## Meeting abstract

# **Open Access** ATC -> ICD - evaluating the reliability of prognoses for ICD-10 diagnoses derived from the ATC-Code of prescriptions

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from 24th Patient Classification Systems International (PCSI) Working Conference Lisbon, Portugal. 8-11 October 2008

Published: 27 November 2008 BMC Health Services Research 2008, 8(Suppl 1):A10 doi:10.1186/1472-6963-8-S1-A10

This abstract is available from: http://www.biomedcentral.com/1472-6963/8/S1/A10

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#### Introduction

Currently, the lack of standardized, reliable and systematic coding of diagnoses in the Austrian outpatient sector renders the availability of valid epidemiological data impossible. Moreover, diagnoses are the basis for an assessment of the cost-effectiveness, a quality monitoring and the calculation of Diagnosis Related Groups (DRG). Therefore, the department for Evidence Based Health Care in the Main Association of the Austrian Social Insurance Institutions has initiated a project to obtain valid diagnoses from the outpatient sector.

#### Methods

The aim of the project is to evaluate and analyze the reliability of prognoses for diagnoses deriving the ICD-10 from the ATC-Code of pharmaceuticals prescribed. In order to provide empirically measurable results, data from several Social Security Carriers will be statistically evaluated by the University of Technology in Vienna. This requires the use of certain statistical methods, e.g. neural networks, classification trees and support vector machines. Moreover, experts are assigned to create hypotheses to link ATC-Codes to ICD-10 Codes. Due to the high amount of data, the statistical analysis requires a software with a lot of capacity and high performance. As an adequate statistic software, the program "R", developed by members of the University of Technology, will be used.

### Results

The results will either prove or disprove the theory stating that diagnoses can be obtained by deriving the ICD-10 Code from the ATC-Code.

#### Conclusion

The aim of the Austrian healthcare system is to ensure adequate and nationwide healthcare provision. To meet future needs, there is an ongoing discussion about reforms. Therefore, different systems and measures need to be developed and taken. One of these measures could be the implementation of a DRG-system for the outpatient sector. In order to carry out valid DRG-calculations, you need main and secondary diagnoses, among other components. A DRG system for the outpatient sector has not yet been implemented. Therefore, this project will provide a basis to evaluate the feasibility of obtaining diagnoses necessary for the calculation of DRGs from the standardized classification systems ICD-10 and the ATC-Code.