Czech national project ‘Clinical Practice Guidelines’ methodology and current results

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ABSTRACT

Currently in the Czech Republic, there does not exist such an institution as a ‘National Centre for Clinical Practice Guidelines’. In 2017, there were about 123 professional medical organizations which developed about 1909 ‘guidelines’ until 2017. However, the majority of these guidelines are ‘expert opinion’ or ‘consensual’ based ‘guidance’ or rather recommendations in the most cases missing a systematic approach that reflects evidence-based medicine principles and methods. The project is led by the Czech Health Research Council, the first partner is the Ministry of Health of the Czech Republic and the second partner is the Institute of Health Information and Statistics of the Czech Republic with support from policy makers, academics, clinicians and members of the Czech National Centre for Evidence-Based Healthcare and Knowledge Translations. This centre is an umbrella for three very important international collaborations which play a key role in Evidence-Based Healthcare, Evidence Synthesis, Evidence Implementation and trustworthy guidelines development. These are Cochrane Czech Republic, Masaryk University Grade Centre and the Czech Republic Centre for Evidence-Based Healthcare: The Joanna Briggs Institute Centre of Excellence.

The main aim of this article is to present the Czech National Methodology of the Trustworthy Clinical Practice Guideline (CPG) development and the first results of the project ‘Clinical Practice Guidelines’.

A pilot phase of the project was realized during the first year of the project from January to December 2018. As the first step, there were established managing authorities including a Guarantee Committee and an Appraisal (Methodological) Committee. The Members of the Appraisal Committee developed a pilot version of the National Methodology of CPG development based on the best available approaches to Trustworthy CPGs development followed by testing on the first five pilot CPGs.

Key words: Clinical Practice Guidelines, evidence transfer, evidence-based health care, GRADE

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Background

Currently in the Czech Republic, there is no such institution like ‘National Centre for Clinical Practice Guidelines’ (NCCPG), which would systematically collaborate with all relevant stakeholders in the Czech Health System (professional medical and allied health care organizations, health and social insurance institutions, patient organizations etc.) in high-quality evidence-based guidelines development.

In 2017, there were 123 professional health care organizations that developed about 1909 guidelines until 2017. However, the majority of these guidelines are ‘expert opinion’ or ‘consensual’ based ‘guidance’ or rather recommendations in the most cases missing a systematic approach that reflects evidence-based medicine principles and methods. This situation, together with international experiences and evidence that high-quality systematically developed Clinical Practice Guidelines...
(CPGs) has potential to positively influence quality of health care in a particular country,¹–³ initiated wider discussion of relevant stakeholders about the project of NCCPG. The project is led by the Czech Health Research Council, the first partner is the Ministry of Health of the Czech Republic and the second partner is the Institute of Health Information and Statistics of the Czech Republic (IHIS CR) supported by policy makers, academics, clinicians and members of the Czech National Centre for Evidence-Based Healthcare and Knowledge Translations. This centre is an umbrella for three very important international collaborations which play a key role in Evidence-Based Healthcare, Evidence Synthesis, Evidence Implementation and trustworthy guidelines development. These are Cochrane Czech Republic, Masaryk University Grade Centre and the Czech Republic Centre for Evidence-Based Healthcare: The Joanna Briggs Institute Centre of Excellence.

The main tasks of the project are to develop systematically coordinated elaboration of methodological documents, their control and updating to unify the preparation of CPG, preparation for legislative anchoring of the methodology of CPG, development and establishment of NCCPG. The overarching aims are reductions of heterogeneity of provided health care due to nonobjective circumstances (geographical, availability, individual professional health worker erudition, lack of staff etc.), and increasing quality and optimizing the funds spent on health care.

**Aims**

The main aim of this article is to present the Czech National Methodology of the Trustworthy CPG development and the first results of the national project ‘Clinical Practice Guidelines’.

**Methods**

A pilot phase of the project was realized during the first year of the 5-year project period from January to December 2018. As the first step, managing authorities were established, including a Guarantee Committee and an Appraisal (Methodological) Committee. The main tasks of the Guarantee Committee are to determine topics priority for CPG based on epidemiological data provided by Institute of IHIS CR; assessment and approval of CPG proposals; nomination of CPG guarantor and approval of completed CPG. The main role of the Appraisal Committee is to create the National Methodology of CPG development, methodological training of junior members of the Appraisal Committee and CPG teams, mentor and support methodologically the CPG development, appraise methodological quality and formal adjustment of the developed CPG (Fig. 1).

The Members of the Appraisal Committee developed a pilot version of the National Methodology of CPG development. First, they have systematically searched all relevant sources related to standardized methodology for CPG development, involving Guidelines International Network, National Institute for Health and Care Excellence, Scottish Intercollegiate Guidelines Network, GRADE Working Group, CPGs in Oncology (National Comprehensive Cancer Network), National Guidelines Clearinghouse and so on. Based on the assessment of identified methodological approaches to CPG development, all members of the Appraisal Committee agreed to follow the GIN-McMaster Guideline Development Checklist⁴ and synthetized knowledge and evidence of all relevant approaches to guidelines development.⁵ The pilot Czech National Methodology together with pilot templates for guidelines development was tested on the

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**Figure 1.** Diagram of Clinical Practice Guideline development. A (M)C, Appraisal (Methodological) Committee; CPG, Clinical Practice Guideline; GC, Guarantee Committee; IHIS CR, Institute of Health Information and Statistics of the Czech Republic; MoH CR, Ministry of Health of the Czech Republic.
Table 1. Pilot Clinical Practice Guidelines

<table>
<thead>
<tr>
<th>No.</th>
<th>Title of Clinical Practice Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early colorectal cancer (stages I and II) – diagnosis and treatment</td>
</tr>
<tr>
<td>2</td>
<td>Chronic lymphocytic leukaemia – diagnosis and treatment</td>
</tr>
<tr>
<td>3</td>
<td>Secondary prevention of cardioembolic stroke using antithrombotic therapy</td>
</tr>
<tr>
<td>4</td>
<td>Use of insulin pumps and glucose sensors at diabetic patients treated with insulin</td>
</tr>
<tr>
<td>5</td>
<td>Acute coronary syndromes (heart attack, unstable angina pectoris) – diagnosis and treatment</td>
</tr>
</tbody>
</table>

The first five pilot CPGs (Table 1). Based on the experience from the first pilot guidelines development, the methodology and templates in living format have been constantly improving to reflect the needs of the guideline developers. Guidance is provided on ADOPTION, ADAPTATION, FULL PROCESS DEVELOPMENT and ADOLPMENT. GRADE-ADOLOPMENT combines all ‘classic’ methods of guideline development and allows the ‘rapid guidelines development’.

Results/Discussion

Pilot Czech National Methodology for CPG development (CNMG) was developed together with templates for the guideline development. Figure 1 is showing the whole process of CPG development. CPGs development within this project is initiated based on the necessity supported by epidemiological analysis done by IHIS CR, on approved CPG proposal by Guarantee Committee, and is mentored by trained methodologists from the Appraisal Committee, developed according to the standardized National Methodology of CPG development, assessed and approved by Guarantee Committee and finally published at the portal of the Ministry of Health and the national portal of the CPG. The training activities are focused mainly on critical appraisal of the CPG using standardized instruments and process of conducting CPG using the GRADE method and ADAPTE. Standardized basic instruments like AGREE II, ADAPTE were already available in the Czech language and implemented within CNMG. Use of GRADEpro GDT (McMaster University and Evidence Prime Inc., https://gradepro.org/#contact) which will be translated into the Czech language is recommended. Use of MAGICapp (http://magicproject.org/) as technological support for trustworthy guidelines development is also currently under consideration. In the process of pilot guidelines development were agreed that the AGREE Reporting Checklist will be also translated into the Czech language and will be an integral part of the published CPGs. This step will make critical appraisal of our guidelines easier for their reviewers. Based on CNMG, the first step in guidelines development is a systematic search of the literature for existence of relevant high-quality CPGs which we can consider for ADOPTION, ADAPTATION or ADOLPMENT. If the relevant guideline of high quality is not identified, a systematic search for relevant high-quality systematic reviews is performed. If a relevant high-quality systematic review exists, we continue with ADOLPMENT. If there is no relevant and high-quality guideline or systematic review, we recommend full process guidelines with development of our own systematic reviews.

Conclusion

Managing authorities including the Guarantee Committee and an Appraisal (Methodological) Committee were established during the first year of the project. The pilot National Methodology of CPG development was developed, tested and validated by the process of the five pilot CPGs development. GRADE Working Group methodology has been used as the main method of Czech National Guidelines development.

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Conflicts of interest

There is no direct conflict of interest of any authors. As indirect conflict of interest regarding this publication could be considered the fact that M.K. is President of the symposium and Chair of the European Joanna Briggs Collaboration.

References