

# Unlock the Future of Healthcare & Life Sciences with Next Gen AI

Harness the transformative power of LLMs to accelerate innovation and create opportunities across the comprehensive Healthcare & Life Sciences value chain.



## Key Challenges

### Long Drug Discovery Lifecycle

Takes a decade or more, costing **\$1B to \$2B** per therapy on average.

### Inefficient Clinical Trial Recruitment Efforts

**85%** fail to meet recruitment goals, jeopardizing data quality and timelines.

### Inconsistent and Manual MLR process

On average, it takes **55 days** for a document to progress through the MLR process.

### High rate of physician burnout

**81%** physicians report high or modest burnout due to administrative burdens.

## Our Solution Offerings

| LIFESCIENCES   | PROVIDER   | PAYER   |
|--|--|---|
| <ul style="list-style-type: none"> <li>Next generation Genome sequencing and Analysis</li> <li>Digital Animal-Free Testing for Pre-Clinical Development</li> <li>Automated Clinical Trial Patient Recruitment</li> <li>Adverse Event Detection for Pharmacovigilance Operations</li> <li>Medical Legal Regulatory Review Automation</li> </ul> | <ul style="list-style-type: none"> <li>Automated Clinical Note Summarization</li> <li>Personalized Patient Outreach and Engagement</li> <li>Workforce/Nurse Staffing Prediction and Management</li> <li>AI Assisted Medical Imaging</li> <li>Patient Fall Prediction in Hospitals</li> </ul> | <ul style="list-style-type: none"> <li>Optimized Health Benefits/ Plan Design</li> <li>Automated Claims Processing</li> <li>Prior Authorization Recommendation</li> <li>Predictive Fraud Detection</li> <li>Virtual Assistant for Personalized Member Engagement</li> </ul> |

**Our solutions are built on NVIDIA AI Enterprise**

## Success Stories

### LLM for RNA Sequencing

*A Flagship Pioneering Biotech Company*

Quantiphi developed a Deep Learning model using variational autoencoders for latent representations of RNA sequences, enabling comprehensive analysis and clustering by similarity, type, and organism.

#### Business Impact

- ▶ >98% Levenshtein similarity w/o compression
- ▶ >96% Levenshtein similarity after compression
- ▶ Prioritized RNA targets based on their relevance and potential impact on disease mechanisms

### Digital Protocol Writer for Clinical Trials

*Fortune 500 global pharmaceutical company*

Quantiphi devised a Generative AI solution integrating Clinicaltrials.gov and PubMed data, using Semantic Search to expedite and enhance cardiology/oncology study protocol authoring.

#### Business Impact

- ▶ Reduction in protocol development time by 40%
- ▶ Yearly \$80M saving on amendments
- ▶ Approx. 40-50% reduction in operating cost for assimilating the clinical information

### Overpaid Claims Detection and Processing

*Leading Healthcare Solutions and Analytics Company*

Quantiphi developed a solution to facilitate auditors in effortlessly identifying overpaid claims and proposing analogous claims to those currently under review. The solution encompasses constructing an end-to-end training pipeline, allowing the model to self-improve through auditor feedback, and implementing a recommendation engine for auditors.

#### Business Impact

- ▶ 25% of Claims were processed through the solution, reducing nurse's review efforts
- ▶ Time and Resource Optimization

### Bedside Shift Report (BSR) Generation

*US Based Leading Healthcare provider*

Quantiphi developed an LLM based solution for generating automated BSR (Bedside Shift Reports) that provides a consolidated clinical picture of a patient's care, based on both non discrete patient notes and discrete nursing documentation.

#### Business Impact

- ▶ Improves communication and comprehension among healthcare professionals
- ▶ Real-time report generation optimizing nursing efficiency

Get in touch with our experts to learn more.

Email us at: [info@quantiphi.com](mailto:info@quantiphi.com)

Quantiphi is an award-winning AI-first digital engineering company driven by the desire to reimagine and realize transformational opportunities at the heart of business. We are passionate about our customers and obsessed with problem-solving to make products smarter, customer experiences frictionless, processes autonomous and businesses safer.

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