

Title: The Reference Model for Chronic Disease Progression
Author: Jacob Barhak Ph.D.
Email: jacob.barhak@gmail.com
Web: <https://sites.google.com/site/jacobbarhak/>

Affiliation: none - freelancer

Abstract:

The Reference Model for chronic disease progression is a prototype that demonstrates the use of computing technology to aid disease modelers.

The prototype relies on the fact that summary data from clinical trials is published as well as many other models and risk equations.

The Reference Model builds upon this available information and cross validates multiple models against multiple population sets. This results in fitness information and ranking of equations.

The Reference Model is built from references to the literature and hence it's name. Another reason for the name is that it is designed to serve as a reference and testing facility for developers of new models. Model developers can propose and test new hypothesis and see how these hypothesis fit the published summary data.

Summary data for clinical trials is accessible through publication without restrictions associated with individual data. The Reference Model can therefore access a wider population than modelers who rely on restricted individual data from a single trial. This provides a new wider view of disease progression over multiple populations.

This YouTube video describes the Reference Model for Disease Progression:

http://www.youtube.com/watch?v=7qxPSgINaD8&feature=youtube_gdata_player