

AI/ML: Transforming Patient Support in the Digital Age

JARA SOLTERO, Principal, Patient Support Services Advisory, IQVIA

BRIAN LOVINGUTH, Associate Principal, Patient Support Services Advisory, IQVIA

Introduction

Artificial intelligence (AI) and machine learning (ML) are transforming the pharmaceutical sector, particularly in patient support services. Leading companies are integrating AI/ML technologies (including Generative AI) into customer support functions, enhancing both efficiency and responsiveness. These technologies power patient-facing interfaces across platforms, such as web applications, mobile apps, and wearable devices, significantly elevating the quality of patient care and support.



Beyond improving patient outcomes, AI/ML offers organizations a range of competitive advantages from boosting operational efficiency to enhancing customer experiences. Despite this potential, implementing these technologies is not without challenges. Many organizations must navigate hurdles such as internal readiness, competing strategic priorities, risk tolerance, cost concerns, and gaps in data infrastructure. AI/ML maturity models provide a framework to assess and guide development efforts across key areas like strategic planning, process optimization, data management, analytics, and workforce readiness.

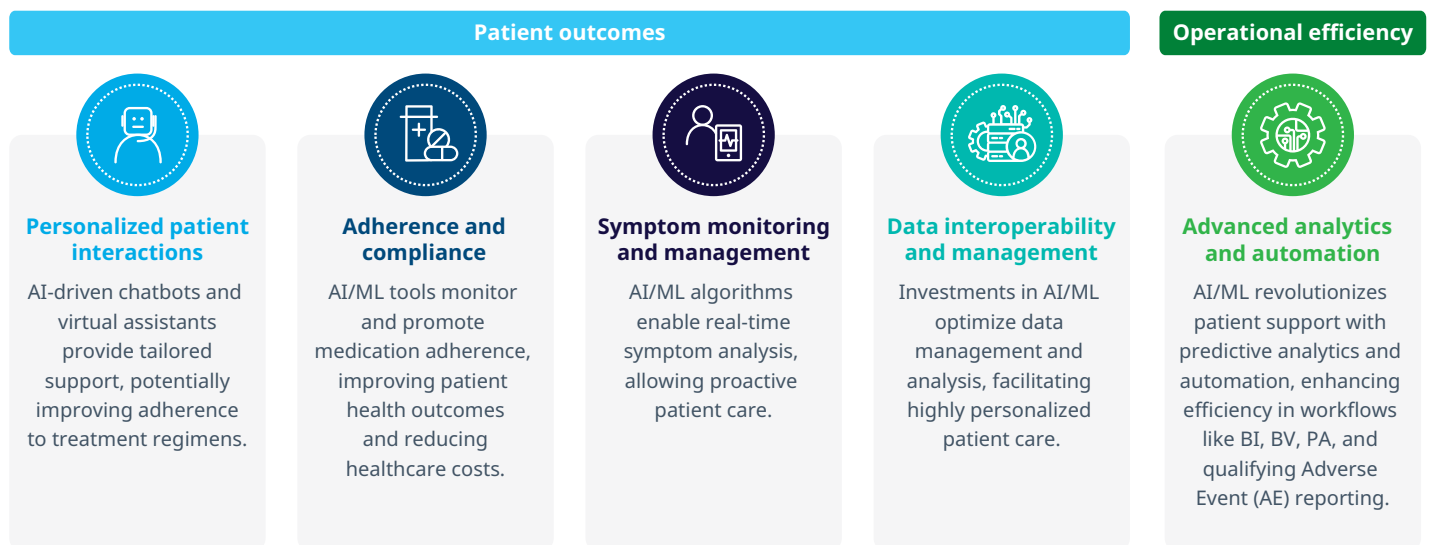
Companies are at varying stages of their AI/ML journey, leading to different levels of adoption and investment. This variability can cause inconsistencies in digital innovation and patient support outcomes. Slow adopters risk inefficiencies and missed opportunities, while fast adopters may over-invest if more accessible technologies emerge. This article explores how AI/ML optimizes patient support programs (PSPs) and highlights how partnering with IQVIA can maximize the benefits of these technologies, regardless of your organization's current position in its AI/ML transformation journey.



Emerging trends in AI/ML for pharmaceutical patient support

AI/ML is driving significant advancements in pharmaceutical patient support. These advancements demonstrate how AI/ML is transforming patient interactions, improving adherence, enhancing symptom monitoring, and optimizing data management. The applications of AI/ML range from analyzing patient interactions and predicting persistency risks to providing personalized guidance and automating routine processes. As illustrated in the following image, these trends are already beginning to reshape the landscape of patient support services, offering substantial improvements in both operational efficiency and patient outcomes.

Key benefits of AI/ML integration in patient support services



Note: BI = Benefits investigation; BV = Benefits verification; PA = Prior authorization

SO WHAT?





The integration of AI/ML into patient support services is a pivotal shift that not only enhances patient care but also significantly streamlines operational processes. This dual impact is crucial for pharmaceutical companies aiming to maintain a competitive edge, as it directly contributes to both the effectiveness of patient care programs and the overall efficiency of service delivery.

Targeted AI/ML applications in pharma patient support services

AI/ML tools are becoming essential in transforming PSPs. These technologies allow pharmaceutical organizations to optimize operational efficiencies and significantly enhance patient outcomes, maximizing their impact in these critical services.

The following table highlights some of the key AI/ML applications currently being utilized in pharmaceutical patient support services, with a focus on operational efficiencies. It outlines the current state of these applications, their potential to drive further improvements, and their feasibility in real-world scenarios.




Key opportunities to improve operational efficiency

AI/ML APPLICATION	CURRENT STATE	POTENTIAL	FEASIBILITY
 Digital assistants <i>Automate routine admin tasks, reducing burden on staff</i>	Early adoption for BI, BV, and PA.	Expanded capabilities for complex tasks, like payer calls, appointment scheduling, and patient follow-ups.	High
 Case management <i>Improve accuracy and speed in managing patient cases</i>	Streamlines data entry and case resolution, reducing human error.	Predictive case routing and automated follow-ups to improve efficiency.	High
 Call scoring and QA <i>Enhance call center operations by automating quality checks</i>	Used in call centers for quality and compliance monitoring.	Integrates sentiment and predictive analytics to proactively address concerns.	Medium to high
 Field tools and intelligence mining <i>Identify and resolve field issues</i>	Early deployment to gather and analyze field data for issue resolution and customer service improvements.	Greater integration with real-time analytics and mobile apps for instant insights.	Medium

Note: BI = Benefits investigation; BV = Benefits verification; PA = Prior authorization

The following table delves into additional AI/ML-driven solutions that are specifically aimed at improving patient outcomes. It illustrates how these technologies are currently being applied, their potential for further advancements, and their feasibility in real-world scenarios.

Key opportunities to enhance patient outcomes

AI/ML APPLICATION	CURRENT STATE	POTENTIAL	FEASIBILITY
 Predicting persistency risk <i>Identify at-risk patients for timely intervention</i>	Used in pilot programs and select PSPs to identify at-risk patients.	Timely interventions and widespread adoption to reduce drop-off rates.	High
 Conversational intelligence <i>Gain insights from patient interactions to boost adherence</i>	Widespread technology to analyze patient interactions to identify and address therapy barriers.	Enhanced capabilities for real-time feedback and personalized support.	Medium to high
 Dynamic Next Best Action conversation guides <i>Provide tailored guides to enhance patient-provider interactions</i>	Limited use in providing personalized interaction guides.	Broad implementation across therapeutic areas, enhancing patient and provider satisfaction.	Medium

However, with these opportunities come challenges that must be carefully navigated to ensure the successful integration and full realization of AI/ML's potential.

Challenges, pitfalls, and opportunities in AI/ML integration

Despite the potential of AI/ML in patient services, the path to integration is fraught with both challenges and opportunities. To successfully navigate this complex landscape, it's pivotal to understand the common pitfalls and areas for potential growth. The following highlights the key challenges, pitfalls, and opportunities associated with AI/ML integration, providing a comprehensive overview of what organizations must consider to maximize the benefits of these technologies in their PSPs.

Critical considerations for successful AI/ML implementation in patient support services



Data privacy and security

Maintaining patient trust is paramount. Developing secure AI/ML solutions that protect patient data and adhere to rigorous standards is essential.



Integration with existing systems

Effective integration of AI/ML with legacy systems requires adept coordination and technical know how to ensure seamless transitions without interruptions to business continuity and patient experience.



Ethical use of AI

Adherence to ethical guidelines in AI/ML usage is mandatory to prevent bias and ensure equitable patient treatment.



Expertise gaps

Lack of in-house AI/ML expertise is a key challenge. Partnering with external experts like IQVIA provides necessary guidance.



Bottom-up design

Relying solely on bottom-up design in AI/ML maturity models can be a pitfall. A balanced approach integrating top-down strategic alignment is needed for comprehensive maturity.



Fear of change and status quo

Resistance to change is significant. Organizations must understand that inaction poses a risk of being left behind.

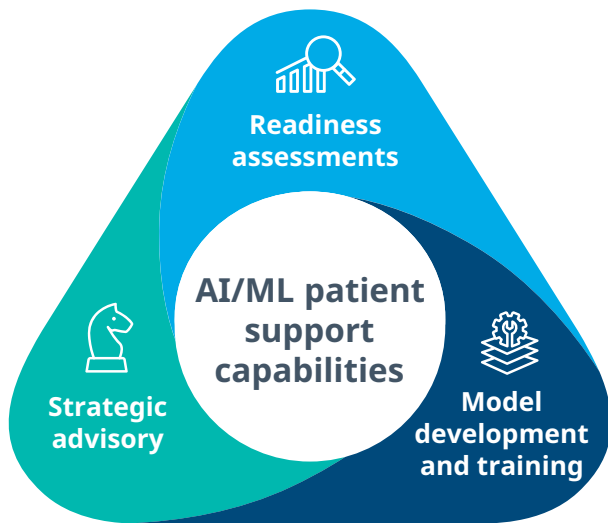
How IQVIA can support your AI/ML journey in patient support

Whether you're just beginning your AI/ML journey in patient support services or looking to enhance existing deployments, IQVIA is your strategic partner for successful implementation. With over two decades of leadership and a proven track record in managing successful PSPs, IQVIA offers unparalleled strategic advisory expertise and leadership in accelerating innovative solutions.

IQVIA has developed proprietary AI/ML models and tools, supported by our extensive data assets and commitment to excellence, which can significantly improve personalized patient care and operational efficiency. Our team of data scientists, AI/ML experts, and strategy consultants provides tailored support to ensure the successful integration and optimization of these technologies for our customers.

Partner with IQVIA to enhance patient outcomes, customer experience, and operational efficiency through effective, compliant, and strategically aligned AI/ML initiatives.

Core AI/ML capabilities for enhancing PSPs



AI/ML readiness assessments

Evaluating your patient services' infrastructure and data capabilities to support planning efforts that accelerate AI/ML maturity and secure a competitive advantage.

Model development and training

Model training and validation, ensuring that your AI/ML initiatives are effective, compliant, and strategically aligned with your patient support goals.

Strategic advisory

Offering continuous strategic advisory and innovation guidance to unlock AI/ML's potential across your patient services and market programs' strategic, programmatic, and experiential aspects.

Contact IQVIA today to learn how we can tailor AI/ML solutions to your organization's unique needs, and accelerate your journey towards increased operational efficiency and superior patient care.

CONTACT AN EXPERT BELOW TO LEARN MORE

JARA SOLTERO,

Principal, Patient Support Services Advisory

(jara.soltero@iqvia.com)

BRIAN LOVINGUTH,

Associate Principal, Patient Support Services Advisory,

(brian.lovinguth@iqvia.com)

[iqvia.com](https://www.iqvia.com)

