

# QuizTime

A DIFFERENT WAY TOLEARN

### WHAT IS QUIZTIME?

A web-based app that delivers daily quiz items to a mobile device or computer.

Gack to Messages 7:31 PM     vstar.mc.vanderbill.edu  Hello 6152682321!	Back to Messages 7:31PM     a vstar mc vanderbilt.edu      You are correct!	Back to Messages 7:31 PM Vstat.mc vanderbill.edu Tailure, hypotension, and tachycardia occurred frequently and more often in the restrictive strategy arm. But when	▲Back to Safari 7:31 PM dropbox.com Cancel Anes 2016 1st Resort.pdf <sup>1</sup> ○○○
Question of the Day 4 You are caring for a 68 yo female with a known history of CAD and HTN undergoing hip fracture repair. Tranfusing PRBCs when the patient's Hgb reaches 8g/dl or when hemodynamically unstable is associated with: Contributor: Matthew D. McEvoy, MD	Finally, in noncardiac surgery, a restrictive strategy (transfusion when hemoglobin concentration decreases below 80 g/l) increased ischemic events, but surprisingly did not affect the mortality rate. The current guidelines in this patient population are largely based on, and consistent with, the restrictive transfusion strategy employed in the Functional Outcomes in Cardiovascular Patients	these hemodynamic symptoms were treated, there were no differences in postoperative myocardial injury or deaths at either 30 days or 3 yr 13 Thus, on the basis of this trial at least, a practice of administering erythrocyte concentrate when the hemoglobin concentration decreases to 80 g/l with the provision for earlier symptomatic transfusion appears both safe and economical. Whether this	<text><text><text><text><image/><text></text></text></text></text></text>
<ul> <li>Worse cardiac outcomes than transfusing to maintain a Hgb of 10g/dl</li> <li>Worse neurologic outcomes than transfusing to maintain a Hgb of</li> </ul>	Undergoing Hip Fracture Repair trial. In this randomized controlled trial comparing transfusion triggers in high cardiac risk, predominately elderly female, patients after hip fracture surgery, the restrictive transfusion threshold was 80 g/l. Importantly, the Functional Outcomes in	treatment plan is generalizable to other populations requires further study. (Anesthesiology 2016; 125:11-13) External Resource: Approaching a Safe Last Resort Triggers for Perioperative	The second secon
<ul> <li>10g/dl</li> <li>Higher mortality rate than transfusing to maintain a Hgb of 10g/dl</li> <li>None of the above </li> </ul>	Cardiovascular Patients Undergoing Hip Fracture Repair trial incorporated a provision to transfuse at any time if there were "symptoms." Notably, the trial found that rapid bleeding, heart failure, hypotension, and tachycardia occurred frequently and more often in	Blood Transfusion Cive Us Your Feedback! Create your own QuizTime!	<ul> <li>Includence in the second second</li></ul>
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## QUIZZING APPS – WE'RE NOT ALONE











Technology + Content Expertise + Education Expertise

#### Quiz**Time**

2020: Conquering COVID: Quiz Question

A 45-year-old man with a past medical history of cardiovascular disease, chronic kidney disease, chronic lung disease, and well-controlled HIV with CD4+ T cell levels within normal ranges presents to an urgent care clinic for fever and cough. Testing for SARS-CoV-2 returns positive, confirming COVID-19 disease. Which of the patient's underlying medical condition has been most frequently associated with hospitalization in the United States?

Click **HERE** to answer.

This question can be answered until 5/3/20 9:00 am.



#### Quiz Question

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#### Cardiovascular disease

- This is the correct answer:
   Chronic lung disease
- Immunosuppressive condition
- Renal disease

#### You are correct!

Implications for Practice: COVID-19-associated hospitalization is associated with underlying medical conditions, particularly hypertension, obesity, chronic metabolic disease, chronic lung disease, and cardiovascular disease.

References:

Garg S, Kim L, Whitaker M, et al. Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019 — COVID-NET, 14 States, March 1–30, 2020. MMWR Morb Mortal Wkly Rep. ePub: 8 April 2020. DOI: http://dx.doi.org/10.15585/mmwr.mm6915e3external icon.

#### Acknowledge Explanation and Close

( Give Us Your Feedback!

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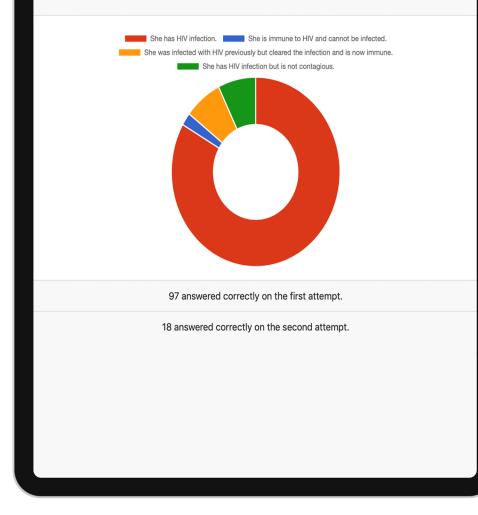
Garg S, Kim L, Whitaker M, et al. Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease 2019 — COVID-NET, 14 States, March 1–30, 2020. MMWR Morb Mortal Wkly Rep. ePub: 8 April 2020. DOI: http://dx.doi.org/10.15585/mmwr.mm6915e3external icon.

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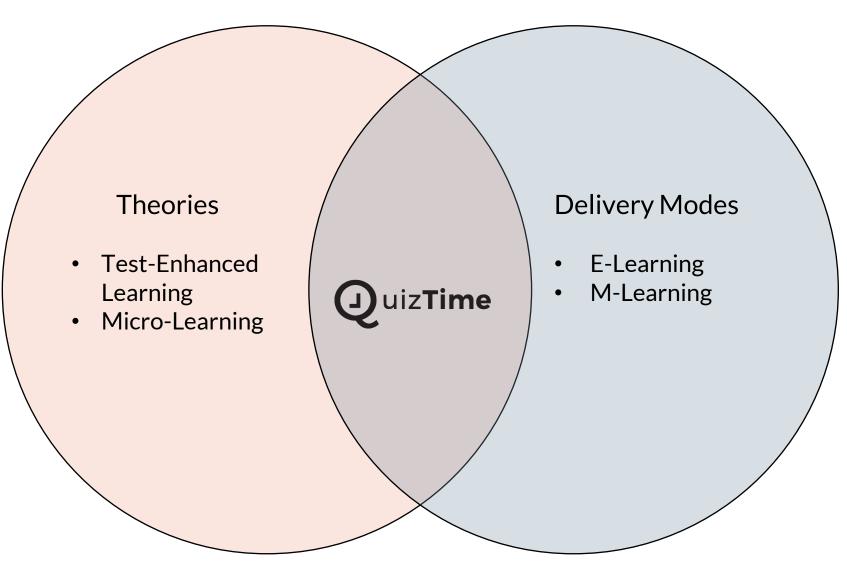
( Give Us Your Feedback!

#### • • • •

Last week, you tested a 37-year-old woman for HIV using an IgM/IgG antibody test (third-generation HIV test). The result returns as "positive for the presence of antibodies to HIV-1", indicating that she is seropositive. She says, "I saw on the news about COVID-19 that antibodies mean I am protected. So, this means I cannot catch HIV, right?" Assuming follow-up testing confirms the initial result, what does her seropositivity mean?



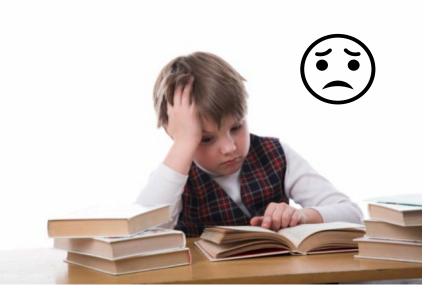
### LEARNING STRATEGIES



#### TEST-ENHANCED LEARNING

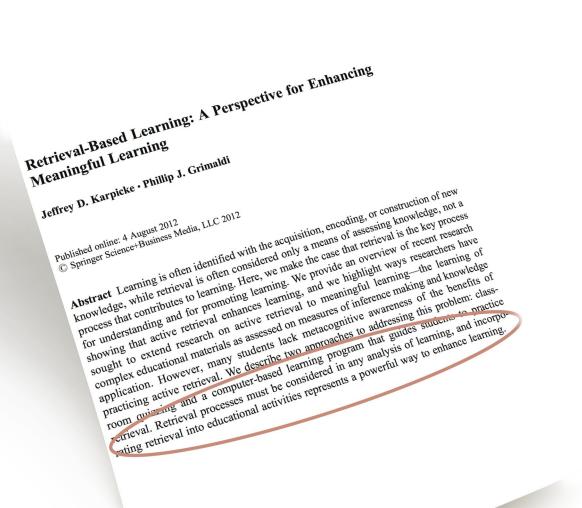
- ✓ Retrieval
- ✓ Feedback
- ✓ Repetition
- ✓ Spacing





"Retrieval processes must be considered in any analysis of learning and incorporating retrieval into educational activities represents a powerful way to enhance learning."

- Cited in Abstract



## MICRO-LEARNING



Small "chunks" of knowledge delivered at a time

Chunks should link to objectives

Objectives should link to a conceptual framework or concept map

Has been utilized most in human resources/workforce training

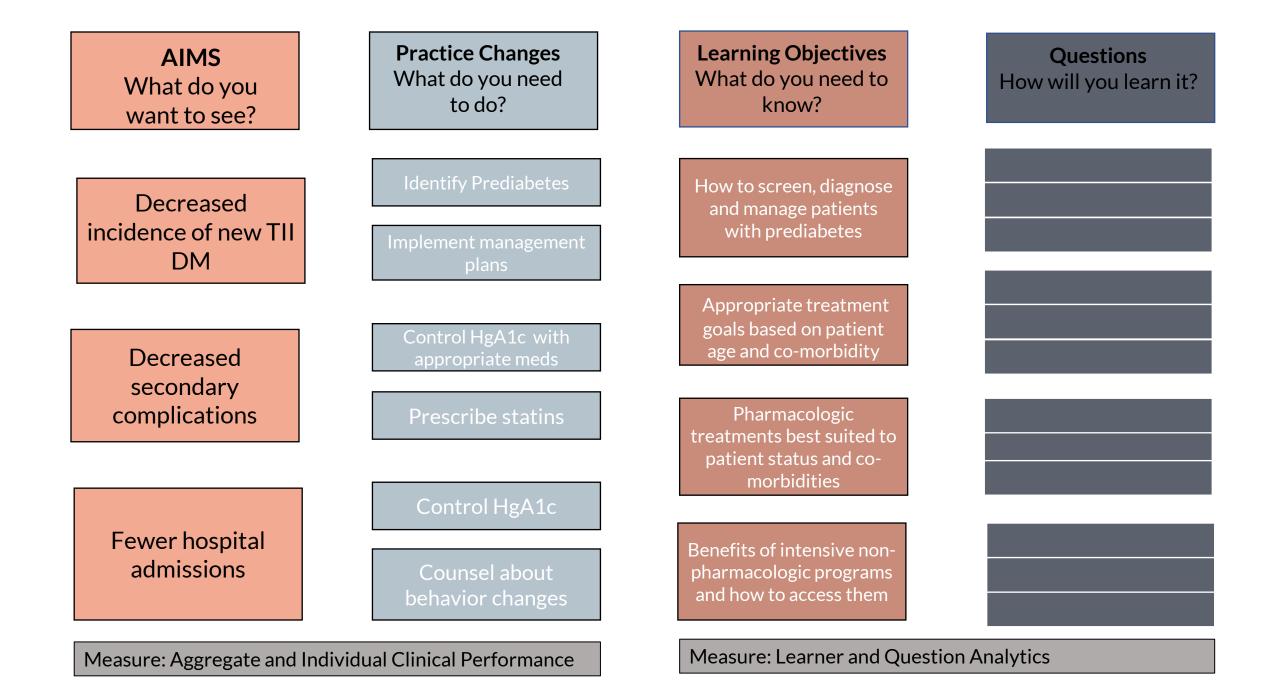
Smaller research base; very little in health professions education

Social micro-learning – Twitter, wikis, chatboards





# CREATING A QUIZTIME COURSE





## CREATING A QUIZTIME COURSE

#### QUIZTIME COURSES







One question each weekday

Usually, 10-20 questions

Individuals can set time and mode of delivery (email vs. SMS)









Questions remain open for 24 or 48 hours. Questions can be resent immediately if answered incorrectly. Unopened items can be resent in a bundle at the end of the quiz.

CME credits awarded if learners engage with 80% of quiz items. Other types of CE available.

#### OTHER FEATURES

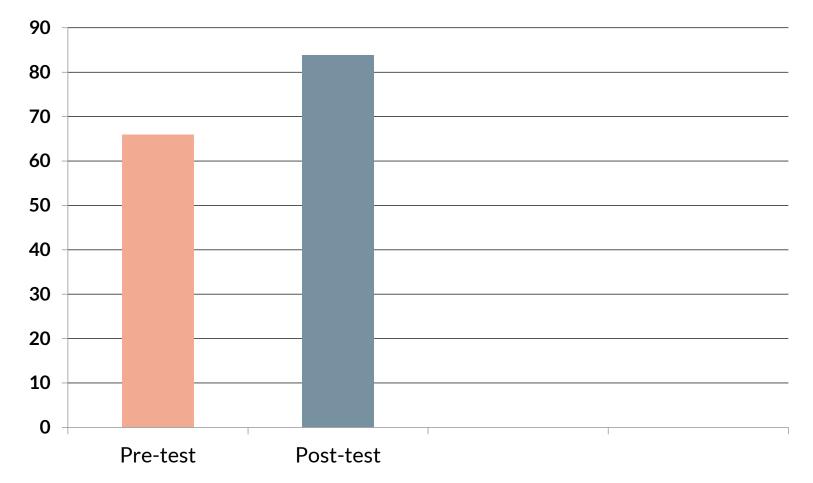
> J Am Coll Radiol. 2019 Mar;16(3):360-364. doi: 10.1016/j.jacr.2018.10.024. Epub 2018 Dec 29.

#### There's an App for That: A Case Study on the Impact of Spaced Education on Ordering CT Examinations

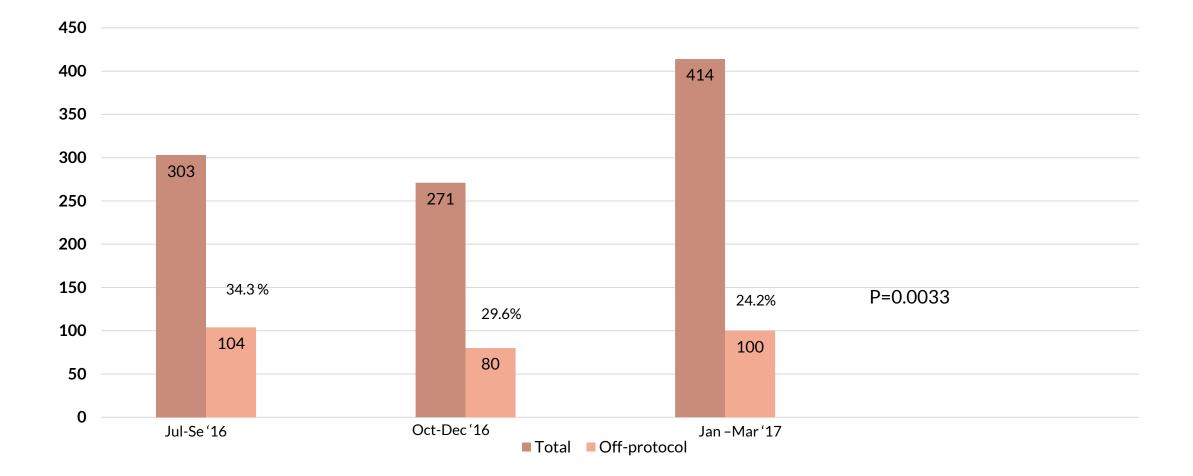
Meaghan Magarik<sup>1</sup>, Leslie C Fowler<sup>2</sup>, Amy Robertson<sup>2</sup>, Jesse M Ehrenfeld<sup>3</sup>, Matthew D McEvoy<sup>2</sup>, Lori A Deitte<sup>4</sup>

### KNOWLEDGE GAINED

% Correct



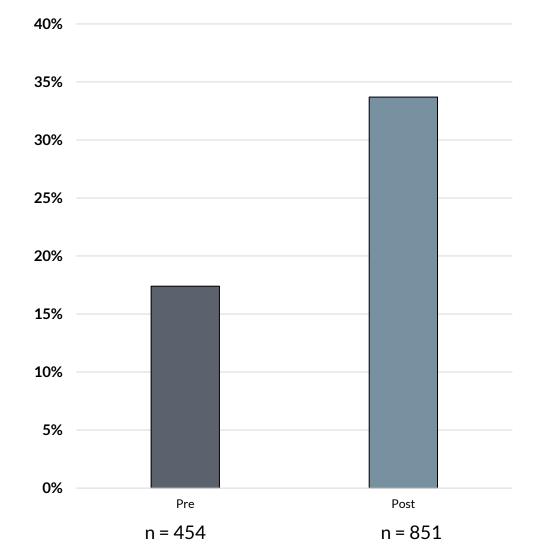
## EFFECT OF QT ON ORDERING



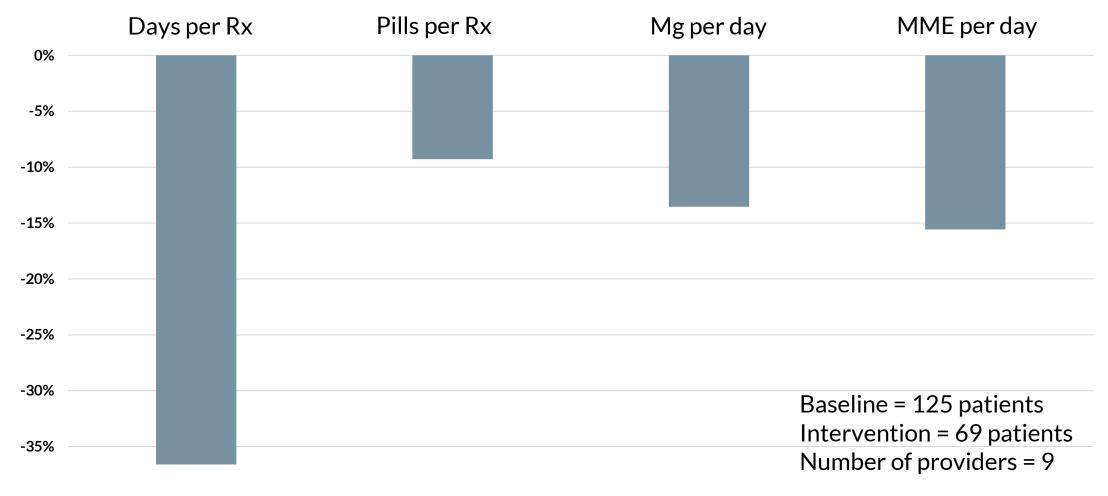
### "FUNCTION FIRST, OPIOIDS LAST" CME PILOT

40 daily questions April – June 2017 Matt McEvoy, Leslie Fowler

#### POST-CAESAREAN DELIVERY: USE OF SCHEDULED NON-OPIOIDS



#### DISCHARGE PRESCRIPTIONS AFTER QUIZTIME



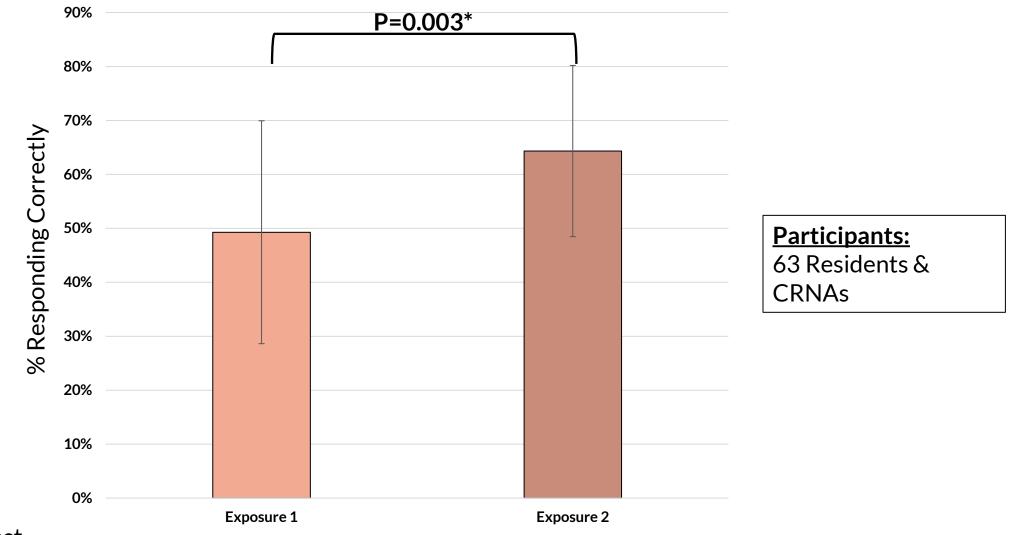
-40%

### ADHERENCE TO TRANSFUSION GUIDELINES

- ASPIRE TRAN 01: Percentage of cases with a blood transfusion that have a hemoglobin or hematocrit value documented prior to transfusion.
- Exclusions:
  - Massive Transfusion: Transfusion of 4 or more units of blood. Note for sites that document transfusions in ml instead of units: If a site has not provided the average amount of blood in atypical unit of PRBCs at their institutions (in ml) ASPIRE will default to 350ml/unit.
  - Estimated Blood Loss ≥ 2000 ml
  - Patients<18 years of age
  - Burn cases
  - ASA 5 and 6

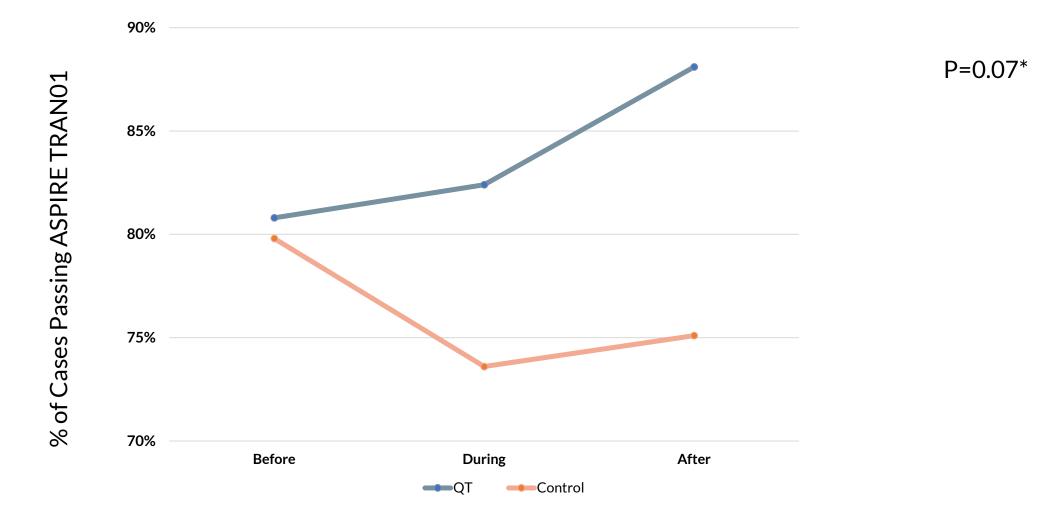
Matt McEvoy, Leslie Fowler

#### SPACED QT MODULES ON TRANSFUSION



\*Paired two-tailed t-test

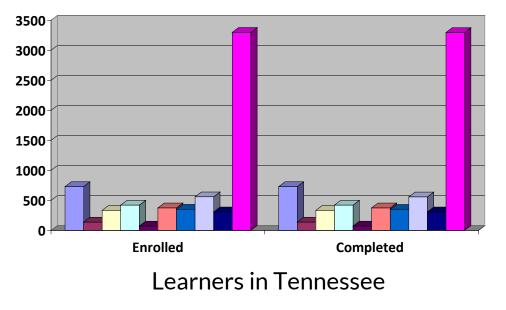
#### IMPACT ON APPROPRIATE TRANSFUSION



\*Comparison via ANOVA for repeated measures of % of transfusions passing ASPIRE TRAN01 criteria

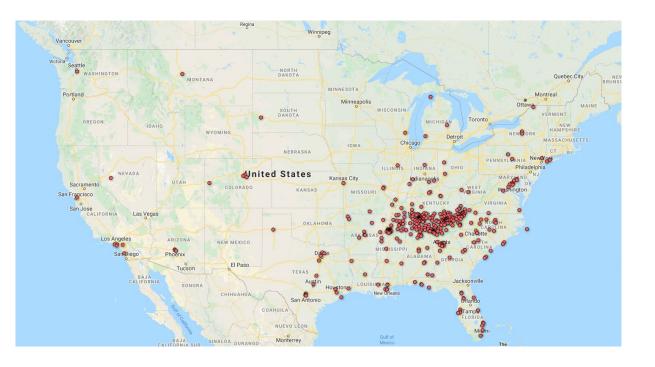
### LEARNING AT SCALE – TDH/CDC OPIOID EDUCATION PROJECT

#### **Enrollments and Completions**





•3298 participants between March and July 2019 •13,500 CE credits awarded



Learners in the US

#### Covid Covid April-May 2020

#### • Student authors:

- Ben Fowler
- Austin Triana
- Jonathan Siktberg
- Colin Dzuro-White
- Editor: Bonnie Miller
- Content expert: Cody Chastain
- ~1100 participants

## QUIZTIME USER FEEDBACK



#### 341 Survey responses



#### 91% satisfaction rate

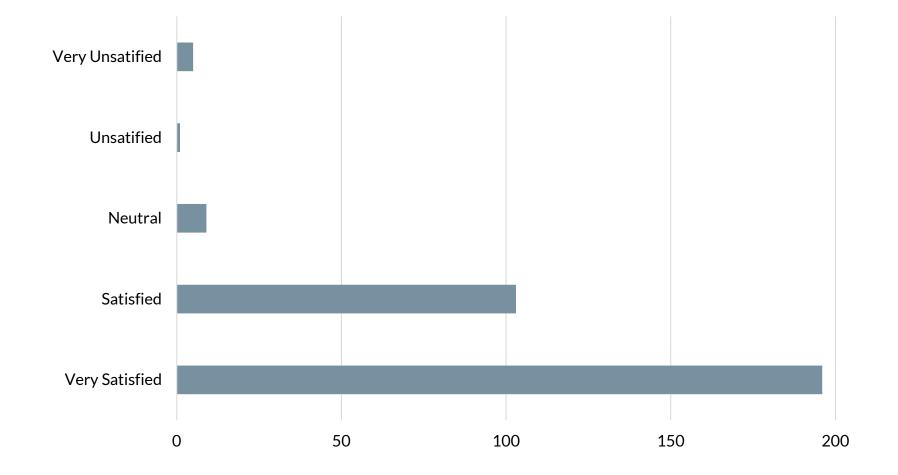


93% would like to see their organization utilize QuizTime

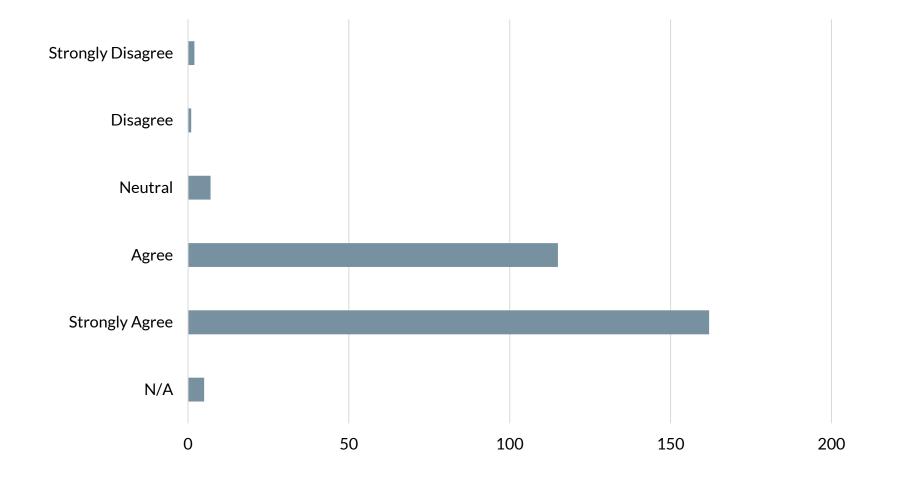


96% agree that it is an effective way of learning

### OVERALL SATISFACTION



### INFORMED CURRENT PRACTICE



### OTHER COURSES- CURRENT OR IN PROGRESS



- Diabetes
- Low Back Pain
- Hypertension
- TDH Preventing Overdose
- Conquering COVID #2
- Spotting Measles
- SEAETC HIV PrEP
- Decisional Capacity
- Pneumococcal vaccination in immunosuppressed patients
- Smoking cessation

### FOR MORE INFORMATION:

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