



# Veterans Health Administration

## Simulation Learning Education And Research Network (SimLEARN)

June 10, 2014

# 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:
  - Patient Care Services
  - Office of Nursing Services
  - Employee Education
- SimLEARN is a national simulation training, education and research program which will develop the strategic vision and system-wide plan for simulation process modeling, training, education and research for VHA
- National program includes the establishment of a National Center for conducting simulation-based training

# SimLEARN's Vision & Mission

**Vision.** To improve Veteran health care outcomes by establishing VHA as a global leader in health care simulation-based training and research

**Mission.** To be VHA's national Center of Excellence that enhances Veteran health care quality through the use and dissemination of simulation technologies, education, and training to facilitate workforce development

Part Task Trainer

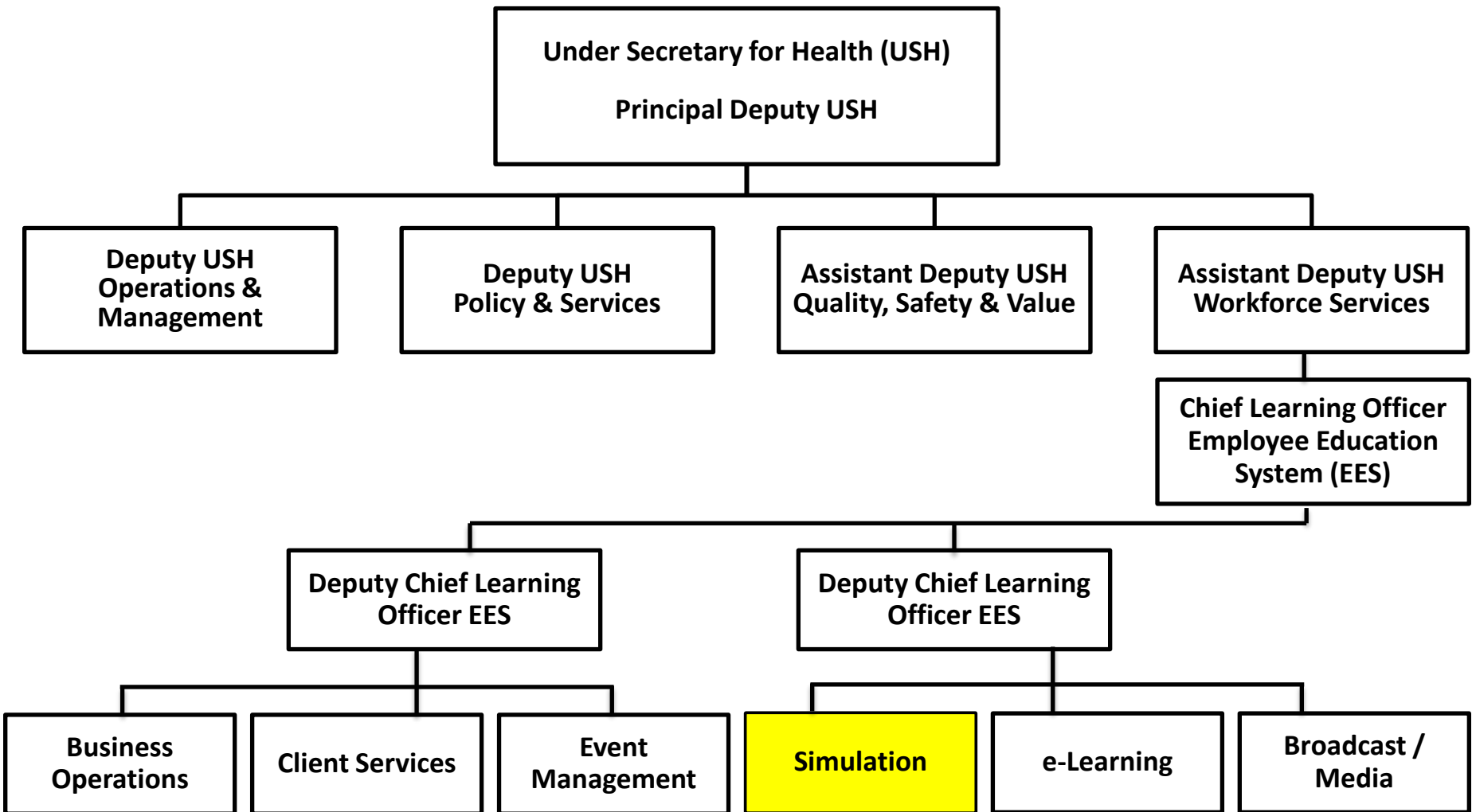


Virtual Simulation

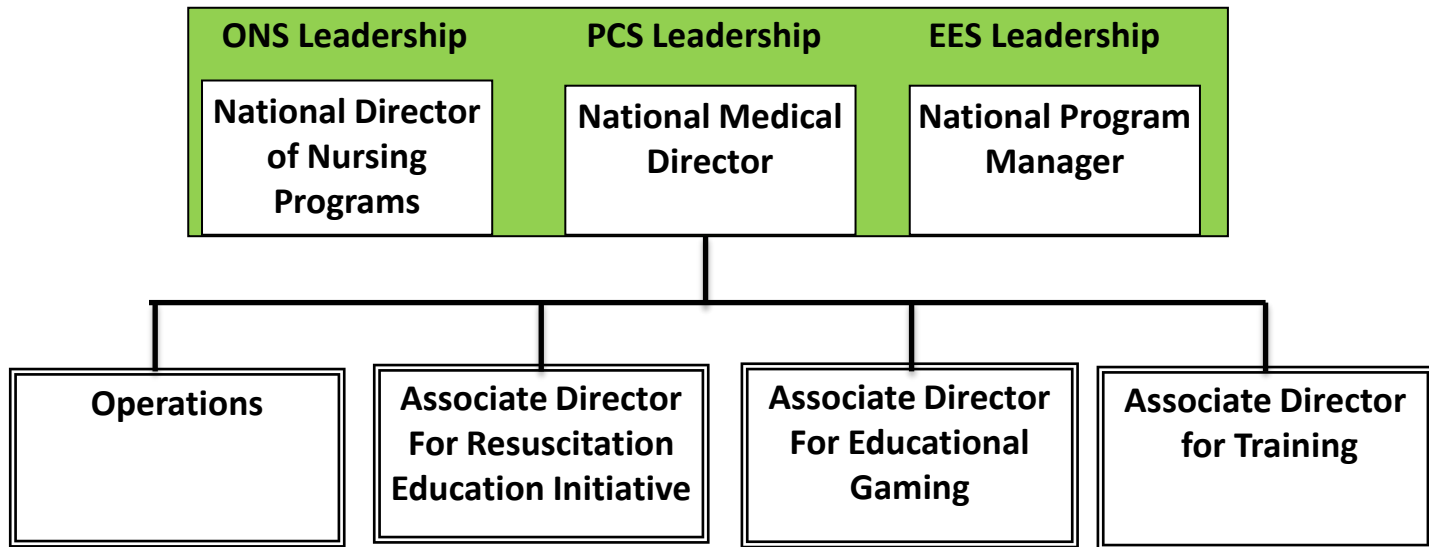


High Fidelity Mannequin

# VHA Abbreviated Organizational Chart



# SimLEARN Organization



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

# VHA's National Simulation Center (NSC)

- **Train the Trainers.** Take knowledge back to their respective Networks and Medical Centers
- **Provide immersive training environment**
  - Requires facilities that replicate actual environment where health care is provided
  - Fidelity of training environment scaled to meet instructional needs
  - Scenarios types:
    - Outpatient / Clinic
    - Inpatient / Hospital
  - Separate students' training environment physically from simulation control

Standardized Patient

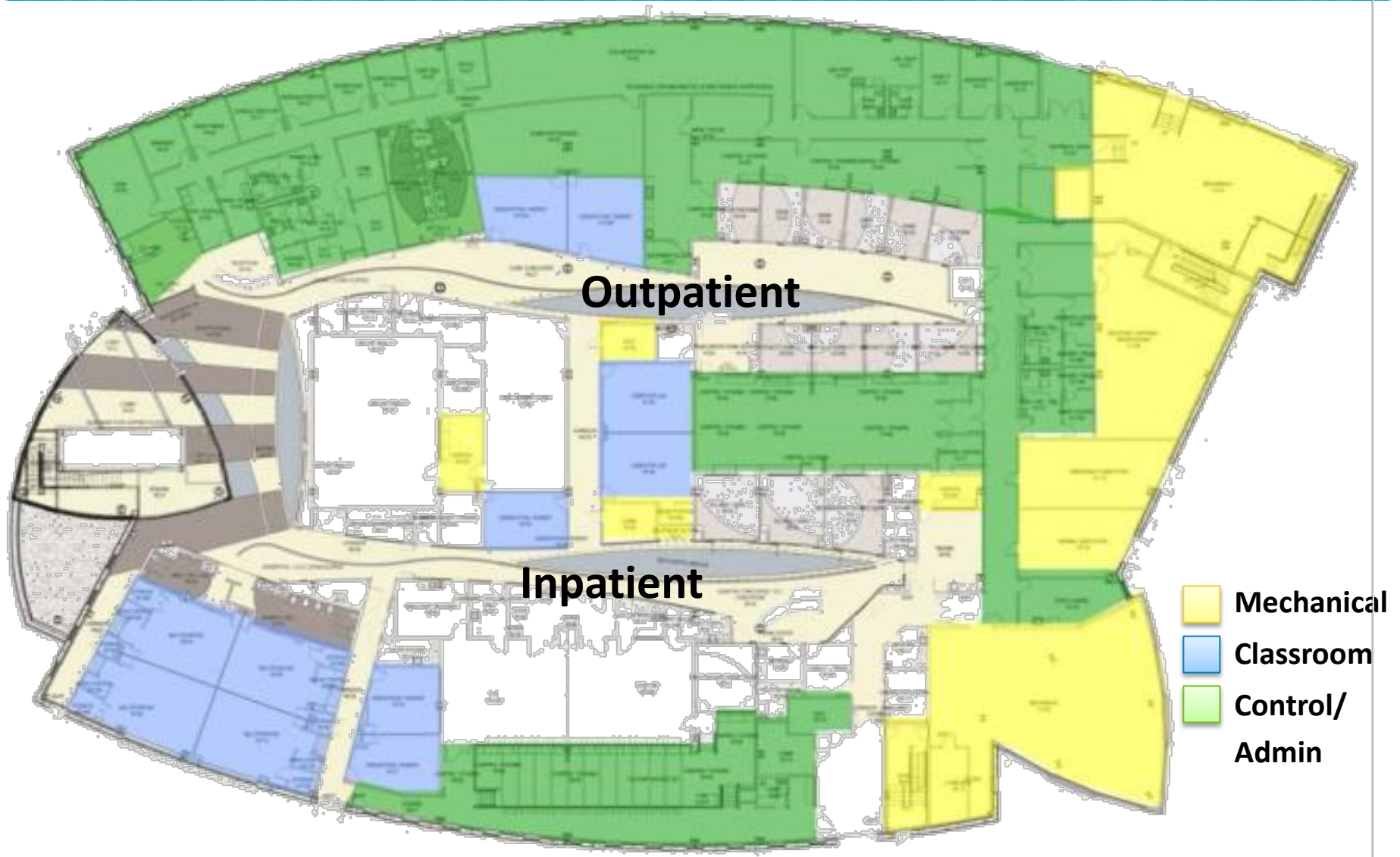


Team Training





# VHA NSC Training Flow



# 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

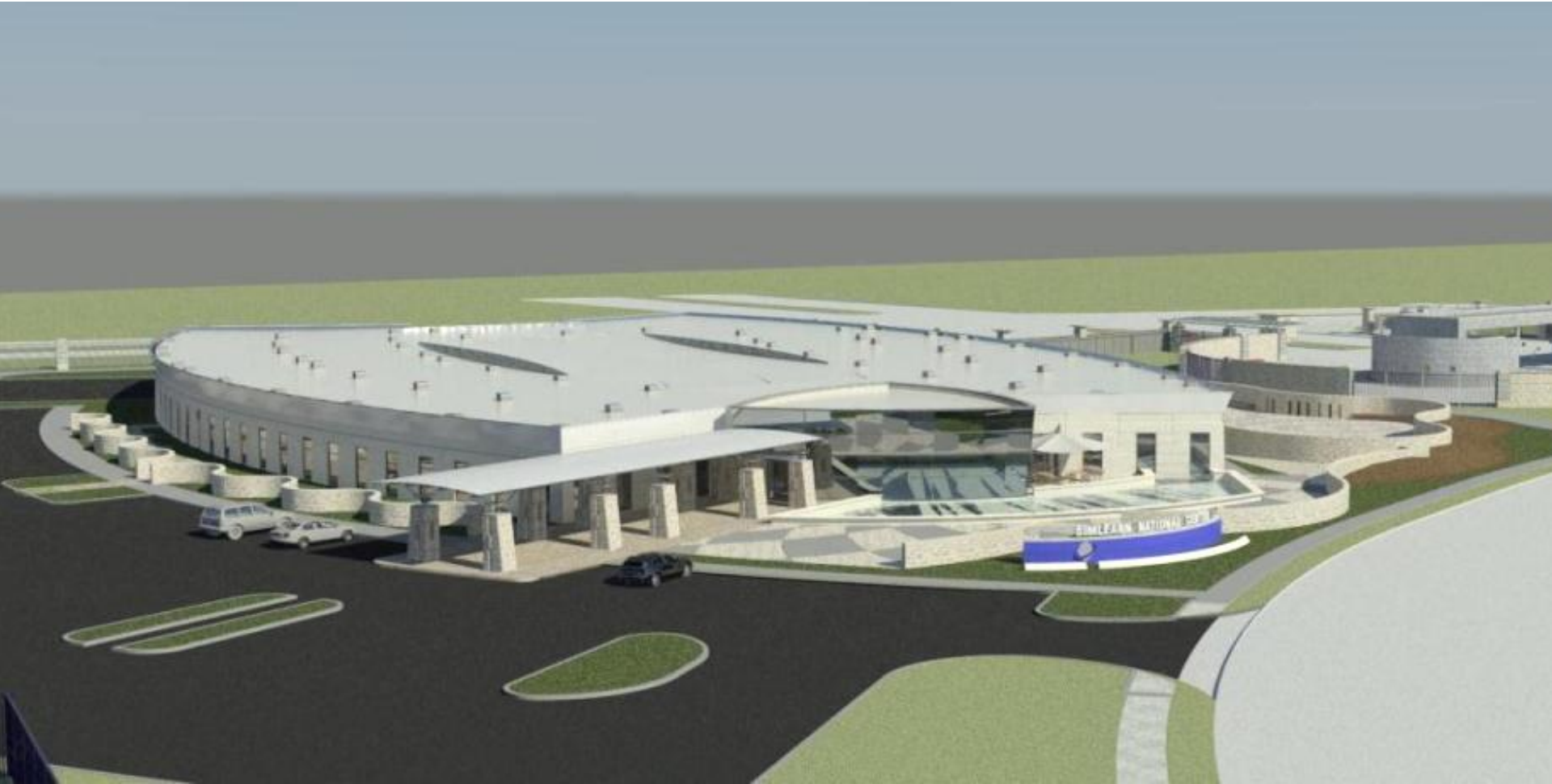
## Expansion Opportunities

- Foundation designed for 4 additional floors,
- 180,000 ft<sup>2</sup> capacity

# Orlando VAMC Campus Massing Perspective

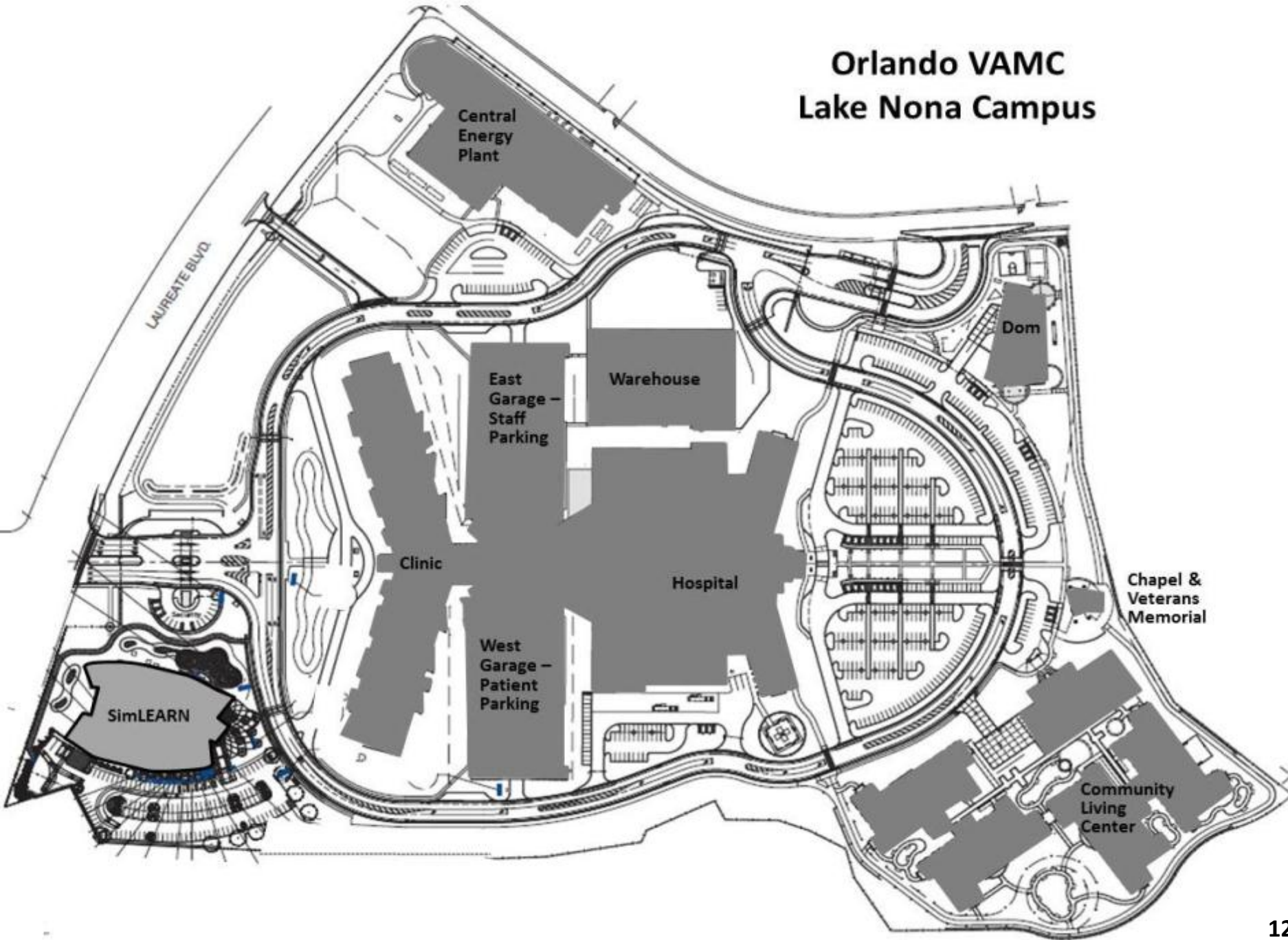


# VHA NSC Massing Perspectives





# Orlando VAMC Lake Nona Campus



# Recent SimLEARN Projects

- **Basic Simulation Instructor Training**
- **Ensuring Correct Surgery and Invasive Procedures**
- **Women's Healthcare Mini Residencies for Primary / Emergency Provider**
- **Virtual Patient Training**
- **Simulation Community of Practice**
- **Resuscitation Education Initiative (Basic/Adv Cardiac Life Support)**
- **Code Team Training**
- **VA Central Office CPR Training**
- **Out of Operating Room Airway Management (OOORAM)**
- **Surgery/Specialty Care Community Advisory Groups**
- **Tele-ICU Training, Center-to-Bedside**
- **Hospital Activation**
- **National Simulation Capability Survey**
- **Clinical Simulation Fellowship**
- **Central Venous Catheter Placement**
- **UCF Research (IPAs)**



# SimLEARN Projects Under Development

- **Virtual Medical Center**
- **Women's Health Interactive Media Instruction**
- **Motivational Interviewing Simulation Tool**
- **REdI**
  - **ACLS Advanced Instructor**
  - **Advanced Trauma Life Support)**
- **Muscular / Skeletal Training**
- **Nursing Orientation**
- **Simulation Technician Operations, Maintenance, and Processes (STOMP)**
- **Ultrasound**
- **Vascular Access Training Program**
- **Field Sim Center Certification**

# SimLEARN Integration with Resuscitation Education Initiative (REdI)

- 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
- National contract allows for
  - update of equipment
  - supply of training material for every student
  - expansion of eLearning options



# External Collaborations & Partnerships



- Acquisition: MEDSIM Project Office, US Army PEO STRI
- Education: Naval Postgraduate School, Medical M&S Certificate
- Department of Defense
  - Federal Medical Simulation and Training Consortium (FMSTC)
  - Telemedicine and Advanced Technology Research Center (TATRC)
  - Joint Program Committee-1 Research and Health Technology
- Simulation & Patient Safety
  - Society for Simulation in Healthcare (SSIH)
  - International Nursing Association for Clinical Simulation & Learning (INACSL)
  - National Patient Safety Foundation (NPSF)
- Academic Collaboration
  - Uniformed Services University for Health Sciences (USUHS)
  - American College of
  - Society for Academic Emergency Medicine
  - Association of American Medical Colleges
  - Alliance for Surgical Simulation Education & Training

# Other Local Collaborations & Partnerships

- University of Central Florida
  - College of Medicine
  - Institute of Simulation and Technology
- Team Orlando
- National Center for Simulation
- Florida Hospital (Celebration)
- University of South Florida – Center for Advanced Medical Learning and Simulation (USF – CAMLS)

## Under Secretary for Health Vision for VHA SimLEARN

“My vision for SimLEARN is to establish VHA as the *world* leader in the application of clinical simulation based strategies. We’re **uniquely positioned** to take on this national leadership role given that VHA is the **largest integrated healthcare system** in the United States. Further, we have a **responsibility to Veterans** to assume this role to ensure that their care is safe, and results in the best clinical outcomes.”