

Special Issue

Transforming Orthopedic and Trauma Surgery with Data: From Claims Analysis to AI-Driven Insights

Message from the Guest Editor

The accelerating digital transformation in healthcare is offering unprecedented opportunities to improve clinical outcomes and health services in orthopedic surgery and traumatology. For this Special Issue, we welcome high-quality contributions that explore how data can provide novel insights into orthopedic care, surgical outcomes, patient safety, and system-wide efficiency. We are particularly interested in interdisciplinary work spanning orthopedic and trauma surgery, medical informatics, epidemiology, and health services research. Topics of interest include, but are not limited to, the following:

- Analysis of large-scale administrative health datasets (e.g., claims, registries);
- Predictive modeling of surgical outcomes using AI/ML techniques;
- Quality measurement and benchmarking in orthopedic and trauma care;
- Postoperative complication tracking and risk stratification;
- Real-world data applications for surgical decision-making and patient pathways;
- The evaluation of health system performance in musculoskeletal interventions;
- Ethical, legal, and policy challenges in the use of big data in orthopedics.

Guest Editor

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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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