Title: PROGRESSION ANALYTICS SYSTEM

(57) Abstract: A method of identifying insights related to the occurrence of an adverse health outcome of interest, comprises extracting electronic clinical data associated with historical healthcare encounters. The method also comprises defining patient groups based upon similar data patterns present in the extracted electronic clinical data wherein the patient groups have varying likelihood for the adverse health outcome. Still further, the method comprises deriving hypothesized etiological explanations for why one or more patient groups have higher likelihood when compared to other patient groups. Optionally, the method comprises identifying clinical interventions that are intended to reduce the likelihood of the adverse outcome for certain patient groups.

FIG. 2
 Declarations under Rule 4.17:
    — of inventorship (Rule 4.17(iv))

Published:
    — with international search report (Art. 21(3))
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06Q 50/24; G06G 7/60 (2014.01)
USPC - 703/1.1, 705/3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8): G06Q 7/48, 7/60; G06G 50/22, 24 (2014.01)
USPC: 703/2, 11, 13, 22; 705/2, 3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 8265955 B2 (MICHELSN S et al.) September 11, 2012; abstract; figures 2, 11, 16; column 3, lines 14-54; column 5, lines 32-67; column 11, lines 50-61; column 16, line 62-column 17, line 17; column 21, lines 22-41; column 23, lines 8-19</td>
<td>1-20, 24, 21-23</td>
</tr>
<tr>
<td>Y</td>
<td>US 2006/0173663 A1 (LANGHEIER J et al.) August 3, 2006; abstract; paragraphs [0013], [0031], [0033], [0036], [0086], [0087], [0146]</td>
<td>21-23</td>
</tr>
<tr>
<td>A</td>
<td>US 2009/0177495 A1 (ABOUSKY K et al.) July 9, 2009; abstract; paragraphs [0015], [0023], [0046], [0060], [0065]</td>
<td>1-24</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:
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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search 28 July 2014 (28.07.2014)

Date of mailing of the international search report 28 AUG 2014

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Authorized officer: Shane Thomas

Form PCT/ISA/210 (second sheet) (July 2009)