A NEW SYSTEM OF EVALUATING MEDICAL LIBRARY SERVICES IN THE CZECH REPUBLIC BY MEANS OF PERFORMANCE INDICATORS

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BACKGROUND

In the past decades, the evaluation of medical library services in the Czech Republic has been was conducted by the National Medical Library in Prague based on a set of traditional quantitive indicators published as "Annual Statistics", and further used for interlibrary comparisons as a criterion of allocating financial support by the Ministry of Healthcare Department of Education, Science and Nursing.

The major indicators valid until present include : size of library collections, library webpage including online catalogue, periodicals subscribed, total circulations, volumes added per year, document delivery/interlibrary loan (received + provided), acquisitions budget, access to databases, reference transactions, satisfied search requests, output of photocopying facilities, number of registered users and their categories, training courses for end-users of bibliographic and fulltext databases.

 However, in the rapidly changing fiscal environment accompanying privatisation of many community hospitals the library staff have to become accustomed to new methods of evaluation to justify the existence of medical libraries, their value to the organization and its new roles.

The contribution describes the efforts to re-engineer the traditional evaluation system of the Czech medical library services to comply with the process of continuous quality improvement in healthcare including the need for access and provision of medical information to all.

LITERATURE SEARCH

The Medline search using the MeSH term "Libraries, medical/standards" confirmed our hypothesis that the biomedical literature should contain much expertise on the practice of medical library evaluation and quality assessment. Of the total number of 123 articles published between 1972 and spring 2005 there were 32 papers dealing with various modes of performance assessment.

After a detailed analysis of the full contents of the articles we selected one document describing the experience of the British experts that seemed to be the most relevant to accomplish the goal of our study.

- ❑ Hewlett T. (1998) Performance indicators in NHS. Health Libraries Review **15,** 245-253.

The paper *"looks at some aspects os performance measurement and suggests other areas for statistics collection in order to make better use of existing data, and consider the usefulness and derivation of PIs….."*.

Besides this core article, a guideline was used, elaborated by Library Research Service of University of Denver (CO, USA) giving precise definitions of the terms related to library performance measurements.

- ❑ Colorado Statistics: Definition of Terms. Available at: http://www.lrs.org/def.asp. Last update 5/26/2005.

SURVEY

Method

In March-May 2005 we conducted a survey among 103 Czech medical libraries registered under Act of Libraries and Provision of Information Services to Public of 2001. The purpose of the survey was to find out whether the libraries would be prepared and willing to change the existing, traditional system of collectiong statistics to measure their performance and prove how their services meet users´ information needs. The survey was performed by means of a questionnaire consisting of 6 questions focused on relevance, i.e. relation of library objectives to the institutional objectives, and interlibrary services including document delivery. The completed questionnaires were

processed by the Palacky University Department of Biometrics (Olomouc).
Out of the total number of 103 distributed questionnaires, 65 were returned (63 %). Of this number, four not meeting the required criteria were excluded (4.9 %). The remaining 61 (58.1 %) were used for statistical analysis.

Results

❑ Relevance

The survey showed that the mission statement was clearly defined in 34 libraries of the total number of 61 respondents, i.e. 55.7%. 27 libraries (i.e. 44.3%), mostly from smaller community hospitals reported the absence of their mission statement (Fig.2).. More than half of these libraries did recognize the importance of this sort of document which was confirmed by the immediate feedback either by phone or e-mail. Having received the questionnaires our colleagues in hospital libraries started thinking seriously about the current position and, in particular, about the future fate of their libraries Some of them said they had already met with their managers to discuss this issue.

❑ Interlibrary Services

The next four questions were focused on evaluation of document delivery, because most Czech medical libraries have long had a relatively high level of interest in this type of services. The official statistics contains figures on the quantity of documents received and/or supplied per year. Until present, there has been no evidence on how the services are provided and how fast. Of the set of 61 libraries that returned the questionnaires, 53 (86.8 %) confirmed they provided document delivery services and 90% of these confirmed they would be able to estimate the average delivery speed. The remaining eight reported the absence of these services (13.2%). The main reason given by most of them was a small size and low "attractiveness" of their library collections as well as increasing availability of fulltext web documents. Out of the total number of 53 libraries that reported document delivery, 28 (52.8%) declared their ability to supply documents electronically and 90% of them could estimate the proportion of E-delivery (Table 1). This part of the survey clearly demonstrated that above 50% of the libraries had started gathering additional statistical data to prove their library services performance (Figs. 3-4, Tab.1).

A PROPOSAL OF NEW PERFORMANCE INDICATORS

Based on the literature data and encouraging results of the survey performed among 61 medical libraries we are proposing 7 new criteria to enhance the performance of medical library services in the Czech Republic.

1. Relevance
is a descriptive performance indicator consisting of written objectives and a business plan. It shows how library objectives link with the parent insitution´s objectives including clinical decision-making and research priorities.

2. Reference Questions Per Capita
relates the annual number of information contacts with a staff member using information sources to the number of persons the library is established to serve. It is the number of reference transactions per typical week multiplied by 52, then divided by the number of registered users.

3. Turnover rate
relates the number of materials checked out to the size of the collection. It is the number of materials circulated divided by the number of volumes held. Turnover rate indicates how often each item in the collection was lent.

4. Circulation Per Capita
relates the number of library materials lent to the number of persons the library serves.

5. Speed of Document Delivery
The library should estimate the percentage of interlibrary request to be fulfilled within a certain period of time (number of days). This needs a long-term careful measurement and revisions upwards or downwards.

6. Materials Expenditures Per Capita

relates library funds spent on materials for the collection (books, periodicals, non-print items) to the number of persons the library was established to serve.

7. Library Service Hours Open Per Week
is a simple count of hours that the library is staffed and open to the public.

CONCLUSION

It may be expected that the new performance indicators will contribute to improving service delivery (how often, how fast), cost efficiency (services related to funding) and staff efficiency of the medical libraries in the Czech Republic. Nevertheless, before full implementation, a "roll-out" period will be required to educate and prepare libraries to collect the new data which may take 1-3 years to accomplish. One of the major advantages is an interest and enthusiasm of most medical librarians to trigger this new process of collecting statistics and performance measures at all library levels.

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APPENDIX

Fig. 1: Annual Report containing statistical indicators on Czech medical libraries, published by the National Medical Library in Prague.
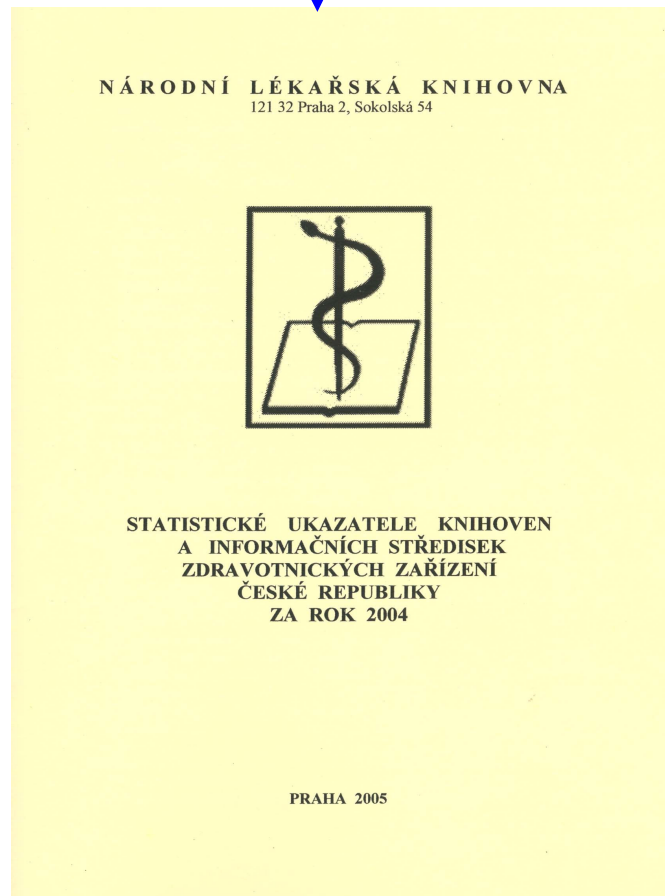

NÁRODNÍ LÉKAŘSKÁ KNIHOVNA
121 32 Praha 2, Sokolská 54

STATISTICKÉ UKAZATELE KNIHOVEN
A INFORMAČNÍCH STŘEDISEK
ZDRAVOTNICKÝCH ZAŘÍZENÍ
ČESKÉ REPUBLIKY
ZA ROK 2004

PRAHA 2005

Fig.2: Proportion of libraries with clearly defined mission statement.

44.3%
NO

Fig.3: Proportion of libraries providing document delivery services.

YES
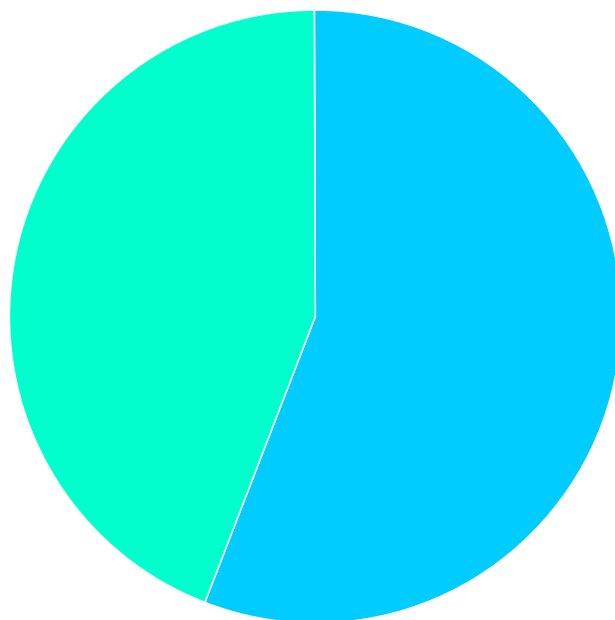
NO
13.2 %

YES
86.8 %
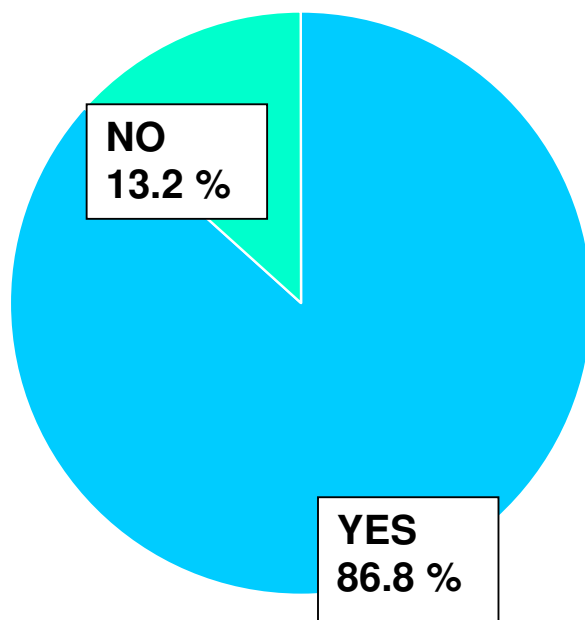
Table 1

NO E-DDS
18.9 %

E-DDS
IN PREPARATION
28.3 %
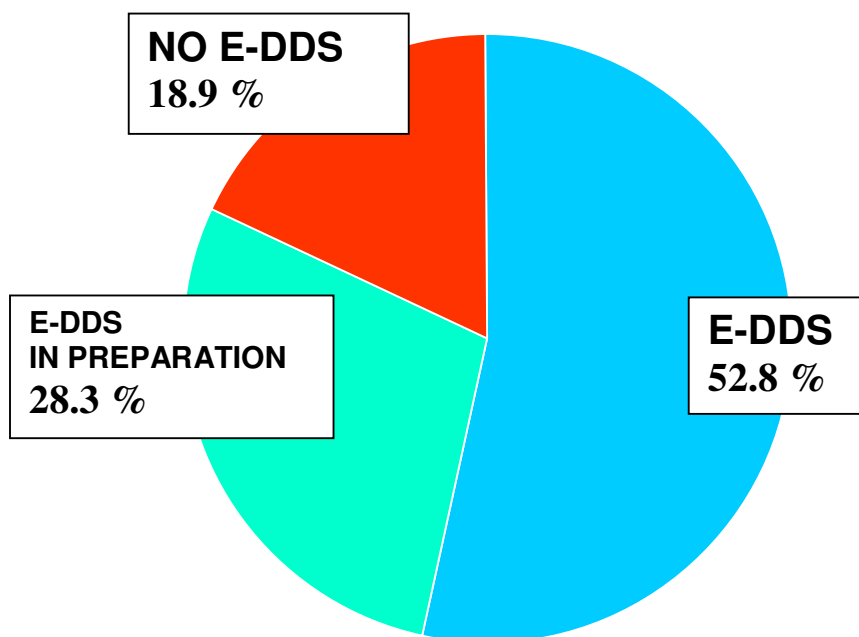
E-DDS
52.8 %

Percentages of Documents Delivered Electronically by 28 Libraries Providing Document Delivery Services

Percentage of E-DDS	Number of Libraries
5 - 10 %	9
11 - 20 %	8
21 - 30 %	5
50 - 60 %	2
70 - 80 %	4