Subject: INVITATION to lecture on COVID modelling

To the Members of the German Association for Health Economics
Deutscher Gesellschaft für Gesundheitsökonomie e.V.

Dear Members of the DGGÖ,

in the name of the Hungarian Health Economics Association we are happy to invite you to an online session on “An economic-epidemiological model to optimize economic activity while keeping the Covid-19 pandemic under control” by Peter C Smith, professor emeritus of the Imperial College London. The lecture will be held in English.

Date of the meeting: **Tuesday, December 8, 2020**, at 05:00 (CET) pm, online (Microsoft Teams).

The session is the kick-off of our second series of COVID mini lectures.

Professor Smith is going to present an economic-epidemiological model that calculates the outcomes (in terms of GDP, employment, infections, hospitalizations, and deaths) of a wide range of alternative Covid-19 control strategies. The intention is to determine which economic sectors to allow to function (partially or fully) over a six month period so as to maximize economic output in the presence of Covid-19. A range of constraints to economic activity are applied. These include the need to keep certain essential services functioning (including health care and education), at least to some extent, and limits to the availability of intensive care hospital beds. On the economic side, the model disaggregates the economy into discrete sectors consistent with national accounts. Given the need to maintain supply chains for sectors that remain open, we model economic interactions between sectors using Input-Output tables. Disease transmission is modelled using a deterministic Susceptible-Exposed-Infectious-Removed (SEIR) model of Covid-19 transmission that projects the spread of infection as sectors are opened and closed to varying degrees, reflecting sectoral heterogeneity in risks of infection between co-workers, in the community, and on the interface between these groups (for example amongst customers). The model is illustrated using data from the United Kingdom, yielding policy recommendations for securing an optimal balance between economic activity, hospital capacity, infections and other important policy outcomes.

Coauthors: David Haw, Paula Christen, Giovanni Forchini, Sumali Bajaj & Katharina Hauck

Invited moderator: Balázs Nagy, PhD Habil, Syreon Research Institute, Head of Modelling Division, Semmelweis University, Center for Health Technology Assessment, Associate professor

If you wish to participate, please, write to office@metaweb.hu so that the Teams link for joining the event can be sent out to you.

We are looking forward to meeting you online!

Hungarian Health Economics Association

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