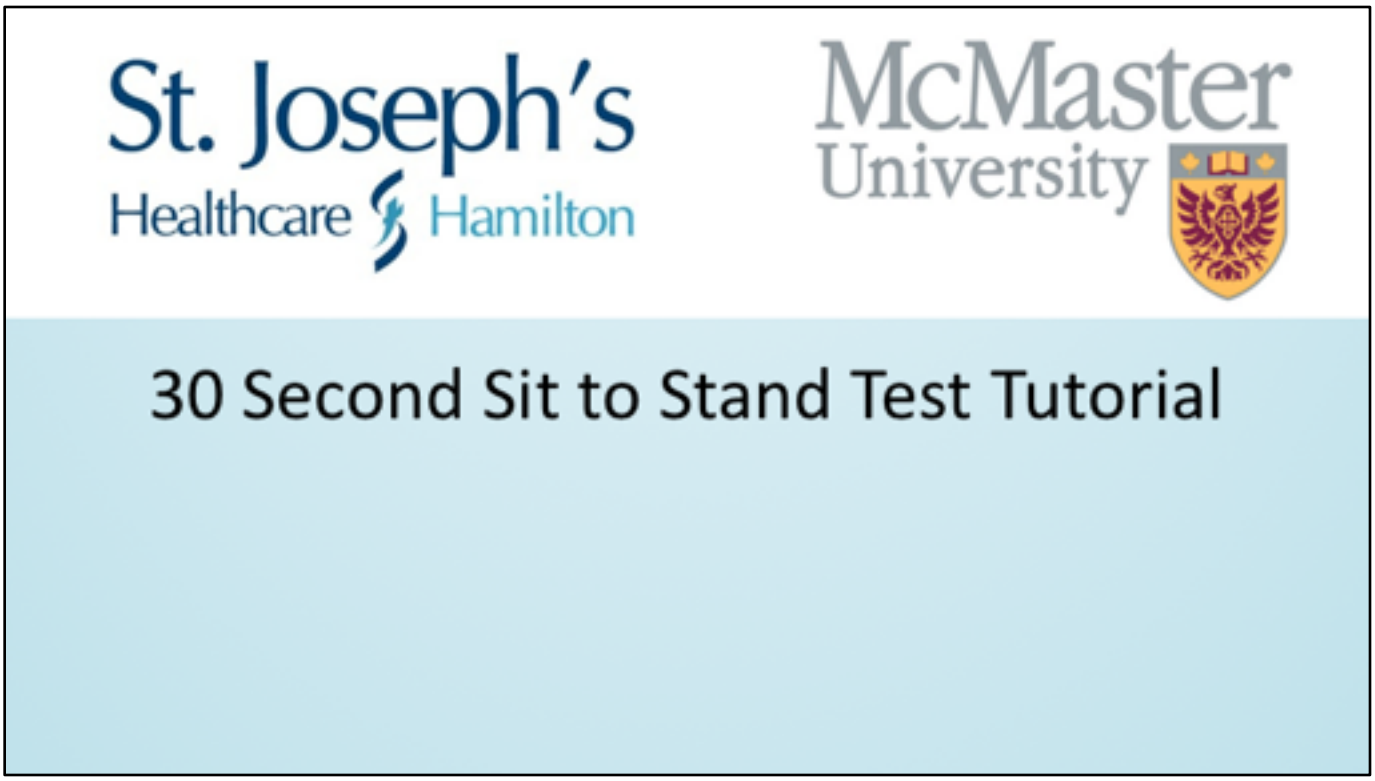


Show this screen with narrator talking overlaid.

"The objectives of this video are to: Describe and demonstrate how to use the 30 second sit to stand test in clinical practice and research, and demonstrate how to score the 30 second sit to stand test."

St. Joseph's Healthcare Hamilton

McMaster University

30 Second Sit to Stand Test Tutorial

The objectives of this video are to:

- Describe and demonstrate how to use the 30 second sit to stand test in clinical practice and research
- Demonstrate how to score the 30 second sit to stand test

Why the 30 second sit to stand test?

- The 30 second sit to stand test is a simple and effective tool that provides a reliable and valid indicator of lower body strength
- Lower body strength is an important factor in maintaining functional ability

"We use the 30 second sit to stand test because it is a simple and effective tool that provides a reliable and valid indicator of lower body strength. Lower body strength is an important factor in maintaining functional ability."

Considerations

- Ideally, this test is done with the participant's arms crossed and held against their chest
  - If the participant is very deconditioned (e.g. critical illness), help may be required for participant safety
  - If necessary, the participant may use a gait aid or the armrests of a chair to help them stand up
- Ensure that any lines or tubes are in a safe position and held in place

EQUIPMENT

To conduct the 30 second sit to stand you will need:

- A stopwatch/clock
- A chair or bed
  - Ensure the participant is in a properly seated position
  - Chair should be 17 inches in height and placed against the wall
  - If in a bed, ensure the brakes are on and the mattress is not overly inflated
- Another person to assist if needed for safety

½ of screen = picture of bed + chair + stopwatch
½ of screen = point form of equipment needed

POSITIONING

Participant positioning

- Seated in the middle of the chair
- Back straight, knees approximately shoulder width apart, and feet placed on the floor at an angle slightly behind the knees
- One foot slightly in front of the other to help maintain balance
- Ideally, the participant's arms should be crossed at the wrists and held against the chest, but this may not be feasible if the participant is very deconditioned

INSTRUCTIONS

Instructions

- Explain to the participant that this is a test of their maximal exercise capacity:
- *"We are trying to determine the maximal number of stands you can complete in 30 seconds"*

Instructions continued

- The tester will first demonstrate 1 repetition

Instructions continued

- The participant then gets opportunity to practice 1 repetition
- This may not be feasible if the participant is very deconditioned
- Ensure you are closely supervising to allow the participant to have as much assistance as they require.

LEVEL OF ASSISTANCE

Level of assistance

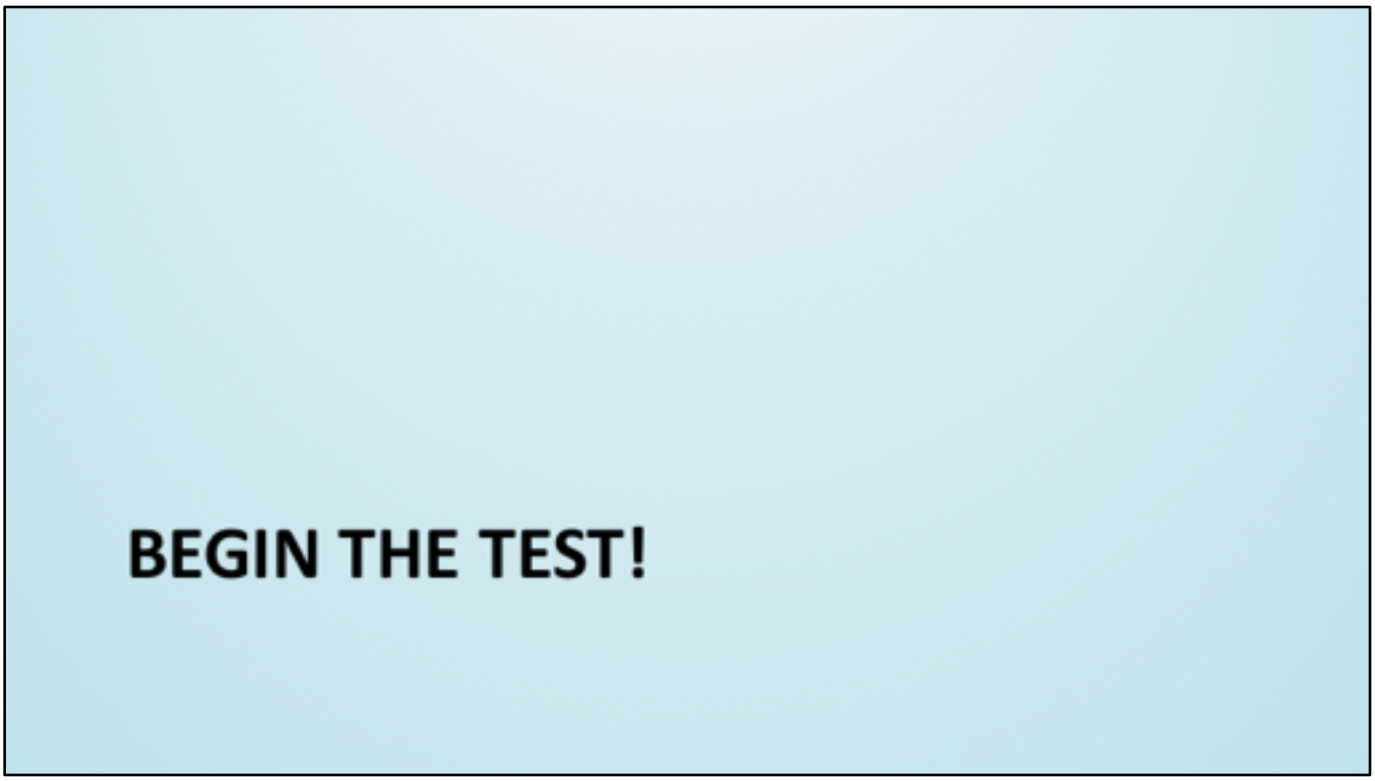
- Take note of whether or not the participant uses the armrests or a gait aid to help them stand up and the level of assistance they require: 0, 1, or 2 person assist
- Record the highest level of assistance required at any point during the test: if the participant needs 1 person to assist to start then 2 people partway through, record the level of assistance as 2 people

Show videos of examples of 0 vs. 1 vs. 2 person assist

SCORING

Scoring

- The 30 second sit to stand test is scored as the total number of stands executed correctly within 30 seconds
- For a correct repetition during the test, the participant must stand fully erect and straight before returning to the initial seated position
- The 30 seconds begins when the tester says go
- If the participant is more than halfway up at the end of 30 seconds, count this as another full stand



To begin, the tester says go

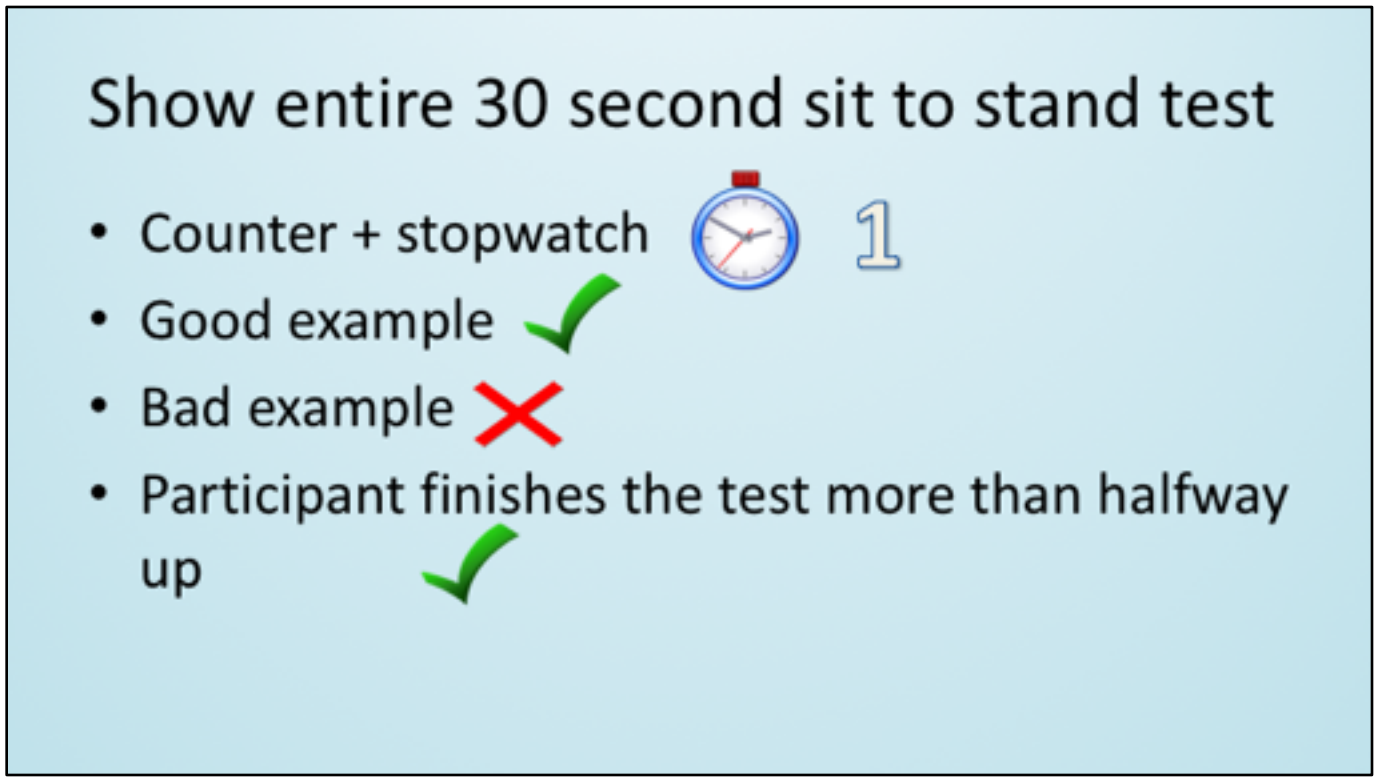
Test Summary

Stand Attempt	Successful attempt?	Why unsuccessful?	Why successful?
1	✓		
2	✗	Did not fully stand	
3	✓		
4	✓		
5	✗	Did not fully sit	
6	✓		More than halfway up at end of test

Total number of stands = 4

This is a summary of our example of the 30 second sit to stand test.
Stand attempt number 2 was unsuccessful because the participant did not stand fully erect and straight.
Stand attempt number 5 was unsuccessful because the participant to did fully sit down.

Stand attempt number 6 was a successful attempt because the participant was more than halfway up when the 30 seconds ended



Counter in the bottom left corner and timer in the bottom right corner.
Tester says "go!"
Side view of participant doing the test, with the chair against the wall.
When the participant does a correct repetition, overlay a green check mark and the counter goes up by 1.

- "Ensure that the participant rises to a full standing position with body and erect and straight and returns back to the initial seated position with every repetition."

When the participant does an incorrect repetition, overlay a red X and the counter does not go up.

- "If the participant does not fully sit down before standing up again or does not stand up straight, it will not count as a correct repetition"

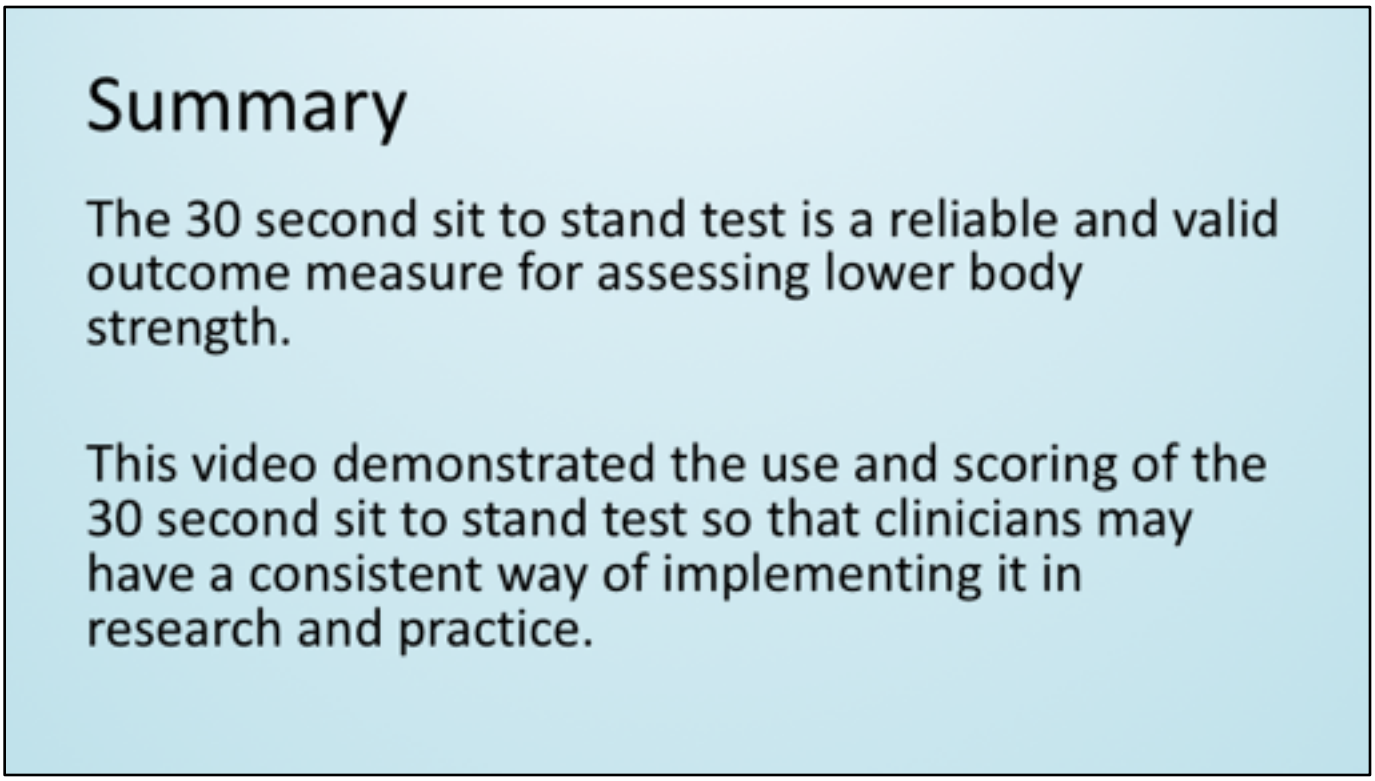
Tester says "stop!" and participant is only halfway up – overlay a green check mark with text "participant is more than halfway up" and counter goes up by 1.

Population Norms

Tveter AT, Dagfinrud H, Moseng T, Holm I. Health-related physical fitness measures: reference values and reference equations for use in clinical practice. Arch Phys Med Rehabil. 2014;95:1366-73.

Distribution of scores on the 30sSTS presented with mean (or median) and 95% CI by sex and age groups (n=370)		
Age group	Women (n)	Men (n)
18-29y	26 (23-29)	27 (25-30)
30-39y	24 (22-27)	27 (25-30)
40-49y	25 (23-27)	29 (27-32)
50-59y	24 (22-26)	25 (23-27)
60-69y	21 (18-23)	24 (22-27)
70-79y	17 (16-19)	19 (17-21)
80-90y	14 (13-16)	17 (15-18)
Total	22 (21-23)	24 (23-25)

"These are reference values for a 30 second sit to stand test for participants in various age groups. These can give an idea about the health-related physical fitness of a participant."



"To summarize, the 30 second sit-to-stand test is a reliable and valid outcome measure for use in critically ill participants. This video demonstrated the use and scoring of the 30 second sit to stand so that clinicians may have a consistent way of implementing it in research and practice."

References

1. Jones CJ, Rikli RE, Beam WC. A 30-s chair-stand test as a measure of lower body strength in community-residing older adults. Res Q Exerc Sport. 1999;70:113-9

2. Tveter AT, Dagfinrud H, Moseng T, Holm I. Health-related physical fitness measures: reference values and reference equations for use in clinical practice. Arch Phys Med Rehabil. 2014;95:1366-73.