ Otolaryngology Residency Program, Department of Surgery
- ✦ Peripheral Vascular Surgery Fellowship Program, Department of Surgery
- ✦ Quality and Patient Safety Award, 2015, Department of Defense Safety Program
- ✦ Radiation Oncology Accreditation, American College of Radiology
- ✦ Radiology Residency Program
- ✦ Simulation Center, Department of Simulation
- ✦ Simulation Center, Society for Simulation in Healthcare
- ✦ Sleep Disorder Center, American Academy of Sleep Medicine
- ✦ Stem Cell Service, Foundation for the Accreditation of Cellular Therapy
- ✦ Surgical Education Fellowship (Department of Simulation)
- ✦ Surgical Simulation Fellowship, American College of Surgeons
- ✦ Urology Residency Program, Department of Surgery



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