

# Web Catalogue of Electronically Published Clinical Practice Guidelines in the Czech Republic

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## Abstract and Objective

*As a preliminary collector of information for decision support systems and due to the absence of web tools and services for clinical practice guidelines organization and searching in the Czech Republic the prototype of a specialized online catalogue was developed. The database allows the collection of 34 parameters for each document. Nowadays this web service includes information about more than 250 documents of clinical practice guidelines published electronically by Czech medical societies.*

## Keywords:

Medical informatics, Clinical practice guidelines, Internet

## Introduction

Approximately 800 electronically published documents of clinical practice guidelines (CPGs) exist on the web pages of Czech medical societies. They vary in their length, quality and inner structure of the text as well as in other properties. There are many specialized web portals, catalogues and on-line services and tools all around the world, such as National Guideline Clearinghouse, National Library of Guidelines Specialist Library, Leitlinien.de, SIGN, NICE, GIN, COGS, AGREE, which are focused on CPGs and their publication in an electronic form. None of them handles documents published in the Czech language. Many authors and users of the CPGs in the Czech Republic cannot use these services because of the language barrier. We have tried to develop a web-based application that can provide satisfying information about electronically published documents of CPGs in the Czech Republic.

## Methods

The web application that provides a user interface through a web browser is created in the PHP language and it is running on the Apache Web Server. Records about CPG documents and all other data are stored in the MySQL database. The information is provided to Internet users by a dynamically generated web portal including additional services such as:

- viewing the information about listed documents,
- searching the target document by name, one or more keywords, MeSH terms, ICD-10 codes,

- information about CPG authors and participating organizations,
- creating of thematic groups of CPG documents,
- editing of individual document records and adding commentaries by registered users/editors,
- suggesting new documents not listed yet,
- suggesting changes in document records,
- sending messages to registered users/editors.

The system includes some tools for team cooperation between registered users and also for cooperation with authors of CPGs text documents. Particularly the life-cycle of the single document can be traced. It can be assigned with a special status like developing, active, updated or obsolete. The information about a special web application using given CPG or about a formalized model of the CPG can be attached. For the catalogue does not contain concrete documents and Internet changes its content permanently, there is a special automatic validity check for listed document links, so the location of each CPG can be tested at any time.

## Results

The address of the functional prototype is <http://neo.euromise.cz/ddp>. The catalogue now includes continuously updated information about 258 documents of CPGs. We propose to complete all existing analogous documents published electronically in the Czech Republic. The catalogue could be widely used by medical specialists, students and patients for retrieving up-to-date information about specialized expert medical documents. It can be also used as a tool for helping in the guidelines creation, for the new guidelines creation policy and for historical comparison of created guidelines. Collected data could be also used as a source of information for decision support systems, which should be developed in the future research. These systems could search through the database for the best compliant guideline (or its formal model if it exists) according to several criteria.

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