Special Issue

Mathematical Models for Measuring and Improving Healthcare Quality

Message from the Guest Editors

Quality measurement is a fundamental step in the quality improvement cycle (see CMS). In healthcare settings, quality measurement is particularly challenging due to its multidimensional nature and the inherent subjectivity of quality observations. Nonetheless, the improvement of healthcare quality is a necessary step and innovative mathematical models are needed to complete the quality improvement cycle. This issue will explore the use of mathematical models to measure and improve the quality of care provided in healthcare settings. The models may employ any mathematical approach, such as optimization, statistics, simulation, and machine learning. The application may be to any healthcare setting, including hospitals, nursing homes, physician offices, clinics, blood collection centers, and others.

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Deadline for manuscript submissions

closed (31 December 2023)

MDPI

Healthcare

an Open Access Journal by MDPI

**Impact Factor 2.7
CiteScore 4.7
Indexed in PubMed**

About the Journal

Message from the Editor-in-Chief

Healthcare is an international, scientific, peer-reviewed, open access journal on health care systems, industry, technology, policy, and regulation, and is published semimonthly online by MDPI. Ocular Wellness & Nutrition Society (OWNS) is affiliated with Healthcare and its members receive discounts on article processing charges.

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