

CHEST rounds out its robust education curriculum with microlearning, sees success throughout the pandemic & beyond



The [American College of Chest Physicians \(CHEST\)](#) is a medical association that helps clinicians optimize the day-to-day practice of pulmonary, critical care and sleep medicine through education, communication and research for the best possible patient outcomes. Currently, its 20,000+ members get access to the latest forward-thinking programs in clinical medical education, new skills and knowledge to advance their careers, as well as a community of innovative problem-solvers who inspire and energize one another.

Their clinical education program is internationally recognized and accredited, and their Accreditation with Commendation from the Accreditation Council for Continuing Medical Education places CHEST in the highest tier of continuing medical education providers.

The challenge

Due to the medical field's ever-changing nature, routine educational classes and seminars can only take learners so far. And due to the science behind [the forgetting curve](#), critical information is often not retained over time. Understanding the high stakes of practicing medicine in a compliance-driven environment, CHEST came to Qstream looking for an engaging way to reinforce key information, promote knowledge gain and retention and most importantly, ensure professionals are implementing the proper procedures and practices in the field.

While CHEST already had an impressive educational program in place consisting of live, in-person and online sessions, self-study products, as well as interactive learning games, they found it challenging to measure the impact of their efforts and take their commitment to longitudinal learning - or bite-sized, continuous education over time in addition to longer courses - to the next level.

“The idea of attending a 60-minute lecture and learning something and actually having it stick with you 30 days later really does not work in our field, where the stakes are so high. Patients need us and our doctors need us, so we are constantly exploring the types of education we can deliver that are going to be sticky and help people learn and improve their practice.”

- Robb Rabito, *Senior Director for Program Development, CHEST*

Medical professionals are busy and traditional training and LMS courses are time consuming, taking them off the floor and cutting into their time caring for patients. While Robb Rabito, Senior Director for Program Development at CHEST, and his team understand that these courses are necessary, many of which are often sent to accrediting bodies to maintain licensure, he also recognizes the need to supplement longer learning courses with microlearning to realize the full benefits of a well-rounded learning ecosystem.

Summary of challenges

- Learning courses were siloed and not sticky enough
- Clinicians are busy and need bite-size learning to reinforce key concepts
- Competency is critical in a compliance-driven industry where the stakes are so high
- No real way to measure effectiveness of content
- Looking to evolve and expand commitment to longitudinal learning
- Traditional learning methods lack the spacing and testing effects, which significantly improve knowledge gain and long-term retention

The solution

Robb and his team introduced Qstream's microlearning technology to round out their current curriculum and further their commitment to longitudinal learning. Microlearning challenges (bite-size assessments) are distributed in conjunction with their other learning programs to reinforce knowledge and calculate precise proficiency metrics for upskilling and coaching opportunities. This ensures that critical information is retained and applied in the field for excellent patient care.

“Our ultimate goal as an education team within our organization is to improve clinical practice and ideally improve patient outcomes. We have found that the most effective way to do that is through multiple exposures to education in a variety of different formats.”

- Robb Rabito, *Senior Director for Program Development, CHEST*

Efficient, engaging & effective learning reinforcement for busy medical professionals

With Qstream in place, CHEST members receive quick and convenient scenario-based questions on a regular cadence throughout the week, which can be answered via a mobile device during a lunch break and even as they're arriving at or leaving work. This on-the-go training prevents disruption in their busy daily work routines. Learners can answer the question in a matter of seconds and get the instant gratification of knowing they got it right. In the event they answer the question incorrectly, they get instant access to a brief explanation of the correct answer and the opportunity to get it right the next time it's asked.

This repetition is proven to increase knowledge retention dramatically by giving learners multiple attempts on individual questions, something other learning and development technologies don't offer. Qstream's algorithms schedule the delivery and redelivery of questions based on performance and at key points in time to reinforce the information before it is likely to be forgotten.

To promote completion of microlearning challenges, Qstream's platform also hosts a leaderboard so learners can see how they stack up against their peers, a key selling point for competitive clinicians, Robb explains. This healthy competition and social engagement promote higher participation rates across learners.

“Qstream is a great tool to deliver bite-size longitudinal learning to be able to get across key points to your learners in a simple, efficient way, not really taking a ton of their time but really inspiring them to be engaged. It's only taking a minute or two of a busy clinician's time to remind them of an important piece of knowledge.”

- Robb Rabito, *Senior Director for Program Development, CHEST*

“Learning is better when it is personal. CHEST made this possible for its members by delivering user-friendly quizzes and providing concise and immediate feedback through the Qstream platform.”

- Septimiu Murgu, *MD, Immediate Past Chair, CHEST Education Committee*

Longitudinal, scenario-based clinical practice in a safe pilot setting

The stakes are so high in the medical field, that one error can be costly not only for medical professionals but for their employers. Microlearning challenges are rooted in real-world context, allowing learners to practice in a safe pilot setting before potentially making mistakes on the floor. This better prepares them for scenarios they may encounter in live settings and ensures they follow the proper procedures and practices for compliance and quality patient care.

Qstream also promotes knowledge retention through multiple exposures to the same key information, which contributes to CHEST's commitment to longitudinal learning.

“Ongoing, continuous education is stickier and Qstream gives us an easy way to do this. Our learning strategy embraces longitudinal learning, which is multiple exposures over time. Qstream is perfect for that because it's organically longitudinal.”

- Robb Rabito, *Senior Director for Program Development, CHEST*

Streamlined analytics that uncover learning gaps, coaching opportunities & areas for program improvement

Qstream provides granular proficiency and engagement analytics, instead of mere completion data, for specific topics and teams. It is the only learning and development technology that supplies learning data at this granular level.

These analytics help CHEST educators identify skill gaps and coaching opportunities, as well as question effectiveness and areas where learners could use additional training and education. Qstream's proficiency metrics also serve as proof that learning has taken place for the CHEST executive team and help Robb's team tailor future initiatives for a better learning experience for members. Additionally, CHEST uses the data in Qstream to report out to their accrediting bodies on education activity.

“It's all about data. Qstream has a great dashboard that helps us identify gaps in our teams' needs in specific content areas and points to some of our internal gaps as far as writing effective questions. We're all improving by using the tool. We have to be able to report on the impact of our programs, and the analytics from Qstream allow us to achieve that goal.”

- Robb Rabito, *Senior Director for Program Development, CHEST*

Microlearning & knowledge reinforcement technology helps clinicians navigate the ups & downs of COVID-19

Over the course of the pandemic, CHEST has utilized Qstream to reinforce new and critical information as it becomes available. This style of continuous learning kept clinicians abreast to the latest COVID-19 best practices for treating patients, such as making decisions on when to ventilate patients, what drugs to prescribe and when to prescribe them during the course of one’s illness. All questions were developed by content experts and underwent peer review by at least two members of CHEST’s COVID-19 Taskforce.

The goal of CHEST’s COVID-19 Qstream was to improve knowledge retention and address “in the moment” needs, which proved to be very difficult through traditional channels such as the webinars, podcasts, essays or consensus statements. New information about the novel virus was being uncovered by the minute and needed to be communicated in real time.

“It’s not just a matter of knowing something, it’s about taking action, so our Qstream questions focused on getting clinicians to take the right actions. We’ve had a lot of great feedback and it’s been a great reinforcement of what we’re trying to share in COVID education.”

- Robb Rabito, Senior Director for Program Development, CHEST

Qstream’s scalable technology has helped CHEST assimilate the key information from other materials they were sharing – webinars, blogs, infographics, peer reviews, etc. – to easily circulate the latest best practices throughout the organization. Ultimately, CHEST’s team members were able to effectively learn more over time, retain critical information and confidently apply their learnings in the field to better serve their patients. Plus, learners found the series of questions both beneficial and fun to complete.

CHEST COVID-19 Qstream participant feedback

“I really enjoyed this series of questions. I will miss not having them every week as I have been looking forward to them!”

“Very good way to keep up with COVID treatments. Well done.”

“Great way to test your COVID knowledge!”


Program overview and results



721
Voluntary
Participants



43
Questions



2
Questions/
week over ~5
months



Average
4-star
participant
review

Overall, CHEST’s Covid-19 Qstream was a success. Although the challenge was voluntary, the series boasted nearly a 75% participation rate. This speaks to the commitment of these medical professionals to patient care, despite demanding work schedules throughout the pandemic.

Looking toward the future

Learning in the medical field is a lifelong effort and the constant development of new information means Robb and his team’s job is never done. So, how will Qstream factor into CHEST’s learning in the future? CHEST has already incorporated Qstream to complement multiple offerings in their learning curriculum and plans to continue to do so as their programs evolve to make them more impactful. The goal is to embrace hybrid learning in its entirety by leveraging live, hands-on programs at their state-of-the-art education center as well as additional learning opportunities through Qstream. Moreover, CHEST aims to offer a comprehensive learning journey and engage its members at scale with relevant information that will make them better at what they do.

“Learning is a continuum, and Qstream helps us deliver on the continuum. Our CHEST Qstreams are a great way to get people to know us.”

- Robb Rabito, *Senior Director for Program Development, CHEST*

“We learn better when we get challenged through a quiz and when the knowledge gained is reinforced on a regular basis. I trust that the spacing and testing effects offered by the Qstream platform will continue to be routinely used by CHEST and integrated in future virtual, in-person or hybrid educational programs.”

- Septimiu Murgu, *MD, Immediate Past Chair, CHEST Education Committee*



About Qstream Qstream is the leading enterprise microlearning and knowledge reinforcement solution proven by science and in practice to boost learner performance. Hundreds of organizations rely on Qstream to build high-performance teams by delivering a personalized and agile learning experience that delivers the highest levels of retention, engagement, and efficiency along with analytics that provide precision insights and expose a real-time view of performance readiness.

