

Clive Kearon Guideline Fellowship

GOAL

CHEST will launch the Clive Kearon Guideline Fellowship to acquaint early career clinicians with key aspects of guideline development, dissemination, and implementation. The program will honor a key contributor to CHEST guidelines, Clive Kearon, MD, PhD, and build a group of engaged and informed clinicians who understand the complexity of the guideline development process and challenges for maximizing widespread dissemination and implementation. This unique opportunity will further expand CHEST's role as a leader in guideline development and guideline innovation.

During their term of service, fellows will support the efforts of the CHEST Guideline department and Guideline Oversight Committee (GOC) by understanding how to develop valuable patient-oriented health care questions; perform and review systematic reviews; critically evaluate and assess quality of research studies; develop evidence-based, implementable guideline recommendations; and understand strategies to maximize guideline dissemination and implementation. Those fellows who are highly engaged and effective will have opportunities to continue to work with CHEST Guidelines in a variety of roles, such as a guideline panelist, guideline methodologist, or GOC liaison.

OVERVIEW

In the pilot year, the CHEST organization will support the involvement of one early career clinician, who will commit to a 2-year fellowship. After the fellowship period, successful individuals will enjoy opportunities to continue to engage with the CHEST Guideline department and GOC, guideline panel participation, and other endeavors related to guideline development, methodology, dissemination, and implementation. The Kearon Fellow will report to the GOC Chair/Director of Guidelines and Statements and work with other CHEST staff throughout their tenure. The Kearon Fellow will work remotely, with travel to the CHEST Headquarters and select conferences as noted.

ELIGIBILITY

Eligibility is extended to individuals with doctoral degrees (MD, DO, PhD, or the equivalent) and who are within 3 years of completing their training. Senior fellows are welcome to apply. Individuals must have a strong interest in guideline development, dissemination, and implementation.

APPLICATION PROCESS

Candidates will be asked to submit the following:

- 1-2-page statement of interest that addresses the following questions:
 - What are your long-term career goals and clinical or research areas of interest?
 - How will this fellowship allow you to further those goals?
 - Discuss how you are uniquely positioned to support and advance CHEST through participation in CHEST guidelines
- 300-word biosketch

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- CV
- 2 letters of support (one letter must be from a division chief/program director)

The CHEST Director of Guidelines and Statements, GOC Chair and Vice-Chair, and key staff and members of the GOC will screen candidates and finalists will undergo an interview.

CURRICULUM/KEY ACTIVITIES

The following curriculum and activities represent the major opportunities available, but the program can be tailored to the interests of the selected individual.

Society and Guideline Overview: CHEST Headquarters (Glenview, Illinois)

Learning Objectives:

1. Differentiate the role of the organizational staff, leadership, and volunteer staff.
2. Navigate CHEST's organizational structure, including key staff roles, leadership and committee governance.
3. Understand the overall guideline development process and identify the key workflow stages.
4. Determine pathways for handling different types of documents related to guidelines (eg, clinical practice guidelines, expert panel reports, technical statements).
5. Understand CHEST Guidelines in the larger context of the organization's goals and mission.
6. Articulate overview of steps in developing a clinical practice guideline.
7. Leverage software and systems to support guideline development.

GRADE Guideline Development Workshop (TBD)

Learning Objectives:

1. Explore key principles of evidence-based medicine and guideline development.
2. Facilitate the basic principles of guideline methodology based on the GRADE approach.
3. Effectively read a systematic review and conduct a systematic review using meta-analysis.
4. Develop expertise in GRADE, including critically appraising evidence, grading evidence quality, and moving from evidence to recommendation.
5. Create evidence profiles using the GRADE approach.
6. Determine strength of recommendation and overall evidence quality for a recommendation.

International Guideline Credentialing and Certification Program (Online)

Learning Objectives:

1. Understand and describe the evidence-based methods to developing practice guidelines.
2. Explore how to apply evidence-based methods to a guideline.
3. Learn how to lead a guideline panel in reaching consensus on a recommendation for health questions.
4. Learn how to participate in a clinical practice guideline in a variety of roles: panelist, methodologist, and/or chair.

Other Travel

The fellow will be required to attend the CHEST Annual Meeting. Additionally, the fellow will be required to attend guideline-specific meetings on an ad hoc basis.

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Self-Study

The Kearon Fellow will participate in self-study to learn about key aspects of evaluating and developing systematic reviews and GRADE methodology. The recommended self-study program includes engagement in reading and online activities. See Appendix for proposed resources.

RESPONSIBILITIES

General Participation

The Kearon Fellow will join the monthly calls of the GOC and take on needs that emerge. The Fellow will also have a role in the development of at least one guideline, which will require contributing to performing systematic reviews, evaluating and synthesizing available evidence, presenting data to guideline panelists, and formulating guideline recommendations. The Fellow will be a co-author on any systematic reviews and guidelines they contribute to in accordance with the International Committee of Medical Journal Editors (ICMJE) criteria.

Clinical Practice Guideline Review

The Kearon Fellow will conduct review of a minimum of three clinical practice guidelines per year and discuss comments and feedback with the GOC Chair and Director of Guidelines and Statements.

Clinical Practice Guideline Development

The key project to be undertaken during the fellowship term will be providing methodology support for a CHEST Clinical Practice Guideline. This will include the development of a systematic review that will serve as the basis of the guideline. With guidance from a senior methodologist, the fellow will be involved with formulating questions with the guideline panel, performing a systematic review of the literature, assessing the quality of individual studies, extracting and synthesizing data pertaining to each question, and formulating guideline recommendations and overall quality of evidence. CHEST methodology staff will provide direction and support at key intervals. The final systematic review and guideline will be submitted to *CHEST*[®] journal for potential publication.

Program Evaluation

The Kearon Fellow will be asked to provide periodic feedback and at the culmination of the program will submit an overall evaluation that addresses whether the experience matched initial expectations and enabled the participant to further their originally stated goals. The Fellow will have an opportunity to offer recommendations for programmatic improvements.

TIMELINE

March 2021	Announce fellowship
May 2021	Application deadline
July 2021	Fellowship candidate selected
January 2022	Beginning of fellowship period
December 2024	Conclusion of fellowship period

APPENDIX: ADDITIONAL SELF STUDY RESOURCES

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Online Coursework

- [GRADE Online Learning Modules](#)
- [Introduction to Systematic Review and Meta-Analysis](#) from John Hopkins School of Public Health
- [Conducting an Intervention Review](#) from Cochrane Interactive Learning

Online Resources

- [PRISMA Statement](#)
- [Step-by-step Web-based Guide to SR development](#) from the University of Edinburgh
- Cochrane Education Video titled [What are Systematic Reviews?](#)
- [GRADE Handbook](#)

Articles

- Hassan, M. (2017). Clinical Practice Guidelines: A Primer on Development and Dissemination. *Mayo Clinic Proceedings*, Volume 92, Issue 3, 423 – 433 (and [video supplement](#) to this article)
- Guyatt, G., et al. Grade Guidelines: 1. Introduction – GRADE evidence profiles and summary of findings tables. *J Clin Epidemiol.* 2011;64:383-94.
- Guyatt, G., et al. Grade Guidelines: 2. Framing the question and deciding on important outcomes. *J Clin Epidemiol.* 2011;64:395-400.
- Balshem, H., et al. Grade Guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol.* 2011;64:401-6.
- Guyatt, G., et al. Grade Guidelines: 4. Rating the quality of evidence – study limitations (risk of bias). *J Clin Epidemiol.* 2011;64:407-15.
- Guyatt, G., et al. Grade Guidelines: 5. Rating the quality of evidence – publication bias. *J Clin Epidemiol.* 2011;64:1277-82.
- Guyatt, G., et al. Grade Guidelines: 6. Rating the quality of evidence – imprecision. *J Clin Epidemiol.* 2011;64:1283-93.
- Guyatt, G., et al. Grade Guidelines: 7. Rating the quality of evidence – inconsistency. *J Clin Epidemiol.* 2011;64:1294-1302.
- Guyatt, G., et al. Grade Guidelines: 8. Rating the quality of evidence – indirectness. *J Clin Epidemiol.* 2011;64:1303-10.
- Guyatt, G., et al. Grade Guidelines: 9. Rating up the quality of evidence. *J Clin Epidemiol.* 2011;64:1311-6.
- Brunetti, M., et al. Grade Guidelines: 10. Considering resource use and rating the quality of economic evidence. *J Clin Epidemiol.* 2013;66:140-50.
- Guyatt, G., et al. Grade Guidelines: 11. Making an overall rating of confidence in effect estimates for a single outcome and for all outcomes. *J Clin Epidemiol.* 2013;66:151-7.
- Guyatt, G., et al. Grade Guidelines: 12. Preparing Summary of Findings Tables – binary outcomes. *J Clin Epidemiol.* 2013;66:168-72.
- Guyatt, G., et al. Grade Guidelines: 13. Preparing Summary of Findings Tables and evidence profiles – continuous outcomes. *J Clin Epidemiol.* 2013;66:173-83.
- Andrews, J., et al. Grade Guidelines 14: Going from evidence to recommendations – the significance and presentation of recommendations. *J Clin Epidemiol.* 2013;66:719-25.
- Andrews, J., et al. Grade Guidelines 15: Going from evidence to recommendations – determinants of a recommendation’s direction and strength. *J Clin Epidemiol.* 2013;66:726-35.