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Title

Is Primary Health Care Ready for Artificial Intelligence? Stakeholder Perspectives: Worth the Risk as Long as You Do It Well

Priority 1 (Research Category)

Healthcare informatics

Presenters

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Abstract

Context: The effective deployment of artificial intelligence (AI) in primary health care requires a match between the AI tools that are being developed and the needs of primary health care practitioners and patients. Currently, the majority of AI development targeted toward potential application in primary care is being conducted without the involvement of these stakeholders.

Objective: To identify key issues regarding the use of AI tools in primary health care by exploring the views of primary health care and digital health stakeholders.

Study Design: A descriptive qualitative approach was taken in this study. Fourteen in-depth interviews were conducted with primary care and digital health stakeholders.

Setting: Province of Ontario, Canada

Population studied: Primary health care and digital health stakeholders

Outcome Measures: N/A

Results: Two main themes emerged from the data analysis: Worth the Risk as Long as You Do It Well; and, Mismatch Between Envisioned Uses and Current Reality. Participants noted that AI could have value if used for specific purposes, for example: supporting care for patients; reducing practitioner burden; analyzing existing evidence; managing patient populations; and, supporting operational efficiencies. Participants identified facilitators of AI being used for these purposes including: use of relevant case studies/success stories with realistic uses of AI highlighted; easy or low risk applications; and, end user involvement. However, barriers to the use of AI included: data quality; digital

divide/equity; distrust of AI including security/privacy issues; for-profit motives; need for transparency about how AI works; and, fear about impact on practitioners regarding clinical judgement.

Conclusion: AI will continue to become more prominent in primary health care. There is potential for positive impact, however there are many factors that need to be considered regarding the implementation of AI. The findings of this study can help to inform the development and deployment of AI tools in primary health care.