



# WELL AI Decision Support

## Optimizing Chronic and Rare Disease Patient Care with Advanced AI Solutions

How AI-powered decision support tools  
are transforming chronic and rare  
disease management



## Understanding the Complexity of Rare and Chronic Diseases

With over 7,000 rare diseases globally and nearly 60% of adults living with chronic conditions, physicians face significant challenges in diagnosis due to overlapping symptoms, often resulting in prolonged diagnostic journeys.

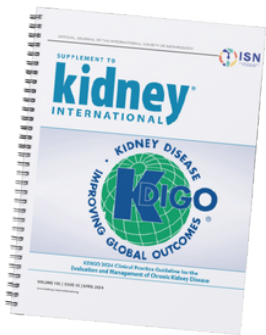
In this white paper, we explore how the use of AI can help you identify patients at risk for chronic and rare diseases. We will share a case study on how AI-powered decision support technology is applied in practice and showcase its impact.

# The Power of Artificial Intelligence

Artificial intelligence (AI) enables the development of computer systems that can store and analyze vast amounts of data to perform tasks typically requiring human intelligence, like facial recognition, speech recognition, and decision-making. Machine learning (ML), a subset of AI, allows computers to learn from experience, adapting their processes based on new data. With modern computing power, large volumes of data from various sources can be swiftly stored and analyzed, turning unstructured information into actionable insights—such as categorizing patients by disease risk levels and predicting disease progression through data patterns.

The integration of AI and ML has paved the way for precision medicine, where treatment plans are customized for individual patients based on genetic, clinical, and lifestyle data. This approach allows for targeted therapies, helping physicians make faster, well-informed decisions and improving patient outcomes.

# AI-Powered Clinical Decision Support In Action: Addressing Chronic Kidney Disease



Chronic Kidney Disease (CKD) is a progressive condition that can remain undetected until it reaches advanced stages, often requiring dialysis or transplantation. Early identification and management are critical for slowing disease progression and reducing complications.

While guidelines, such as [KDIGO recommendations](#), offer evidence-based approaches for CKD management, physician adoption can be delayed due to time constraints and workflow interruptions. This lack of uniform adoption contributes to disparities in care delivery and missed opportunities for timeline intervention.

In a recent study, healthcare providers using a Decision Support tool reported significant increase in adherence to KDIGO guidelines. Specifically, the platform led to a 300% increase in guideline-recommended diagnostic testing and a 96% increase in the use of GDMT among high-risk CKD patients. This measurable improvement highlights the effectiveness of AI-driven solutions in driving positive change in clinical practices and improving patient outcomes.



# WELL AI Decision Support

## Introducing WELL AI Decision Support

WELL AI Decision Support is at the forefront of this innovation, harnessing AI and ML to bring together extensive diagnostic insights on chronic and rare diseases with the clinician's own case data from their EMR.

Using an intuitive clinical dashboard, a patient's electronic medical record can be instantly screened, utilizing a rare and chronic disease algorithm to identify potential risks. Physicians can also scan complex cases against a curated panel of top rare and chronic diseases, enabling proactive identification of high-risk patients, speeding up diagnosis, and facilitating timely next steps, such as ordering targeted lab work or referring to a specialist.



# The Benefits of WELL AI Decision Support

AI-driven tools like WELL AI Decision Support play a crucial role in expediting diagnoses, helping physicians identify at-risk patients faster, reduce misdiagnoses, and ultimately alleviate the healthcare system's burden.

## Comprehensive Rare and Chronic Disease Screening

WELL AI Decision Support screens for 110+ rare and chronic conditions, enabling early detection and providing accurate, timely insights aligned with current medical guidelines.

## Advanced Clinical Dashboards and Analytics

The user-friendly dashboard presents essential patient data in a clear, actionable format, helping physicians make well-informed decisions and enhance patient care quality.

## Automated Detection of Rare and Chronic Conditions

By analyzing EMR data, WELL AI Decision Support flags patients at risk for specific rare and chronic conditions, providing valuable insights with minimal manual input.

## Actionable Patient Management

Physicians can set patient-specific actions and reminders, streamlining follow-ups, care coordination, and interventions for a more personalized patient experience.



## Security & Data Privacy

WELL AI Decision Support prioritizes security and privacy by implementing robust encryption, access controls, and compliance with federal and provincial regulations including the Personal Information Protection Act (PIPA), the Personal Health Information Protection Act (PHIPA) and the Personal Information Protection and Electronic Documents Act (PIPEDA).

Patient data is anonymized where possible, ensuring insights are used responsibly without compromising individual privacy. Our platform's ethical AI framework guarantees transparency and supports clinicians with secure, explainable recommendations. Regular updates and audits further strengthen security, providing peace of mind for healthcare providers and their patients.

# Ready to explore the future of diagnosis?

If you're interested in enhancing diagnostic accuracy and efficiency with AI, we're here to support you. WELL AI Decision Support is designed to empower healthcare providers, helping them identify and manage rare and complex conditions more effectively.

"This isn't a tool that replaces my practice – it enhances it. It helps me provide better patient care, not just for individual patients but also for the greater system, which takes pressure off our limited healthcare resources."

- Dr. Alex Kilpatrick

To learn more about how WELL AI Decision Support can transform your practice, get in touch with our team today at [info@wellhealth.ai](mailto:info@wellhealth.ai).

