

Development and application of the Health Equity Impact Assessment – Digital Health Supplement

Amanda Gambin, PhD

camh



Project Team

Allison Crawford, MD, PhD

Anne Kirvan, MSW, RSW, PhD(c)

Denise Canso, MSc, PMP

Aamna Ashraf, MEd

Renee Linklater, PhD

Gideon Quaison, MPH

Nelson Shen, PhD

Mercedes Sobers, PhD(c)

Gillian Strudwick, RN, PhD

Eva Serhal, MBA, PhD

camh

Virtual Mental Health at CAMH

camh

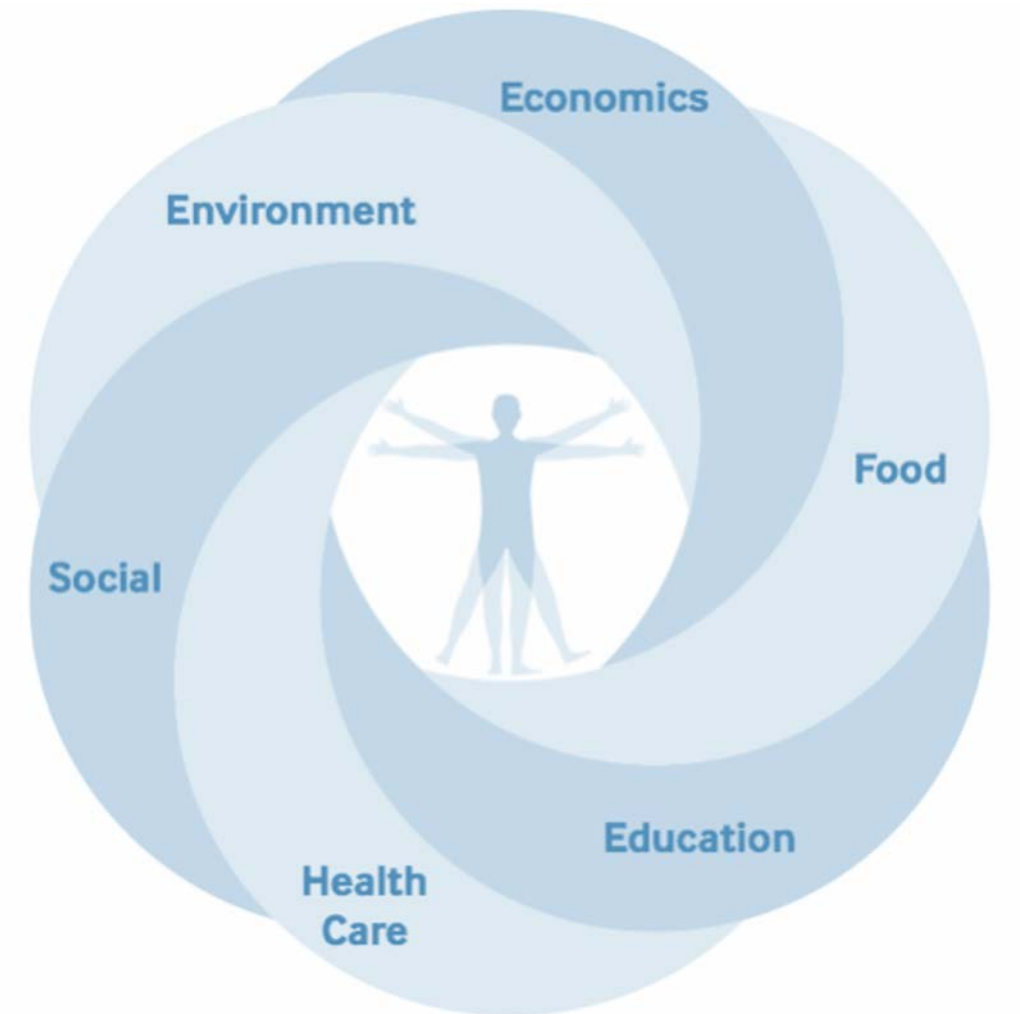
- ❖ As in other healthcare fields, the COVID-19 pandemic led to the rapid expansion, and sustained use, of virtual mental health care across CAMH:
 - ❖ *from April 1st-Nov, 2022 there were roughly 10K + video-based outpatient visits/month*
- ❖ Inequities in access to virtual care were identified by age, gender, ethnicity, income, housing, dis/abilities
- ❖ Additionally, an estimated 19 million Canadians use some form of ehealth, and that number is expected to continue to rise*

If digital healthcare is here to stay, how do we address equity in this space?

Social Determinants of Health

Determinants of health are the broad range of personal, social, economic and environmental factors that determine individual and population health. The main determinants of health include:

- Income and social status
- Employment and working conditions
- Education and literacy
- Childhood experiences
- Physical environments
- Social supports and coping skills
- Healthy behaviours
- Access to health services
- Biology and genetic endowment
- Gender
- Culture
- Race / Racism



Equity Considerations for virtual care

Economics
Geography

- Access to internet
- Access to hardware

Housing

- Access to private space

Social
supports

- Lack of supports to access digital healthcare

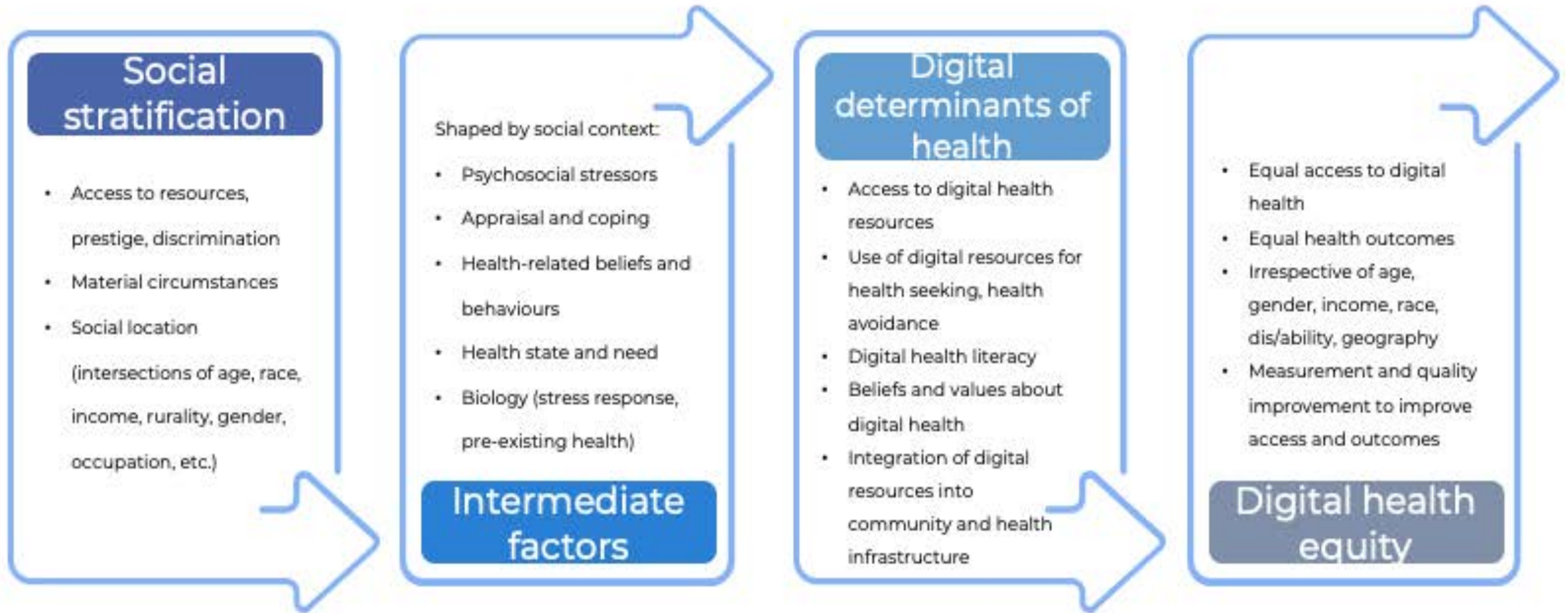
Education
Culture
Language

- Digital health literacy
- Beliefs about digital health

Health
Care

- Lack of integration
- Training of health providers

The Digital Health Equity Framework



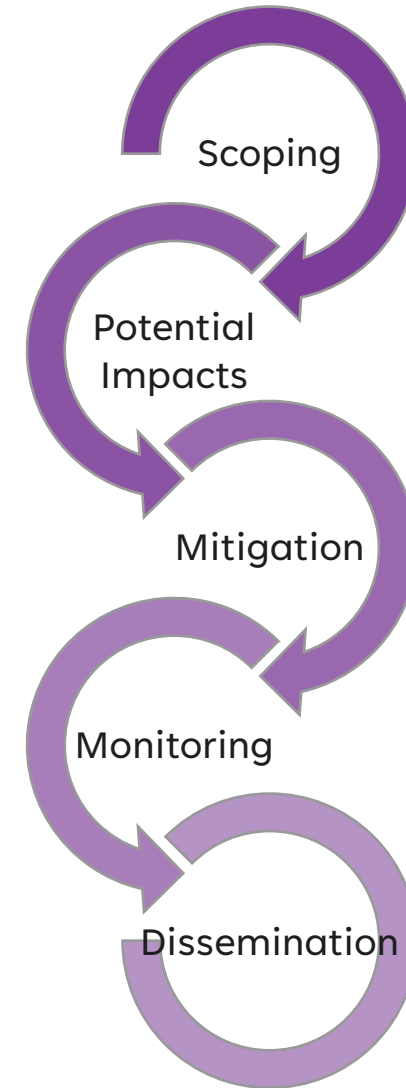
Simplified version of the DHEF, Crawford & Serhal (2020)

Adaptation of the Health Equity Impact Assessment

camh

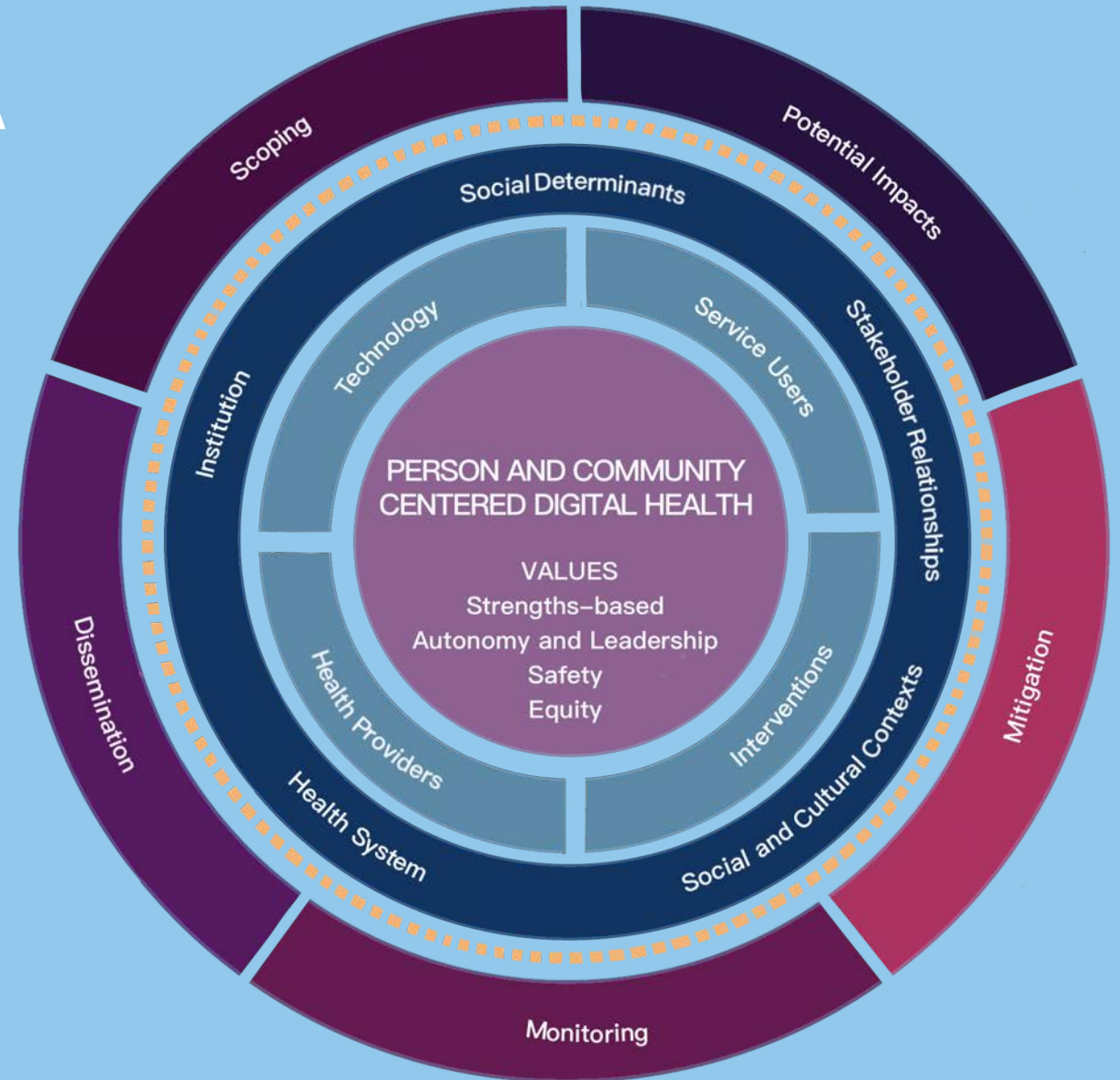
The Health Equity Impact Assessment (HEIA)

- HEIA developed by the Ontario Ministry of Health in 2011
- Tool for identifying and improving the equity of health interventions and programs
- 5 steps aiming to identify the unintended effects of a policy or program on the health of marginalized or underserved groups and develop mitigation strategies



Development of the HEIA Digital Health Supplement (HEIA-DH)

AIM: To support service providers, organizations, and technology developers to identify health equity considerations in the design and implementation of digital health, including virtual care.



Tool development

- ❖ 3-pronged approach:
 - 1) Evidence-based theory
 - 2) Expert Consensus
 - 3) Consultation with diverse clinical programs across CAMH
- ❖ Content-validity: use of the HEIA-DH with clinical programs at CAMH
- ❖ External validity: piloted the HEIA-DH with digital health applications

HEIA-DH

1

SCOPING:

- Identify groups your digital health intervention may impact
- Consider intersectional identities
- What social and digital determinants of health might this group(s) face?

2

UNINTENDED IMPACTS:

- Consider strengths as well as challenges
- Is there evidence available or is more information needed?

HEIA-DH

3

MITIGATION:

- Develop an evidence-based mitigation strategy
- Aim to minimize or eliminate negative impacts

4

MONITORING:

- Develop an evaluation plan - Did your actions increase digital health equity?
- What outcomes does the community value?

5

DISSEMINATION:

- Share your results in ways that are meaningful for relevant community(ies)

Example HEIA-DH focused on Neurodiverse populations including Autistic people accessing virtual care

SCOPING	POTENTIAL POSITIVE IMPACTS	POTENTIAL NEGATIVE IMPACTS	MITIGATION STRATEGIES	MONITORING	DISSEMINATION
<ul style="list-style-type: none"> Digital literacy Social Connectedness 	<ul style="list-style-type: none"> Comfort with using technologies Stronger preference to receive care at home (i.e. virtually) 	<ul style="list-style-type: none"> Material not plain language enough Missed opportunity for social interaction 	<ul style="list-style-type: none"> Leverage interest in technology Provide peer support for digital literacy Involve people with lived experience in writing materials 	<ul style="list-style-type: none"> Measure digital literacy Track engagement (in-person vs. virtual services) 	<ul style="list-style-type: none"> Community Newsletter Website

Example HEIA-DH focused on Manchester Pain Manikin with ethnically diverse populations

SCOPING	POTENTIAL POSITIVE IMPACTS	POTENTIAL NEGATIVE IMPACTS	MITIGATION STRATEGIES	MONITORING	DISSEMINATION
<ul style="list-style-type: none"> • Language • Cultural differences in pain reporting • Intersection of ethnicity, age, education 	<ul style="list-style-type: none"> • Potential for app to overcome language barriers • Can increase specificity of pain reporting • May reduce unconscious bias 	<ul style="list-style-type: none"> • Unintended emotional impact of daily reporting • Concerns regarding shame in reporting 	<ul style="list-style-type: none"> • Offer translation of app into other languages • Develop partnerships with community champions • Adapt app to support people with disabilities (e.g. offer audio recording) 	<ul style="list-style-type: none"> • Track engagement (via demographics of app users) • Clinician & patient interviews (is this helping?) 	<ul style="list-style-type: none"> • Through community partnerships • App website • Healthcare setting

Focus Group Feedback

- overwhelmingly positive across user groups
- Encouraged client-provider partnership
- Clinicians indicated it could be a useful tool for targeted QI in their clinical programs
- Suggestions for improvement included further emphasis on intersectionality, more accessible language, guidance on pursuable actions

Where do we go from here?

camh

- Further refinement of the tool (e.g. how do you prioritize mitigation strategies?)
- Develop a HEIA-DH toolkit to support external use of the tool
- Apply the HEIA-DH to digital health applications across the translational pathway

Want more information?

Amanda.gambin@camh.ca



References

- Crawford A, Serhal E. Digital Health Equity and COVID-19: The Innovation Curve Cannot Reinforce the Social Gradient of Health. *J Med Internet Res*. 2020 Jun 2;22(6):e19361. doi: 10.2196/19361. PMID: 32452816; PMCID: PMC7268667.
- Ontario Ministry of Health and Long-Term Care, "Health Equity Impact Assessment (HEIA), Background - the Ontario HEIA," *Ontario Ministry of Health and Long-Term Care*, April 19, 2013, <http://www.health.gov.on.ca/en/pro/programs/heia/background.aspx>.
- Public Health Agency of Canada Determinants of Health https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html#key_determinants
- World Health Organization, Draft Global Strategy on Digital Health <https://extranet.who.int/dataform/upload/surveys/183439/files/Draft%20Global%20Strategy%20on%20Digital%20Health.pdf>