Health: Overview

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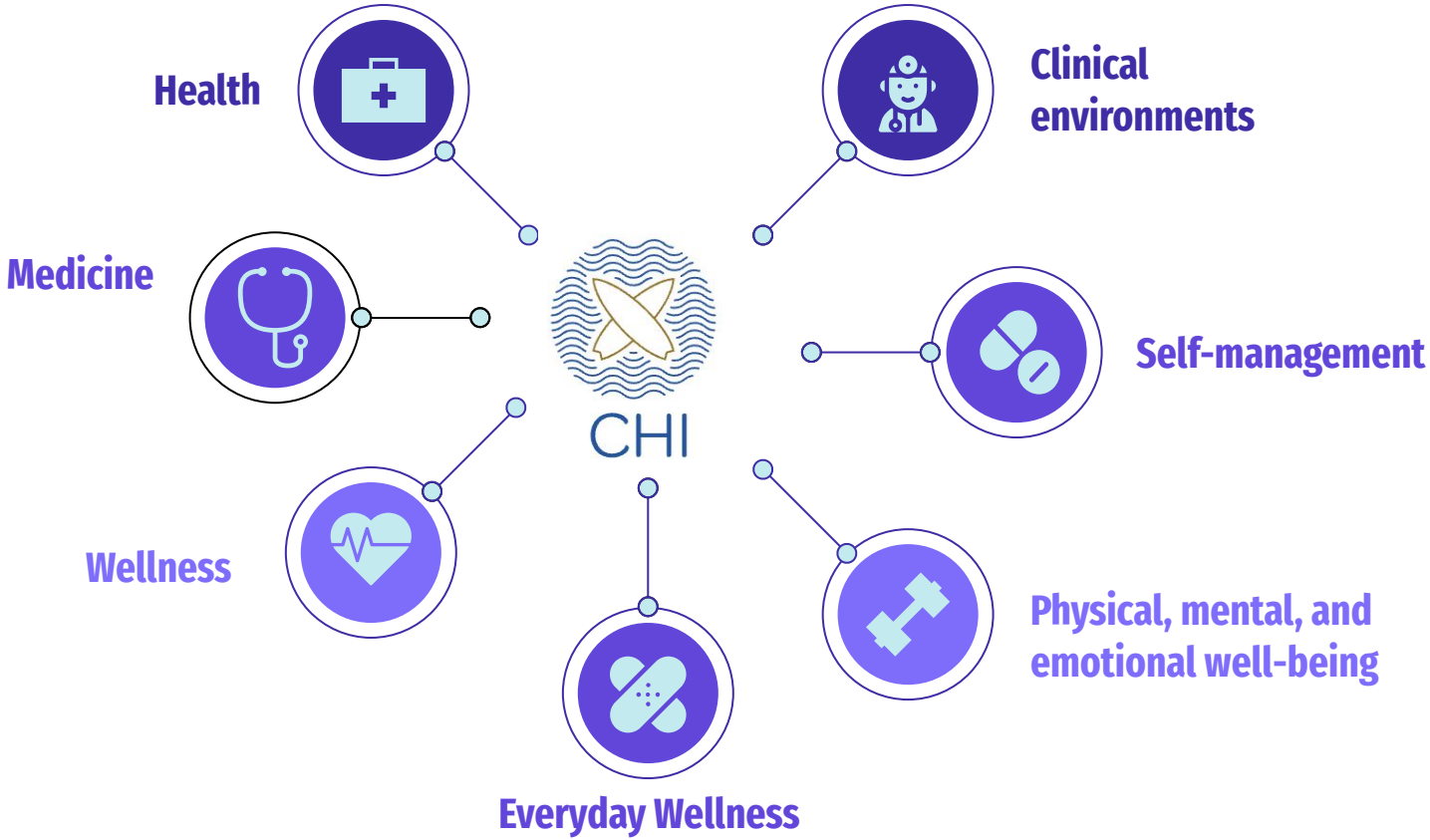
Venues for Health (+ HCI)

Academic conferences that is generally considered the most prestigious in the field of human–computer interaction.

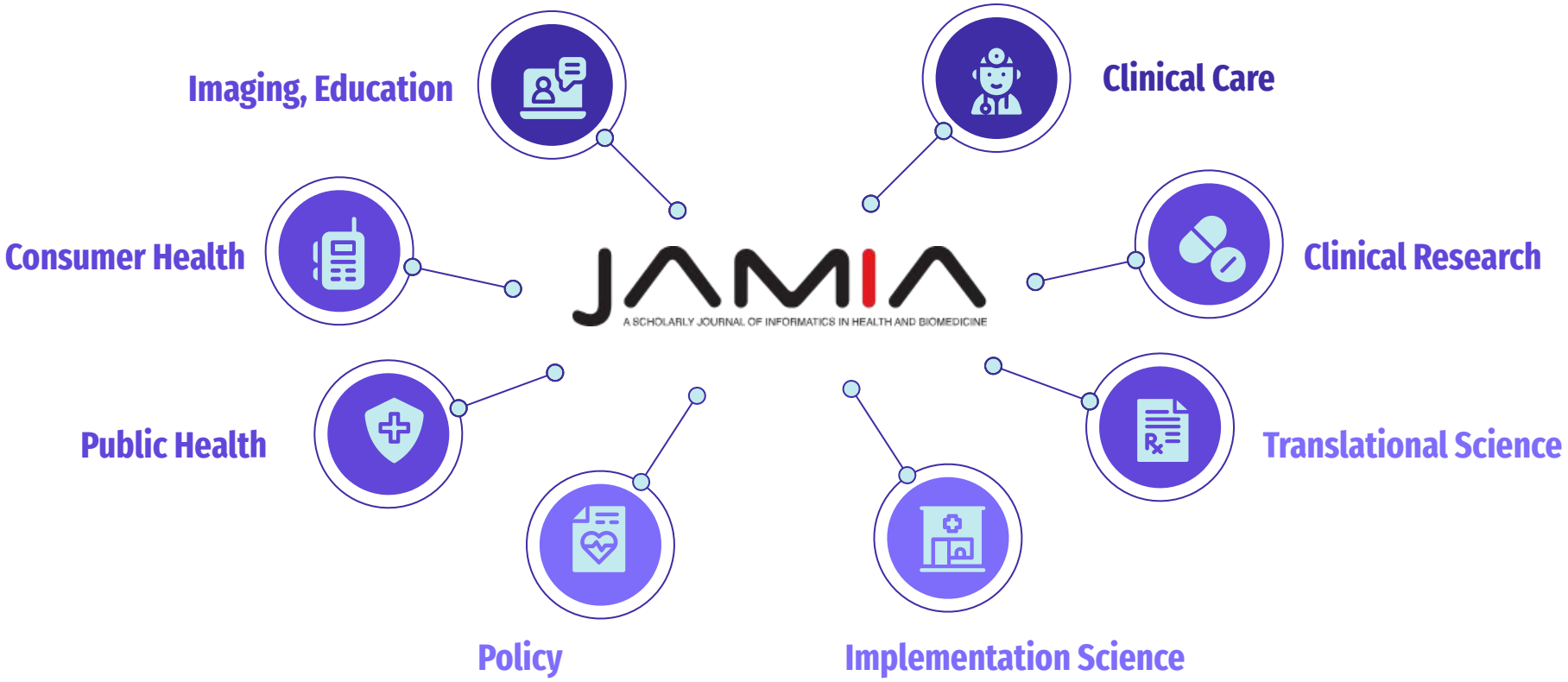
A peer-reviewed scientific journal covering research in the field of medical informatics published by the American Medical Informatics Association.

An American non-profit organization dedicated to the development and application of biomedical and health informatics in the support of patient care, teaching, research, and health care administration.

CHI Health Subcommittee: Core Research Questions/Topics



JAMIA: Core Research Questions/Topics



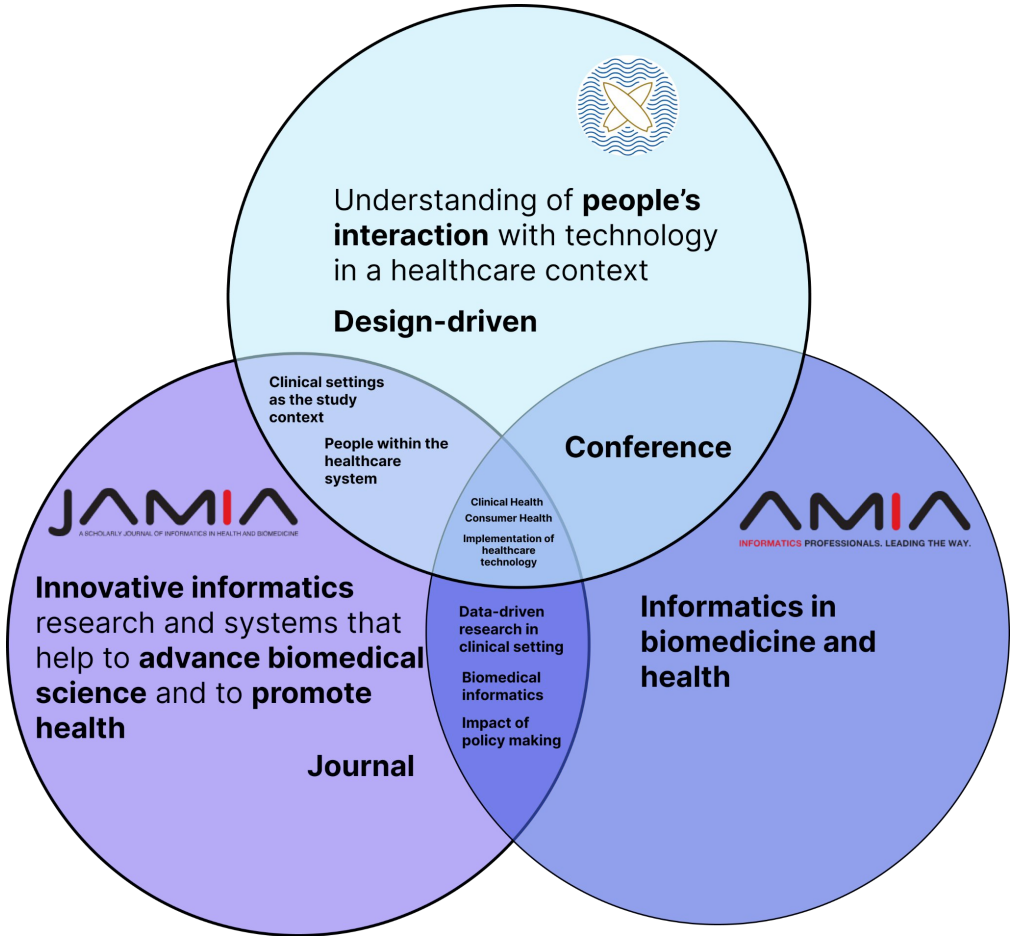
AMIA: Core Research Areas

- Translational Bioinformatics/Precision Medicine
- Clinical Research Informatics
- Data Science/Artificial Intelligence

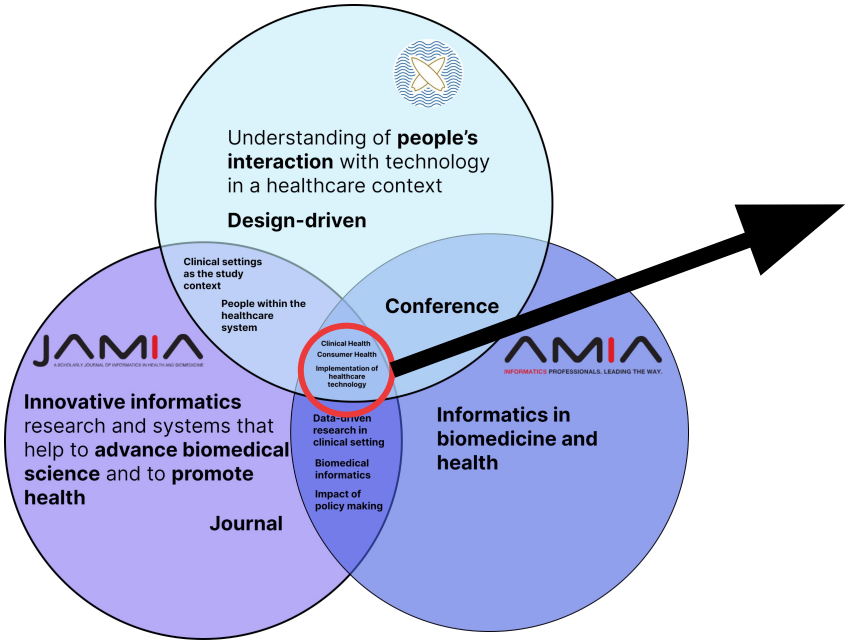
AMIA: Highlighted Themes

1. Harnessing the Power of Large Language Models in Health Data Science
2. Real-World Evidence in Informatics: Bridging the Gap between Research and Practice
3. Integrating Multi-Modal Health Data to Enhance the Power of Informatics
4. Proactive Machine Learning in Biomedical Applications: The Power of Generative AI and Reinforcement Learning
5. Fairness and Disparity in Health and Biomedical Informatics: Addressing Inequities through Innovation
6. Implementation Science and Deployment in Informatics: From Theory to Practice
7. Telehealth, Wearable Devices, and Patient-Generated Health Data: The New Frontiers of Informatics
8. Citizen Science and Democratizing AI and Informatics for Healthcare

The Venues for Health: Similarities and Differences



The Venues for Health: Similarities and Differences

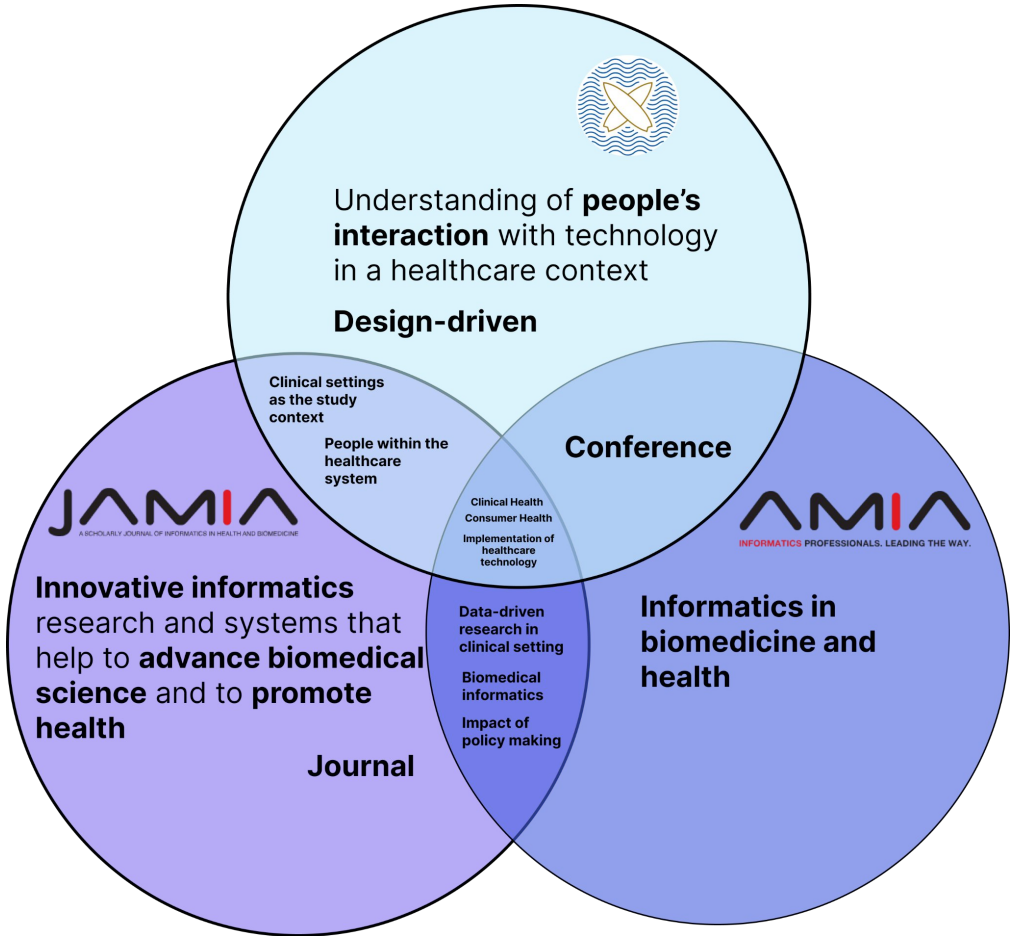


Clinical Health (Health, Medicine, Clinical care, Clinical Research Informatics)

Consumer Health (Health, Medicine, physical, mental, and emotional well-being, self-management, everyday wellness)

Implementation of healthcare technology

The Venues for Health: Similarities and Differences



Activity Time!

A

Identifying opportunities for informatics-supported suicide prevention: the case of Caring Contacts

Hannah A. Burkhardt[1], Megan Laine[1], Amanda Kerbrat[2], Trevor Cohen[1], Katherine A. Comtois[2], Andrea Hartzler[1]
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[2]University of Washington, Department of Psychiatry and Behavioral Sciences

B

Identification of Imminent Suicide Risk Among Young Adults using Text Messages

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C

"Can I Not Be Suicidal on a Sunday?": Understanding Technology-Mediated Pathways to Mental Health Support

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D

What health records data are required for accurate prediction of suicidal behavior?

Gregory E Simon,[1] Susan M Shortreed,[1] Eric Johnson,[1] Rebecca C Rossom,[2] Frances L Lynch,[3] Rebecca Ziebell,[1] and Robert B Penfold[1]

[1]Kaiser Permanente Washington Health Research Institute, Seattle, Washington, USA, [2]HealthPartners Institute, Minneapolis, Minnesota, USA, and [3]Center for Health Research, Kaiser Permanente Northwest, Portland, Oregon, USA

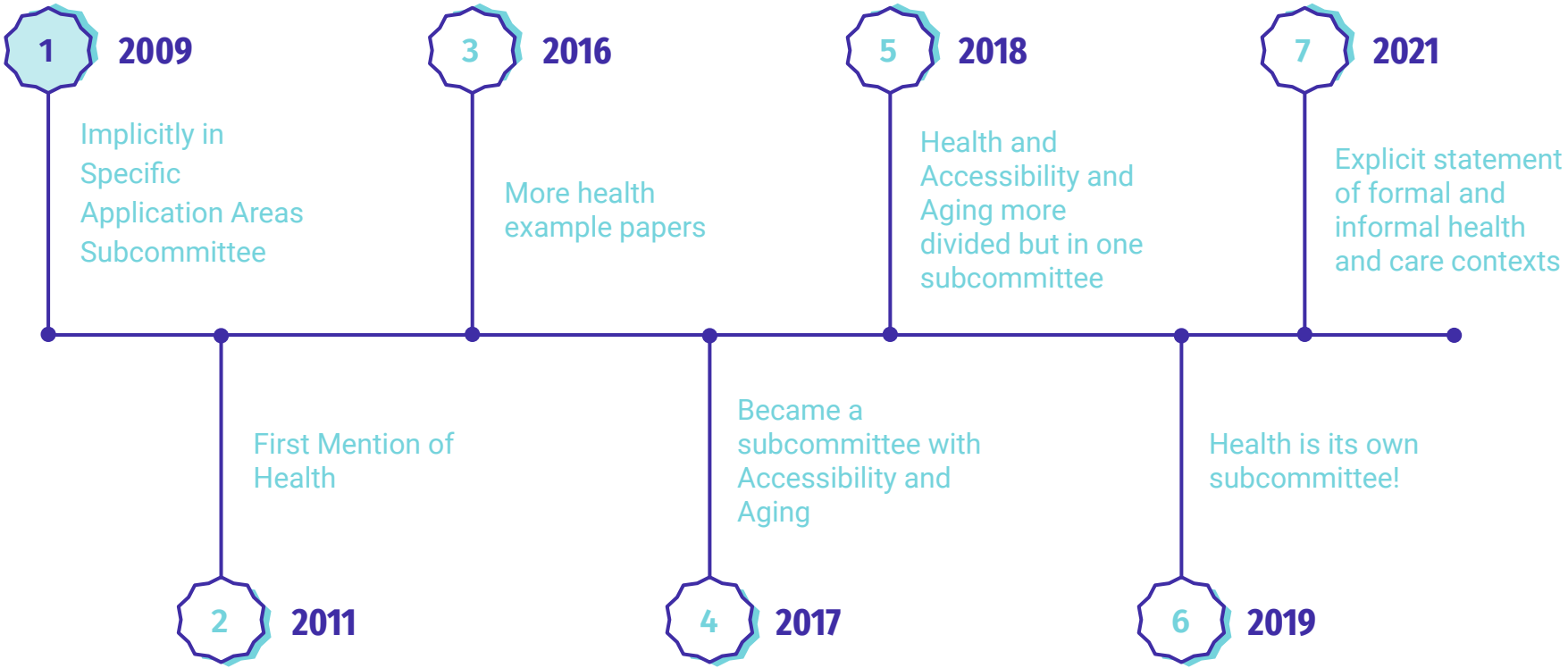
E

An NLP approach to identify SDoH-related circumstance and suicide crisis from death investigation narratives

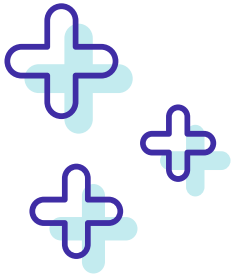
Song Wang [1], Yifang Dang [2], Zhaoyi Sun[3], Ying Ding[4], Jyotishman Pathak[3], Cui Tao[2], Yunyu Xiao[3], and Yifan Peng [3]

[1]Cockrell School of Engineering, The University of Texas at Austin, Austin, Texas, USA, [2]School of Biomedical Informatics, The University of Texas Health Science Center at Houston, Houston, Texas, USA, [3]Population Health Sciences, Weill Cornell Medicine, New York, New York, USA, and [4]School of Information, The University of Texas at Austin, Austin, Texas, USA

History of the CHI Health Subcommittee



2009: Implicitly in the Specification Application Areas Subcommittee



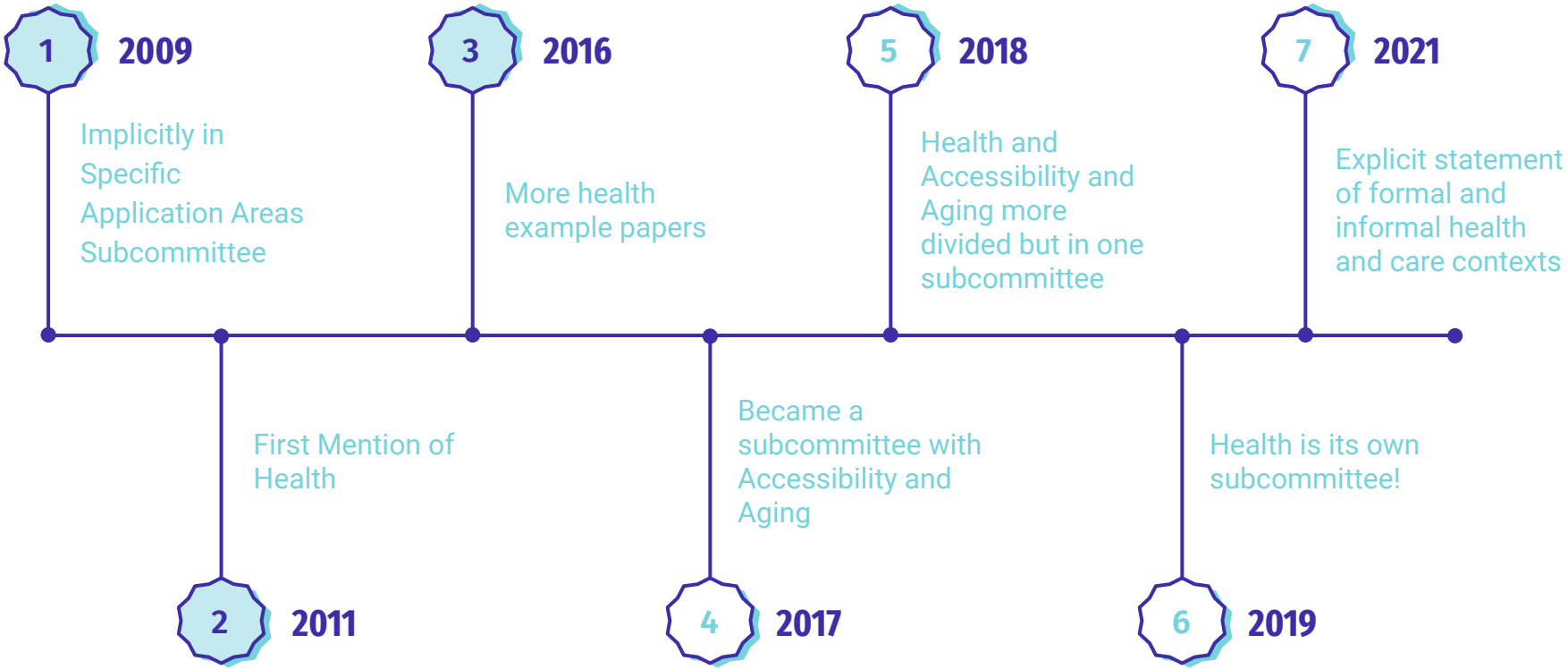
This subcommittee will focus on **papers which make a contribution by extending the design and understanding of applications for specific domains of interest to the HCI community**, or by bringing enhancements to particular user communities of interest. Examples of application areas include but are not limited to: elearning, home, office, elderly, children, ecommerce, sustainability, creativity. These contributions will be judged in part on their impact on the specific application area and/or community they address.

2011: First Mention of Health

This subcommittee will focus on papers which make a contribution by extending the design and understanding of applications for specific user communities or domains of interest to the HCI community. Examples of user communities include but are not limited to: older adults, children, families, disabled users, the underserved in developing countries. Examples of application areas include but are not limited to: education, home, entertainment, office, ecommerce, **health**, sustainability, and creativity. These contributions will be judged in part on their impact on the specific application area and/or community they address.

Example Paper: Mobile-izing health workers in rural India

History of the CHI Health Subcommittee



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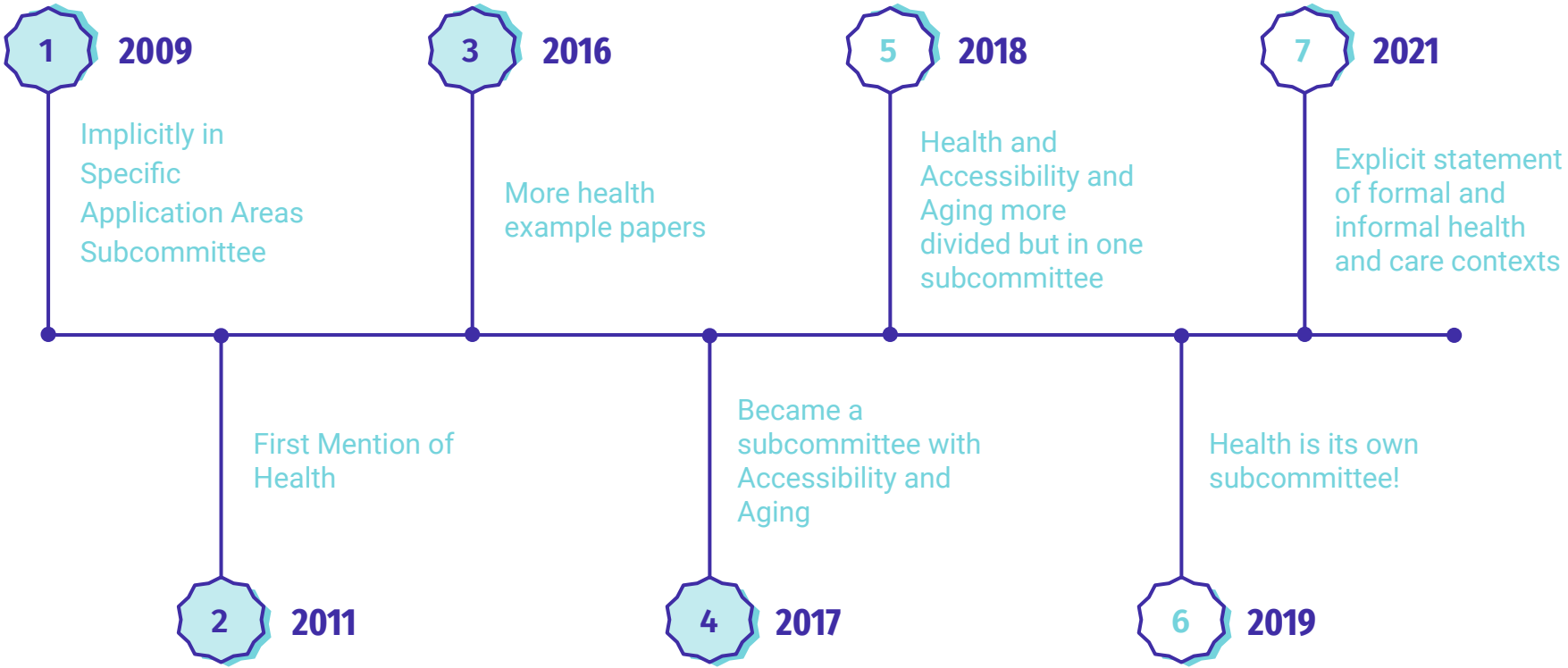
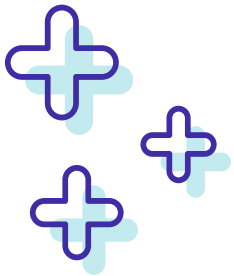


2017: Health, Accessibility and Aging Subcommittee is Formed

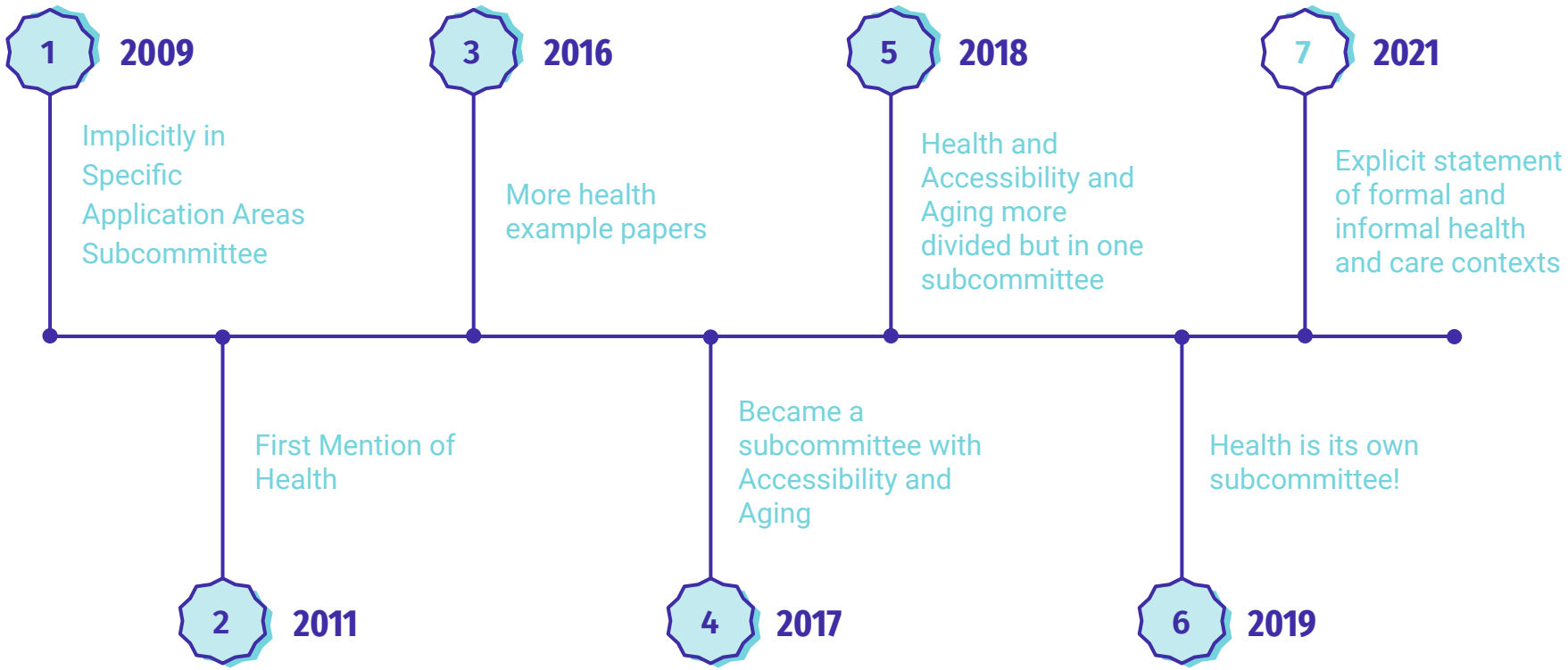


This subcommittee is suitable for **contributions to independent and healthy living over a lifetime.** It combines the areas of (i) accessibility for people with disabilities, (ii) **health, wellness,** and aging; and, (iii) technology for and studies involving older adults. Submissions to this subcommittee will be evaluated in part based on their inclusion of and potential impact on their target user groups and other stakeholders. This subcommittee balances the rigor required in all CHI submissions with awareness of the challenges of conducting research in these important areas. This subcommittee welcomes all contributions related to accessibility, **health**, and aging, including empirical, theoretical, conceptual, methodological, design, and systems contributions.

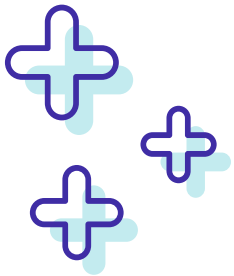
2018: Health, Accessibility and Aging Subcommittee is More Divided

The "health" component of this subcommittee is suitable for contributions related to health, wellness, and medicine, including physical, mental, and emotional well-being, clinical environments, self-management, and everyday wellness. The "accessibility and aging" subcommittee is suitable for contributions related to accessibility for people with disabilities and/or technology for and studies involving older adults (i.e., senior citizens). Accessibility papers are those that deal with technology design for or use by people with disabilities including sensory, motor, and cognitive impairments. **We have indicated below which ACs will handle the "health" papers** and which will handle "accessibility and aging"; please add the keyword "health," "accessibility," or "older adults" as appropriate to your submission in PCS so that we can be sure to direct your submission to the appropriate subset of this committee. **Note that if your paper primarily concerns interactions of older adults with their healthcare providers, then the *Health* keyword is probably a better fit,** whereas papers reflecting on how older adults use technologies and/or designing interfaces and interactions suited to the needs of older adults are better suited for the accessibility and aging component of this committee. We strongly suggest that authors review this Accessible Writing Guide in order to adopt a writing style that refers to stakeholder groups using appropriate terminology. Submissions to this subcommittee will be evaluated in part based on their inclusion of and potential impact on their target user groups and other stakeholders. This subcommittee balances the rigor required in all CHI submissions with awareness of the challenges of conducting research in these important areas. This subcommittee welcomes all contributions related to health, accessibility, and aging, including empirical, theoretical, conceptual, methodological, design, and systems contributions.

History of the CHI Health Subcommittee



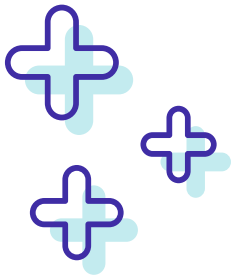
2019: Health is its Own Committee!



This subcommittee is suitable for contributions related to health, wellness, and medicine, including physical, mental, and emotional well-being, clinical environments, self-management, and everyday wellness. This subcommittee balances the rigor required in all CHI submissions with awareness of the challenges of conducting research in these challenging contexts. This subcommittee welcomes all contributions related to health, including empirical, theoretical, conceptual, methodological, design, and systems contributions. Papers are also welcome that describe studies that are impactful to their communities.

(Taken from CHI 2020)

2021: Explicit Statement of Formal and Informal Health and Care Contexts



This subcommittee is suitable for contributions related to health, wellness, and medicine, including physical, mental, and emotional well-being, clinical environments, self-management, and everyday wellness. Accepted papers will balance the rigor required in all CHI submissions with awareness of the challenges of conducting research in these challenging contexts. **The research problem can be grounded in both formal and informal health and care contexts.** Submissions to this subcommittee will be evaluated in part based on their inclusion of and potential impact on their stakeholders. We welcome papers that are empirical, theoretical, conceptual, methodological, design, and systems contributions. Papers must have a clear and novel contribution to HCI in terms of our understanding of people's interaction with technology in a healthcare context, or the design of health and wellness technologies. For example, systematic reviews or usability studies associated with clinical trials must also have contributions for the HCI community.

Framing Papers: Core Sub-Topics

- Behavior Change
- Mental Health
- Self-Tracking
- Collaborative Healthcare Work
- Artifacts & Systems
- Hospital Spaces & Operations
- Moving Care into the Home
- Telemedicine

Framing Papers: Methodological Approaches to Doing Research

"In healthcare literature over recent years, the need for a qualitative component to healthcare technology evaluations is becoming more recognised." (Sanchez et al.)

Interviews (semi-structured or unstructured)

Surveys

Ethnography/ Observations

Lab-Based Studies

Participatory Design
Design Workshops

Outcomes:

- Design Implications
- Organizational/ Conceptual Implications

THANK YOU!