



**ADVANCEMENT &  
DEVELOPMENT  
PROJECT**

*COMPUTER-BASED TESTING AND PART IV EXAM*





# AGENDA

1. Project Background
2. Proposed CBT Changes
3. Proposed Part IV Changes
4. Discussion

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# PROJECT BACKGROUND

## Collecting feedback

- ACC representation at NBCE board meetings
- Feedback sessions at ACC-RAC with Presidents and CAOs
- Formed an Advisory Board for the Part IV project with 5 representatives selected by the ACC
- Increased faculty participation in Test Development Committees and Standard Setting Committees
- 2019 Listening Tour
- 2021 clinical assessment evaluation
- 2022 Mini Delphi Summit
- Surveys and focus groups with students and State Board representatives

# PROJECT BACKGROUND

## Key Learnings

- Increase opportunities to test
- Manage exam costs
- Update administration methods and content to match DCPs
- Understand the cost of on-campus testing to DCPs and provide off-campus testing opportunities.

# PROJECT BACKGROUND

## Research

- Evaluated other healthcare testing organizations' assessment models
- Evaluated vendor capabilities
- Built multiple financial models with changes to exam development and administration



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# PROPOSED CBT CHANGES

Triple the number of testing opportunities

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
	1	2	3	4	5	6					1	2	3						1	2		1	2	3	4	5	6	
7	8	9	10	11	12	13	4	5	6	7	8	9	10	3	4	5	6	7	8	9	7	8	9	10	11	12	13	
14	15	16	17	18	19	20	11	12	13	14	15	16	17	10	11	12	13	14	15	16	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	17	18	19	20	21	22	23	21	22	23	24	25	26	27	
28	29	30	31				25	26	27	28	29			24	25	26	27	28	29	30	28	29	30					
MAY							JUNE							JULY							AUGUST							
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5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	31	
							30																					
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
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						7			1	2	3	4	5						1	2		1	2	3	4	5	6	7
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	
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22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28	
29	30						27	28	29	30	31			24	25	26	27	28	29	30	29	30	31					

# PROPOSED CBT CHANGES

## Implementation of a modified version of Linear on the Fly Testing (LOFT)

- Algorithm-based development of exam forms that comply with our test specifications.
- Exam forms will be developed and reviewed internally prior to each administration.

## *Why not Computer-Adaptive Testing (CAT)?*

- CAT is still not widely utilized in high-stakes testing, and there is not a lot of vendor support.
- Strains item banks as it requires a lot of questions around the cut.
- Expensive implementation and maintenance, and not required at this point.



# PROPOSED CBT CHANGES

## Elimination of domain-level scoring for Parts I & II

- Examinee will receive one score for Part I and Part II.
- DCPs and students will still receive domain-level performance data.
- Elimination of individual subject retakes. Failing examinees will need to retake the whole exam.

### *Why is this necessary?*

- By using inferences about performance across multiple domains, we can shorten the exam forms which reduces “seat” costs as well as increases the percentage of field test items to build the item bank.
- More accurately reflects curriculum weightings at DCPs.
- Positions us for CAT when that becomes a viable solution.



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# PROPOSED PART IV CHANGES

Stations that mimic a complete patient encounter- from patient history to a treatment decision.

- Exam will be reduced from 25 stations to eight to ten stations.
- Instead of a post-encounter multiple choice question, examinees will write a patient note.

## *Impact*

- Each exam session will now only test eight examinees in the same time it took to test 25.
- Requires more extensive patient training, and a high-caliber of simulated patients.
- Computers and a secure testing software are required for the patient note component.

# PROPOSED PART IV CHANGES

## Video recording of every patient encounter station

- Each patient encounter room will have two cameras, a high-powered microphone, and a speaker for announcements.
- Equipment integrates with a robust software that allows for real-time monitoring and cataloging of videos for remote review and evaluation.

## *Impact*

- Significant up-front investment for equipment and installation.
- Annual maintenance and software contracts based on number of recorded rooms.
- Permanent footprint in patient encounter rooms as well as control rooms for monitoring and secure server storage.

# PROPOSED PART IV CHANGES

Moving the exam to a centralized assessment center in Greeley, Colorado.

- Allows us to offer the exam 3 days a week, 48 weeks out of the year, increasing testing opportunities by 25% with no impact to campus operations.
- Requires construction of an assessment center on our campus.
- There will be additional travel expenses for the majority of examinees.

# PROPOSED PART IV CHANGES

## *Why is this necessary?*

- Cost: To execute this new exam model at our current Part IV test sites on-campus we would increase annual Part IV expenses by 64%. If we move to a centralized testing location, we would be reducing our current annual administration expenses by 6%.
- Exam opportunities and scheduling complications
- Staffing efficiencies and future concerns related to distributed staffing
- Increased standardization and quality
- Ease of future innovation



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# RECAP

Tamara Sterling, *VP of Administration*  
tsterling@nbce.org

## Proposed CBT Changes:

1. Triple the number of testing opportunities
2. Implementation of a modified version of Linear on the Fly Testing (LOFT)
3. Elimination of domain-level scoring

## Proposed Part IV Changes:

1. Stations that mimic a complete patient encounter
2. Video recording of every patient encounter station
3. Moving the exam to a centralized assessment center in Greeley Colorado.

## Discussion Prompts:

- What do you think could go wrong if these changes were implemented?
- What are the most important problems to avoid in completing this project?
- Do these changes solve any other problems?
- What happens if these changes are not made?
- When these projects are completed, what will make you say “I had a voice in this project and my input was valued.”

Please provide your feedback about these proposed changes by selecting “Open Comments” here:

<https://www.nbce.org/adv-dev-2/>