

National Institute for Healthcare Quality and Excellence Institute of Health Information and Statistics of the Czech Republic Ministry of Health of the Czech Republic Palackého náměstí 4, P.O. BOX 60, 128 01 Praha 2, Czech Republic

Annual Report 2024

Report on Activities Defined in the Strategic Plans for the Cochrane Czech Republic









Activities of Cochrane Czech Republic in 2024

Priority 1:

Support the production of high-quality, relevant, up-to-date systematic reviews and other synthesised research evidence to inform health decision-making, mainly in the selected field of Medicine and Public Health.

Priority 2:

Advocating for evidence in the Czech Republic to inform health decision-making, build greater recognition of our work, and become a leading advocate for evidence-informed health care in the Czech Republic.

Priority 3:

Education of medical students and also graduates medical doctors about Cochrane collaboration, its mission, vision, activities, and methods.

Priority 4:

Training of key stakeholders in evidence synthesis and the use of best evidence in decision-making in the Czech healthcare.







Priority 1

Support the production of high-quality, relevant, up-to-date systematic reviews and other synthesised research evidence to inform health decision-making, mainly in the selected field of Medicine and Public Health.

In 2024, Cochrane Czech Republic continued its close collaboration with the National Institute for Quality and Excellence in Health Care (NIKEZ), particularly with its Methodological Centre. NIKEZ, as the key institution responsible for developing national clinical guidelines, adopts the methodological standards of Cochrane and GRADE, which serve as the foundation for ensuring the highest possible quality and transparency of processes. This collaboration is reflected in a unified approach to evidence evaluation, guideline formulation, and their implementation in practice, contributing to the effective transfer of scientific knowledge into the Czech healthcare system. The synergy between the expertise of Cochrane Czech Republic and the institutional support of NIKEZ exemplifies a model partnership that strengthens the quality of healthcare in the Czech Republic.

Meeting with Colleagues from the Agency for Care Effectiveness (ACE)

Cochrane Czech Republic and the Methodological Centre of NIKEZ had the honor of welcoming a delegation from Singapore's Agency for Care Effectiveness (ACE) to their Brno office. The meeting, attended by Daphne Khoo, Rujia Xu, Phyllis Kim, Valentina Ricci, and Jing Xi Yang, provided a unique opportunity to exchange experiences and discuss the development of clinical guidelines, operational recommendations, and their implementation in healthcare systems.

The main topics of the meeting included:

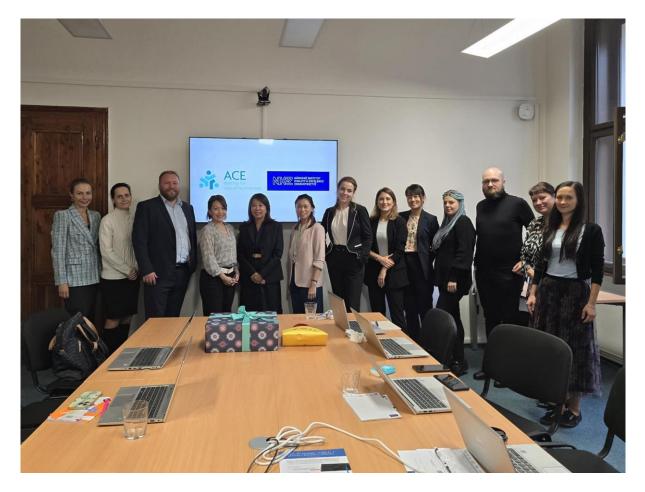
- Barriers in guideline development, such as limited capacity and trained staff, challenges in collaboration with medical societies and functional units, and time constraints faced by experts involved in these processes.
- Challenges faced by methodological teams, including:
 - Motivating healthcare professionals to collaborate on guideline development.
 - Integrating the use of guidelines into the continued education of physicians.
 - Improving the process of scoping questions and conducting literature reviews.
 - Addressing language barriers in accessing evidence.
 - Balancing the diverse needs and perspectives of stakeholders during guideline development.







The meeting was highly beneficial for both parties, as it provided a platform for sharing experiences, addressing challenges, and exploring innovative approaches to overcoming obstacles in methodological activities.



Cochrane Czech Republic and ACE teams members in Brno



NIKEZ NÁRODNÍ INSTITUT KVALITY A EXCELENCE ZDRAVOTNICTVÍ



Priority 2

Advocating for evidence in the Czech Republic to inform health decisionmaking, build greater recognition of our work, and become a leading advocate for evidence-informed health care in the Czech Republic.

The Director of the Institute of Health Information and Statistics of the Czech Republic (IHIS CR), Ladislav Dušek, was one of the keynote speakers at the second instalment of the GES series. He presented his talk titled "From Clinically-Based Evidence to Evidence-Based Medicine: A Story of Building Data-Based Policy via eHealth Tools in the Czech Republic."



Ladislav Dušek at Global Evidence Summit.

In his presentation, Ladislav Dušek summarized more than 10 years of experience in building a new health information system in the Czech Republic. This system was developed as a key component of the newly introduced eHealth concept. He highlighted specific examples of how this system contributes to the strategic development of oncology care. The main points of the presentation included:

- The establishment of a network of comprehensive oncology centers, enabling the centralization of specialized care.
- The implementation of cancer screening programs, contributing to early diagnosis and more effective treatment.
- Ensuring comprehensive socio-health support for patients in advanced stages of the disease and at the end of life.

All these steps were supported by thorough data analysis and the use of information platforms. Ladislav Dušek emphasized that without representative data collection and its effective utilization within the framework of broad collaboration between political authorities and the healthcare system, it would not have been possible to implement or achieve significant changes in healthcare delivery.

The video of the keynote presentation can be found here.



Jitka Klugarová at Global Evidence Summit.

Trusted evidence. Informed decisions. Better health. Members of Cochrane Czech Republic are also part of the Methodological Centre of NIKEZ, which showcased its activities at the prestigious international event, the Global Evidence Summit (GES) 2024. The first instalment of the new series on this event was opened by Jitka Klugarová, who delivered a keynote speech titled "Where is the Balance Between Speed and Rigour in Guidelines Production and Utilization Synergy?"







Members of Cochrane Czech Republic are also part of the Methodological Centre of NIKEZ, which presented its activities at the prestigious international event, the GES 2024. The first session of the new series on this event was opened by Jitka Klugarová, who delivered a keynote speech titled "Where is the Balance Between Speed and Rigour in Guidelines Production and Utilization Synergy?"

In her presentation, Jitka Klugarová addressed the critical question of synergy between guideline development and their rapid implementation. She highlighted the necessity of finding a balance between time efficiency and high-quality preparation of guidelines, which includes:

- Prioritizing and efficiently utilizing available resources.
- Building interdisciplinary collaboration among experts from various fields.
- Leveraging digital tools to accelerate and refine processes.

The main challenges in this process include the risk of compromising rigour, limited stakeholder engagement, and potential biases that could jeopardize the quality of the resulting guidelines.

The presentation aimed to initiate a professional discussion on finding a balance between quality and time efficiency in the development of clinical guidelines. The presentation garnered significant interest and sparked insightful debates among the summit participants.

The video of the keynote presentation can be found <u>here</u>.

Access to Cochrane Library for the Czech Republic

As a result of the collaboration with Cochrane and its publishing partner, Wiley, free access to the Cochrane Library was secured for all citizens of the Czech Republic until the end of October 2024. The aim was to provide both the general public and healthcare professionals in the Czech Republic with access to high-quality and independent evidence to support informed decision-making in healthcare.

Catherine Spencer, CEO of Cochrane, commented on this initiative:



Catherine Spencer at Global Evidence Summit

"Cochrane continues to improve global health by producing trusted healthcare evidence. We are thrilled to celebrate the Czech Ministry of Health's agreement with our publishing partner Wiley. This agreement will make our healthcare evidence from the Cochrane Library freely accessible to everyone across the Czech Republic until the end of October, even after the Global Evidence Summit has concluded."







Cochrane Library contains:

- More than 9,300 systematic reviews and 2,300 registered protocols for systematic reviews.
- Plain language recommendations that are easily understandable, even for non-experts.
- Over 2,100,000 clinical trials.
- More than 3,500 answers to clinical questions.



Members of Cochrane Czech Republic. From left: Iuliia Pavlovska, Andrea Pavlíková, Jana Kopečná, Klára Bouzková, Miloslav Klugar, Jitka Klugarová, Pavel Kopečný, Dana Vigašová, Tereza Vrbová, Vlasta Křenková and Dagmar Tučková.

Priority 3

Education of medical students and also graduates medical doctors about Cochrane collaboration its mission, vision, activities, and methods.

NIKEZ special Session

The GES 2024 provided a platform for the Methodological Centre of NIKEZ to present its work to an international audience through one of the invited Czech sessions. This special session offered an in-depth look at the Centre's activities and the challenges it faces.







Within this session, members of NIKEZ presented the following areas of their work:

- An introduction to the activities of NIKEZ was delivered by Miloslav Klugar and Ladislav Dušek, who jointly presented the institute's main mission and activities.
- The methodology for national clinical guidelines and operational recommendations was presented by Miloslav Klugar.
- The prioritization of topics in the Czech context was described by Dana Vigašová, who focused on the process of selecting key topics for guideline development.
- The central registry of protocols for approved topics was introduced by Jitka Klugarová, who emphasized the importance of transparency and organization in the Centre's work.



Special session NIKEZ. In the photo, from left to right: Dana Vigašová, Dagmar Tučková, Jitka Klugarová, Vladimír Černý, Ladislav Dušek

The presentation also included specific examples:

- Dagmar Tučková presented operational recommendations for prostate cancer screening.
- Vladimír Černý focused on the use of high-flow oxygen therapy as an example of an innovative approach in practice.







After the presentations, a panel discussion followed, during which key challenges faced by the Methodological Centre of NIKEZ were addressed. The challenges discussed included:

- Limited time available for the development of guidelines.
- A shortage of qualified researchers in the field of evidence-based medicine (EBM).
- The position of clinical guidelines within the healthcare and legal systems of the Czech Republic.

The aim of this session was to spark a debate on these issues at an international level and seek inspiration for the further development of the Centre within the framework of global collaboration.

The video of the special session can be found here.

The GES 2024 provided a unique platform for engaging all key stakeholders in the development of clinical guidelines and health policy, including patients and the broader public. The importance of this approach was highlighted by the Czech patient-focused session titled "Empowering Engagement: Integrating Patients and the Public in Guideline and Health Policy Development."

The aim of the session was to:

- Emphasize the importance of involving patients and the public in healthcare decision-making processes.
- Share practices and methodologies for effective collaboration with these groups.
- Foster critical discussion on the challenges and barriers associated with their engagement.



Discussion at the Special Patient Session at the Global Evidence Summit

The session was facilitated by Anna Arellanesová and Robert Hejzák from patient organizations, along with Dagmar Tučková and Dana Vigašová from the Methodological Centre of NIKEZ and Cochrane Czech Republic. The program included expert presentations as well as a panel discussion, which provided an opportunity for participants to share experiences. Jitka Klugarová, representing the Methodological Centre of NIKEZ, delivered a presentation titled "National Institute of Quality and Excellence in Healthcare: Patient's Involvement in the Guideline Development."







The discussion focused primarily on the challenges and barriers that patients and the public face when involved in guideline development. Key topics included limited awareness, the need for appropriate education and support, and obstacles related to organizational and legislative processes.

This session highlighted the necessity of integrating the voices of patients and the public into health policy development processes and creating an environment where their experiences and needs are fully acknowledged.

Special Pedagogical Section

The GES 2024 featured an innovative special session titled **"Evidence-Based Education, Synthesis, and Guideline Development in Pedagogy"**, which focused on the state of this field and its methodological approaches.

This session aimed to:

- Analyse the current state of evidence-based education (EBE).
- Present methodologies and approaches for effective evidence synthesis and implementation in practice.
- Discuss key challenges and strategies for the future development of this field.



Pedagogical Special Session at the Global Evidence Summit 2024

The session was facilitated by Jian Du, Jana ^{Evidence Summit 2024} Marečková, and Alžběta Smrčková, who led a program featuring expert lectures and panel discussions.

Representing the Methodological Centre of NIKEZ, Tereza Vrbová and Miloslav Klugar delivered a presentation titled "**Evidence Transfer and Implementation in Education**." Their talk focused on practical approaches to effectively utilizing evidence for the development of educational practices and strategies to enhance the credibility and robustness of such evidence.

The discussion centred on the challenges faced by guideline developers in education, including the lack of high-quality data, time constraints, and the need to overcome public scepticism. Additionally, potential strategies were presented to help address these obstacles in the future and enhance the credibility of evidence-based education outcomes.

This session highlighted the importance of a systematic approach to developing educational recommendations and the use of evidence-based methodologies as a key element for future innovations in pedagogy.







Special Hyperbaric Section

The GES 2024 provided a platform for an innovative discussion within the Czech special session titled "Diving Deep into Evidence: The Role of Hyperbaric Medicine within Evidence-Based Medicine." This session focused on the integration of hyperbaric medicine (HBOT) into the evidence-based medicine (EBM) approach and its potential in clinical practice.



Miloslav Klugar at Global Evidence Summitu

The session was facilitated by and featured presentations from Michal Hájek, Radek Spudil, and Miloslav Klugar. Representing the Methodological Centre of NIKEZ, Miloslav Klugar presented his talk titled "The Effectiveness and Safety of Hyperbaric Oxygen Therapy for Chronic Diabetic Foot Ulcers: An Overview of Systematic Reviews with de Novo Meta-Analysis of Randomized Controlled Trials."

The topics discussed in this session included:

- Reviewing the latest evidence supporting the clinical applications of hyperbaric medicine, including wound healing, carbon monoxide poisoning treatment, and decompression sickness.
- Challenges in conducting research and generating high-quality evidence in hyperbaric medicine, stemming from its specific operational and clinical contexts.
- Implications of recent research findings for clinical practice, including the balance between evidence, expert opinions, and patient preferences.
- Future directions in hyperbaric medicine research, including the need for collaborative studies and innovative methodologies to overcome existing limitations.

The session featured expert presentations as well as a lively discussion, during which participants shared their experiences and ideas for further research and clinical applications in hyperbaric medicine.

This session emphasized the importance of bridging evidence with practice and highlighted the need for international collaboration to advance this field of medicine.







Priority 4

Training of key stakeholders in evidence synthesis and the use of best evidence in decision-making in the Czech healthcare.

GRADE Working Group Workshop

The international GRADE Working Group meeting, held at Hotel ILF in Prague, brought together experts from around the world to discuss the latest trends in evaluating the certainty of evidence and the strength of recommendations. Members of the Methodological Centre of NIKEZ, who are part of the Czech network of GRADE centers, also participated in this significant event.

The GRADE Working Group is a global team that developed a transparent methodological approach to evidence evaluation. This system, considered the gold standard for guideline development, was created through collaboration among many leading organizations in the field of evidence-based medicine (EBM).

The Saturday meeting aimed to:

- Connect members of the GRADE Working Group and regional branches to exchange experiences.
- Present updates in methodology, including topics such as artificial intelligence, health equity, and healthcare economics.
- Strengthen international collaboration and knowledge sharing for further methodological advancement.

Members of the Methodological Centre of NIKEZ regularly undergo training in GRADE methodology, and participation in events like this meeting allows them to acquire the most up-to-date information. These insights play a crucial role in the development of national clinical guidelines and operational recommendations.

International collaboration is essential to ensuring that recommendations in the Czech Republic align with the latest global standards and contribute to the delivery of high-quality and effective healthcare.











Grade Working Group meeting. On photograph Holger Schünemann a Miloslav Klugar

Articles Published in 2024 by Members of Cochrane Czech Republic:

KLUGAR, Miloslav; LOFTI, Tamara; DARZI, Andrea J.; REINAP, Marge; KLUGAROVÁ, Jitka; KANTOROVÁ, Lucia; XIA, Jun; POKORNÁ, Andrea; DRAPÁČOVÁ, Pavla; HAZLEWOOD, Glen; MUNN, Zachary (2024). GRADE Guidance 39: Using GRADE-ADOLOPMENT to adopt, adapt or create contextualized recommendations from source guidelines and evidence syntheses. Journal of Clinical Epidemiology. <u>https://doi.org/10.1016/j.jclinepi.2024.111494</u>.

> Impact Factor: 7,3 Quartile: Q1 Decile: D1

JASTER, Christina; KLUGAROVÁ, Jitka; KRÓLIKOWSKA, Aleksandra; KOŁCZ, Anna; PERIČIĆ, Tina Poklepović; BAŁA, Małgorzata M.; VRBOVÁ, Tereza; BECKER, Roland; PRILL, Robert (2024). Promoting running as the best treatment for lower back pain in physiotherapy practice: a best practice implementation project. JBI Evidence Implementation, 22(3): 281-290. <u>https://doi.org/10.1097/xeb.0000000000000441</u>.







Impact Factor: 2,7 Quartile: Q2 Decile: D4

MUESHLENSIEPEN, Felix Britten; STANZE, Henrikje; MAY, Suzann; STAHLHUT, Kerstin; HELM, Carolin; HAKAM, Hassan Tarek; BAŁA, Małgorzata M.; PERIČIĆ, Tina Poklepović, VRBOVÁ, Tereza; KLUGAROVÁ, Jitka, PRILL, Robert (2024). Crossdisciplinary advance care planning in oncology and palliative care amidst a pandemic: a best practice implementation project. JBI Evidence Implementation. <u>https://doi.org/10.1097/xeb.0000000000000445</u>.

Impact Factor: 2,7 Quartile: Q2 Decile: D4

POLLOCK, Danielle; KHALIL, Hanan; EVANS, Catrin; GODFREY, Christina; PIEPER, Dawid; ALEXANDER, Lyndsay; TRICCO, Andrea C.; MCINERNEY, Patricia; PETERS, Micah DJ.; KLUGAR, Miloslav; FALAVIGNA, Maicon; STEIN, Airton Tetelbom; QASEEM, Amir; MORAES, Érica Brandão de; SARAN, Ashrita; DING, Sandrine; BARKER, Timothy; FLOREZ, Ivan D.; JIA, Romy; MUNN, Zachary (2024). The Role of Scoping Reviews in Guideline Development. Journal of Clinical Epidemiology, 169. <u>https://doi.org/10.1016/j.jclinepi.2024.111301</u>.

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> Impact Factor: 3,9 Quartile: Q2 Decile: 4

PIEPER, Dawid; KLUGAR, Miloslav; AYENI, OLUFEMI R.; KARLSSON, Jon; LUND, Hans (2024). Evidence-based research in orthopaedics, sports medicine and rehabilitation—Why new studies should rely on earlier work. Knee Surgery Sports Traumatology Arthroscopy, 32: 203–205. <u>https://doi.org/10.1002/ksa.12047</u>.

Impact Factor: 3,3 Quartile: Q1 Decile: D2

HÁJEK, Michal; CHMELAŘ, Dittmar; TLAPÁK, Jakub; KLUGAR, Miloslav (2024). The Effectiveness of Hyperbaric Oxygen Treatment in Patients with Complex Regional Pain Syndrome: A Retrospective Case series. International Journal of Medical Sciences, 21(11): 2021–2030. <u>https://doi.org/10.7150/ijms.97513</u>.

Impact Factor: 3,2







Quartile: Q1 Decile: D2

KANIA, Michał; SUDUŁ, Paulina; WILK, Magdalena; SZOPA, Magdalena; KATRA, Barbara; MAŁECKI, Maciej T.; POKLEPOVIĆ Peričić, Tina; PRILL, Robert; KLUGAROVÁ, Jitka; VRBOVÁ, Tereza; KLUGAR, Miloslav; LEŚNIAK, Wiktoria; BAŁA, Małgorzata M. (2024). Education of adult type 1 diabetes patients in a diabetes ward setting: a best practice implementation project. JBI Evidence Implementation. https://doi.org/10.1097/XEB.00000000000436.

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PRILL, Robert; PIEPER, Dawid; KLUGAR, Miloslav; AYENI, Olufemi R.; KARLSSON, Jon; LUND, Hans (2024). Evidence-based research in orthopaedics, sports medicine and rehabilitation—Why new studies should rely on earlier work. Knee Surgery, Sports Traumatology, Arthroscopy, 32(2), 203–205. https://doi.org/10.1002/ksa.12047.

Impact Factor: 3,8 Quartile: Q1 Decile: D2

STONE, Jennifer C.; LEONARDI-BEE, Jo; BARKER, Timothy; SEARS, Kim; KLUGAR, Miloslav; MUNN, Zachary; AROMATARIS, Edoardo (2024). Common tool structures and approaches to risk of bias assessment: implications for systematic reviewers. JBI Evidence Synthesis, 22(3): 389–393. https://doi.org/10.11124/JBIES-23-00463.

Impact Factor:1,5 Quartile: Q3 Decile: D7

POTMĚŠILOVÁ, Petra; POTMĚŠIL, Miloň; KLUGAR, Miloslav (2024). Differences between the creativity of people who are deaf or hard of hearing and those with typical hearing: a protocol for the further scoping review. Creativity Studies, 17(1). https://doi.org/10.3846/cs.2024.15890.

> Impact Factor: 2 Quartile: Q2 Decile: D4

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Joseph L.; SUVADA, Jozef; AKL, Elie A.; KREDO, Tamara; MBUAGBAW, Lawrence; MOTILALL, Ashley; BABA, Ami; SCOTT, Shannon D.; FALAVIGNA, Maicon; KLUGAR, Miloslav; FRIESSOVÁ, Tereza; LOTFI, Tamara; STEVENS, Adrienne; OFFRINGA, Martin; SCHÜNEMANN, Holger J.; POTTIE, Kevin (2024). A multimethods randomized trial found that plain language versions improved adults understanding of health recommendations. JBI Evidence Synthesis, 165. https://doi.org/10.1016/j.jclinepi.2023.11.009.

> Impact Factor:1,5 Quartile: Q3 Decile: D7