

Editorial

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# Embracing the future of healthcare: launching the Journal of *Connected Health And Telemedicine*

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**How to cite this article:** Zhang YT, Deen MJ, Shen D. Embracing the future of healthcare: launching the Journal of *Connected Health And Telemedicine*. *Conn Health Telemed* 2023;2:200001. <https://dx.doi.org/10.20517/chatmed.2023.01>

**Received:** 13 Jun 2023 **Revised:** 14 Jun 2023 **Accepted:** 16 Jun 2023 **Published:** 16 Jun 2023

**Academic Editor:** Yuan-Ting Zhang **Copy Editor:** Yanbing Bai **Production Editor:** Yanbing Bai

## INTRODUCTION

In the era of rapid technological advancements, the convergence of wearable and flexible sensing, medical imaging, artificial intelligence (AI), and information technologies are revolutionizing healthcare. The potential for these technologies to acquire, store, transmit, analyze, retrieve, and share health-related information has paved the way for groundbreaking advancements in the early detection, prediction, prevention, diagnosis, treatment, monitoring, and rehabilitation of major diseases such as cardiovascular diseases. Recognizing the immense potential of these fields, we are thrilled to announce the launch of a newly renamed open access journal focused on these areas of research, namely *Connected Health And Telemedicine* (CHATmed).

## SCOPE AND OBJECTIVES

The aim of our journal is to provide a platform for researchers, industrialists, and practitioners to share their knowledge, findings, and insights on the multidisciplinary field of connected health and telemedicine. This includes technical innovations and clinical applications of wearable and flexible sensing, AI, medical



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imaging, and information technologies for the advancement of healthcare. By covering a broad range of research topics, we aim to promote collaboration and foster innovation in the field.

Connected health and telemedicine has emerged as a promising tool for improving access to care and empowering patients anytime, anywhere. By leveraging technologies such as digital health, mHealth, and telehealth, significant advancements have been made in the management of various conditions, including hypertension, heart failure, stroke, and chronic diseases such as diabetes, mental illness, cancers, and infectious diseases. The potential of AI, including GPT in Health, has also been realized, leading to improved diagnosis, treatment, and patient outcomes. Our journal, *CHATmed*, will actively contribute to the dissemination of knowledge in these areas.

## KEY RESEARCH TOPICS

The technical research topics selected for our journal encompass a wide range of emerging research areas. These include wearable and flexible sensors, tele-radiology, telemedical imaging, tele-robotic surgery, smart hospital at home, point-of-care technology, biomedical and molecular testing technologies at home, virtual reality, AI, deep learning, machine learning, and AI-assisted diagnostic systems. We are particularly interested in emerging topics such as ChatGPT/GPT/AGI in connected health and telemedicine, which hold immense potential for transforming healthcare delivery.

## CLINICAL AND WELL-BEING ASPECTS

*CHATmed* aims to highlight research in feasibility and usability studies, clinical trial reports, multi-center trials, efficacy studies, AI doctors, applications in elderly home and well-being studies, connected health and telemedicine for parental and fetal care, and other relevant areas. By showcasing these studies, our goal is to foster innovation and bridge the gap between scientific research and clinical practice, ultimately improving patient care and well-being.

## ECONOMIC STUDIES AND POLICY

Understanding the economic implications of digital healthcare solutions is crucial for their widespread adoption. *CHATmed* will serve as a platform for studies on the cost-effectiveness of these remote care solutions and the development of social-technical models of telemedicine and digital health that promote their integration into existing healthcare systems. Additionally, we will explore regulatory issues, health policies, ethics, privacy, and legal considerations to ensure responsible and ethical implementation of connected health technologies.

## PERSONALIZED MEDICINE AND TELEPHARMACY

*CHATmed* will focus on the integration of molecular information, medical images, and wearable health data with AI to enable personalized and precise prediction, prevention, diagnosis, and treatment of diseases. By shifting disease management toward a patient-centered model of care, we can optimize outcomes and improve the overall patient experience. Furthermore, the journal will explore telepharmacy, including remote close-loop drug delivery, medication dispensation, pharmacovigilance, and monitoring of medication adherence, to revolutionize pharmaceutical care delivery.

## MOST RECENT DEVELOPMENTS AND PAPERS IN THIS ISSUE

As we write this editorial, we are pleased to inform you that the European Society of Hypertension (ESH) Recommendations for the Validation of Cuffless Blood Pressure (BP) Measuring Devices have been published online in the *Journal of Hypertension*<sup>[1]</sup>. While the IEEE 1708<sup>TM</sup> standard is a landmark

contribution in the era of cuffless BP devices, which considered fundamental and methodological issues on the evaluation of wearable and cuffless BP devices for the first time<sup>[2-3]</sup>, these ESH recommendations represent another milestone in the development of Cuffless BP standards. They focus on specific, clinically meaningful, and pragmatic validation procedures for various types of intermittent cuffless devices. Our journal welcomes both reviews and original contributions on the validation of Cuffless BP devices. We encourage researchers to use these standards and recommendations to ensure that only accurate devices will be used in the management of hypertension.

In this inaugural issue, *CHATmed* is proud to present four papers that exemplify the breadth of research in the field. These papers shed light on crucial topics, such as remote photoplethysmography (PPG) for BP measurement by T. Curran *et al.*, identifying global decline in multimorbidity through a connected health approach by I. L. Henderson *et al.*, advancements in BP measurement including emerging technologies and remote monitoring for hypertensive patients care by J.S. Ringrose *et al.*, and co-designing technology to support physical activity for adolescents with type 1 diabetes by D. Morrow *et al.* We extend our gratitude to the authors for their invaluable contributions and cordially invite researchers, practitioners, and policymakers to explore and engage with this cutting-edge research.

## CONCLUSION

We are thrilled to announce the launch of our newly renamed open access journal, dedicated to fostering collaboration, innovation, and the dissemination of knowledge in the multidisciplinary field of digital health. The journal eagerly invites original research articles, systematic reviews, meta-analyses, case studies, and perspectives that contribute to the scientific understanding and practical implementation of digital health technologies, with the aim to drive advancements in healthcare, improve patient outcomes, and ultimately enhance the quality of life for individuals worldwide. We warmly invite all stakeholders to join us on this exciting journey towards a more connected, efficient, and patient-centered future in healthcare.

We eagerly anticipate your contributions to this journal.

## DECLARATIONS

### Authors' contributions

Preparation of the manuscript: Zhang YT, Deen MJ, Shen D

### Availability of data and materials

Not applicable.

### Financial support and sponsorship

None.

### Conflicts of interest

All authors declared that there are no conflicts of interest.

### Ethical approval and consent to participate

Not applicable.

### Consent for publication

Not applicable.

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