EDITORIAL

# Cognitive Screening in Aging Physicians

## Faith in Numbers

Lawrence J. Whalley, MD

*Neurology: Clinical Practice* April 2021 vol. 11 no. 2 89-90 doi:10.1212/CPJ.0000000000000833

**Correspondence**
Dr. Whalley
l.j.whalley@abdn.ac.uk

**RELATED ARTICLE**

Cognitive Impairment in Aging Physicians: Current Challenges and Possible Solutions
Page 167

Systematic screening of the cognitive health of older physicians could improve clinical care and reduce medical errors. This claim is difficult to evaluate because clinical decisions rely on a spectrum of knowledge. Comprising scientific evidence, experience, ethical principles, fairness, and personal values, this range varies among physicians. After a lifetime of effort, it seems impossible to understand how an individual clinician has assembled these diverse influences into a framework of knowledge, skills, and values to guide clinical decision making. Nevertheless, the opinion is sometimes expressed that older physicians hold archaic fixed views, unresponsive to medical progress, and remain embedded in a defensive style of practice. If true, this invites simplistic explanations of the behavior of older physicians, open to misinterpretation in ways that fail to appreciate the complexity of clinical decision making.

The United States faces meeting increasing numbers of older patients with an aging physician workforce whose clinical practice may appear idiosyncratic. An unknown number of older physicians will be cognitively impaired. The question follows: do older physicians make more mistakes? This is difficult to answer. Medical malpractice claims, for example, appear more often to arise from failures of doctor patient communication than cognitive error,[1] although age may be linked to more frequent medical mistakes in some specialties.[2]

In this issue of *Neurology: Clinical Practice*, Devi et al.[3] set out issues arising in the detection of age-related cognitive impaired physicians and propose a possible 2-stage solution for discussion. Their proposal requires faith in the validity and reliability of cognitive test scores of physicians and their relationships with clinical competence. This is not straightforward. Physicians are well educated with high mental ability who have benefited from intellectually demanding training. As such, it seems reasonable to presume older physicians fare better than average when making good age-related cognitive impairments in ways that could mask underlying progressive neurodegenerative disease.[4] In nonpathologic cognitive aging, there is uneven decline among cognitive abilities. Repositories of knowledge (crystallized intelligence) are well preserved and can increase with age, whereas mental speed, abstract reasoning, and spatial/motor skills (fluid intelligence) decline.[5] Notwithstanding, substantial variation occurs between older people, and, for example, although men and women decline at similar rates, sex differences between cognitive domains persist.[6,7] Devi et al.[3] avoid consideration of the effects of such normative cognitive decline and focus on the detection of underlying neurodegenerative disease. They believe that their first stage of assessment will achieve this. Although reasonable, it will not identify those few aging physicians with uncommon cerebral diseases or substance abuse.[8] These can present as nonamnestic dementia-like syndromes with changes in temperament and disruptive behavior. Such presentations require additional information from knowledgeable informants.

Regulatory authorities and employers face competing demands to manage the availability of physicians while maintaining the safety of patients, full transparency, and anticipating claims from employment attorneys. Threatened physicians can feel unfairly treated and challenge results of cognitive appraisal with ensuing costly court actions. Devi et al.[3] describe how neurologists could assess cognitively impaired physicians. They describe wide variation within the United States

Institute of Applied Health Sciences, University of Aberdeen, Aberdeen, United Kingdom.

Funding information and disclosures are provided at the end of the article. Full disclosure form information provided by the authors is available with the full text of this article at Neurology.org/cp.

among pathways (that include Physician Health Programs) toward satisfactory resolution of the issues arising. Without being prescriptive, their 2-stage process should be acceptable to most physicians and likely meet requirements to ensure safe practice and full transparency. As a first stage, they discuss options among cognitive screening tests and choose scores falling more than 2 SD below adjusted norms as indicative of cognitive impairment of serious concern and likely to yield minimal numbers of false positives. Physicians who meet this criterion would progress to a detailed confidential evaluation, whereas those falling between 1 and 2 SD below the same norms would require a negotiated form of surveillance and repeat assessments perhaps after 1 or 2 years. Some might regard this cutoff as providing insufficient protection for patients for 3 reasons. First, it would miss some physicians with milder forms of cognitive impairment whose clinical practice is unsafe. Second, it would not identify the early phase of those uncommon dementia syndromes with loss of insight and poor interpersonal judgment who retain most other cognitive functions. Third, reliance on a cutoff score on 1 or more cognitive tests may be misplaced in some physicians with underlying health problems such as disturbances of mood.[9] A cautious approach is needed to avoid missteps when explaining scores and their implications with opportunities to consider those factors that typically confound normative performance on cognitive tests in long-term studies.

On balance, it appears best to regard their proposals as interim measures that aim in a limited way to win acceptance by older physicians of regular cognitive screening. Nonetheless, the Numbers Game is not a trivial matter: it can be played in the minds of physicians worried about their declining cognitive health. Faced with possible revocation of a license to practice medicine, an aging physician may sense coercion to undergo unwanted cognitive testing and the devastating threat of loss of employment. They may feel mortally exposed by scoring below a threshold on a cognitive test. Indeed, there are instances of physician suicides occurring in these exact circumstances. Unsurprisingly, a conscientious physician faced with private or public concerns about age-related cognitive impairment can feel vulnerable and unable to disentangle self-interest from the needs of self.[10] On the one hand, self-interest arises from obligations to maintain a particular lifestyle to meet enduring financial commitments, whereas the needs of self are more intimately related to self-esteem and status. Although public safety must remain a priority, fellow physicians share a collegial responsibility to care and support older physicians who wish to continue in practice. This can never be overlooked and should be embedded in future health care systems.

## Author Contributions

L.J. Whalley: drafting/revising the manuscript.


## Study Funding

No targeted funding reported.


## Disclosure

The author reports no disclosures relevant to the manuscript. Full disclosure form information provided by the authors is available with the full text of this article at Neurology.org/cp.

## References


1. Jena AB, Schoemaker L, Bhattacharya J, Seabury SA. Physician spending and subsequent risk of malpractice claims: observational study. BMJ 2015;351:h5561.
2. Baxter AD, Boet S, Reid D, Skidmore G. The aging anesthesiologist: a narrative review and suggested strategies. Can J Anesth 2014;61:865–875.
3. Devi G, Gitelman DR, Press D, Daffner KR. Cognitive impairment in aging physicians: current challenges and possible solutions. Neurol Clin Pract 2021; 11:167–174.
4. O'Bryant SE, Humphreys JD, Smith GE, et al. Detecting dementia with the mini-mental state examination in highly educated individuals. Arch Neurol 2008;65: 963–967.
5. Horn JL, Cattell RB. Age differences in fluid and crystallized intelligence. Acta Psychol (Amst) 1967;26:107–129.
6. Miller DI, Halpern DF. The new science of cognitive sex difference. Trends Cogn Sci 2014;18:37–45.
7. McCarrey AC, Yang A, Kitner-Triolo MH, Resnick SM. Sex differences in cognitive trajectories in clinically normal older adults. Pyschol Aging 2016;31:166–175.
8. Brooks E, Gendel MH, Parry AL, Humphreys S, Early SR. Challenging cognitive cases among physician populations: case vignettes and recommendation. Occup Med (Lond) 2017;67:68–70.
9. Graziane JA, Beer JC, Snitz BE, Chang CCH, Ganguli M. Dual trajectories of depression and cognition: a longitudinal population-based study. Am J Geriatr Psychiat 2016;24:364–373.
10. Onyara B, Bohnen J, Wasylnki D, et al. Reimagining the self at late-career transitions: how identity threat influences academic physicians' retirement considerations. Acad Med 2015;90:794–801.