List of accepted abstracts for presentation at Economics, simulation modelling & diabetes 2016 Mt Hood Challenge

1. Can delaying onset of diabetes be cost-effective? A simulation study based on NAVIGATOR data

Alastair Gray¹, Oliver Rivero-Arias², Shelby D Reed³, Yanhong Li³, Rury Holman⁴, Jose Leal¹

 Health Economics Research Centre, University of Oxford
National Perinatal Epidemiology Unit, University of Oxford
Duke Clinical Research Institute, Duke University
Diabetes Trials Unit, University of Oxford, Duke Clinical Research Institute, Duke University)

2. Prediction models for the risk of retinopathy in persons with type 2 diabetes. A systematic review

Josan S Yauw¹, Joline W Beulens^{1,2}, Fariza Badloe², Linda M Peelen¹, Giel Nijpels³, Amber A van der Heijden³

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3 University Medical Centre, 3 EMGO Institute for Health and Care research, Department of Epidemiology and Biostatistics, VU University Medical Centre, Amsterdam.

3. Follow up on the 6th Mount Hood Conference: filling the gap to model type 1 diabetes.

Slingerland AS, Choudhurry R, Redekop WK, Niessen LW

Erasmus University, Institute of Health Policy & Management, Liverpool School of Tropical Medicine, Johns Hopkins Bloomberg School of Public Health

4. Data structures and algorithms for modelling conditionally random events in a probabilistic discrete-time simulation model for type 2 diabetes: exploitation of modern C++ features

An Tran-Duy1, Philip Clarke2

Maastricht University, The Netherlands; 2 The University of Melbourne, Australia

5. Impact of adjusting diabetes treatment pathways according to disease severity – the case of HbA1c and macular oedema

A Zsólyom, L Szilberhorn, B Németh, B Nagy, Z Vokó

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6. The Importance of Considering Differences in Network Meta-analyses (NMAs): An Example of Sodium Glucose Co-transporter 2 Inhibitors (SGLT2i) in the Treatment of Type 2 Diabetes Mellitus (T2DM)

Christian Asseburg,¹ Michael Willis,¹ Cheryl Neslusan,² Agata Schubert³

1 The Swedish Institute for Health and Economics (IHE), Lund Sweden;

2 Janssen Global Services, LLC, Raritan, NJ, USA;

3 Janssen-Cilag Poland, Warsaw, Poland.

7. Costs of hypoglycemia in insulin-treated diabetes in Switzerland: a health economic analysis

Simon Wieser¹, Christina Tzogiou¹, Sascha Hess¹, Klaus Eichler¹, Marie Azoulay², Sima Djalali³, Thomas Rosemann³, Michael Brändle⁴

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3 Institute of Primary Care, University Hospital Zurich, University of Zurich, Zurich, Switzerland4 Division of Endocrinology and Diabetes, Department of Internal Medicine, Kantonsspital St. Gallen, St. Gallen, Switzerland

8. The estimation of post-treatment HbA1c using a beta regression in the Sheffield Type 1 Diabetes Policy Model.

Author list: Daniel Pollard, Alan Brennan, Jackie Elliott

9. Combining parameter and sampling uncertainties within diabetes clinical outcome simulation models

Helen A. Dakin,¹ Rury R. Holman,² José Leal,¹ Alastair M. Gray¹

1 Health Economics Research Centre, University of Oxford 2 Diabetes Trials Unit, University of Oxford

10. Using big data to estimate treatment effects: The impact of statins on HbA1c levels in individuals tested in a community setting

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1 Centre for Health Policy, Melbourne School of Population and Global Health, The University of Melbourne

2 Section of Epidemiology and Biostatistics, School of Population Health, The University of Auckland

11. Life-expectancy and costs for people with type 2 diabetes

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- 3 Sydney School of Public Health, University of Sydney
- 4 Melbourne School of Population Health, University of Melbourne

12. Challenges and opportunities for decision modelling from the onset of prediabetes onwards

Jose Leal¹, Talitha Feenstra², Eva Pagano³

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- 2 University Medical Center Groningen, University of Groningen
- 3 "Città della Salute e della Scienza di Torino" Hospital, Turin

13. Self care practice and its associated factors among diabetic patients in addisababa public hospitals, cross sectional study

Melat Mamo¹ Meaza Demissie²

1. Department of Public health, School of Graduate Studies, Haramaya University, Ethiopia

14. The Importance of HbA1c Evolution in Modeling Type 2 Diabetes Mellitus

Michael Willis,¹ Christian Asseburg,¹ Cheryl Neslusan,² Andreas Nilsson¹

1 The Swedish Institute for Health Economics (IHE), Lund, Sweden;

2 Janssen Global Services, LLC, Raritan, NJ, USA.

15. Cost-effectiveness of Individualizing Glycemic Goals for U.S. Adults with Type 2 Diabetes

Neda Laiteerapong, MD, MS, Jennifer M. Cooper, MPH, Rochelle N. Naylor, MD, Elbert S. Huang, MD, MPH

16. Cost analysis of insulin treatment regimens for patients with type 1 diabetes in the Ukrainian setting

Olha Zalis'ka, Danylo Halytsky Lviv Oresta Piniazhko, Danylo Halytsky Oleh Syarkevych

National Medical University, Ukraine, President Lviv National Medical University, Ukraine, President ISPOR Ukraine Student Chapter, JSC Farmak, Ukraine, Director of Business Development

17. The Importance of Capturing Cardiovascular Benefits Not Mediated by Traditional Risk Factors in Type 2 Diabetes Mellitus (T2DM) Modeling: An Example Using Statins and the UKPDS 82 Risk Engine

Pierre Johansen,¹ Michael Willis,¹ Andreas Nilsson,¹ Christian Asseburg,¹ Cheryl Neslusan,²

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LLC, Raritan, NJ, USA.

18. Replacing input probability distributions with mean values can bias simulation output: an illustration using the CORE diabetes model.

Phil McEwan1 Volker Foos2 Mark Lamotte2

1 School of Human & Health Sciences, Swansea University, Swansea, UK 2 IMS Health, Da Vincilaan 7, 1935 Zaventem, Belgium

19. Impact of Improving Diabetes Care on Quality Adjusted Life Expectancy (QALE) and Costs: A 30-Year Perspective

Patrick J. O'Connor MD MA MPH, Todd P. Gilmer Ph.D., JoAnn M. Sperl-Hillen MD, Heidi L. Ekstrom MA, A. Lauren Crain Ph.D.

20. Implications of introducing patient heterogeneity in cost effectiveness modeling

Volker Foos² Phil McEwan¹ Mark Lamotte²

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21 Estimating the cost effectiveness of a patient-directed mealtime insulin titration algorithm

JC Gahn, X Yu, S Perk, DR Murphy, and HJ Smolen

Medical Decision Modeling Inc., Indianapolis IN, USA

22. How consistent is the relationship between improved glucose control and modelled health outcomes for people with type 2 diabetes? A systematic review

Xinyang Hua¹, Thomas Wai-Chun Lung ^{1,2}, Andrew Palmer³, Lei Si³, William H. Herman⁴

- 1. School of Population and Global Health, University of Melbourne
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- 4. School of Public Health, University of Michigan

23. Abstract Title: Breaking away from central tendencies: Using more flexible and informative economic models of the cost of healthcare for people with type 2 diabetes.

Dr Joel Smith (University of Oxford, UK) and Prof John Forbes (University of Limerick, Ireland)