Mining Medical Data: Multifactor Analysis of General Practice Consultations in Paris.

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Abstract: A statistical investigation covering simultaneously most aspects of the general practice consultation, with minimal information loss, was required.
A retrospective study has been performed over 2140 consultations and visits, for 1200 patients. Four physicians, all voluntaries, were selected in Paris. A random sample of 300 foldings was extracted in each of the four files available at their office. Data were recorded on a one page form created for this purpose.
Informations about most aspects of the consultation were got: age, address, trade, men/women ratio, interconsultation delay, prescription, certificats, urgency, accident, work stopping, additional diagnostic procedures, becoming, reasons of consulting, prevention, becoming, payments, including free care. An open classification of 255 reasons of consulting has been created on the basis on the files content. The average number of reasons of consulting is 1.23. A prescription is given for 63% of the consultations. A half of the patients come back less than 50 days after the first consultation. Women are consulting more often than men (W/M=40%/60%). Adults have a slight trend to consult a physician of the same sex. The patients having free care (chronic desease or community services card) are consulting twice more than the others patients.
Medical data mining has given rise to knowledge data discovery, which contained much more informations than a questionnaire investigation.

Keywords: medical information; general practice; Paris; input data sheet; consultation; interconsultation delays; data mining; KDD. knowledge data discovery.