

**Timed Up and Go (TUG)****Performance Measure**

Considerations	
Which type of TJA is it appropriate for?	THA and TKA
What part of the TJA continuum is it appropriate for?	Pre-op Acute Post-acute Active Living
What domain(s) does it measure within the ICF?	Activity
Who completes it?	Patient and clinician
What does it measure?	Strength, agility, mobility and dynamic balance through rising from chair, walking short distance and changing direction. <sup>1-2</sup>
What equipment is required?	Standard arm chair (44-46cm seat height; 65 cm arm rest height) backed against wall, stopwatch, tape or other marker on floor 3 m away from chair, usual walking aid
How long does it take?	~ 2 mins to complete and score
How do I do it?	Instructions available at: <a href="http://www.oarsi.org/sites/default/files/docs/2013/manual.pdf">www.oarsi.org/sites/default/files/docs/2013/manual.pdf</a> <a href="http://www.rehabmeasures.org/Lists/RehabMeasures/DispForm.aspx?ID=903">www.rehabmeasures.org/Lists/RehabMeasures/DispForm.aspx?ID=903</a> The patient should use the walking aid (if any) normally used and this should be recorded. <sup>1</sup>
How good is it?	<b>Validity:</b> Construct - Good to excellent, correlates with Berg Balance Scale and gait speed in frail elderly and with quadriceps strength in people with knee OA. <sup>3</sup> Criterion – Older people with hip OA with TUG > 10 secs were 3 times more likely to have a near fall in the previous year. <sup>4</sup> <b>Reliability:</b> Inter-rater - excellent in people with hip OA tested within 7 days. <sup>5</sup> Test-retest - good in patients with advanced hip and knee OA awaiting TJA when retested after 6 months. <sup>6</sup> <b>Responsiveness:</b> Responsive in detecting initial deterioration and subsequent improvement in patients during post-acute phase after TJA. <sup>6</sup> Small effect size (ES = 0.33) in patients with knee OA after physiotherapy treatment. <sup>7</sup> <b>Floor/ceiling effects:</b> Floor effect reported in acutely hospitalized older people with about 25% unable to perform the test. <sup>8</sup> Ceiling effects found 6 months prior to TJA. <sup>6</sup>
How is it scored?	Total time to arise from chair, walk 3 m, turn around, return to chair and sit down. Two trials performed and the faster of the two is recorded to the

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	nearest 10 <sup>th</sup> of a second. <sup>1</sup>
What do the results mean?	<p>Lower value = better performance</p> <p>MDC: 2.49 secs in patients with hip or knee OA awaiting TJA<sup>6</sup></p> <p>MCID: Reductions <math>\geq</math> 0.8-1.4 secs associated with a major improvement in older adults with hip OA<sup>5</sup></p> <p>Time &lt; 20 secs typically indicates independence in most ADL's and outdoor mobility while 20-29 secs indicates probable need for a gait aid and supervision for outdoor mobility.<sup>1,2</sup></p> <p>Normative values available<sup>3</sup></p>
Where can I get it?	<p>Available at:</p> <p><a href="http://www.oarsi.org/sites/default/files/docs/2013/manual.pdf">www.oarsi.org/sites/default/files/docs/2013/manual.pdf</a></p> <p><a href="http://www.rehabmeasures.org/Lists/RehabMeasures/DispForm.aspx?ID=903">www.rehabmeasures.org/Lists/RehabMeasures/DispForm.aspx?ID=903</a></p> <p><a href="http://www.vimeo.com/74649738">www.vimeo.com/74649738</a></p>

## References

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