

Cognitive Adverse Event Intake and Processing



Shift your focus from low-value manual processes to understanding and interpreting insights to enhance product safety and improve patient outcomes.

Pharmacovigilance (PV) organizations face a growing volume of adverse event (AE) cases, but today's manual processes can be time-consuming and costly. Now there's a way to automate AE processing to help reduce costs and uncover more insights that can improve product safety.

With the growing number of AE events reported through traditional sources, PV organizations are struggling to cope while maintaining their focus on safety. These challenges will likely increase as adoption of new technologies (i.e., wearables) and potential new regulatory guidance on non-traditional real-world sources raises the prospect of exponential increases in AEs.

Deloitte's Cognitive AE Intake and Processing offers a better way. This module of the ConvergeHEALTH Safety platform automates intake and processing to help significantly improve the efficiency and quality of your AE lifecycle. It will likely free up resources, helping you to investigate anomaly cases, better manage quality, improve your understanding of product safety profiles, prepare to respond to changing regulations, and evaluate new opportunities for safety insights.

Shift from low-value tasks to high-impact insights

Don't settle for incremental change. This innovative cognitive- and automation-driven application can transform your AE process and unlock new opportunities to improve your understanding of drug risk profiles.

Here's how it works. Our cognitive engine—with machine learning, natural language processing and generation, plus robotic automation capabilities—is specifically designed to power case entity extraction and coding while also delivering quality improvement recommendations. Workflow automation eliminates manual processes from case receipt through medical and quality review to help improve quality, compliance, and richness of case data available for scientific safety analysis downstream.

This means that safety analysts can shift their focus from low-value manual processes to understanding and interpreting insights to enhance product safety and improve patient outcomes. ➤

Key Features

- **Cognitive case extraction.** Identifies and extracts case information from multiple semi-structured and unstructured sources, including forms, faxes, emails, literature, and more.
- **Auto-coding.** Auto-generates coding recommendations with auto-commit capabilities based on configurable confidence interval thresholds. The quality of recommendations is constantly improved through machine learning loops.
- **Adaptive processing.** Routes cases to appropriate users based on case content, rules, preferences, or prior experience.
- **Alerts and notifications.** Proactively issues alerts to safety analysts, managers, and medical personnel based on defined thresholds, rules, and predictive risk/anomaly models.

Potential benefits

- **Reduces cost per case.** Helps reduce time spent on repetitive manual tasks by increasing throughput with automated rule-based and machine-learning models.
- **Improve case quality.** Identifies duplicates, extracts additional case information, and recommends values along with confidence scores.
- **Priorizes resource allocation.** Enables organizations to shift resources to high-value analysis supported by cognitive insights and recommendations.
- **Accellerates compliance.** Quickly routes cases to appropriate teams for review based on content.

Should we talk?

Deloitte's leading life sciences practice can deliver the experience, knowledge, and technologies needed to help you effectively navigate the rapidly evolving world of drug safety. If you're looking for professionals who understand today's PV issues and deliver innovative solutions, let's talk.

Glenn Carroll

Principal

Deloitte Consulting LLP
gcarroll@deloitte.com

John Whitebrook

Managing Director

Deloitte Consulting LLP
jowwhitebrook@deloitte.com

Aditya Kudumala


Principal

Deloitte Consulting LLP
akudumala@deloitte.com

There's more to ConvergeHEALTH Safety

The ConvergeHEALTH Safety platform enables an end-to-end, integrated, and evidence-based model for safety intelligence to help mitigate risk, reduce cost, and improve patient outcomes. The platform architecture supports four modular applications, which can be deployed separately or in combination.

- Cognitive AE Intake and Processing
- Aggregate Reporting and Safety Analysis
- Safety Operations and Compliance
- Signal Detection, Evaluation, and Management

 **For more information visit**
[www.deloitte.com/us/
convergehealth.html](http://www.deloitte.com/us/convergehealth.html)

As used in this document, "Deloitte" means Deloitte Consulting LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of our legal structure. Certain services may not be available to attest clients under the rules and regulations of public accounting.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms or their related entities (collectively, the "Deloitte Network") is, by means of this communication, rendering professional advice or services. Before making any decisions or taking any action that may affect your finances, or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.