Supplemental material 2 corresponding to manuscript: "Cost-effectiveness Models for Alzheimer's disease and related dementias: IPECAD Modelling Workshop Cross Comparison Challenge". See <u>www.ipecad.org</u>.

International Pharmacoeconomic Collaboration on Alzheimer's Disease (IPECAD) -

### Modelling Work Group

#### Workshop on Health Economic Modelling in AD

Stockholm September 19-20, 2019

#### Background

We have a growing literature describing a wide range of health economic models that have been developed to evaluate treatments and diagnostics for Alzheimer's disease (Nguyen et al, 2018, Gustavsson et al 2017, Green & Zhang 2016, Cohen & Neumann 2008). In the literature there is considerable variability in the choice of model structure, disease states, outcomes and data sources. There is often a lack of transparency in published reports, and models are difficult to compare, due to key differences across disease models, and limited alignment on key methodological issues. This may limit the usefulness of these models in future HTA processes and other decision-making contexts related to pharmacological or other interventions for AD.

#### Objectives

The aim of this workshop is to bring together those who are research active in the field of Alzheimer's disease decision-modelling, in terms of developing modelling methods in the context of cost-effectiveness analyses and health technology assessment, or disease progression models that may be used in this way.

The long-term goal is to create a dedicated forum for exchange of ideas on health economic modeling in AD, to discuss and align on key methodological issues and to foster the development of robust and transparent models to guide decision making around novel treatment scenarios/pathways for AD. We therefore plan for this workshop to be the first of a future series of meetings and activities to further the development of modelling methods, and the identification of data to populate decision-models, in the area of AD. Whilst the initial focus is on AD, we hope to be able to extend the scope of our future activity into and across related dementias, and across the full diagnostic and treatment pathways associated with dementia. We wish to encourage and facilitate, where possible, a greater number of open access modeling studies/frameworks in AD.

## Agenda

## Thursday September 19

Morning	Welcome and registration with coffee/tea	
08.30-08.45	Welcome and introductions	B Winblad
08:45-09.00	Workshop objectives and program	L Jönsson
08.45-09.00		
	Session 1: overview of modelling in AD	Chair: A Gustavsson
09.00-09.30	The song remains the same: Recurring themes and persistent challenges in Alzheimer's Disease modeling	W Herring
09.30-10.00	ROADMAP review of HE and disease models and	R Handels
	proposed model specification	
10:00-10:30	Coffee Break	
	Session 2: approaches to disease modelling in AD	Chair: R Handels
40.00.44.00	The IPECAD model	C Green
10.30-11.00		
11.00-11.30	Modeling Nondrug Dementia Interventions in the United States Using a Dementia Simulation Model	E Jutkowitz
11.30-12.00	Modelling time to institutionalization	M Belger
12.00-12.30	Finding a common baseline: the pattern of cognitive decline in Alzheimer disease	L L Raket
12.30-13.30	Lunch	
13.30-14.00	Estimating Transition Probabilities Using a Measure of Dependence for Patients with Alzheimer 's Disease	E Spackman
14.00-14.30	The AD-ACE model: Benefits and challenges of modeling on an individual level	J Möller
14.30-15.00	Biomarker based prognosis for patients with mild cognitive impairment: the ABIDE project	I van Maurik
15:00-15:30	Discussion on key issues in AD modelling	Organizing committee & All
15:30-16:00	Coffee Break	
16.00-16.40	Model sharing and joint development: experience from the Mount Hood Challenge	M Willis
	Session 3: data on cost of illness, progression and diagnostics	Chair: A Wimo
16.40-17.00	The Mayo Clinic Study of Aging – a population-based longitudinal study on cognitive decline and impairment	M Vassilaki
17.00-17.20	Healthcare and Social impact of dementia-related neuropsychiatric symptoms.	J Mar Medina
17.20-17.40	Towards cost-efficient data-driven differential diagnostics in neurodegenerative diseases	J Lötjönen
17.40-18.00	Access to Future Alzheimer's Therapies and Value of Blood-Based Tests	J Hlavka
10.00		
18.00	Adjourn	
19.00	Dinner	

# Friday September 20

08.00-09.00	Breakfast	
09.00-09.15	Introduction to group work	L Jönsson
09.15-10.30	Group work: identifying key issues in AD modeling & defining scenarios for model benchmarking	All
10:30-11:00	Coffee Break	
11.00-12.30	Group presentations and discussion in plenum	L Jönsson
12.30-13.30	Lunch	
13.30-15.00	Summary / concluding remarks / final discussion points /next steps	Organizing committee
15.00	Adjourn and departures	