

# #3392 OBJECTIVE MEASUREMENT OF CANCER-RELATED FATIGUE: CLINICAL AND RESEARCH IMPLICATIONS

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## INTRODUCTION

- Cancer-related fatigue (CRF) is one of the most common yet under-reported cancer symptoms.
- Despite behavioral correlates and prevalence, the pathophysiology is poorly understood.
- CRF mechanisms is central, peripheral, or both.
- Patient-reported outcome measures cannot provide insight into multifactorial pathophysiology alone.
- Objective measures are crucial for pathophysiology and have significant clinical and research implications.

## METHODS

- This narrative review was conducted in two phases.

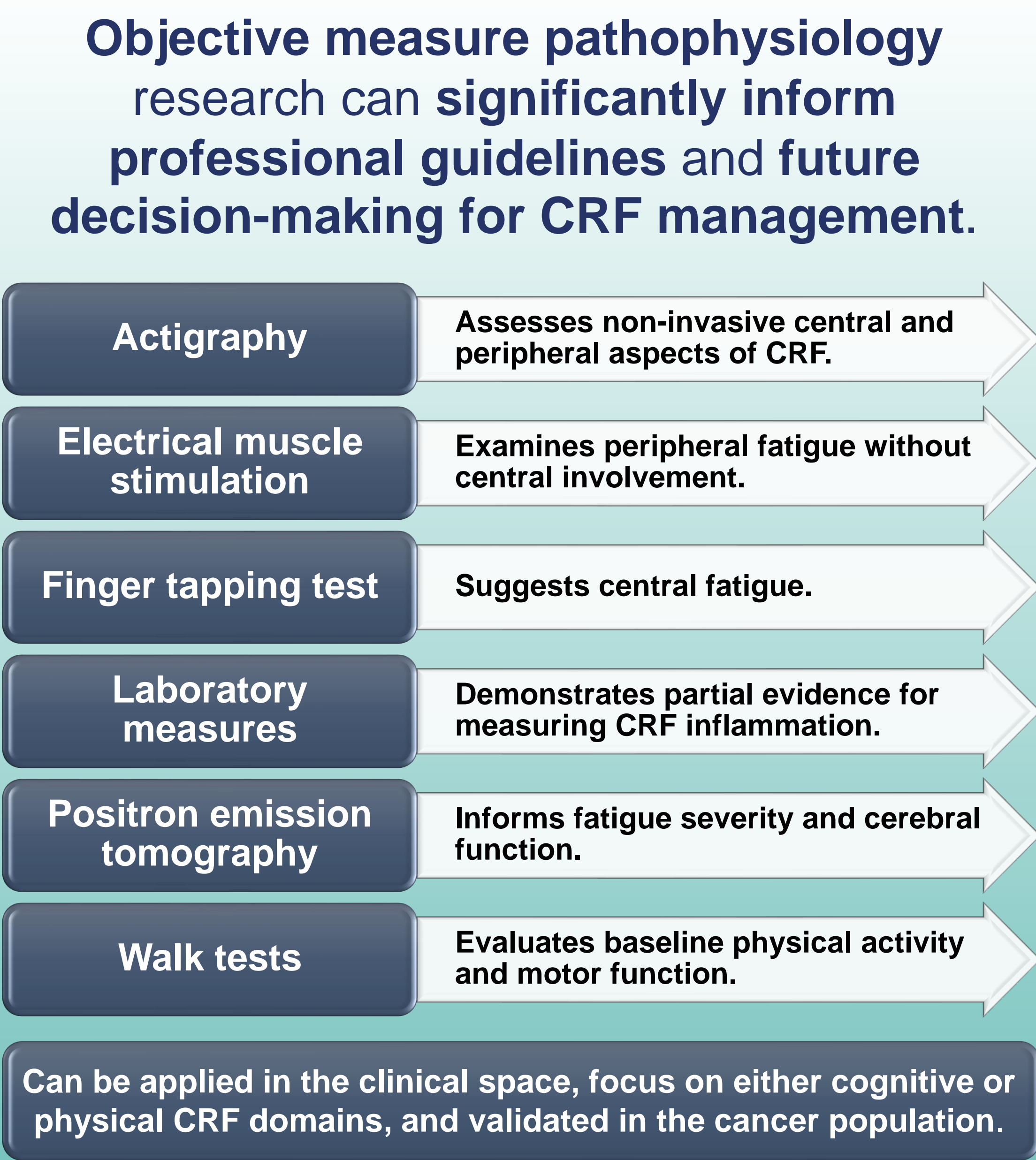
2018

First, CRF-focused studies published through peer review

2024

Second, search results to identify more recent CRF publications

- Professional guidelines were considered; editorials, letters to the editor, or abstracts excluded.
- Literature was reviewed where cognitive or physical CRF was the primary outcome.



## RESULTS

- Sixteen objective CRF measures were identified.
- Six measures (TABLE) are highlighted.
- No professional guideline-informed consensus on the objective measurement of CRF exists.

Practicalities and Clinical Utility*	Bedside
Wrist-worn device during sleep; inexpensive; no expertise.	✓
Two types, surface or needle (invasive); specialized equipment of variable expense; training to apply and analyze.	✓
Device to record tapping number and inter-tap intervals; 10-20 second trials (recommended 3 times); specialized equipment of variable expense; analysis requires statistical software.	✓
Blood draw; specialized equipment of variable expense.	✓
It may be cost-prohibitive, frequent maintenance, or specialty expertise.	✓
Needs a chair, stopwatch, and tape measure; a 10- to 14-m walkway; inexpensive; easy to administer in the clinic, no special training.	✓

## CONCLUSION

- Integrating objective measure(s) with patient-reported measures can support CRF management decision-making.