# **November 11 Highlight and Commentary**

# MCI case definitions change the prevalence, not the outcomes

Fisk et al. found that although various mild cognitive impairment (MCI) case definitions resulted in as much as a threefold increase in prevalence estimates, all yielded similar risks of institutionalization and dementia. Interestingly, with each case definition, almost 30% of people had no cognitive impairment after 5 years.

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## Mild cognitive impairment as a useful clinical construct

Commentary by Ronald C. Petersen

Mild cognitive impairment (MCI) is gaining acceptance as a clinical concept, and as more research is being done, at least two issues need to be addressed in greater detail: 1) clarification of the clinical criteria; and 2) prevalence of the disorder in the community.<sup>1</sup> With respect to the clinical criteria, recent work has recognized the heterogeneity of subtypes of MCI.<sup>2</sup> As is shown in the figure, MCI can be viewed from any of three perspectives: 1) amnestic MCI with a primary memory disorder that likely progresses to clinically probable Alzheimer's disease; 2) multidomain MCI, in which memory is usually mildly impaired in addition to other cognitive domains, such as language and attention; and 3) single nonmemory domain MCI, in which a nonmemory cognitive domain is most notably impaired.

With all of these subtypes of MCI, the activities of daily living are largely preserved, and, most importantly, the patient does not meet clinical criteria for dementia. In this issue, Fisk et al. evaluate the utility of the individual criteria for amnestic MCI and conclude that a memory complaint and the requirement for preserved instrumental activities of daily living may not be necessary. Although these findings are interesting, one has to be cautious about discarding the requirement for intact instrumental activities of daily living because their preservation is required for excluding dementia. Finally, it must be emphasized that the diagnosis of MCI is clinical and does not rely on cutoff scores on cognitive instruments.

The investigators also address the prevalence of amnestic MCI and report a rate of approximately 3% in the population aged 65 years and older. This is a reasonable estimate for this subtype of MCI; however, data from the Cardiovascular Health Study indicate that the amnestic form of MCI may be less frequent than the multiple domain subtype of MCI.<sup>3</sup> Consequently, the overall prevalence of MCI in the population may be considerably higher, possibly approaching 10%.

#### References

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