The Simulation Advantage: A Strategic Guide for Allied Health Administrators

SimTutor

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As the demand for allied health professionals grows—projected to increase by 13% by 2031, according to the U.S. Bureau of Labor Statistics—the need to build inclusive, scalable, and practical training environments is vital to student success. Training programs are under pressure to prepare students for real-world care while facing severe constraints on time, resources, and capacity.

That is why many institutions are turning to virtual simulation-based learning as a scalable and student-centered solution. As you start to explore the world of simulation-based learning, this guide will help you understand the options, benefits, and thoughtful questions to ask.

What is Simulation-Based Learning?

Simulation-based learning tools employ methods that replicate real-world clinical scenarios in a safe, controlled environment. This allows students to build competency and confidence without the pressure of live patient interactions.

There are several modalities [1] :

✦ Virtual Simulations

Virtual simulations are digital scenarios that allow students to access realistic clinical events on demand. They typically include interactive procedures, decision-making scenarios, and built-in assessments.

SIMTICS is a powerful example of a complete online virtual training solution that gives healthcare learners hands-on practice in a fully interactive, risk-free environment. The tool incorporates procedural overviews, interactive modeling, and hands-on practice on demand.

✦ Hybrid Simulation

Hybrid simulation refers to a combination of virtual and hands-on simulation. Often used to reinforce learning before and after in-person practice, hybrid models utilize traditional manikins or lab-based activities and digital platforms to reinforce critical material.

✦ High-Fidelity Simulation

High-fidelity simulations are live, in-person trainings that utilize advanced manikins or standardized patients, designed to mimic the complexity of clinical settings. This approach is regarded as most effective but labor-intensive and costly.

✦ Low-Fidelity Simulation

Low-fidelity simulations utilize more simplistic manikins or role-play scenarios for practicing isolated skills, such as blood pressure and catheter insertion. They are best used for early skill-building and assessments. Although lower in cost, they still require an upfront investment as well as faculty to administer the demonstrations.

The most effective learning curricula in allied health combine all types of simulations with classroom lectures.

Administrators are Embracing Simulations

Simulated training has been used for decades to help students prepare for their careers in health services. Hands-on clinical hours are a strict requirement for most certifications. However, as program directors are challenged by funding lab costs and staffing to the required faculty-student ratios, virtual simulated training is becoming a strategic asset to help reduce the high costs of lab consumables and extraordinary equipment expenses. [2]

Administrators find that students who participate in virtual simulations report feeling "better prepared for their clinical practice".[3] The ability to practice virtually simulated scenarios that promote clinical judgment, prioritization, delegation, problem-solving, professional and therapeutic communication, and teamwork is a valuable supplement to classroom lectures and high-fidelity simulations.

It also supports equity in learning by reducing the variance in teaching styles and learning preferences. Students with learning disabilities or cognitive differences will benefit from the **self-paced, repeatable nature of simulations**.

> *I had to learn medicine without this type of resource so I know what It's Like to feel you have no experience. SIMTICS truly puts the student at an advantage.*
>
> *-Dr. Kiran Patel, Real SIMTICS Customer*

Benefits of Simulation-Based Learning

Students

- Increases retention and skill mastery.
- Builds confidence before clinical placements.
- Offers repeatable, self-paced practice.
- Helps students make and learn from mistakes in a risk-free environment.
- Promotes equity by leveling access to clinical learning, regardless of lab hours.

Faculty

- Reduces the need for 1:1 hands-on instruction.
- Provides consistent training regardless of staffing.
- Enables data-driven assessment of student progress.
- Frees up faculty time for feedback and deeper instruction.

Institutions

- Scales training without increasing physical lab space.
- Mitigates faculty shortages.
- Enhances recruitment and retention through a modernized curriculum.
- Improves NCLEX and certification pass rates.
- Supports accreditation and compliance standards.

Over 80% of students say simulation improves their confidence in clinical skills. [4]

Use Cases Across Allied Health Programs

Simulation-based training is adaptable across multiple disciplines.

Program	Sample Simulated Scenarios
Radiologic Technology	Patient positioning, radiation safety, emergency protocol response.
Diagnostic Medical Sonography	Probe manipulation, anatomy identification, scanning techniques.
Medical Assisting	EKG setup, injections, room preparation, triage conversations
Respiratory Therapy	Ventilator setup, oxygen delivery, airway management.
Phelbotomy	Site selection, order of draw, specimen handling.

Cost, Time, & Operational Benefit

Allied health programs are under increasing pressure to support the demand for qualified healthcare workers. Enrollments are rising, clinical site availability is shrinking, and faculty workloads are stretching to unsustainable levels. Meanwhile, the expectation to deliver job-ready graduates has never been higher.

Administrators are tasked with doing more, often with less.

Traditionally, this demand has meant building out physical labs—a costly and time-intensive endeavor. Outfitting a high-fidelity simulation lab can cost over $500,000 per setup, excluding maintenance, equipment replacement, and staff training. And that's just for one lab.

But virtual simulation platforms like SIMTICS offer a scalable, flexible, and far more cost-effective alternative that ticks all the boxes.

Tangible Cost Benefits

- Consumables (gloves, syringes, gowns, linens, etc.)
- Equipment repairs or replacements due to overuse or improper handling.
- Printed materials and procedural checklists, as most platforms are fully digital.
- Remediation sessions for underprepared students, thanks to self-paced reinforcement.

One of the most immediate advantages is the **reduction in lab-related expenses**. Institutions that adopt virtual simulation tools can lower their costs on consumables such as gloves, syringes, linens, and single-use kits. Virtual simulated training also reduces wear and tear on lab equipment, saving money on repairs and replacements to expensive equipment like high-fidelity manikins (upward of $150,000). A 2023 study found that schools using virtual simulation saw a **significant decrease in lab material and equipment spending**—a meaningful gain for programs managing tight budgets.[5]

Time-Saving for Faculty and Staff

Faculty shortages are one of the top challenges facing allied health programs. Onboarding new instructors and adjuncts takes time, and standardizing training for them is even more challenging. Simulation can help by:

- Reducing the draw on existing faculty to perform new instructor training.
- Freeing up time spent on repetitive demonstrations or early-skills coaching.
- Automating student progress tracking, so faculty can intervene strategically instead of manually reviewing every step.
- Allowing new adjuncts to teach confidently by using structured, self-guided content.

With standardized content and built-in assessments, virtual simulation platforms enable new instructors and adjuncts to quickly get up to speed, eliminating the need for extensive one-on-one training. Faculty who use simulation report spending less time on repetitive demonstrations and more time on high-value instruction, such as coaching clinical reasoning or reviewing reflective debriefs.

Faculty using SIMTICS reported a reduction in time spent on repeat procedural instruction and a 20% gain in time available for high-value activities like debriefing and coaching.

Built for Scalable Results

Perhaps most significantly, virtual simulation is **designed for scalable growth**. Programs can increase student enrollment with fewer instructor additions or less lab space requirements. It allows multiple cohorts to engage with consistent clinical content, regardless of schedule, location, or faculty availability. Students can access their training on demand, giving programs the **flexibility to support diverse learning needs**. For example, a medical assisting program could significantly increase its enrollment without hiring additional faculty by integrating simulation into foundational courses.

- Increased cohort sizes without increasing instructor-to-student ratios.
- Provide remote learners or satellite campuses with consistent instructional
- quality.
- Deliver hybrid and online programs without sacrificing clinical preparation.
- Give students 24/7 access to practice opportunities.

One university using SIMTICS said "It has given the students a way to role play the skills they need and practice them outside of a lab setting, but with the attention to detail they need to be able to provide proper care for patients."

Strategic Operational Advantages

Simulation also brings essential operational advantages. Content can be updated centrally and deployed immediately, allowing programs to adapt quickly to curriculum changes or new industry standards. This is especially valuable for supporting departments that require ongoing training and continuing education.

Built-in analytics help programs track student engagement and performance, streamlining both internal reviews and external accreditation reporting. With students able to train outside of scheduled lab hours, scheduling conflicts drop significantly, along with student frustration. By reducing the burden of repetitive instruction, **simulation enhances faculty satisfaction**, which in turn contributes to retention in a competitive job market.

- Faster curriculum adaptation: Virtual content can be updated and deployed faster than rewriting physical lab protocols.
- Streamlined accreditation reporting: Built-in assessments and usage tracking help demonstrate student competency and learning outcomes.
- Decreased scheduling conflicts: Students can practice when it fits their schedule, not just when lab space is available.
- Improved faculty satisfaction and retention: Reducing burnout from repetitive tasks allows instructors to focus on mentoring and development.

Virtual simulation platforms, like SIMTICS, deliver more than just educational content—they provide infrastructure for operational agility and student success. For institutions facing faculty shortages, budget constraints, and growing student demand, simulation offers a measurable return on investment: better-trained students, more efficient programs, and more sustainable growth.

In short, it's not just about replacing labs—**it's about building a smarter, more adaptable way to train the next generation of healthcare professionals.**

If you're exploring scalable ways to improve readiness, reduce costs, and future-proof your clinical training, **now is the time to consider virtual simulation**.

Implementation Tips for Success

Launching simulation-based training in your program doesn't have to be complex. Here's how to set the stage:

Checklist for Success

- [ ] Map simulations to real-world scenarios such as high-risk medical procedures or equipment troubleshooting.
- [ ] Engage faculty early—include them in tool selection and design.
- [ ] Align simulations with curriculum and skills checklists.
- [ ] Use performance tracking features to assess progress and intervene early.
- [ ] Provide orientation and dedicated support for students and faculty.

Are you ready to revolutionize your training strategy? Contact SimTutor today to explore customized simulation training solutions.

- *simtutor.com*
- *info@simtutor.com*

Partner With Us to Transform Your Allied Health Program

Start using simulation-based training to give allied health learners the skills and knowledge they need to excel in their roles.

Request a Demo

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