

# **Virtual Simulation Center**

Version 0.78.0 Q4 2023



Watch a brief introductory video.

by



## **Welcome to Acadicus**

Acadicus provides an expansive library of simulations, environments, patients, equipment, and templates that can facilitate and customize simulations.



Content creation is determined, guided, and sponsored by our community of users, aligning the community's greatest need and content prioritization.

### Example Industries

- Nursing
- EMS
- Pediatrics
- Medical
- Geriatrics
- Multiple Casualty

### **Example Uses**

- Live multi-user simulations
- Recorded instructor demonstrations
- Remote sim via Zoom / screen share
- Practicing communication and critical thinking skills
- Classroom demonstrations

Note: The Acadicus platform and content are updated regularly, so the features and content described here are subject to change.

## More Than an App

We understand that there is more to virtual technology than automating simulations with pre-programmed experiences. Our goal is to reduce costs, increase access to simulation, while supporting established standards and best practices based on decades of research and experience, and still allow you the control you want to customize your simulations.

## Access

There are different options for accessing Simulations in Acadicus, which is <u>free to download on our website</u>. We provide high fidelity virtual simulation experiences by leveraging the power of a windows PC.



Non-VR Viewer Mode Windows PC



VR Mode Windows PC



Classroom Projected Screen share for class viewing



**Remote Access** Screen share via Zoom, etc.

## **Multi User or Solo**

Enter a simulation experience in solo mode, or enter with multiple simultaneous participants, joining from any location.

Holographic avatars are minimal by design, enabling the experience to focus on learning objectives, rather than how each student customizes their avatar.



Like a traditional simulation center, you will access Aadicus by entering individual Labs.

### Public

After installing Acadicus, anyone can enter the **Acadicus Commons**, a public multi-user Lab featuring a directory of freely available Featured Simulations to explore.

### Private

When you're ready to run your own Simulations, subscribe to a private Lab, where you gain access to the entire Shared Content Library and can run private multi-user Simulations.

## Community

Become part of a growing community of simulation innovators, building and defining the future of this exciting new frontier!

### **Simulation Pulse**

Stay informed about what's new in the virtual sim world by subscribing to the <u>Simulation Pulse</u> on our website. Gain access to live simulation demonstrations, expert interviews, new content unboxing, virtual sim lab tours, tutorials, and more.







## **Simulation Manager**

Instructors and Sim Techs can control live Simulations using the Simulation Manager dashboard.

Instructors or trained actors can role play patients and other characters (family members, other providers, etc.), manipulating their animations, changing patient states, vital signs, triggering alarms, and a variety of other variables to create lifelike learning experiences.

## **3D Spatial Recordings**

Play and capture 3D recordings of instructor demonstrations and interactive lessons.

Learners can replay these recordings, viewing from any angle, following along and repeating as many times as needed.





## **Scene Editing**

Acadicus' powerful scene editing tools enable technicians to customize and easily update scenarios.

Save as many configurations in your private Lab as you'd like.

As new content is added to Acadicus, it becomes immediately available to all Lab subscribers as downloadable content packs.



## Onboarding

## Training

Each private Lab comes with 3 training sessions, providing everything you need to know to run your own Simulations.

### Support

The Acadicus team provides robust support through a Knowledge Base, FAQ, Tutorials, Discord channel, an upcoming new Orientation Hub, and the ability to submit tickets to our help desk.

## **Simple Pricing**

### **Private Labs**

The cost of Acadicus is \$20,000 per year, per private Lab. This subscription unlocks access to all features, shared content, multi-user capabilities, all support channels, and anything added to the library during your subscription.

Each Private Lab supports one concurrent active Simulation. Expand your capacity as your program grows with additional Labs.

### Acadicus Assist and Custom Content

An optional budget allowance can be added to your Quote for any amount you would like to include. Allowances have ranged from \$1,000 to \$100,000, depending on the organization's goals. These allowance budgets can be applied toward any of our Acadicus Assist services, such as:

- sponsoring custom content
- advanced training sessions
- scene editing services
- assistance running simulations
- patient actors

If you don't use your designated allowance, it can be applied toward future Lab renewals as well.







## **Featured Content Catalog**

Find additional information about this content on our Shared Library Wiki.



### **Gen2** Patients

Our Gen2 patients introduce a new class of patients. This enhancement will allow you to multiply the variety of patient simulations you can create through a powerful range of new features and capabilities. Many of the OpenRN cases feature Gen2 patients (<u>learn more here</u>).

The initial Gen2 lineup includes several patients you can configure in an infinite range of states via our Simulation Manager. Most newly created patients will include this standardized feature-set!



Millie



Amy



Micheal



Nao

## **Limitless Possibilities**

Each Gen2 patient can be easily configured using the Simulation Manager to support a wide variety of scenarios.







#### Below is a sample of Gen2 patient capabilities, subject to change.

Edema

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Cognition

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Strength Test

Absent

Skin and Subcutaneous Tissue

Skin Tone

Nervous and Musculoskeletal

Seizure

Shiver

Eye

Tremor

Face Droop

Hemiplegia

Arm Raise (Forward)

Nonresponsive (with pulse)

PPE Door Card (Contact)

PPE Door Card (Droplet)

PPE Door Card (Airborne)

Nonresponsive (pulseless, non

Hand Squeeze

. Leg Raise

Foot Press

Conscious

breathing)

Dentures

Pen Light

Hearing Aids

Nasogastric Tube

**Tongue Depressor** 

Emesis Bucket

Emesis Bag

Wheelchair

PICC Line

Learner Interaction Panel

Blanket

Bed Side Rails

**Reposition Patient** 

Bed Height

Bed Lock

Tracheostomy Collar

Sanitization Station (Wall)

Sleepy

Accompanying Assets

Perspiration

Pressure Injury (Sacral)

Leg Swelling (Left)

Leg Swelling (Right)

Pressure Injury (Heel - Left)

Pressure Injury (Heel - Right)

1+

2+

3+ •

4+ •

#### **Animation Status**

- Talking .
- Emotion •
- Head Gesture •
  - Shake 0
    - 0 Shrua
  - Arm Gesture
  - Push away 0
  - Head Pose
    - 0 l eft
    - 0 Center
    - Right 0
    - **Body Position** 
      - 0
      - Fowler's 30 Fowler's 45 0

      - Fowler's 90 0
      - Fowler's Leaning Forward 0
      - Sitting (Bed Edge) 0
      - Sitting (Chair) 0
      - Sitting Leaning Forward 0 (Chair)
      - Supine 0
      - Lateral Recumbent (Right) 0
      - 0 Lateral Recumbent (Left)
      - Prone 0
      - Sims' 0
      - 0 Standing
      - 0 Fallen

#### Socket Functionality

- Socket Functionality •
- Forehead Thermometer •
- Pen Light
- Tympanic Thermometer •
- Mouth/nose Sockets •
- Non-rebreather Mask •
- Venturi Mask
- Nasal Cannula •
- **CPAP Mask** •
- Surgical Mask •
- Mouth Thermometer •
- Nebulizer Mouthpiece •
- ETT
- NG Tube •
- Tongue Depressor
- Pen light
- Tracheostomy Collar •
- Shock Pad •
- ECG Stickers and Electrodes (x10) •
- IV (x6)
- BP Cuff (x2) •
- PICC Line •
- Chest Tube
- Pulse Oximeter (x2) •
- Stethoscope (x17) •
- Learner Interactions Panel •
- Vitals Monitor •
- Hospital Bed •

#### Pupils

9

- Dilation
- **Response Rate**

#### **General Apparel and Equipment**

- Clothing .
- Partial Gown
- Blanket
- Hospital Bed

#### Heart Auscultation

- Normal
- Atrial Fibrillation
- Murmur

#### Lung Auscultation

- Coarse Crackles
- Fine Crackles
- Wheezina •

#### **Digestive and Abdomen**

- Tongue
  - Tongue Out Center 0 0
  - Tongue Out Left Tongue Out - Right
  - 0 Vomit
  - 0
    - Normal Bloodv
    - 0 Black 0
    - 0 Green
- Mouth
  - Normal 0
    - White Patches 0
    - Ulcers 0
- Teeth
  - Good Teeth 0
  - No Teeth 0
  - 0 Decayed Teeth

#### Respiratory

- Cough (Single)
  - Nonproductive 0
- Productive Clear 0
- Productive Yellow 0
  - Productive Green 0
- Cough (Ongoing)

Frequently

Normal

Shallow

Labored

Stridor

Default

**Bloody Drainage** 

Clear Discharge

Yellow/green Discharge

Off 0

0

0

0

0

0

0

0

0

0

Hypoactive

Hyperactive

Absent

Present

Nose

**Bowel Auscultation** 

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Breathing

Occasionally 0

## Environments

Set the Stage Your Simulations



**Operating Room** 



**Emergency Room** 



PICU



**Hospital Lobby** 



Clinic



4 Bay Multi-Sim



**Exam Rooms** 



Assisted Living

Neonatal



Long Term Care



Suburban Residential



Suburban Residential Interior



Suburban Residential Interior



Classroom



**Simulation Hall** 



**Downtown 1** 



**Downtown 2** 



**Old Farmhouse with Interior** 

**Condo Interior** 



**Office Interior** 









**Forest Lake and Meadow** 



Warehouse



**Beach Pavilion** 



Soccer Stadium



**Space** Pavilion



## **Featured Simulations**

As new content is added to Acadicus, it becomes immediately available to all users.



### **Birthing Simulator**

Many of the OER OpenRN cases feature this content (learn more here)



### Administering Cardiac Medications to a Patient with Dementia

An OpenRN Scenario

Miles Johnson is an 87 year old resident of Shady Acres rehabilitation facility. He has a past medical history of dementia, hypertension, atrial fibrillation, and chronic renal failure.

Students must perform appropriate assessments prior to safely administering cardiac medication while also communicating therapeutically with a patient with dementia.

#### Addressing Safety Hazards An OpenRN Scenario

Students must identify and resolve safety hazards in Miles' room while also communicating therapeutically with him.



### **Caring for a Pediatric Patient Experiencing Pain**

An OpenRN Scenario

Ella Peterson is a seven-year-old patient who underwent a tonsillectomy this morning. She tolerated the surgery well but could not swallow fluids during the post-op recovery period, so was admitted for overnight observation until she can swallow fluids and food. Ella has been sleeping since being admitted. Her mother was at Ella's bedside all day, but recently went home to care for Ella's siblings. The student should assess Ella for pain and safely perform interventions to manage her pain while communicating therapeutically.



### **Caring for a Client with Chronic Heart** Failure

An OpenRN Scenario

Hector Fernandez is a 62 year-old Hispanic male recently admitted to a long term care facility due to recent falls. He has a history of chronic heart failure.

Students must assess Hector while communicating therapeutically regarding his concerns. Any new or unexpected findings should be communicated to the provider and cardiac medications administered safely.



#### Administering Nitroglycerin to a **Client with Chronic Angina** An OpenRN Scenario

Bjorn McClelland is a resident who was admitted to a Long-Term Care (LTC) setting yesterday. He has a history of chronic stable angina, hypertension, and heart failure. As his morning medications are prepared to be administered, he complains of chest pressure. Students must perform appropriate focused assessments, apply the nursing process, and use clinical judgment to provide safe, effective care.



Alcohol Withdrawal An OpenRN Scenario (currently in development)

Students assess a patient withdrawing from alcohol in a Medical Surgical hospital unit and appropriately administer medication based on a CIWA (Clinical Institute Withdrawal Assessment for Alcohol) protocol.



**Cirrhosis and GI Bleed** 



**Congestive Heart Failure** 



**Respiratory Therapy** 



End of Life



**Foley Catheter Placement** 



**ECG Lead Placement** 



Lumbar Puncture



### **Dynamic Cardiology**

Staged within a residential environment, the Dynamic Cardiology scene template includes 'Miles', a patient configured with a Simulation Manager used by facilitators to manipulate patient vital signs and animations.

Miles' wife Karen is standing in the kitchen. Interactivity includes a defibrillator with pads, BVM, IV, blood pressure cuff and more.







### **Multiple Casualty**

The goal of the virtual MCI content is to provide a demo scenario enabling users to triage severely injured patients following a series of explosions.

This pack also includes firefighters, police officers, an ambient soundboard, an ambulance with scene lights and a siren, an interactive triage board, and more.





Interactive Skull Visualizer



**Skeletal Visualizer** 



**Muscle Visualizer** 





Eye

Kidneys



**Heart Block Visualization** 



**Interactive Organs** 



**Skin Surface** 



**Animated Heart** 



**Dental Anatomy** 



Molecular



Brain

## **Thank You!**



Visit the <u>Acadicus Website</u>

Contact Us at info@acadicus.com to request a Quote, or to ask questions.

Submit a support email: support@acadicus.freshdesk.com

Learn more: FAQ

Join us: Discord Community

See content in action on episodes of the Acadicus Simulation Pulse.