Veterans Health Administration

Simulation Learning, Evaluation, Assessment, and Research Network (SimLEARN)

February 25, 2021

SimLEARN History

- In July, 2009, the Under Secretary for Health signed Executive Decision Memorandum approving establishment of a national simulation training and education program

- Cross-organizationally represented. Reports to leadership of:
  - Discovery, Education and Affiliate Networks
  - Office of Nursing Services

- SimLEARN is a national simulation training, education and research program that develops the strategic vision and system-wide plan for simulation process modeling, training, education and research for VHA

- National program includes a 51,000 sq ft National Simulation Center for conducting simulation-based training, evaluations and exploring cutting-edge technology to be used in VA

SimLEARN's Vision & Mission

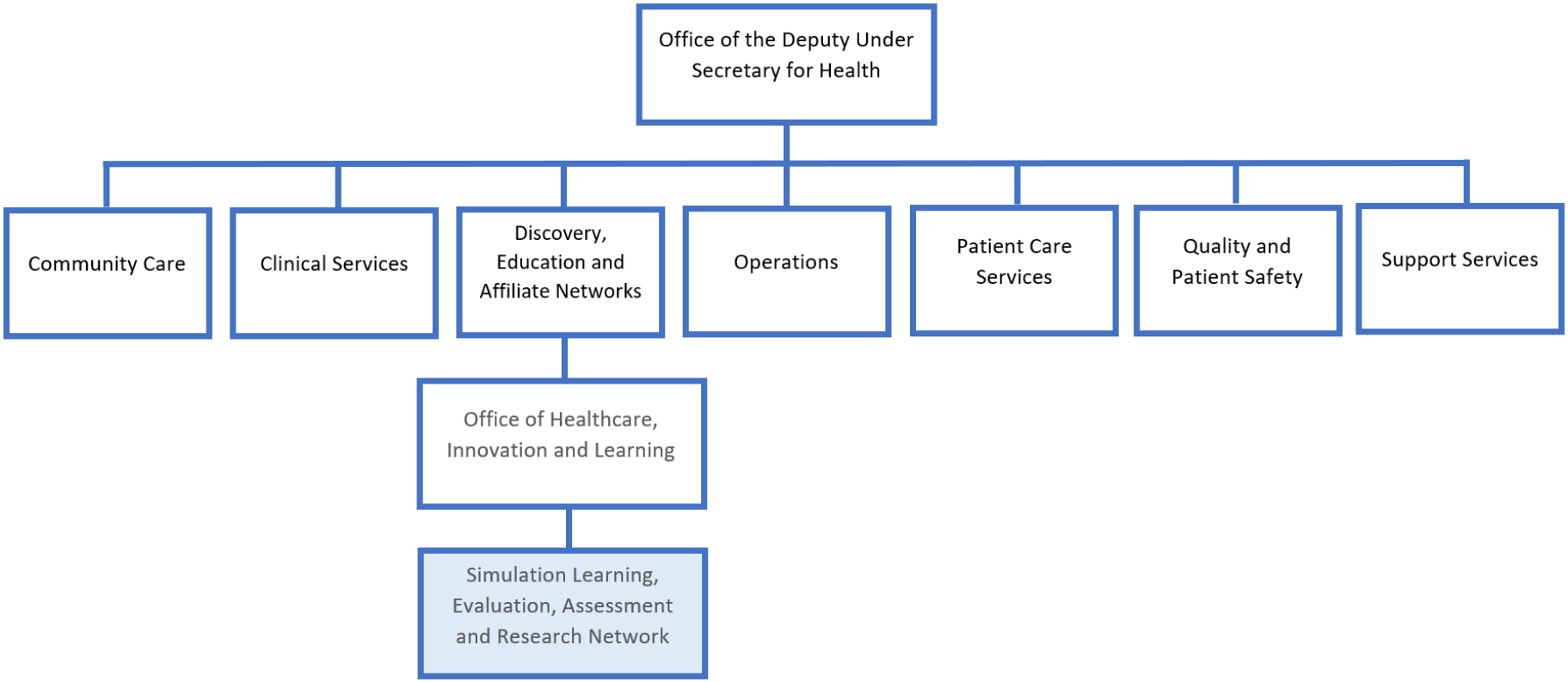
Vision. Providing reliable, relevant and results driven clinical-based Simulation Training to ensure exceptional healthcare for Veterans throughout our Nation

Mission. SimLEARN is positioned as the simulated "Hospital of the Future" through execution of a robust learning system that addresses clinical practitioners' challenges by providing education and training, local and distributed simulation techniques to providers and trainers, and developing simulations curriculum for innovative healthcare ideas

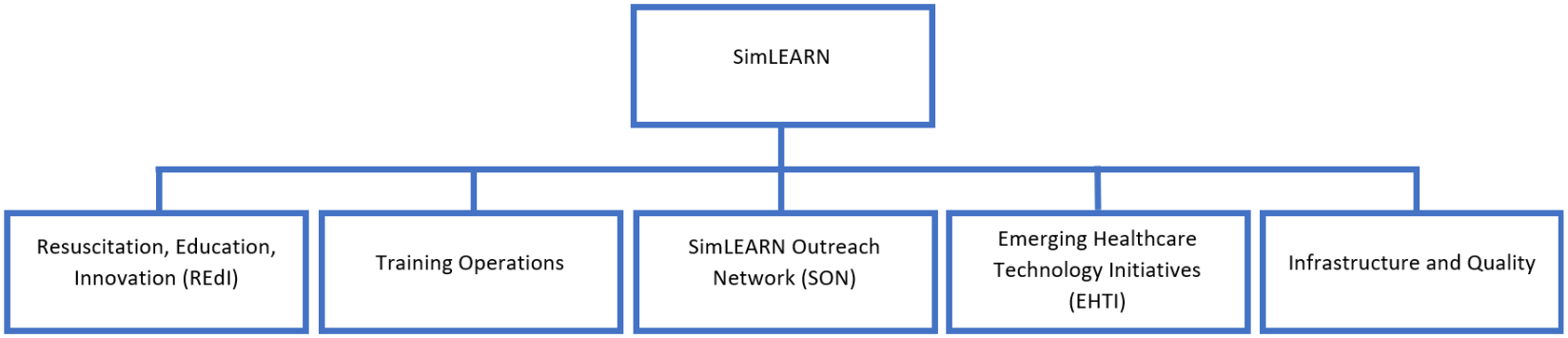
Part Task Trainer

Virtual Simulation

VHA Abbreviated Organizational Chart



SimLEARN Organization



VA

U.S. Department of Veterans Affairs

Veterans Health Administration
Simulation Learning, Education and Research Network (14HIL2)

VA NURSING
Excellence in Patient-Driven Care

Simulation Based Training Outcomes

Veteran

- Veteran centered safe, quality care
- Improved clinical outcomes
  - Reduced mortality and morbidity
  - Improved quality of life

Learner

- Mastery learning and deliberate practice
- Improve or acquire new skills
- Train in safe environment without adverse impact on patient outcomes
- Teamwork and communication

Organizational

- VA as a leader in healthcare simulation
- Improved national clinical outcomes

SimLEARN Training Methodologies

- Train-the-Trainer (TTT) / Train-the-Provider (TTP)
  - Facilitate conduct of locally-based training using fielded simulation training equipment and developed curriculum

- Distributed Learning
  - Web based training
  - PC-based simulation, virtual environment
    - Virtual, augmented and extend reality

- High-value, low inventory equipment training at National Simulation Center that is not economically conducive for local training

SimLEARN Innovation Cells for Education and SimLEARN Virtual Academy

SimLEARN Innovation Cells for Education (SLICE)

SimLEARN creates training curriculum, then trains VHA staff to become instructors of that program at their facilities. These local SimLEARN-trained instructors facilitate courses and coordinate with the National Simulation Center, ensuring continuity of curricula across the entire VHA workforce. SLICE allows greater flexibility in providing localized training across the nation.

SimLEARN Virtual Academy (SVA)

SVA leverages innovation and technology to advance simulation education through synchronous and asynchronous modalities. Synchronous methods are conducted via virtual live instruction on various platforms such as SimIQ, MS Teams, Webex, Moodle and Zoom to meet the needs or capabilities of each facility. Asynchronous training will include pre-learning for synchronous events, persistent learning environments for recurring asynchronous courses and just-in-time training solutions.

VHA's National Simulation Center (NSC)

- **Train the Trainers.** Take knowledge back to their respective Networks and Medical Centers

- **Provide <u>immersive training environment</u>**

  - Requires facilities that replicate actual environment where health care is provided
  - Fidelity of training environment scaled to meet instructional needs

- **Simulation Testing.** A testing ground for technologies implementation into medical facilities and pilot programs that need a VA medical center test environment

Standardized Patient

Team Training

VHA NSC Major Components

Clinical Simulation Sets:

- 6 Primary Care Exam Rooms
- 3 Specialty Care Exam Rooms

Procedural Simulation Sets

- 2 Operating Rooms / Cath Labs
- Prep/Induction/PACU Station
- 1 Trauma Room (2-Stations)
- Triage Room

Patient Unit Simulation Sets

- 2 ICU & Med/Surg Patient Rooms
- 1 ICU, Med/Surg, CLC Bariatric Patient Room
- 1 Mental Health Patient Room with Bath

Classrooms/Multipurpose Training

- 5 Debriefing Rooms
- 1 Task Training Classroom
- 2 Computer Classrooms
- 4 Multipurpose Rooms
- 1 Innovation Space

Administration and Support

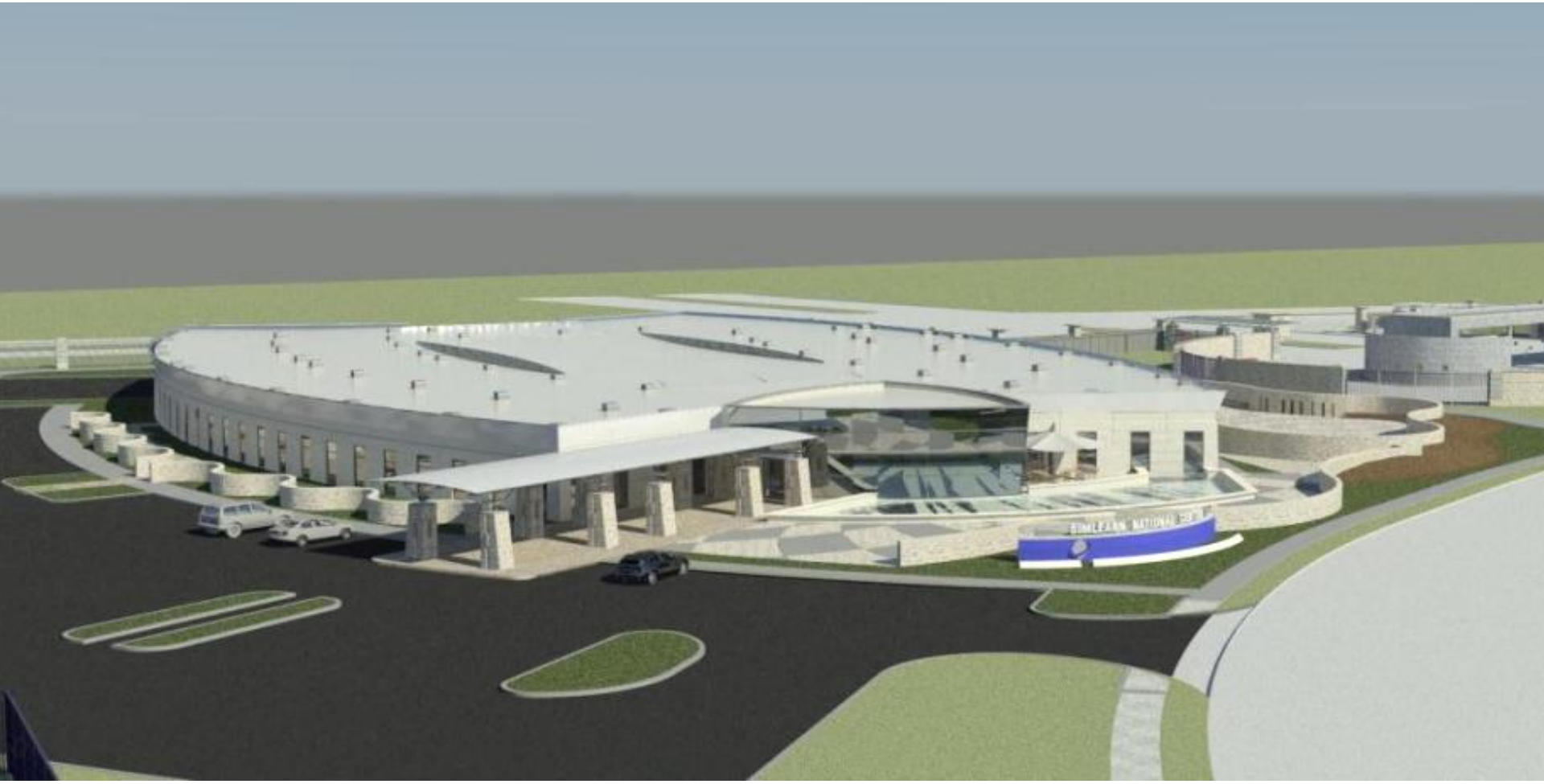
- 12 Offices
- 14 Workstations
- 1 Server Room

Expansion Opportunities

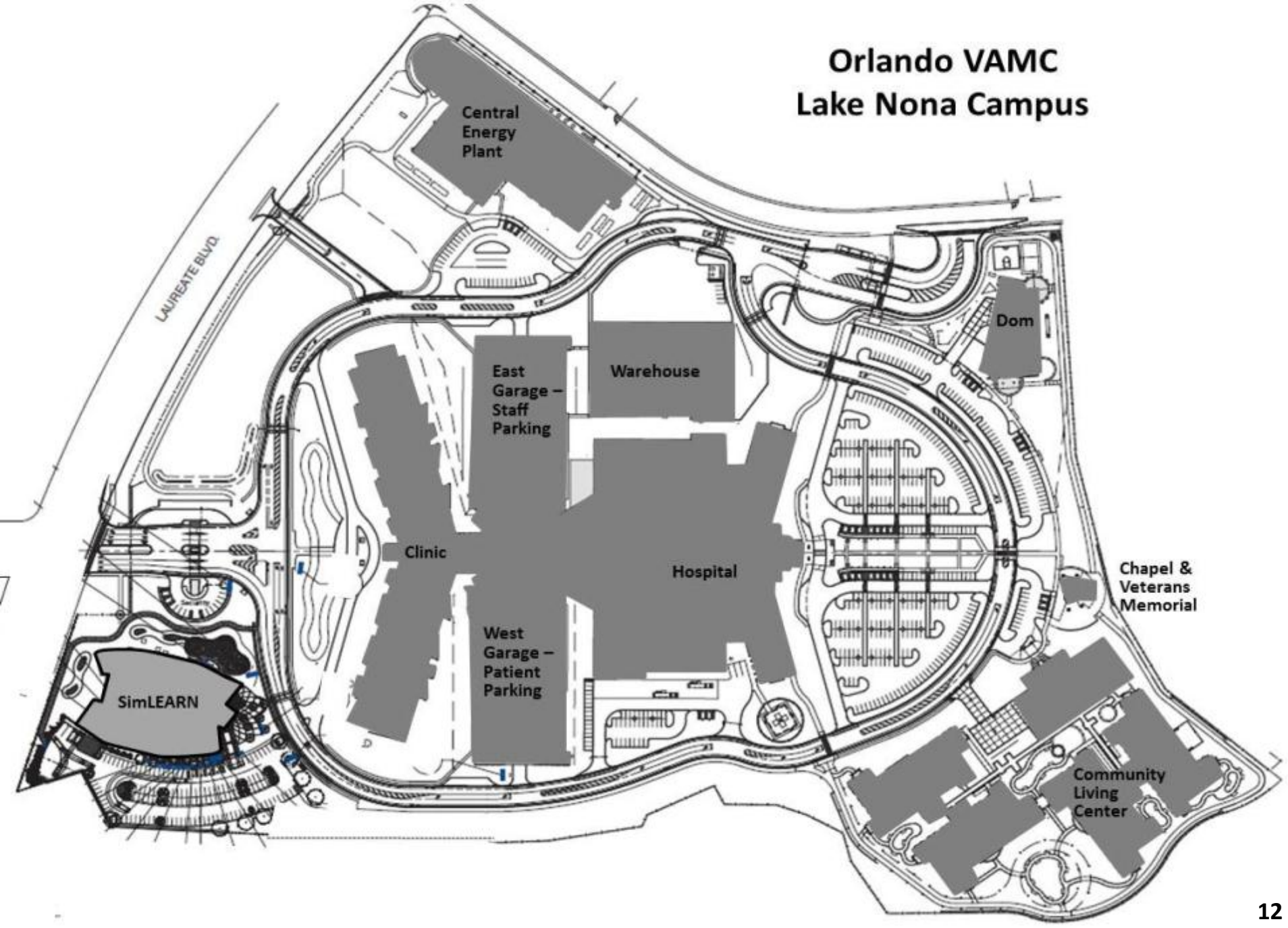
- Foundation designed for 4 additional floors,
- 180,000 ft^2 capacity

Orlando VAMC Campus

VHA NSC Perspective



Orlando VAMC
Lake Nona Campus



Recent SimLEARN Projects

- SimLEARN Innovation Cells for Education (SLICE)
- SimLEARN Virtual Academy (SVA)
- Hospital Activations
- 3D printing for dental
- Medvis' Anatomy X learning portal
- OOORAM 2.0 course launch
- Needs assessment for Suite of Operating Room Simulations
- 2020 AHA guidelines established for RQI

SimLEARN Projects Under Development

- SLOPE - Addiction Mini-Residency
- Intro to 3D Printing
- Geriatric Research Education and Clinical Center - Delirium Training
- Mechanical Ventilation for the Non-Intensivist
- Ultrasound Guided Peripheral IV (UGPIV)
- Musculoskeletal Emergency Department
- Pharmacy Benefits Management (PBM) Sterile Compounding Training
- SimLEARN Outreach Network - Sim Essentials
- Telehealth Mini Residency

SimLEARN Integration with Resuscitation, Education, and Innovation

- Expand the number of employees certified in Basic and Advanced Cardiac Life Support (BLS / ACLS) in order to advance the quality of patient care
- Standardize, document, track, and monitor resuscitation training throughout the VHA, in accordance with the American Heart Association (AHA) guidelines
- 125 VAMCs affiliated their resuscitation training

External Collaborations & Partnerships

- Team Orlando
- JPC-1 / MedSim Committee / Federal Medical Simulation Consortium
- Defense Health Agency – Modeling and Simulation
- University of Central Florida (UCF)
  - School of Medicine (Lake Nona)
  - Graduate School / Nursing School (Main Campus)
  - Institute for Simulation & Training
  - 3D Printing Lab
- Lake Nona Research Consortium (UCF, SimLEARN and Nemours)
- Naval Postgraduate School (Monterrey, CA) / MOVES Institute
- Uniformed Services University (USU)
- State and National Medical Boards / Societies
- Society for Simulation in Healthcare

VHA Internal Collaborations

- Office of Nursing Services (ONS)
- Integrated Clinical Communities (ICCs): Primary Care, Surgery, Specialty Care Services, Diagnostics, Mental Health and Suicide Prevention, Geriatrics & Therapy
- National Center for Patient Safety
- Office of Healthcare Transformation / HRO Sustainment
- Office of Connected Care / Telehealth
- Office of Community Care
- VISN Leadership Groups (Directors, Chief Medical Officers, etc)
- Intermediate Care Technician (ICT) Program Office
  - Also associated with DoD to VA Skills Bridge program.
- VA ECHO Program (POC – Dr. Elizabeth Mattox)
- Women's Health Service
- EES (Virtual MC / COVID website)

Deputy Under Secretary for Health Vision for VHA SimLEARN

"DEAN is thrilled to welcome SimLEARN into our thriving community. Our vision is to establish this organization as the world leader of clinical simulation-based practices, and we could not conceptualize a better synergistic partnership than within our umbrella. The DEAN office is uniquely positioned to lead the effort to advance medical research and healthcare education for its professionals, with SimLEARN now at the forefront of this mission."