

Family Medicine Updates



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EXPLORING ARTIFICIAL INTELLIGENCE AND THE FUTURE OF PRIMARY CARE

Reflections From the NAPCRG Trainee Committee Pre-Conference Workshop

The artificial intelligence (AI) revolution in health care, in particular primary care, is being emphasized worldwide.¹⁻⁴ Alongside discussions about the transformational potential of AI is apprehension and skepticism due to its propensity for shortcomings (eg, privacy and liability),¹ especially for exacerbating issues of equity. Balancing this duality of possibilities and shortcomings of AI in primary care is particularly important for newcomers to the primary care field, becoming a central priority for the NAPCRG Trainee Committee. The Trainee Committee was established in 2018 and includes a group of international trainees with diverse academic and clinical backgrounds who share a passion for primary care research. A key priority of the NAPCRG Trainee Committee is to foster a supportive and collaborative community of practice for budding primary care researchers around the globe. This duality was underscored by Dr Winston Liaw and Dr Jaky Kueper, 2 leaders in the field of AI for primary care research, who presented at the 2023 NAPCRG Trainee Pre-Conference Workshop. The Trainee Committee is also involved in designing and delivering programming such as the annual NAPCRG pre-conference workshop where future primary care leaders gather to network and discuss important topical issues in primary care. We outline 3 key areas of reflection from this event, summarizing insights from Drs Liaw and Kueper.

Reflection #1. Potential for AI in Primary Care

Both Dr Liaw and Dr Kueper underscored the transformative potential AI has for primary care. Noteworthy themes included the potential for AI in assisting with operational tasks such as referrals, scheduling, information gathering, synthesis, and documentation. Further, reduction of administrative burden may be instrumental for easing growing issues like physician burnout.^{5,6} Another key area for transformation was the capacity for AI to support physician decision making to differentiate diagnoses (eg, more accurate and earlier) and individually tailoring treatment plans. These examples were consistent with a College of Family Physicians of Canada AI working group report by Kueper et al.⁷ Despite such possibilities, Drs Liaw and Kueper noted the important risks and

possible pitfalls of AI, if ethics and human rights are not at the forefront.⁴

Reflection #2. Equity Concerns

A key priority of the NAPCRG Trainee Committee is equity.⁸ AI, a technology created and implemented in particular social contexts, has the potential to exacerbate health inequities. Drs Liaw and Kueper highlighted issues such as algorithmic biases. Examples include issues using unrepresentative data sets that ultimately perpetuate bias and create outcomes that are inaccurate for certain populations such as ethnic minorities.⁹ Similar biases can yield inappropriate analytic decisions, such as those used in racialized adjustments of estimated glomerular filtration rate (eGFR), fracture risk assessment (FRAX) scores, and pulmonary function tests (PFTs).¹⁰ Additional considerations include the digital divide that disproportionately benefits those with the appropriate technology, infrastructure, and digital literacy. Furthermore, the issue of mistrust can mitigate positive impact and use, particularly in historically marginalized patients and patients who have been victimized by discriminatory practices within the health care system. Therefore, concerns regarding the protection, privacy, and security of patient information are of utmost importance in building trust, especially for groups that have experienced health inequities.^{9,11} These discussions naturally segued into our workshop delivered by Dr Jon Salsberg and the Public and Patient Involvement (PPI) Research Unit from University of Limerick who discussed PPI in health research. Participatory approaches, which actively engage patients and the public in AI research, could serve as a crucial mitigation strategy to help address issues of health inequity such as those mentioned above, a sentiment also echoed in the literature.⁹

Reflection #3. AI in Primary Care Research

Not only can AI be a powerful tool in health care delivery, but it also has potential impacts in primary care research. Opportunities include the benefits for research processes and efficiency, such as streamlining the aggregation and analysis of data.¹² Another important reflection, prompted by a question posed to Dr Kueper, included who should perform AI research. In response, Dr Kueper highlighted the need for interprofessional collaboration, emphasizing that AI research is not just for computer scientists and those technologically inclined, but requires interdisciplinary perspectives and PPI to drive impactful change. As interest in AI continues to expand, it is important to recognize the new possibilities and known limitations of these tools. Without significant innovation, AI will continue to struggle to support qualitative inquiry and the humanistic, social, and relational aspects of primary care. A holistic primary care research agenda will support qualitative and quantitative inquiry, leveraging the strengths of AI when effective and appropriate.

Closing/Next Steps

To summarize, the NAPCRG Trainee Committee Pre-conference Workshop presentations and discussions informed and enlightened the perspectives of AI in primary care practice and research, especially for trainees for whom this rapidly advancing technology is likely to have the greatest impact. Indeed, the NAPCRG Trainee Committee shall continue to prioritize AI and its implications for primary care trainees, striving for additional training and guidance from NAPCRG leaders and mentors in this space (like Drs Liaw and Kueper). We are particularly motivated to learn more about how we can leverage AI in research for the better.

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AAFP WELL-BEING ACTIVITIES EXPAND FOCUS ON LEADERSHIP AND DEIB

The American Academy of Family Physicians (AAFP) has a decades-long history of embracing the diversity of its membership and building members' leadership skills; former AAFP President Warren Jones, MD, FAAFP, recalled that fact in a blog post (<https://www.aafp.org/news/blogs/wordfrompresident/entry/warren-jones-75th-anniversary.html>) he penned in 2022 to mark the Academy's 75th anniversary. The AAFP also has voiced its strong commitment (<https://www.aafp.org/membership/initiatives/well-being-initiative.html>) to safeguarding members' ability to thrive in practice and find joy in their work. The Academy's identification of diverse leadership development, gender equity, and physician well-being as key priorities in 2024 reflects these goals. This update recaps some of the steps the organization is taking.

Since 2018, the Physician Health and Well-being (PHWB) Conference (<https://www.aafp.org/events/physician-health-and-well-being-conference.html>) has empowered participants to:

- Assess their individual state of well-being
- Determine areas of need to address, such as chronic stressors in practice
- Create a personal action plan to promote and maintain a positive state of well-being
- Develop a leadership plan to improve patient outcomes through organization- or system-wide enhancements

The curriculum for the 2024 PHWB Conference, scheduled for May 6-8, 2024, in Scottsdale, Arizona, will incorporate a heightened emphasis on leadership issues, as well as a more explicit focus on diversity, equity, inclusion, and