

Family Medicine Updates



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INTEGRATING SCHOLARSHIP AND RESEARCH INTO CLINICAL PRACTICE

Background

Clinical medicine saves lives only by advancing new knowledge and its implementation. Family Medicine is a clinical discipline. Ergo, family medicine must evolve based on new knowledge and its implementation into practice. So, why are so few medical students, family medicine residents, fellows, and physicians engaged in this evolution called scholarship and research?

As professionals committed to the health and well-being of patients and communities, physicians must master a large and complex body of knowledge and skills.¹ Engaging in patient-centered care requires health care teams to work with patients and communities to answer their health care questions while adopting a critical and evidence-informed approach to treatment and management.¹ To tailor health care strategies to meet the needs of patients, families, and/or a community, all members of the health care team, including family physicians, must be engaging in adapting and expanding the complex body of knowledge and skills they possess at that moment in time.

In Canada, it is within CanMEDS-2015, CanMEDS-FM (Family Medicine), and the CanMEDS-FM Indigenous Health Supplement that the role of Scholar highlights the fact that “physicians demonstrate a lifelong commitment to reflective learning; as well as the creation, dissemination, application, and translation of medical knowledge”.¹⁻³

An essential component of the patient-centered clinical method is a commitment to asking and systematically answering questions.⁴ These changes would not have been possible without applying research into practice. As all health care teams focus on providing patient-centered clinical care, it is essential to always consider whether specific study results/findings and current clinical practice guidelines were designed for the individual to whom care is being provided. Asking questions and systematically answering them (research) is relevant to all forms of clinical practice. It is the responsibility of all health care team members, including family physicians, as they strive to provide optimal care to the individual, family, and/or community.

In Canada, Standards for Accreditation for Residency Programs in Family Medicine⁵ highlight resident involvement in practice improvement as a key component of maintaining satisfactory levels of scholarly activity within Departments of Family Medicine and the importance of having faculty

members facilitate and coach residents’ involvement in such activities.

Ensuring that practice improvement is a fundamental part of everyone’s job, every day, in all parts of the health system will be required to build a culture where everyone recognizes that in health care, “everyone has two jobs when they come to work every day: to do their work and to improve it.”^{6,7} As a result, it will require reflective practice and curiosity about one’s own practice, focusing on improving care, outcomes, and experiences.⁸

NAPCRG members have created an Introduction/Orientation for medical students and Family Medicine Residents/Fellows showing how the career of a physician can include research at various levels of saturation. There are practice-based research networks and electronic health information networks for those who are comfortable contributing their actions and patient-consented data to research. For those who want to understand more about study design and interpretation of analyses, there are other career opportunities, including Fellowships, data skills training and acquisition, and NIH training grants. There are options available for every level of research engagement. NAPCRG members introduce and mentor different groups of interested trainees as they change career pathways to include some or more research.

Annals of Family Medicine has also created its own video championing primary care research (<https://www.youtube.com/channel/UCATLpuu7PmgHzsDAeoPmKcA>), with highlights on the publication and dissemination of the work we do as primary care researchers.

To further integrate family medicine/primary care research into clinical practice, NAPCRG and ADFM (Association of Departments of Family Medicine in the USA) will be hosting a Research Summit on October 30, 2023 just before the 51st Annual Meeting of NAPCRG. This Research Summit is being supported through the ABFM (American Board of Family Medicine) Foundation’s Family Medicine NEXT Initiative. Stay tuned...

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References

1. Royal College of Physicians and Surgeons of Canada. The CanMEDS 2015 Physician Competency Framework. Royal College of Physicians and Surgeons of Canada. Published 2015. Accessed Jul 24, 2016. https://canmeds.royalcollege.ca/uploads/en/framework/CanMEDS%202015%20Framework_EN_Reduced.pdf
2. Shaw E, Oandasan I, Fowler N, eds. CanMEDS-FM 2017: a competency framework for family physicians across the continuum. College of Family Physicians of Canada. Published 2017. Accessed Jul 9, 2018. https://cfpc.ca/uploadedFiles/Resources/Resource_Items/Health_Professionals/CanMEDS-Family-Medicine-2017-ENG.pdf
3. Kitty D, Funnel S, eds. CanMEDS-FM Indigenous health supplement. College of Family Physicians of Canada. Published 2020. Accessed Dec 2, 2022. <https://www.cfpc.ca/CFPC/media/PDF/CanMEDS-IndigenousHS-ENG-web.pdf>

4. Stewart M, Brown J, Levenstein J, McCracken E, McWhinney IR. The patient-centred clinical method. 3. Changes in residents' performance over two months of training. *Fam Pract*. 1986;3(3):164-167. [10.1093/fampra/3.3.164](https://doi.org/10.1093/fampra/3.3.164)
5. College of Family Physicians of Canada. Standards of Accreditation for Residency Programs in Family Medicine. College of Family Physicians of Canada. Published 2020. Accessed Jan 22, 2023. <https://www.cfpc.ca/CFPC/media/Resources/Accreditation/2020701-RB-V2-0-ENG.pdf>
6. Batalden PB, Davidoff F. What is "quality improvement" and how can it transform healthcare? *Qual Saf Health Care*. 2007;16(1):2-3. [10.1136/qshc.2006.022046](https://doi.org/10.1136/qshc.2006.022046)
7. Hosain J, Reis O, Verrall T, et al. Grounded in practice: integrating practice improvement into daily activities. *Can Fam Physician*. 2020;66(12):931-933. [10.46747/cfp.6612931](https://doi.org/10.46747/cfp.6612931)
8. Pimlott N, Katz A. Ecology of family physicians' research engagement. *Can Fam Physician*. 2016;62(5):385-390.



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AAFP ISSUES NEW CLINICAL PRACTICE GUIDELINE ON HYPERTENSION

The AAFP has published a new clinical practice guideline on appropriate blood pressure treatment targets for adults with hypertension. The guideline applies to individuals with hypertension (with or without cardiovascular disease) and focuses on target blood pressure levels rather than specific treatments. It is available at <https://www.aafp.org/dam/AAFP/documents/journals/afp/AAFPHypertensionGuideline.pdf>.

The guideline strongly recommends that clinicians treat adults who have hypertension to a standard blood pressure target of less than 140/90 mm Hg to reduce the risk of all-cause and cardiovascular mortality. It also recommends that clinicians consider treating adults who have hypertension to a blood pressure target of less than 135/85 mm Hg to reduce the risk of myocardial infarction, based on evidence showing a small additional benefit with this lower target.

"This guideline is important because there are multiple competing guidelines with different recommendations for blood pressure treatment targets," explained Sarah Coles, MD, an associate professor in the Department of Family, Community and Preventive Medicine at the University of Arizona College of Medicine, Phoenix, and program director at the Colorado Plateau Family and Community Medicine residency program, North County HealthCare in Flagstaff, Arizona. "The AAFP guideline provides clear, evidence-based recommendations for optimal blood pressure targets for adults with hypertension."

Coles also served as the guideline panel chair. In addition to coauthoring the guideline, she helped develop the clinical questions, review the evidence and systematic reviews, and develop recommendations.

Recommendations and Key Points

The hypertension clinical practice guideline contains 2 recommendations.

First, the AAFP recommends that clinicians treat adults with hypertension to a standard blood pressure target of less than 140/90 mm Hg to reduce the risk of all-cause mortality and cardiovascular mortality. This is a strong recommendation based on high-quality evidence. While treating to a lower blood pressure target of less than 135/85 mm Hg may be considered based on patient preferences and values, the lower target does not provide additional benefit at preventing mortality.

The systematic review found no significant differences in total serious adverse events between the lower and standard target groups but did note a significant increase in all other adverse events (such as syncope and hypotension) when treating to a lower systolic target. Overall, the lower target group had an absolute risk increase of 3% for all other serious adverse events compared with the standard target group.

Second, the AAFP recommends that clinicians consider treating adults with hypertension to a lower blood pressure target of less than 135/85 mm Hg to reduce the risk of myocardial infarction (MI). This is considered a weak recommendation and is based on moderate-quality evidence. Although treating to a standard blood pressure target of less than 140/90 mm Hg reduced the risk of MI, there was a small additional benefit observed with a lower blood pressure target; however, there was no observed additional benefit in preventing stroke.

Coles, who served as the guideline panel chair, noted several key takeaways for family physicians to consider when implementing the recommendations.

"High-quality evidence shows that treating adults with hypertension to a target blood pressure of less than 140/90 mm Hg reduces the risk of all-cause and cardiovascular mortality," she said. "Treating to a lower blood pressure target does not provide any additional benefit to mortality or stroke risk. This holds true for adults with and without preexisting cardiovascular disease."

"Treating to a target of less than 135/85 can further reduce the risk of MI by about 4 fewer MIs per 1,000 patients. However, treating to a lower blood pressure target does come with harms. People treated to a lower blood pressure target increased rates of adverse events, including syncope and hypotension, with a number needed to harm of 33 over 3.7 years. On average, each patient would need to take 1 additional medication to get to the lower target. This could increase cost, medication adverse effects, and drug-drug interactions."

"Because the potential benefit is small and there are increased risks, family physicians should use shared decision making when considering treating to a lower blood pressure goal to reduce MIs. These discussions should include a patient's risk of MI, potential for increased harms for lower targets, costs, and patient values and preferences."

Guideline Development

To create the new guideline, the AAFP's Commission on Health of the Public and Science appointed a development group that analyzed the evidence from a 2020 Cochrane systematic review and conducted a target literature search of additional trials. The primary objective was to determine whether lower blood pressure targets were associated with lower morbidity and mortality compared with standard blood pressure targets.

In constructing the guideline, the development group focused on patient-centered clinical outcomes such as total mortality, cardiovascular-related mortality, cardiovascular events such as stroke and myocardial infarction, and adverse events. The group also used a modified version of the Grading of Recommendations Assessment, Development and Evaluation system to rate the quality of evidence for each outcome and the overall strength of each recommendation.

Future Research

The authors and the guideline development group noted several gaps in the existing research. They called for additional studies that would, among other things,

- Evaluate longer-term outcomes
- Examine whether certain patient populations would benefit from lower blood pressure targets
- Evaluate blood pressure targets in younger individuals at low risk
- Examine the social determinants of health that contribute to health care disparities

Since all AAFP clinical practice guidelines are scheduled for review 5 years after completion (or earlier if new evidence is available), the authors said any new research into these and other areas will provide important information for future guidelines.

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CORE OUTCOMES OF RESIDENCY TRAINING 2022 (PROVISIONAL)

The 2023 ACGME family medicine residency program requirements¹ call for the most significant change in family medicine residencies in the last 50 years. Major new features include an emphasis on the practice as the curriculum, outreach to communities to address health disparities, residency learning networks, independent learning plans for residents,

flexibility for residencies and residents, a significant shift to competency-based education (CBME), and dedicated educational time for residency faculty to drive these changes.

All of these require significant change for residencies, faculty, and residents; most pressing now, however, is the transition to CBME because the new requirements go into effect July 1, 2023. These changes require the hard work of consensus building among the Family Medicine Review Committee (RCFM), the American Board of Family Medicine (ABFM), residency program directors, faculty and the residents themselves, as well as changes in data systems the RCFM uses to accredit residencies and the ABFM uses to evaluate board eligibility, and modifications of the assessments that residents and faculty use on a daily and weekly basis. For many experienced program directors, the changes called for in the new standards are dramatic—the elimination of the 1,650 visits requirement as well as many fewer standards for specific numbers of months or hours of specific curricula. Instead, there are expectations that residents be competent on graduation in dozens of required essential skills in many curricular domains, and much more flexibility for residencies to create curricula that meet community needs and take advantage of the unique educational opportunities each community has to offer.

It is important to understand why CBME is so important—and why now. Despite ubiquitous rhetoric of “innovation and transformation,” the outcomes of health care in the United States are getting worse, with declining life expectancy,² worse outcomes across all ages and most diseases,³ and COVID-19 teaching us all—again—about health disparities.⁴ We believe that well-trained personal physicians, embedded in communities and supported by a robust team, can address these problems. The new ACGME FM residency requirements double down on the Starfield 4 C's—first contact care, comprehensiveness, continuity, and care coordination—and extend them to the community.⁵ We assert that exposure does not equate to competence: a family medicine resident is not competent in the care of children just because she has completed 5 months of rotations! We expect residents to co-create their education and believe that this will attract the best medical students. CBME will also force rethinking of faculty development and continuous quality improvement of residency programs. Finally, and most importantly, CBME done well can help drive the broader residency redesign effort the specialty has envisioned.

The key features of CBME are now well understood (Table 1).⁶ The first step is “to start with the end in mind”—to define the outcomes we expect from family medicine residencies. To that end, the ACGME RCFM, with input from ABFM, has begun to define the core outcomes of family medicine residency education. Beginning with the Entrustable Professional Activities (EPAs) developed as a part of *Family Medicine for America's Health* by the American Academy of Family Physicians (AAFP), ABFM, American College of Osteopathic Family Physicians, the Association of Departments of Family Medicine, the Association of Family Medicine

Table 1. Van Melle Framework⁶ for Competency-Based Medical Education

Component	Description
An outcomes-based competency framework	<ul style="list-style-type: none"> Desired outcomes of training are identified based on societal needs. Outcomes are paramount so that the graduate functions as an effective health professional.
Progressive sequencing of competencies	<ul style="list-style-type: none"> In competency-based medical education (CBME), competencies and their developmental markers must be explicitly sequenced to support learner progression from novice to master clinicians. Sequencing must consider that some competencies form building blocks for the development of further competence. Progressions is not always a smooth, predictable curve.
Learning experiences tailored to competencies in CBME	<ul style="list-style-type: none"> Time is a resource, not a driver or criterion. Learning experiences should be sequenced in a way that supports the progression of competence. There must be flexibility to accommodate variation in individual learner progression. Learning experiences should resemble the practice environment. Learning experiences should be carefully selected to enable acquisition of one or many abilities. Most learning experiences should be tied to an essential graduate ability.
Teaching tailored to competencies	<ul style="list-style-type: none"> Clinical teaching emphasizes learning through experience and application, not just knowledge acquisition. Teachers use coaching techniques to diagnose a learner in clinical situations and give actionable feedback. Teaching is responsive to individual learner needs. Learners are actively engaged in determining their learning needs. Teachers and learners coproduce learning.
Programmatic assessment (ie, program of assessment)	<ul style="list-style-type: none"> There are multiple points and methods for data collection. Methods for data collection match the quality of the competency being assessed. Emphasis is on workplace-based assessment. Emphasis is on providing personalized, timely, meaningful feedback. Progression is based on entrustment. There is a robust system for decision making. Good assessment requires attention to issues of implicit and explicit bias that can adversely affect the assessment process.

Residency Directors, NAPCRG, and the Society of Teachers of Family Medicine (STFM), along with concepts from the ACGME core competencies.^{7,8} A national summit of family medicine organizations January 19-20, 2023 provided broad input, and a revised document was reviewed again by the RCFM, the ABFM, the leadership of the AAFP, and the Family Medicine Leadership Council in February 2023.

Table 2 lists the proposed core outcomes of family medicine residency education. These outcomes represent a commitment to the public on behalf of the RCFM, the ABFM, and the specialty. There are a total of 12 outcomes, more practical than the roughly 67 curricular competencies detailed in the 2023 standards, and lower than 17 and 18 EPAs in pediatrics

and surgery, respectively. The list includes specific competencies, such as communication skills, and also entrustable activities such as competence in continuity care and management of the acutely ill patient in the hospital. It takes advantage of strengths of the current family medicine curriculum, including teaching in behavioral health, quality improvement, and community health. These strengths will allow for the repurposing of many current assessments. Table 2 is also provisional: we commit to learning with the community and adjusting as necessary.

What now? The RCFM is responsible for accrediting residencies. The RCFM and ABFM will now work with the ACGME data leadership to develop the data systems, including logs of clinical experiences and updating family medicine-specific resident survey questions, to allow the RCFM to monitor residencies. Importantly, family medicine is aligned with pediatrics, surgery, and other specialties, which are now moving from counts to competence: data systems will need to change. The RCFM understands that change will take time and will extend grace to programs. The ABFM will use the list of core outcomes to set standards for board eligibility. We are committed to high standards across a broad scope of practice. Priorities for 2023 include assurance that residencies can assess competencies effectively and emphasis on the most important competencies for individual residents. For example, program directors and the clinical competency committees (CCCs) will need to assure the ABFM that individual resi-

dents provide excellent continuity care, can assess and treat a sick child appropriately, and be able to diagnose and manage an acutely ill hospital patient with multiple comorbidities. We also expect that graduating residents will be able to lead or participate in the hard work of interprofessional teams necessary for improving quality and addressing health disparities.

Neither the RCFM nor the ABFM, however, has the capacity to develop, test, and spread assessments or lead the new faculty development programs necessary across the country. We have learned from the experience of the College of Family Physicians of Canada⁹ that it is vital that family medicine develop an explicit *assessment* strategy for what will be assessed and how assessment will take place, and a

Table 2. Core Outcomes of Family Medicine Residency Training (Provisional)

The ACGME Family Medicine Review Committee, the American Board of Family Medicine, and family medicine residency programs and faculty across the country commit to the patients and communities they serve that residents who complete ACGME-accredited training in family medicine will be able to:

1. Develop effective communication and constructive relationships with patients, clinical teams, and consultants
2. Practice as personal physicians, providing first-contact access, comprehensive, and continuity medical care for people of all ages in multiple settings and coordinate care by helping patients navigate a complex health care system
3. Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness in early, treatable stages for people of all ages while supporting patients' values and preferences
4. Evaluate, diagnose, and manage patients with undifferentiated symptoms, chronic medical conditions, and multiple comorbidities
5. Diagnose and manage common mental health conditions in people of all ages
6. Diagnose and manage acute illness and injury for people of all ages in the emergency room or hospital
7. Perform the procedures most frequently needed by patients in continuity and hospital practices
8. Care for low-risk patients in prenatal care, labor and delivery, and post-partum settings
9. Effectively lead, manage, and participate in teams that provide care and improve outcomes for the diverse populations and communities they serve
10. Model lifelong learning and engage in self-reflection
11. Assess priorities of care for individual patients across the continuum of care—in-office visits, emergency, hospital, and other settings, balancing the preferences of patients, medical priorities, and the setting of care
12. Model professionalism and be trustworthy for patients, peers, and communities

complementary *educational* strategy that underscores how residents will learn in the new system, including digital tools that allow real-time formative feedback to help faculty, CCCs, and program directors to guide residents' development. We are grateful to the STFM for leading this effort and engaging other organizations and specialties in the dialogue. All of the organizations of family medicine have a critical role to play: it takes a village to redesign residency education!

Several other specialty-wide interventions will support these efforts. As of this writing, the ACGME Board of Directors has reconsidered the specialty's request for more faculty time devoted to education; substantial work and advocacy remain, but we are cautiously optimistic. Dedicated faculty time for education is critical to CBME and to residency redesign. In addition, in early April, STFM will convene a national summit on residency learning networks. The examples of I³, P4, Length of Training, Clinic First, and WWAMI have

demonstrated huge benefits from residency collaboratives. We hope that all US residencies will participate in a learning collaborative addressing practice transformation and CBME, with departments, AAFP state chapters and other organizations serving as sponsors.¹⁰ Soon, the ABFM Foundation will announce a \$2,500,000 request for proposals for planning and seed funding for residency learning networks. In May, the ACGME will conduct a special workshop to "train the trainers"—the residency faculty who will help teach us all about the implementation of CBME. We are grateful to Dr Eric Holmboe and the ACGME for this tangible support for our specialty.

Family medicine starts with a considerable challenge. As a specialty, our residencies have suffered more than most specialties from COVID-19, and healing at the clinic, community, and personal levels will take years. We currently have 745 residencies, over 15,000 residents and are growing faster than any other specialty. And, of course, the changes called for by the new ACGME FM requirements are very ambitious. Despite all the challenges, almost 4,000 people participated in planning over the last 3 years. Our tribe is passionate about clinical care and education—and convinced our graduates can help heal our patients, communities, and the health care system. The RCFM and the ABFM are proud to have all of you as partners.

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References

1. Accreditation Council for Graduate Medical Education. ACGME Common Program Requirements (Residency). Published 2023. Accessed Feb 18, 2023. https://www.acgme.org/globalassets/pfassets/programrequirements/cprresidency_2023v2.pdf
2. Woolf SH, Schoomaker H. Life expectancy and mortality rates in the United States, 1959-2017. *JAMA*. 2019;322(20):1996-2016. [10.1001/jama.2019.16932](https://doi.org/10.1001/jama.2019.16932)
3. National Research Council, Institute of Medicine. The National Academies Collection: Reports funded by National Institutes of Health. In: Woolf SH, Aron L, eds. *US Health in International Perspective: Shorter Lives, Poorer Health*. National Academies Press; 2013.
4. Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. National Academies Press; 2003.
5. Bazemore A, Grunert T. Sailing the 7C's: Starfield revisited as a foundation of family medicine residency redesign. *Fam Med*. 2021;53(7):506-515. [10.22454/FamMed.2021.383659](https://doi.org/10.22454/FamMed.2021.383659)
6. Van Melle E, Frank JR, Holmboe ES, Dagnone D, Stockley D, Sherbino J; International Competency-Based Medical Education Collaborators. A core components framework for evaluating implementation of competency-based medical education programs. *Acad Med*. 2019;94(7):1002-1009. [10.1097/ACM.00000000000002743](https://doi.org/10.1097/ACM.00000000000002743)

7. Association of Family Medicine Residency Directors. Entrustable Professional Activities (EPAs). Accessed Feb 18, 2023. <https://www.afmrd.org/page/epa>
8. Society of Teachers of Family Medicine. EPAs competencies, subcompetencies, and milestones. Accessed Feb 18, 2023. <https://www.stfm.org/teaching/resources/resources/epascompetenciesmilestones/overview/>
9. Oandasan I, Saucier D, eds. Triple C Competency-based curriculum report - part 2: advancing implementation. Published 2013. Accessed Jul 29, 2013. https://www.cfpc.ca/uploadedFiles/Education/_PDFs/TripleC_Report_pt2.pdf
10. Newton W, Fetter G, Hoekzema GS, Hughes L, Magill M. Residency learning networks: why and how. *Ann Fam Med*. 2022;20(5):492-494. [10.1370/afm.2885](https://doi.org/10.1370/afm.2885)



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FAMILY MEDICINE ADVANCES TRANSITION TO COMPETENCY-BASED EDUCATION

By July 2023, family medicine residency programs will need to make major changes to their programs to meet new ACGME requirements. The 2023 requirements reflect the first major update for family medicine residencies in about 10 years.¹ The new requirements include several components that necessitate changes in how education is delivered and assessed, with an emphasis on ensuring that residents demonstrate competence.²

In August 2022, the American Board of Family Medicine Foundation awarded the Society of Teachers of Family Medicine (STFM) a 17-month grant to support the development phase of a multi-year project to equip residency programs to deliver competency-based medical education (CBME) and assessment. This work is being chaired by Linda Montgomery, MD, Vice Chair of Education at the University of Colorado Department of Family Medicine.

To set the groundwork for the project, 41 individuals met at a Summit in January 2023 to discuss the future of CBME in family medicine. Participants included family medicine leaders, faculty, coordinators, and residents, plus representatives from pediatrics, surgery, and Canadian family medicine. Topics of discussion included:

- Needs of family medicine residency programs
- The difference between CBME and traditional medical education
- Competency frameworks and outcomes
- Assessment methods
- Assessment technologies
- Individualized learning plans
- Expectations for standardization of CBME across programs
- Next steps for a task force

Broad takeaways from the Summit:

- This change/reform in education is in service to what family medicine needs.

- Don't assume CBME is time variable.
- A transition will require extensive faculty development.
- It's important to ensure we're not creating one more thing for programs to do/measure. This is "the thing," not "an additional thing."
- With CBME, we don't necessarily need to assess competence in everything a family physician might do. We can test some and assume others.
- This transition will take time; we need to make incremental changes.

Summit participants also discussed strategies for ensuring that CBME is equitable, accurate, and not too burdensome for faculty, coordinators, and residents.

STFM has now formed a task force, which will meet through January 2024 to:

- Identify and aggregate available training and resources
- Develop new assessments and assessment approaches
- Aggregate and develop templates and strategies for individualized learning plans
- Identify strategies for including residents in the assessment process
- Create a plan for faculty development
- Create a plan for piloting new assessments and assessment approaches

Task force members include:

- R. Aaron Lambert, MD, Program Director, Cabarrus Family Medicine Residency Program
- Pamela MacMillan, GME Coordinator, University of Wyoming
- Stephenie Matosich, DO, Associate Program Director, Family Medicine Residency Spokane
- Linda Montgomery, MD, Vice Chair of Education, University of Colorado Department of Family Medicine
- W. Fred Miser, MD, MA, Professor Emeritus, The Ohio State University Wexner Medical Center
- Randolph Pearson, MD, Assistant Dean for GME, MSU Family Medicine Residency
- Michelle Roett, MD, MPH, Professor and Chair, Department of Family Medicine, Georgetown University Medical Center
- Mary Theobald, MBA, Chief of Strategy and Innovation, Society of Teachers of Family Medicine
- Priyanka Tulshian, MD, MPH, Residency Faculty, Contra Costa Family Medicine Residency
- Olivia Rae Wright, MD, Program Director - PeaceHealth Southwest Family Medicine/Addiction Medicine Fellowship
- Velyn Wu, MD, MACM, Core Faculty, University of Florida Family Medicine Residency Program
- Bright Zhou, MD, MS, Resident, Stanford O'Connor Family Medicine Residency

Future phases of CBME work will focus on faculty development, plus implementation, piloting, and dissemination of

CBME resources and assessment tools developed and aggregated by the task force.

Mary Theobald, MBA

References

1. Newton WP, Mitchell KB. Shaping the future of family medicine: reenvisioning family medicine residency education. *Fam Med*. 2021;53(7):490-498. [10.22454/FamMed.2021.207197](https://doi.org/10.22454/FamMed.2021.207197)
2. ACGME. ACGME program requirements for graduate medical education in family medicine. Accessed Feb 7, 2023. https://www.acgme.org/globalassets/pfassets/programrequirements/120_familymedicine_2023.pdf



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CLIMATE CHANGE AS A THREAT TO HEALTH: FAMILY MEDICINE CALL TO ACTION AND RESPONSE

Problem

Climate change presents existential threats to human health and the sustainability of life on earth.¹⁻² Increased global temperatures have resulted in more frequent and extreme weather events, widespread fires, and catastrophic flooding, which in turn affect food production, air quality, access to clean drinking water, safe shelter, vector-borne diseases, and essential infrastructure; thus threatening the health of people, animals, and ecosystems (Figure 1).²

The United States (US) Centers for Disease Control and Prevention (CDC) have identified a multitude of health effects resulting from climate disruptions including increased respiratory and cardiovascular diseases; injuries and premature deaths related to extreme weather events; changes in the prevalence and geographical distribution of food- and water-borne illnesses and other infectious diseases; and threats to mental health.³⁻⁴ Moreover, climate change disproportionately affects vulnerable populations who have minimally contributed to causing these climate problems including people living on low incomes, some communities of color, immigrants including those with limited English proficiency, Indigenous peoples, pregnant people and children, older adults, at-risk occupational groups, persons with disabilities, and persons with preexisting or chronic medical conditions.^{2,5} In fact, countries ranked as highly vulnerable to climate change have a 10-times higher mortality rate from hazardous climate events compared to those less vulnerable.⁶ The number of climate refugees will continue to increase due to diminished access to food and essential resources. Social unrest triggered by climate changes provokes conflicts and threatens community, national, and international security.⁷

The US National Institutes of Health (NIH) has recently launched a Climate Change and Health Strategic Framework to foster research to address urgent threats of climate change organized around 4 core elements: health effects research; intervention science; health equity and training; and capacity building.⁸

Relevance to Family Medicine, Patients, and Communities

Family physicians are well positioned to leverage trusting relationships with individuals, families, and communities, and to provide education and resources to promote health and prevent diseases precipitated or exacerbated by climate change. While two-thirds of physicians surveyed believe climate change is relevant to primary care, less than one-third believed they should take active roles in discussing climate change with patients.⁹ Family physicians can seek best evidence to inform patients about the health impacts of climate change. They can leverage their knowledge and power in partnerships with other leaders, businesses, governmental and public agencies, and community organizations to co-create policies, solutions, and resources to mitigate catastrophic individual and planetary health outcomes.⁹⁻¹⁰

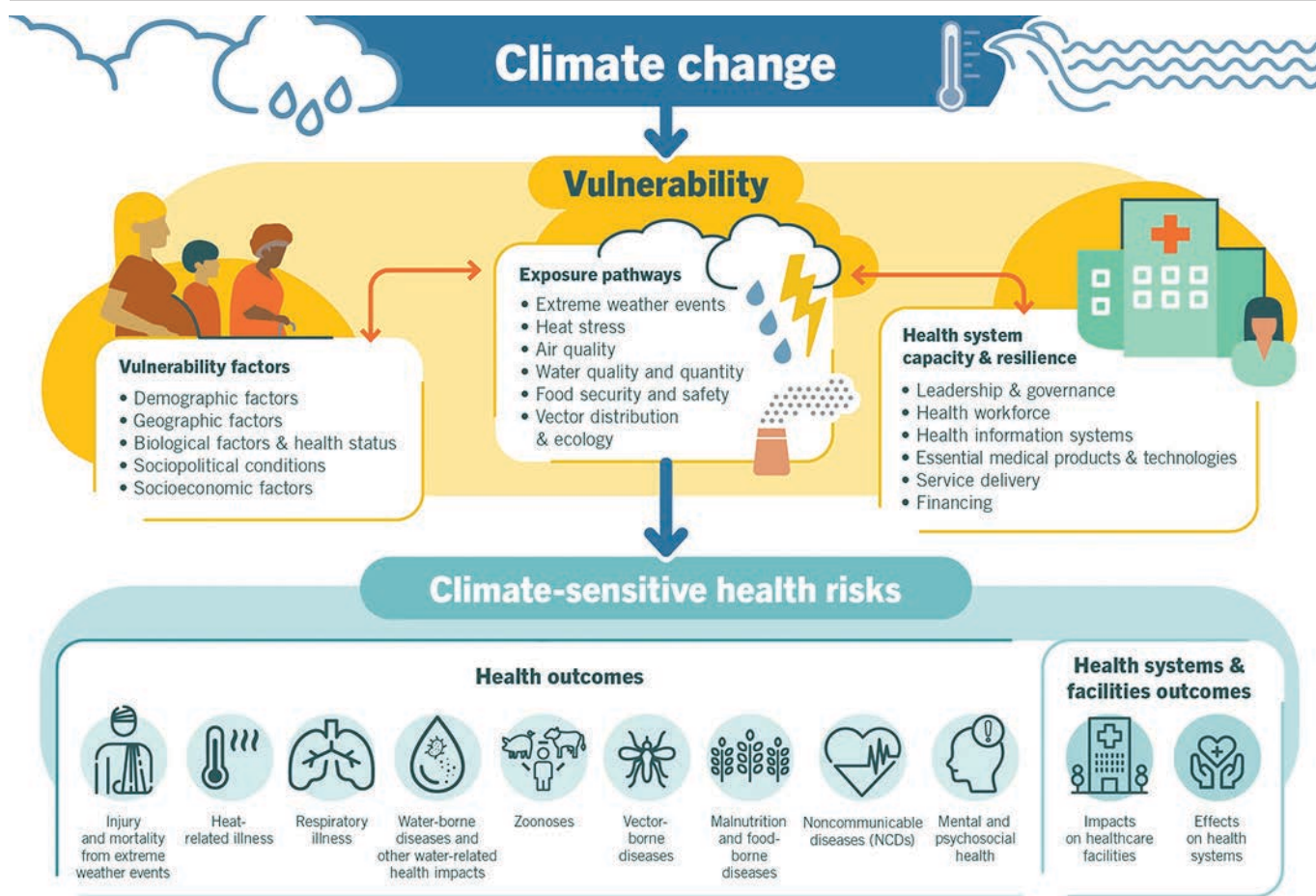
Response

Physicians are ethically bound to address the issues that affect the health of our patients and communities.¹¹ Many efforts are already underway within family medicine to address the health effects of climate change.

The American Academy of Family Physicians (AAFP) joined with medical organizations and associations to form the Medical Society Consortium on Climate and Health (MSCCH) in 2017. The MSCCH created a platform representing organizations with over 600,000 physicians to collectively advocate for climate solutions. The AAFP joined over 100 organizations and individuals to call on government and business stakeholders to recognize climate change as a health emergency and to create a Climate, Health and Equity Policy Action Agenda in 2019.¹² The AAFP provides a climate change module within their *Health Equity Curricular Toolkit*, which includes tools to counsel patients and materials to use during advocacy efforts with legislators.¹³⁻¹⁷

NAPCRG, an international primary care research organization, has supported dissemination of research on how climate change impacts health and potential solutions. Their 2022 annual meeting featured a plenary on Climate Change, multiple poster presentations, and the Climate Change interest group providing networking opportunities for researchers.¹⁸

The Association of Departments of Family Medicine (ADFM) featured climate change as the theme of their 2022 annual meeting. Dr Jonathan Patz emphasized that academic leaders are ideally positioned to train the next generation of physicians to address this problem through education and advocacy.¹⁹ The ADFM's Advocacy Committee provides resources for academic departments of family medicine to create and share best practices.²⁰

Figure 1. Climate change and health risks.

Note. An overview of climate-sensitive health risks, their exposure pathways and vulnerability factors. Climate change impacts health both directly and indirectly, and is strongly mediated by environmental, social, and public health determinants.¹

Reprinted from World Health Organization (WHO). Climate change and health. Accessed Feb 17, 2023. <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

DeMasi and colleagues have outlined an action plan for academic medicine to address this issue through education, patient care (eg, switching metered-dose inhalers [MDI] for dry powder versions), practice transformation (creating a more climate-friendly practice) and advocacy.²¹⁻²² The STFM website includes information on developing and implementing curricula on climate change to inform family medicine training.²³ STFM members have recently formed a Planetary Health Collaborative to support family medicine educators in education, research, and systems change related to planetary health, climate change, and sustainability.

Call to Action

The profound effects of climate changes call for widespread and coordinated actions among family physicians, their practices, and communities, and across family medicine departments and organizations. Family physicians can select priorities for action at the individual, community, regional, state, national or global levels. Effective responses will require changes in education, clinical services, research, community outreach, and

coalition building. Physicians are more likely to be effective by building coalitions or joining organizations to promote widespread collective efforts. We invite all family physicians and departments of family medicine to join these vital efforts!

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References

1. Climate change and health. World Health Organization. Updated Oct 30, 2021. Accessed Nov 15, 2022. <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>
2. Climate change 2022: impacts, adaptation and vulnerability. IPCC Sixth Assessment Report. Published 2022. Accessed Nov 15, 2022. <https://www.ipcc.ch/report/ar6/wg2/>
3. Climate effects on health. Centers for Disease Control and Prevention. Updated Apr 25, 2022. Accessed Nov 15, 2022. <https://www.cdc.gov/climateandhealth/effects/>
4. Centers for Disease Control and Prevention; National Center for Environmental Health. Preparing for the Regional Health Impacts of Climate Change in the United States. Published Jul 2020. Updated Jul 2022. Accessed Nov 15, 2022. https://www.cdc.gov/climateandhealth/docs/Health_Impacts_Climate_Change-508_final.pdf

5. Justice, equity, diversity, and inclusion in climate adaptation planning. Centers for Disease Control and Prevention. Updated Apr 13, 2022. Accessed Nov 15, 2022. <https://www.cdc.gov/climateandhealth/JEDI.htm>
6. Birkmann J, Jamshed A, McMillan JM, et al. Understanding human vulnerability to climate change: a global perspective on index validation for adaptation planning. *Sci Total Environ*. 2022;803:150065. [10.1016/J.SCITOTENV.2021.150065](https://doi.org/10.1016/j.scitotenv.2021.150065)
7. von Uexkull N, Buhaug H. Security implications of climate change: a decade of scientific progress. *J Peace Res*. 2021;58(1):3-17. [10.1177/0022343320984210](https://doi.org/10.1177/0022343320984210)
8. Woychik RP, Bianchi DW, Gibbons GH, et al. The NIH Climate Change and Health Initiative and Strategic Framework: addressing the threat of climate change to health. *Lancet*. 2022;400(10366):1831-1833. [10.1016/S0140-6736\(22\)02163-8](https://doi.org/10.1016/S0140-6736(22)02163-8)
9. Boland TM, Temte JL. Family medicine patient and physician attitudes toward climate change and health in Wisconsin. *Wilderness Environ Med*. 2019;30(4):386-393. [10.1016/j.wem.2019.08.005](https://doi.org/10.1016/j.wem.2019.08.005)
10. Singh C, Iyer S, New MG, et al. Interrogating 'effectiveness' in climate change adaptation: 11 guiding principles for adaptation research and practice. *Clim Dev*. 2022;14(7):650-664. [10.1080/17565529.2021.1964937](https://doi.org/10.1080/17565529.2021.1964937)
11. Peters JL. Mitigating the impact of climate change on human health: the role of the medical community. *AMA J Ethics*. 2017;19(12):1153-1156. [10.1001/journalofethics.2017.19.12.fred1-1712](https://doi.org/10.1001/journalofethics.2017.19.12.fred1-1712)
12. US call to action on climate health and equity: a policy action agenda. Published 2019. Accessed Nov 29th, 2022. <https://climatehealthaction.org/cta/climate-health-equity-policy/>
13. Hansmann K, Bumol J, Newman N. AAFP Health Equity Curriculum Toolkit Climate Change. Climate Change Module. Accessed Nov 30, 2022. https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/health-equity-toolkit/climate-change-module.pdf
14. AAFP. Health equity: leading the change. Accessed Jan 17, 2023. <https://www.aafp.org/cme/all/online/health-equity-leading-the-change.html>
15. Wellbery CE, Lewandowski A, Holder C. Climate change and the local environment: communicating with your patients about health impacts. *Am Fam Physician*. 2021;104(5):526-530.
16. American Academy of Family Physicians. Environmental health and climate change. Updated Sep 2019. Accessed Nov 30, 2022. <https://www.aafp.org/dam/AAFP/documents/advocacy/prevention/environmental/BKG-EnvironmentalHealthClimateChange.pdf>
17. Hansmann K, Bumol J, Newman N. AAFP Health Equity Curriculum Toolkit Climate Change. Climate Change, Health and Health Equity. Accessed Jan 27, 2023. <https://www.fammed.wisc.edu/files/webfm-uploads/documents/diversity/climate-change-health-equity.pdf>
18. Pacheco S. Climate change & impact on healthcare. Oral presentation at: NAPCRG Annual Meeting; November 21, 2022; Phoenix, Arizona.
19. Patz J. The climate crisis and our health: roles and opportunities in primary care. Oral presentation at: ADFM Annual Conference; June 9, 2022; Denver, Colorado.
20. Advocacy Committee. Association of Departments of Family Medicine. Updated Jun 2022. Accessed Jan 27, 2023. <https://www.adfm.org/resources/advocacy/>
21. DeMasi M, Chekuri B, Paladine HL, Kenyon T. Climate change: a crisis for family medicine educators. *Fam Med*. 2022;54(9):683-687. [10.22454/FamMed.2022.827476](https://doi.org/10.22454/FamMed.2022.827476)
22. Family & Community Medicine, University of Toronto. Climate change and health – what can family doctors do? Published Apr 22, 2021. Accessed Nov 29, 2022. <https://www.dfcu.utoronto.ca/news/climate-change-and-health-what-can-family-doctors-do>
23. Mondragon R, et al. Developing & implementing curricula on climate change in family medicine training. Oral presentation at: STFM Annual Conference; April 26-May 1 2019; Toronto, Ontario, Canada.



Ann Fam Med 2023;21:197-198. <https://doi.org/10.1370/afm.2974>

SOARING TO NEW HEIGHTS: STRENGTHENING OUTCOMES AND ASSESSMENT IN RESIDENCY

Preparing family medicine physicians to meet the needs of their patients is a fundamental goal of residency training. These needs shift, and so training must also adapt. The revised Accreditation Council for Graduate Medical Education (ACGME) requirements for GME in family medicine call on residency programs to become increasingly sophisticated at measuring trainee outcomes with patient experience data, population health metrics, Milestones and/or ITE scores.¹ Increasingly, stakeholders recognize that true outcome measures must also incorporate performance *after* residency to evaluate whether training goals are actually accomplished as graduates enter their practice. Further, in the absence of a formal knowledge-sharing system, a wealth of experiential wisdom is siloed rather than shared between program directors (PDs).² A rising tide raises all ships! So, we might ask: in what novel ways can PDs measure and take pride in describing their program's strengths and outcomes? Or: how can PDs whose alumni consistently perform well in one or more areas of family medicine practice share with other PDs how to prepare their residents for the same?

In 2023, the Strengthening Outcomes and Assessments in Residency (SOAR) project, a new community of practice established by the Association of Family Medicine Residency Directors (AFMRD) and the American Board of Family Medicine (ABFM), will aid residency programs in understanding their outcomes, sharing what works, and supporting self-study and improvement efforts. SOAR builds upon prior AFMRD efforts, such as the Residency Performance Index (RPI), and expands upon the ABFM National Graduate Survey (NGS).³⁻⁵ It will augment existing forums and events where program directors and faculty gather to reflect and swap bright spots by featuring outcomes data and information. It will provide opportunities for PDs to engage in educational scholarship and GME innovation that will shape the future of new program requirements and family medicine care delivery.

SOAR recognizes the importance of imprinting during residency as the foundation to post-graduate practice.⁶⁻⁸ To achieve socially accountable outcomes as a specialty, PDs must carefully consider the influence of their programs on their residents' actual post-graduate practice. Examples might include whether graduates of rural residencies ultimately practice in rural areas or if programs that emphasize training in substance use disorder treatment produce alumni who continue to provide that care. SOAR aims to connect family

medicine PDs with both the tools to identify programs whose alumni demonstrate certain qualities in post-graduate practice and with a forum in which to identify and discuss the replicable program characteristics that prepared those newly minted physicians to be successful.

SOAR seeks to help family medicine PDs adapt to recent revisions to the ACGME program requirements for family medicine, which call for the Program Evaluation Committee to include outcomes data—including graduate performance—in its programmatic assessment. SOAR can also assist PDs in composing Annual Program Evaluations, which should include a section on graduate attainment outcomes.

To facilitate a key principle of SOAR, the “For You by You” joint advisory committee was established in 2022. Members of the advisory committee include PDs, associate PDs, program coordinators, alumni PDs, and new-to-practice physicians. Over the past year, the advisory committee started to envision how the community of family medicine residencies can measure, highlight, and disseminate what family medicine GME does well. To align its work with AAFP and other health care organizations, the SOAR Advisory Committee, together with the AFMRD Board of Directors, proposed the project initially prioritize study and discussion of outcomes in 4 areas:

- (1) Pregnancy care
- (2) Care of infants and children
- (3) Behavioral health
- (4) Care of vulnerable populations

At the 2023 AAFP Residency Leadership Summit, the ABFM Foundation sponsored a SOAR kick-off event for residency leaders to introduce the community and discover some uncommon but successful behaviors and strategies of family

medicine residency programs. To learn more about SOAR, visit the AFMRD and ABFM Foundation websites.

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References

1. Accreditation Council for Graduate Medical Education. ACGME Program Requirements in Graduate Medical Education in Family Medicine. https://www.acgme.org/globalassets/pfassets/programrequirements/120_family_medicine_2023_tcc.pdf
2. Carek PJ, Potts SE. Ongoing self review and continuous quality improvement among family medicine residencies. *Fam Med*. 2021;53(7):626-631. [10.22454/FamMed.2021.888193](https://doi.org/10.22454/FamMed.2021.888193)
3. Hoekzema GS, Maxwell L, Gravel JW Jr, Mills WW, Geiger W. The Residency Performance Index: an effort at residency quality assessment and improvement in family medicine. *J Grad Med Educ*. 2014;6(4):756-759. [10.4300/JGME-D-13-00355.1](https://doi.org/10.4300/JGME-D-13-00355.1)
4. American Board of Family Medicine. 2021 National Graduate Survey Report. https://www.theabfm.org/sites/default/files/2022-10/2021%20National%20Graduate%20Survey%20Report_NationalOnly.pdf.pdf
5. Peterson LE. Using the Family Medicine National Graduate Survey to improve residency education by monitoring training outcomes. *Fam Med*. 2021;53(7):622-625. [10.22454/FamMed.2021.719992](https://doi.org/10.22454/FamMed.2021.719992)
6. Phillips RL Jr, Holmboe ES, Bazemore AW, George BC. Purposeful imprinting in graduate medical education: opportunities for partnership. *Fam Med*. 2021;53(7):574-577. [10.22454/FamMed.2021.264013](https://doi.org/10.22454/FamMed.2021.264013)
7. Coutinho AJ, Levin Z, Petterson S, Phillips RL Jr, Peterson LE. Residency program characteristics and individual physician practice characteristics associated with family physician scope of practice. *Acad Med*. 2019;94(10):1561-1566. [10.1097/ACM.0000000000002838](https://doi.org/10.1097/ACM.0000000000002838)
8. Etterman KG. How do you define success after residency? KevinMD.com. Published Jun 27, 2016. <https://www.kevinmd.com/2016/06/define-success-residency.html>