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From Classroom to Practice: Implementing the Core Set of Outcome Measures in a Student-Led Clinic

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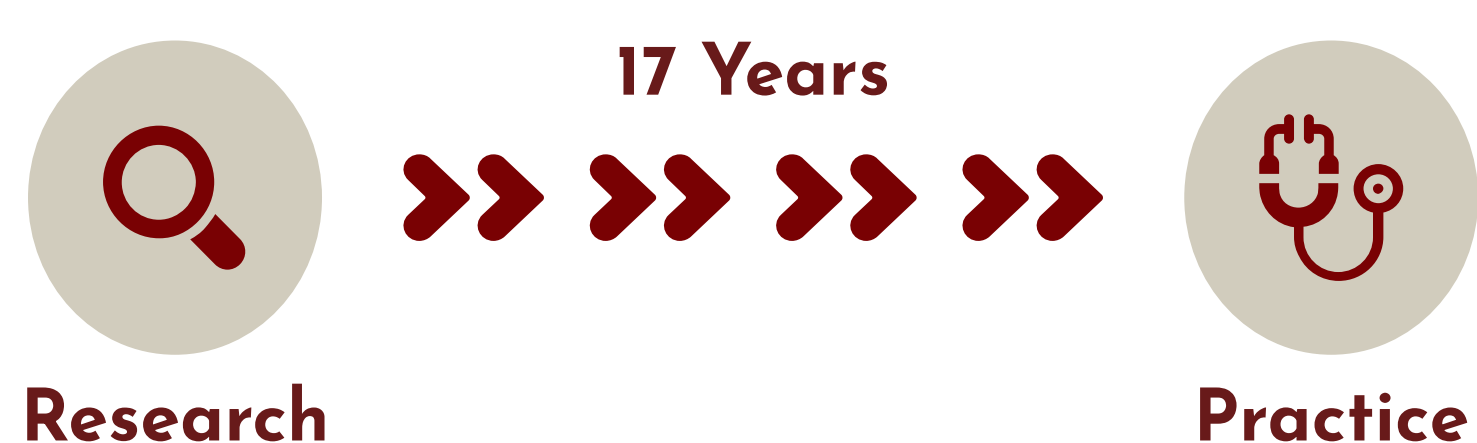
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From Classroom to Practice: Implementing the Core Set of Outcome Measures in a Student-Led Clinic

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Background

Although clinicians generally recognize the utility of Clinical Practice Guidelines (CPGs), there are challenges in implementing CPGs in clinical settings.¹⁻⁵ Prior literature suggests that knowledge synthesis (i.e. CPGs or systematic reviews) and dissemination (i.e. peer-reviewed journals) are not sufficient to facilitate behavior change in healthcare systems, clinicians, or other stakeholders.^{2,6-8} Translating research to clinical practice is essential for an evidence-based practice approach to healthcare.⁹ Prior to the Academy of Neurologic Physical Therapy's (ANPT) publication of the Core Set of Outcome Measures (CSOMs) for Adults with Neurologic Conditions CPG in 2018, all recommended outcome measures (OMs) were included in the University of Puget Sound (UPS) School of Physical Therapy curriculum. Beginning Fall 2018, the didactic instruction was modified such that the CPG action statements were emphasized, clinical decision-making for administration of the CSOMs was instructed as outlined in the CPG, and ANPT knowledge translation tools were utilized in the core curriculum (see Figure 1 for timeline of events).



Purpose

- 1 To determine whether utilization of CSOMs in a student-led neurologic outpatient physical therapy clinic changed after students received intentional didactic instruction on CPG utilization.
- 2 To determine whether any OM utilization frequency changed.

Methods

N=390
Student physical therapist - patient interactions

DATA COLLECTION
Electronic medical records collected for all patients who attended UPS's neurologic on-site clinic between 2017 and 2022.

DATA CODING
Data coded by diagnosis, semester, ambulatory status, and outcome measures conducted at initial evaluation and discharge.

STATISTICAL ANALYSIS
Descriptive and inferential statistical tests were conducted using non-parametric methods via SPSS.

After intentional didactic instruction, student physical therapist utilization of the ANPT's Core Set of Outcome Measures significantly increased.

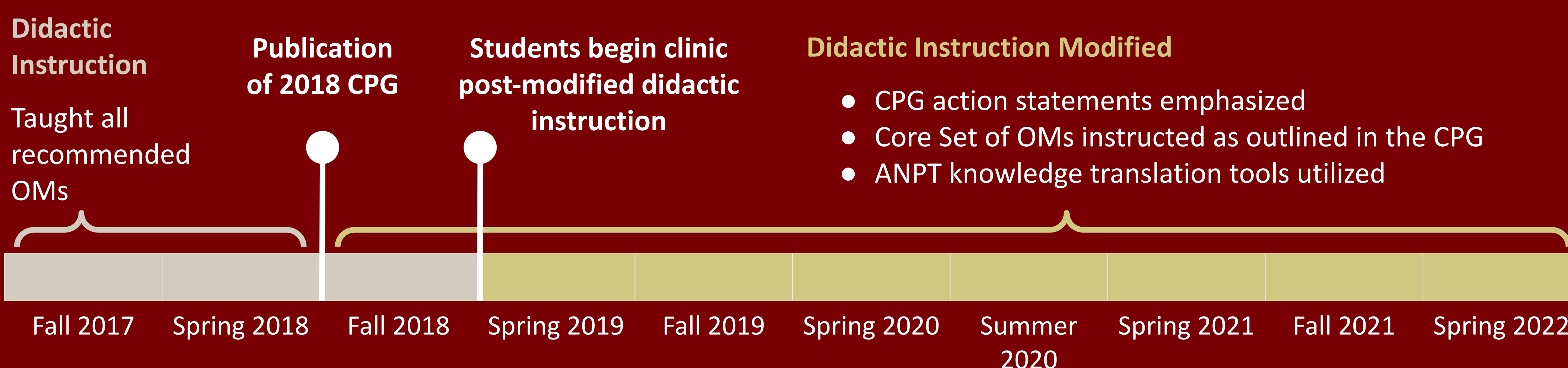
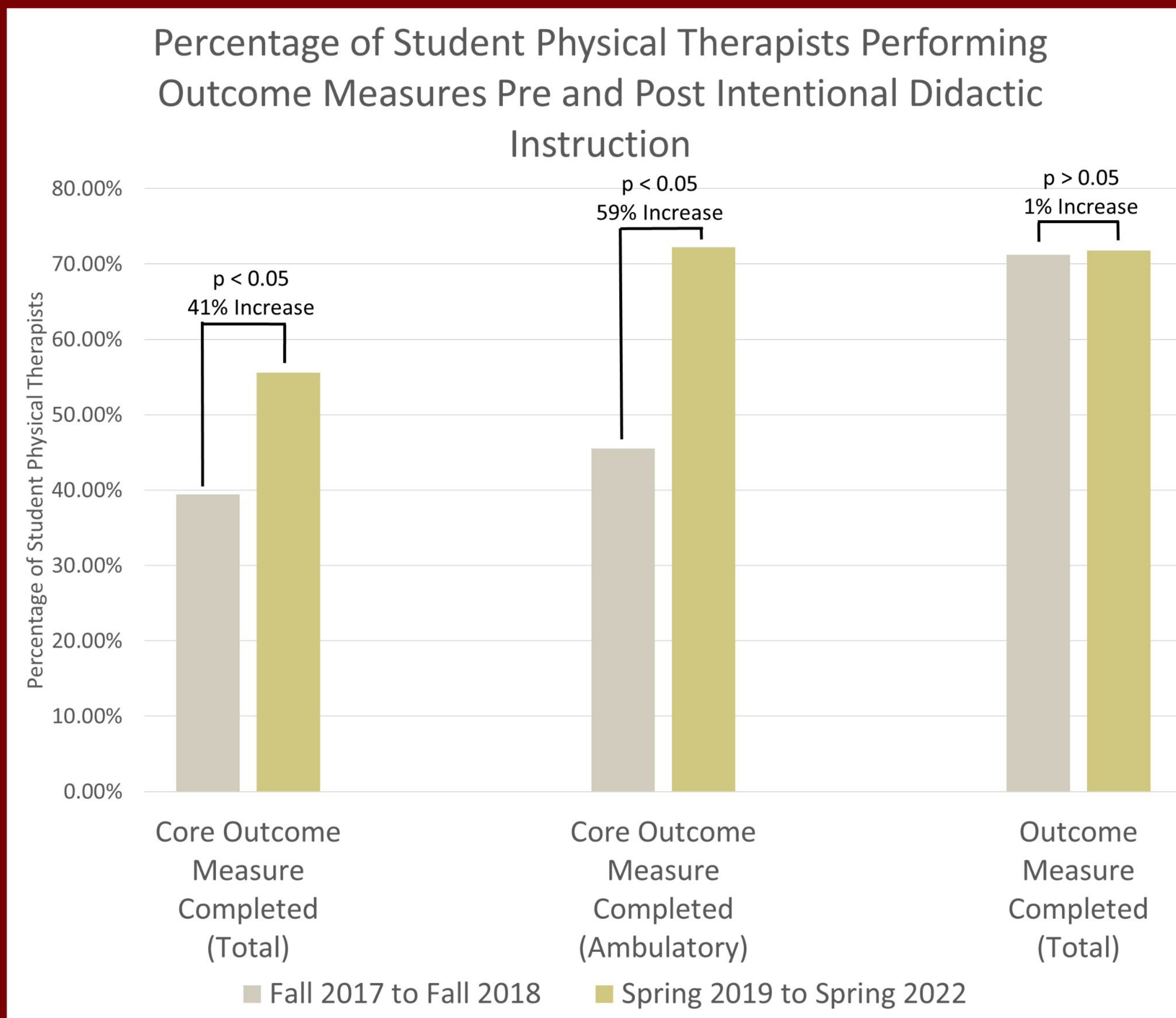


Figure 1. Timeline of events prior to data collection

Results

After instruction of the Core Set of OMs for Adults with Neurologic Conditions CPG, utilization of the core set of OMs increased by 41% overall and 59% for ambulatory patients. Prior to fall 2018, the most frequently utilized OMs were the Timed Up and Go (TUG), 5 Times Sit to Stand (5xSTS), Dynamic Gait Index, and Four Square Step Test. Following publication and instruction of the CPG, the most frequently utilized OMs were the TUG, 5xSTS, ABC, and FGA. The frequency of overall utilization of any OM did not change.

Top 4 Outcome Measurements by Diagnosis					
	Rank	Cerebral Vascular Accident	Spinal Cord Injury	Traumatic Brain Injury	Parkinson's Disease
Fall 2017 to Fall 2018	1	TUG	TUG	TUG	TUG
	2	5xSTS	6MWT	6MWT	FSST
	3	FSST	DGI	DGI	DGI
	4	DGI	5xSTS	FIST	30sSTS
Spring 2019 to Spring 2022	1	5xSTS	6MWT	TUG	TUG
	2	TUG	5xSTS	5xSTS	ABC
	3	6MWT	TUG	BBS	5xSTS
	4	ABC	BBS	FIST	MiniBEST

■ Core Outcome Measure □ Non-Core Outcome Measure

Abbreviations ABC: Activities-Specific Balance Scale, BBS: Berg Balance Scale, DGI: Dynamic Gait Index, FIST: Function in Sitting Test, FSST: Four Square Step Test, MiniBEST: Mini Balance Evaluation Systems Test, TUG: Timed Up and Go, 30sSTS: 30 Second Sit to Stand, 5xSTS: 5 Time Sit to Stand, 6MWT: 6 Minute Walk Test

Discussion

To the authors' knowledge, no studies have examined whether the introduction of a CPG and the intentional use of knowledge translation resources in a didactic setting elicits behavior change for students in an entry-level physical therapist education program. The results indicate a significant increase (59% in ambulatory patients) in the utilization of CSOMs from pre to post intentional didactic instruction with minimal change in overall utilization of OMs (0.60% increase). These results indicate that while overall OM usage stayed steady, utilization of CSOMs became much more prominent. CSOMs replaced the use of other OMs that may have lacked evidence or validity in the specific patient population or presentation. While certain barriers still exist to translating knowledge into the student-led clinic, focused didactic instruction appears to be effective in increasing utilization of CSOMs.

Conclusion

Knowledge translation tools can be incorporated in classroom instruction to facilitate changes in behavior in clinical practice for student physical therapists.

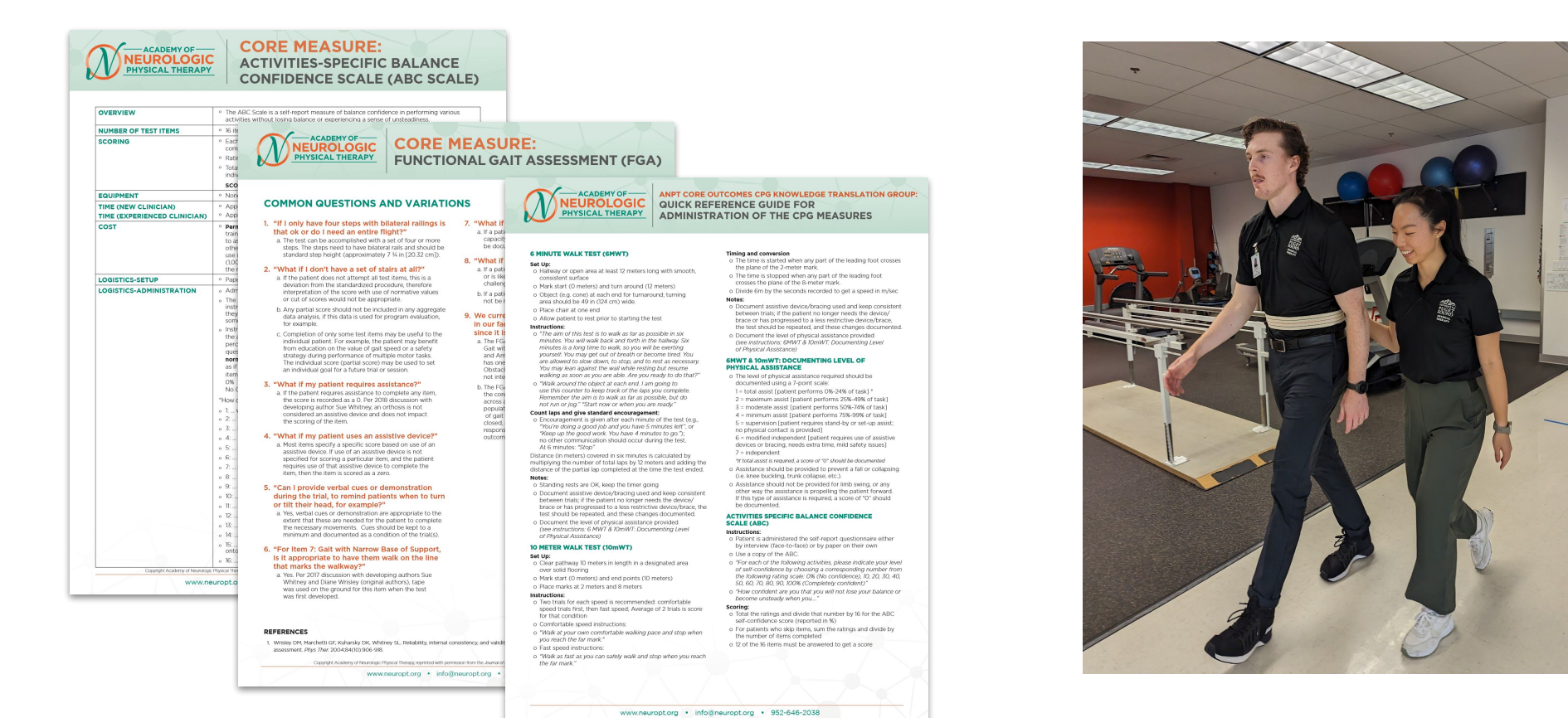


Figure 2 (Left) ANPT's knowledge translation tools utilized in didactic labs. Figure 3 (Right) Students in class practicing the 10mWT.

References

