

Special Issue on  
**Advanced Computational Intelligence Technology in  
Healthcare Management**

# CALL FOR PAPERS

Advancements in technology have significantly improved medical and healthcare management in clinical tasks due to integrated healthcare analytics. Artificial intelligence applications in the health sector have been recognized as new intelligent paradigms for the planning and delivery of health care and health services. This has enabled rapid development in the field of health informatics, which then requires efficient health care services. These developments are creating new opportunities for health promotion, disease prevention, and support in health care. In addition, healthcare management needs to be strengthened to enhance the quality of medical services. With the recent advances in computational intelligence technology, the use of data and information has transformed public health services.

The need to understand the challenges in developing and implementing expert systems to support health care is essential in the health sector. In many fields, recent end-to-end machine learning approaches have shown great success and had a remarkable impact with the availability of large, annotated datasets. As tumultuous as the current healthcare environment is, it is expected to become even more complex over the next several years. Challenges such as evolving market dynamics, increasing governmental regulation, and more demanding consumers will require smarter, more informed decisions from healthcare providers to remain competitive and deliver value to communities.

The aim of this Special Issue is to invite researchers who are working in healthcare analytics and informatics and providing software-based solutions to submit their research on this topic. We hope to bring together original research and review articles focusing primarily on healthcare management and analytics, and to cover recent advances in the feasibility of novel applications of machine and deep learning approaches in healthcare management systems or software.

Potential topics include but are not limited to the following:

- ▶ Machine learning and deep learning-based healthcare analytics
- ▶ Smart healthcare technologies, including sensors, big data analytics, edge computing, and Internet of Things (IoT).
- ▶ Optimization techniques in medical and healthcare applications
- ▶ Improved supply chains and improved patient prediction
- ▶ Smart healthcare staffing and enhanced patient engagement
- ▶ Predictive risk disease management

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.hindawi.com/submit?specialIssue=186038>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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