Early dementia detection and management

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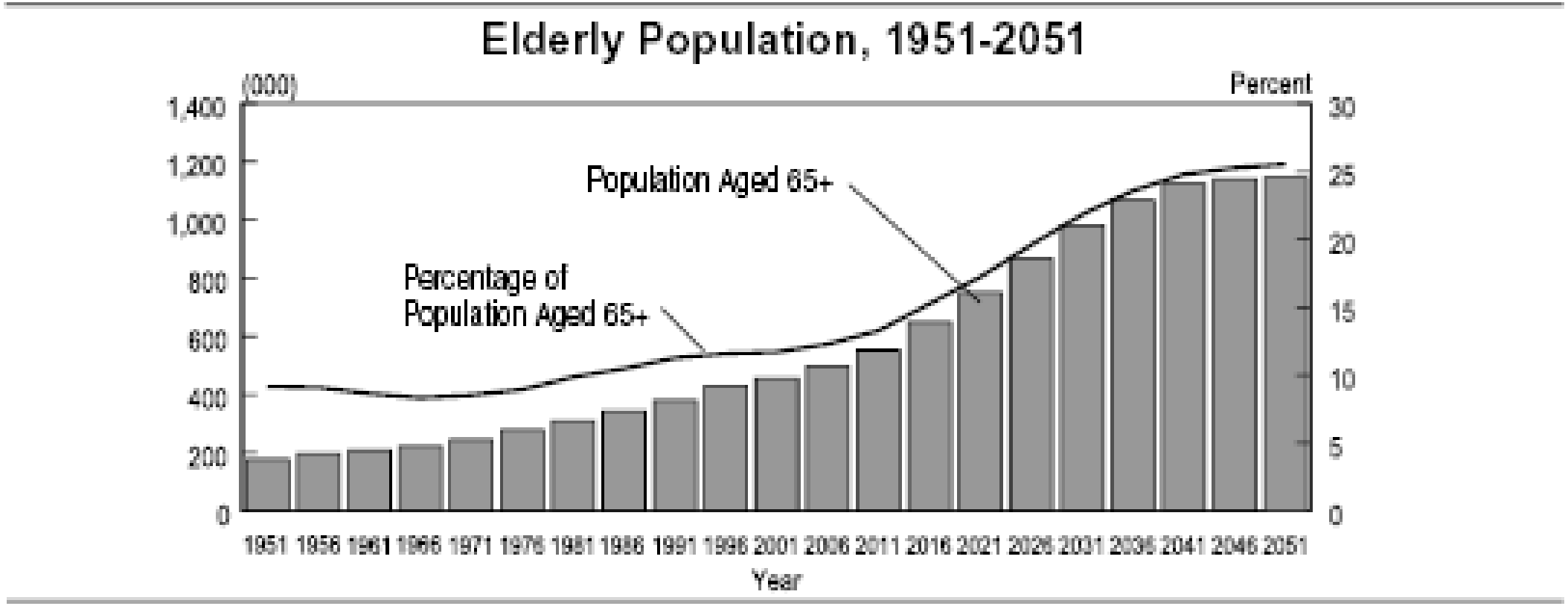
GERIATRICIAN

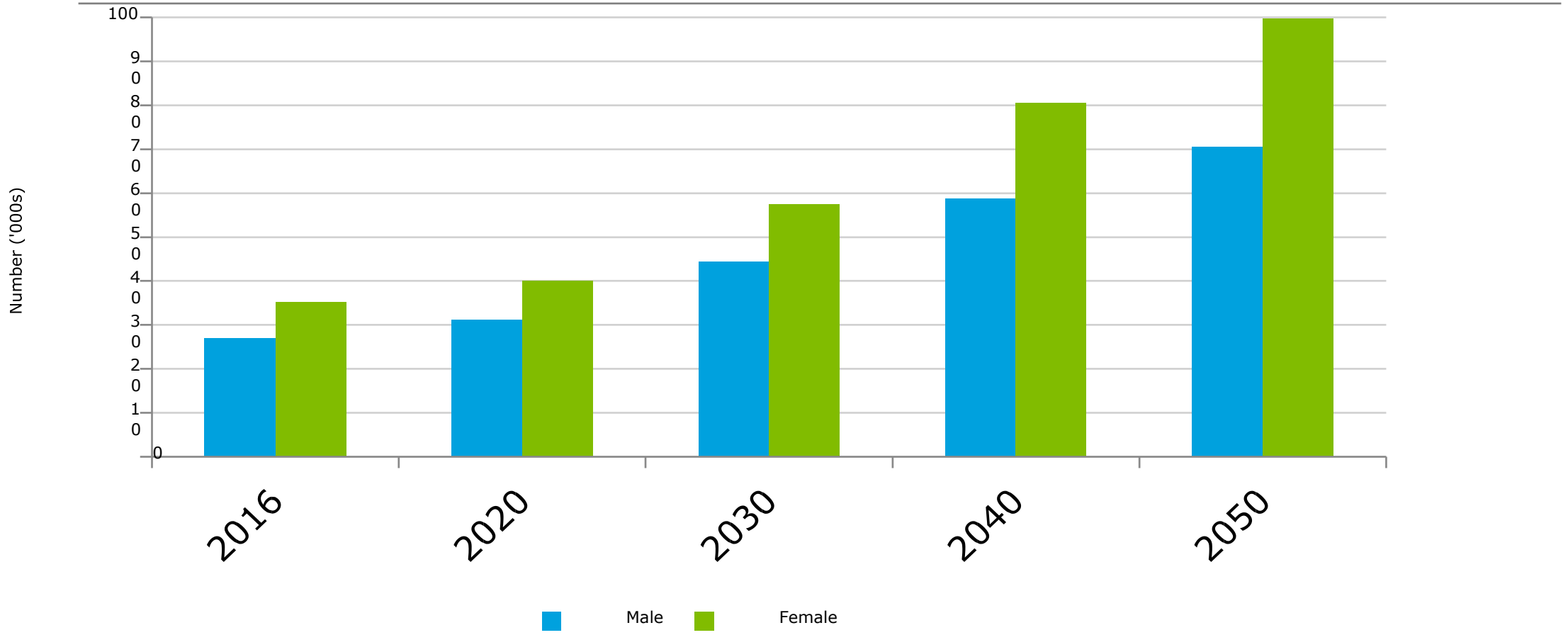
Aging population

Figure 1



Source: Stats NZ

Prevalence projections by gender, New Zealand, 2016 to 2050



Source: Deloitte Access Economics calculations

DSM-5: “Major Neurocognitive Disorder”

1. **There is evidence of substantial cognitive decline from a previous level of performance in one or more of the domains outlined.**
   - **complex attention,**
   - **learning and memory,**
   - **executive ability,**
   - **language,**
   - **visuoconstructional-perceptual ability, and**
   - **social cognition**
2. **The cognitive deficits are sufficient to interfere with functional and instrumental independence.**
3. **The cognitive deficits do not occur exclusively in the context of a Delirium, and**
4. **The cognitive deficits are not primarily attributable to another mental disorder (e.g. depression, schizophrenia).**

When to screen?

- 45+ health check (risk factors)
- 75+ health check – routinely ask about cognitive difficulties
  - Driver licence renewal
- Those with chronic disease
- patient and family raising concerns
- “vague patients”

Formal cognitive screen

- GPCog
  - Fast, sensitivity ~89-96%, specificity ~62%, online, multiple languages
  - www.gpcog.com.au

- MMSE
  - Longer test, similar sensitivity as GPCog, copy right issue
- MOCA +/- IQCODE
- RUDAS
- ACE-III

However, don’t rely on numbers. Consider clinical history, reported functional deficit related to the cognitive impairment and importantly, collateral history from family/friends..

Investigation

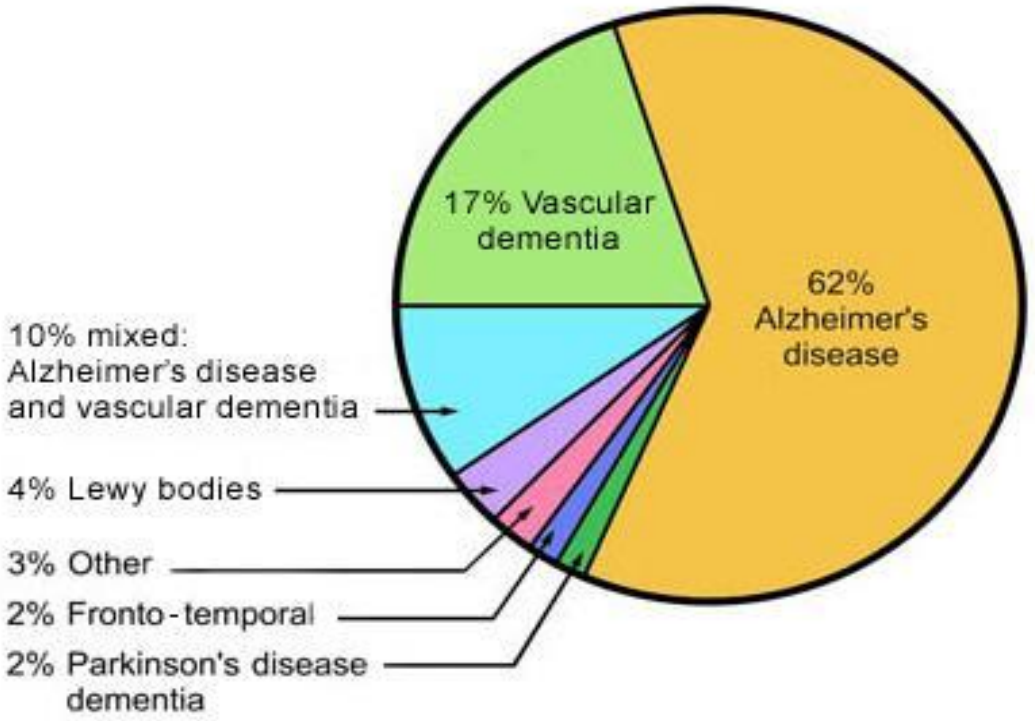
Physical exam – rule out organic cause/delirium/depression/Parkinsonism/neurological event

Bloods – electrolytes, Mg, Calcium, B12/folate, TFT (syphilis/HIV in suspicious cases)

Neuro-imaging

Medication review – avoid anticholinergics, correlation with new medications

Dementia: Main Causes



Other Causes

Alcohol
Trauma
Anoxia
Huntington's Disease
Prion Diseases
Mitochondrial Disorders
Progressive Supranuclear Palsy
NPH
AIDS / Syphilis
Wilson's Disease

Depression
Delirium
Psychosis

Mangement

Legal – EPOA, Wills (if appropriate depending on stage at diagnosis)

Driving

Medication – if appropriate. Compliance. Review dispensing record. Deprescribing. Blister pack. Simplify regime.

Vascular risk – caution with aggressive BP and BSL management

Lifestyle – regular exercise, routines, cognitive stimulation

Local dementia society for carer support, programs

NASC – ensure family/carer is present for assessment

ACP – if appropriate

Medication for dementia

Cholinesterase Inhibitors

Donepezil *****

Rivastigmine patch

(Galantamine)

NMDA inhibitor

(Memantine)

Alzheimer's, Lewy Body Dementia, Parkinson's dementia 

Vascular Dementia 

FTD 

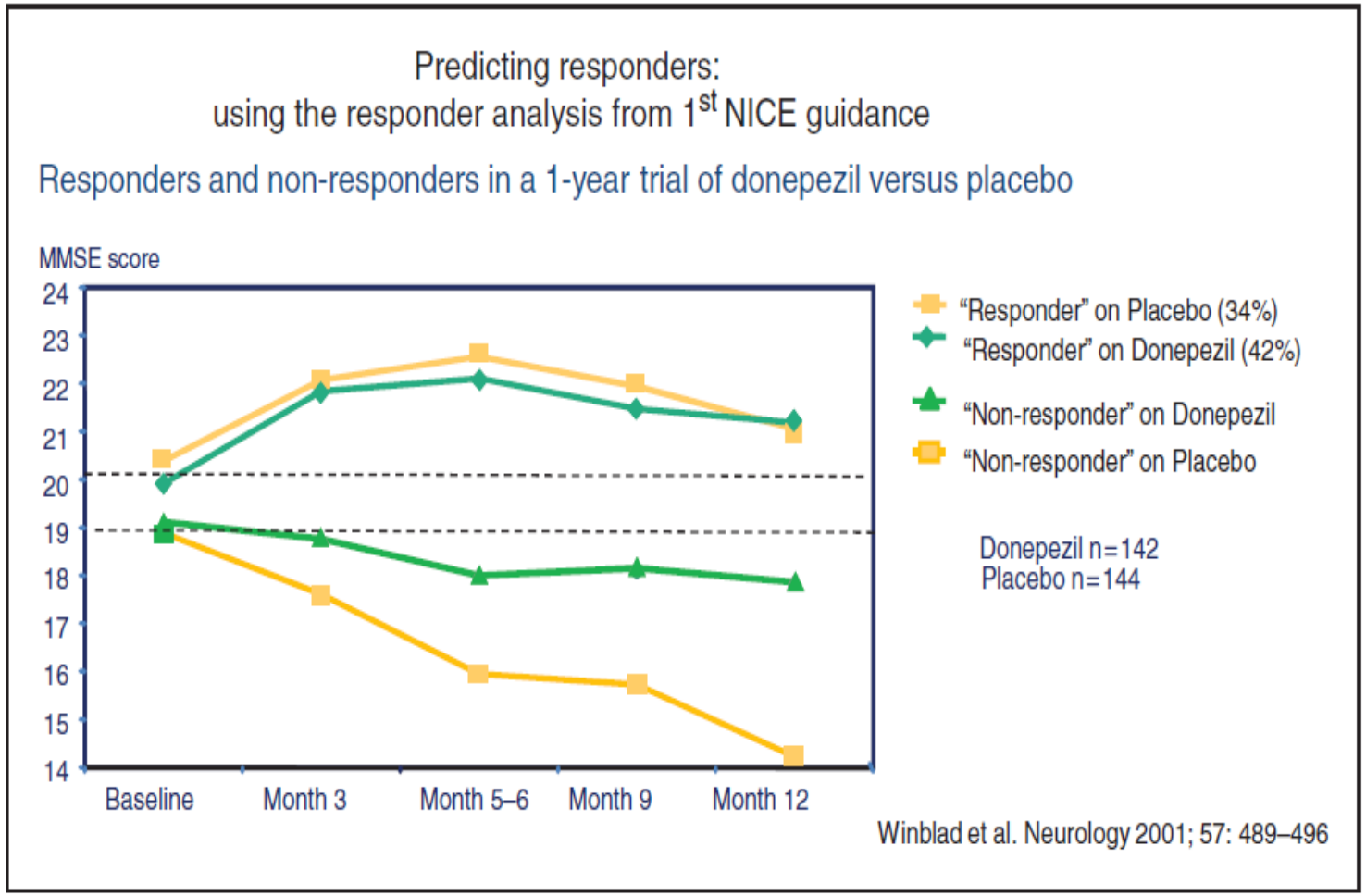


Figure 1. Patients declining according to the NICE definition of response at 3 months showed much less MMSE decline on donepezil compared with placebo, demonstrating a clear drug effect.

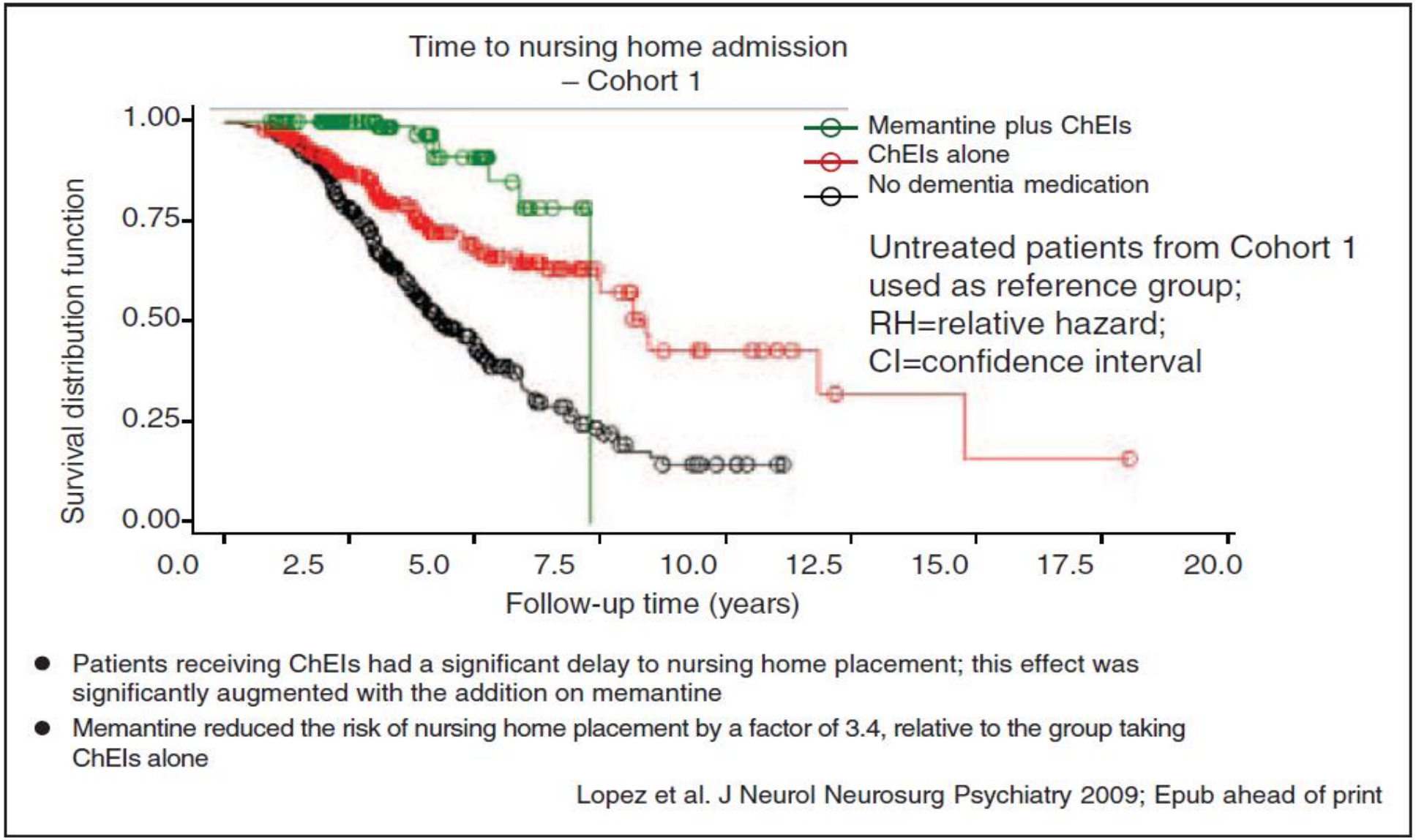


Figure 3. Long-term effects of the concomitant use of memantine with cholinesterase inhibition in AD.

Into the future…….

Multiple drug trials targeting amyloid/tau – still disappointing

- ?given too late
- ? Wrong targets

New strategies to “prevent” or delay dementia

- Aggressive vascular/lifestyle management in “mid-age” – age 45-65 group
- Education level
- HT, DM, Dyslipidaemia, smoking, alcohol, exercise, food/diet, depression

Medscape

News > Neurology

Dementia Incidence on the Decline

Pauline Anderson

September 11, 2017