IQVIA Healthcare-grade AI®

Leading the Way

Accelerating decision making and deployment with trusted Healthcare-grade AI® applications.

Contributing to trustworthy and defensible AI guidelines to meet stakeholder needs

IQVIA Healthcare-grade AI® ensures generative AI is harnessed responsibly and with the speed, precision, and trust required for the healthcare industry.

The information below explores how trustworthy, defensible AI provides industry confidence in the quality and accuracy of generative AI in healthcare. We also present a case study that illustrates how AI capabilities and a comprehensive end-to-end workflow support emerging market needs.

Determining the path forward

Life sciences and healthcare organizations have specific needs that raise important questions about the use of generative AI in guiding decision making. Emerging regulatory oversight and expectations in how AI systems will be managed heightens the risk profile of novel uses and applications for generative AI. Unclear governance through principles-based guidance for generative AI adds uncertainty regarding expectations and risks. A lack of clarity around this guidance can make it challenging for stakeholders about a clear path forward, ultimately slowing decision making.

Moving forward through collaboration

IQVIA collaborates with healthcare, technology and regulatory organizations globally to responsibly accelerate the evolution and adoption of AI in healthcare and improve patient outcomes. We have informed 25+ guidelines represented in regulatory guidance and standards worldwide (e.g., ISO, UK ICO).

IQVIA Healthcare-grade AI® implements the following guidelines to reduce confusion around expectations and risks of using generative AI for decision making and ensure stakeholder needs are met:

- Enabling data for good with an actionable framework to evaluate the uses of AI and when different tiers of governance are needed to build a trusted system.

- Adhering to regulations and user expectations across jurisdictions with formal assessment against international standards in the management of AI.

- Developing a pragmatic implementation framework that provides a roadmap for greater transparency with clear and actionable methods to improve safe AI efficiency.

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Gaining momentum through alignment

Implementing clear guidelines to satisfy regulator expectations and internal needs for driving business outcomes answers stakeholder questions about the safe use and efficacy of generative AI in healthcare. Improved stakeholder alignment across various functional teams regarding expectations and the path forward help accelerate decision making.

IQVIA is recognized as the leader in generative AI expertise for RWE and Medical Affairs solutions

Source: As determined by independent research on RWE/Medical Affairs Market landscape
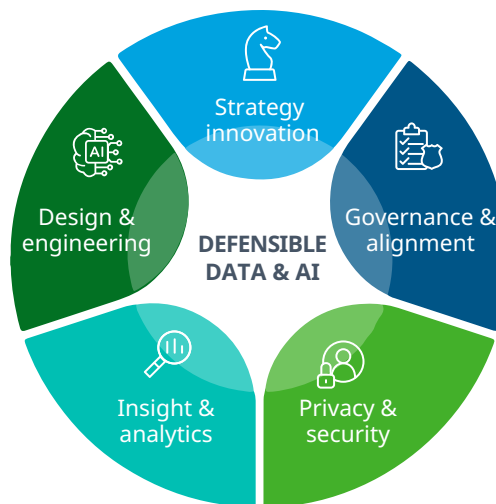
Figure 1: Defensible Data and AI — Driving trustworthy patient insights at scale

Solutions and services informed by expertise in technology, data protection, and privacy to provide world-class guidance and solutions on safe uses of predictive and generative AI, part of IQVIA Applied AI Science

Strategic planning for future AI, identifying emerging technologies and developing strategic patient data frameworks for safe data & AI

Technical development and architectural design of AI systems and data infrastructure, including data modeling and ontologies

Governance and management of data and AI, aligning with regulatory expectations, operational goals, and new capabilities like data mesh

Analytical methods and AI models, leveraging data to extract valuable insights by interpreting and utilizing data effectively

Data protection and privacy techniques, maintaining the integrity and confidentiality of data and AI operations

Strategy innovation

Design & engineering

DEFENSIBLE DATA & AI

Governance & alignment

Insight & analytics

Privacy & security

Source: IQVIA Applied AI Science.

Notes: For more information, please contact defensibleAI@iqvia.com or visit http://iqvia.com/defensible-AI

Case study: IQVIA Healthcare-grade AI® optimizes client research monitoring for COVID-19

Delivering a living review literature database for a Top 10 pharma client

Situation

The volume and velocity of published research related to COVID-19 is unprecedented in its scale and diversity. The ongoing extraction of insights from such a rich and expansive amount of information posed a significant challenge for a Top 10 Pharma client seeking enhanced publication monitoring with efficient selection and accurate extraction from the most relevant and high-quality peer-reviewed articles.
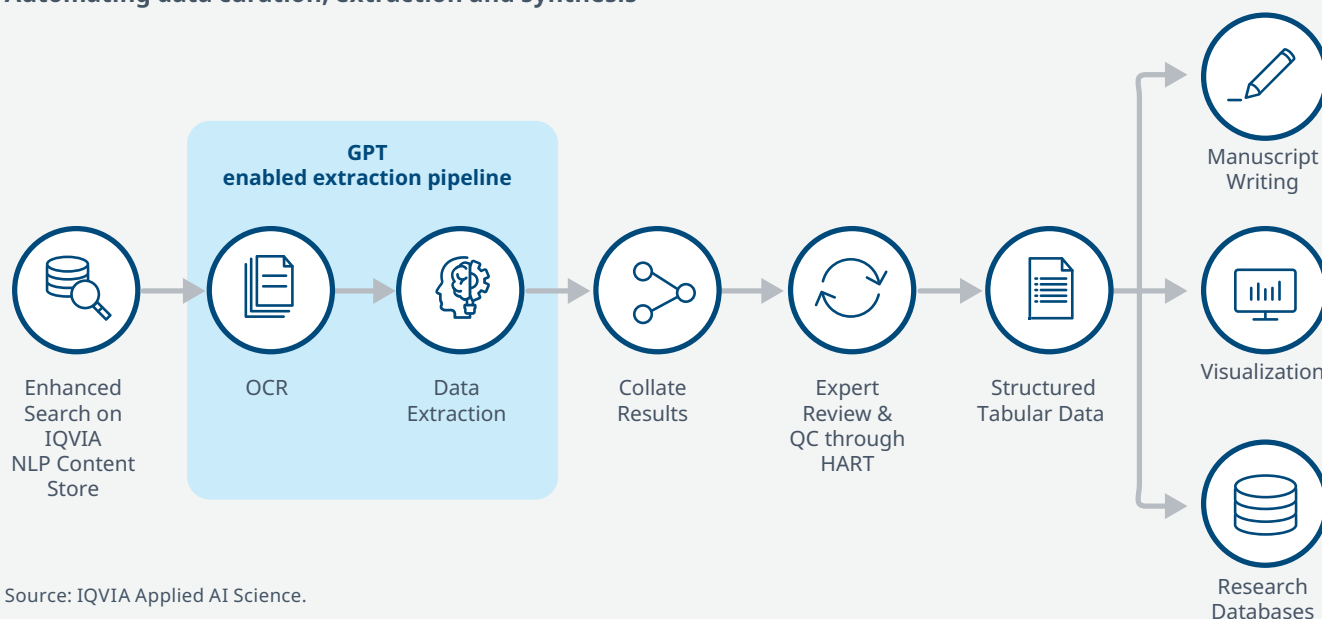
The ongoing extraction of insights from such a rich and expansive amount of information posed a significant challenge.

Solution

The capabilities of IQVIA Healthcare-grade AI® enabled a "living review" database in which key publications were continuously searched and selected for review and real world data extracted from the literature, giving the client increased insight into the desired research. To expedite the literature review process, generative AI and Natural Language Processing (NLP) methods were combined with IQVIA Evidence Synthesis expertise to automate data curation, extraction and synthesis. Our Human Assisted Review Tool (HART) interface ensured prompt validation of results with expert oversight to ensure accuracy.

Automating data curation, extraction and synthesis

GPT enabled extraction pipeline

Enhanced Search on IQVIA NLP Content Store → OCR → Data Extraction → Collate Results → Expert Review & QC through HART → Structured Tabular Data → Manuscript Writing / Visualization / Research Databases

Source: IQVIA Applied AI Science.

Results

The advanced search and extraction capabilities of the living review delivered significant results for the client, including a 70% reduction in manual data extraction efforts. Adapting methods based on IQVIA expert feedback from HART allowed for seamless integration between experts and AI, delivering capabilities precisely optimized for the client's needs.
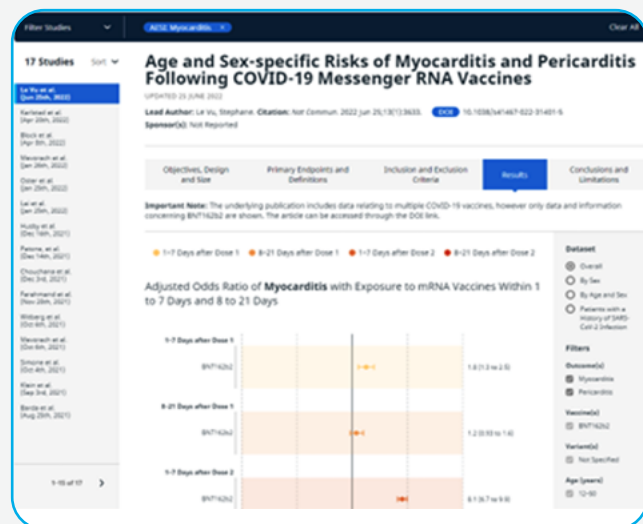
IQVIA *Healthcare-grade AI®* is AI engineered to meet the level of precision, speed, and trust required in life sciences and healthcare. [Learn more](#).

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