

## **Health sciences research in Finland 2003–2005: A Comparison between the special government transfer (EVO) points and levels of evidence**

**Helena Tähtinen\***(presenting author), **Päivi Rautava\*\***, and **Risto-Pekka Happonen\*\*\***

\* Medical Library, Turku University Library, Turku, Finland

\*\* Dept. of Public Health, University of Turku, and Clinical Research Centre, Turku University Hospital, Turku, Finland

\*\*\* Dept. of Oral and Maxillofacial Surgery, University of Turku, and Dept of Oral Diseases, Turku University Hospital, Turku, Finland

### Objective

In Finland, the state funding (EVO) for health sciences research to the health care units is currently based on the amount of special transfer points (EVO points) produced. The number EVO points of a single publication are based on the Impact Factor (IF) of the journal in which the article is published. During 2003–2005, a total of about 10.100 qualifying EVO articles were published in the responsibility areas of five university hospitals. The aim of the study was to compare the production of EVO points and the levels of evidence of the articles published by professionals of the health care units.

### Methods

With the help of PubMed Journal Subject Terms research fields of the articles published in international journals were determined. The number of publications and special government transfers points of each field were calculated, as well as the levels of evidence (the quality) of the publications (N = 7300) were sorted out. 15 scientific fields that produced the largest amount of transfer points were included in the levels of evidence analysis.

### Results

The 10 top scientific fields in producing specified government transfer points were *Neurology*, *Neoplasms*, *Endocrinology*, *Vascular Diseases*, *Medicine*, *Biochemistry*, *Cardiology*, *Allergy and Immunology*, *Psychiatry* and *Molecular Biology*. According to the evidence analyses, 3050 articles (42%) fulfilled the criteria for evidence levels A–C. *Cardiology* came first in two university hospitals and *Psychiatry*, *Vascular Diseases* and *Rheumatology* in the rest tree hospitals. *Neurology* was among the top five fields in terms of specified government transfers points and among the top six in the evidence analyses in all university hospitals.

### Conclusions

The research outcomes based on analyses of specified government transfer points or levels of evidence differ considerably from each other. Both analyses have obvious shortcomings: a part of publications (e.g. part of the articles of nursing sciences) will fall outside the analyses in the former and the articles dealing with laboratory and test animal studies in the latter. Also defining the scientific fields is not exact enough to find out trustworthily the research areas of a single publication. The analysis based on EVO points and IF favors basic research, big medical specialties, and popular scientific fields, while all specialties are equally treated in the evidence level based analysis. Statistical analyses will show if there is any correlation between the results obtained using the two evaluation methods.