

# ADAPTIVE TRAINING

charles river analytics



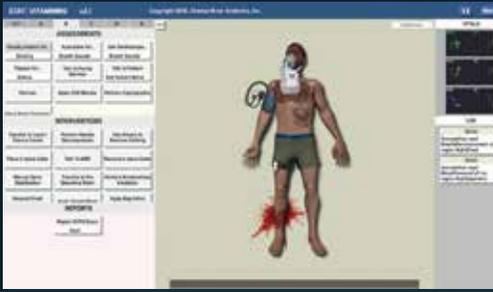
How do I know my trainees are mastering the practical knowledge and skills they need, and not just getting good at the training system?

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Simulation-based training requires a significant investment in time, materials, and instructional staff per trainee. Without targeted preparation, training schedules, and interventions, your organization risks expending unnecessary resources or failing to address key training deficiencies.







These solutions ensure trainees remain engaged with the subject matter and get the most out of their training sessions without putting undue strains on your budget.

When you select Charles River Analytics technology to enrich your simulation-based training, our proprietary processes and tools ensure that your investment in training technology translates into engagement and learning by trainees.

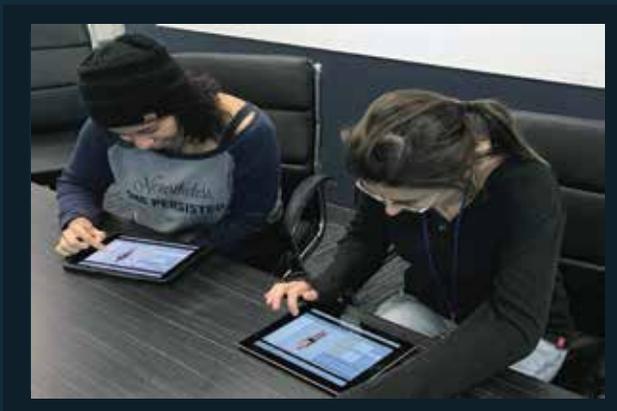
## Screen-based Virtual Patient Simulators for Cognitive and Decision-making Skills

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Charles River Analytics worked with the Air Force to develop Character™, a screen-based simulator and adaptive tutor for rehearsing key decision-making skills in the initial trauma assessment. Character is designed to bridge the gap between book learning and expensive, hard to schedule simlab time by giving learners the “mental reps” on the cognitive skills of trauma assessment. Learners arrive knowing what to do, and can focus on how to execute procedures in a realistic team environment.

The Character training platform includes virtual patients with dynamic physiology and automated assessment of key trauma assessment skills as well as a tutoring system that delivers targeted instruction according to measured trainee skill state. Character is deployable to personal computers and tablets, enabling “anytime, anywhere” practice of key trauma cognitive skills that makes optimal use of training time and avoids costly interactions with physical simulators and instructional staff. Initial evaluations have revealed significant knowledge gains in users, relative to traditional methods, and further testing is ongoing.

The Character training platform has been adapted to address a variety of other domains, including emergency room team communication, mass casualty response, and trauma injury perceptual skills. The system now supports a variety of new features such as AI-driven virtual teammates, scenario authoring by instructional staff, and voice input commands.



## About Charles River Analytics

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Founded in 1983, Charles River Analytics is an Employee-Owned Small Business, now with nearly 200 employees, many of whom hold advanced degrees. Our clients are a “who’s who” of government and industry. The original focus of our business was working with the Department of Defense, and we continue to enjoy ongoing relationships supporting DoD, Army, Air Force, and Navy organizations. Today, our relationships with clients throughout government and industry enable us to bring best-in-class research and ideas to the projects we undertake for our customers.

We work with our clients to translate new ideas and research into actionable solutions to the opportunities most important to their success. Charles River Analytics has a solid track record of success in providing our clients with AI systems, technology, software tools, and design and analytic services in a variety of settings. In recent years, we have worked defense, intelligence, medical technology and health care, training, transportation, space, cyber security, and more.



U.S. Prime Contractor



Employee-owned Small Business

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