

# Diverse Perspectives and State-of-the-Art Approaches to the Utilization of Data-Driven Clinical Decision Support Systems

Part of the Advances in Medical Technologies and Clinical Practice Book Series

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## Description:

The medical domain is home to many critical challenges that stand to be overcome with the use of data-driven clinical decision support systems (CDSS), and there is a growing set of examples of automated diagnosis, prognosis, drug design, and testing. However, the current state of AI in medicine has been summarized as “high on promise and relatively low on data and proof.” If such problems can be addressed, a data-driven approach will be very important to the future of CDSSs as it simplifies the knowledge acquisition and maintenance process, a process that is time-consuming and requires considerable human effort.

**Diverse Perspectives and State-of-the-Art Approaches to the Utilization of Data-Driven Clinical Decision Support Systems** critically reflects on the challenges that data-driven CDSSs must address to become mainstream healthcare systems rather than a small set of exemplars of what might be possible. It further identifies evidence-based, successful data-driven CDSSs. Covering topics such as automated planning, diagnostic systems, and explainable artificial intelligence, this premier reference source is an excellent resource for medical professionals, healthcare administrators, IT managers, pharmacists, students and faculty of higher education, librarians, researchers, and academicians.



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Drug Dosage Regimen (DDR)

Ethnomethodology  
Explainable Artificial Intelligence (XAI)  
Hierarchical Reinforcement Learning  
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**Subject:** Medical, Healthcare, and Life Sciences

**Classification:** Edited Reference

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