Risk selection at the era of AI

Using Data, Risk knowledge and AI to shape the **next generation** of Underwriting solutions

SOA - AI for Reinsurer

February 2026

Introduction

Transformation of the UW

Key drivers, business goals and anticipated impacts

Context

Back in 2022 when Open AI launched Chat GPT, we realized the revolution that Gen AI was about to start

Artificial Intelligence
simulation of human intelligence in machines, enabling to perform tasks that typically require human cognition

Machine Learning
Panel of models that can be used mainly on **tabular data** to predict outcomes (**risk prediction**, etc.)

Deep Learning
utilizes neural networks with multiple layers, applied especially to **unstructured data** (images, text…)

Generative AI

Generative AI

is a **subset of deep learning** that focuses on producing **new, previously unseen, content** based on the patterns it has learned.

Images & Videos
Using vast visual data, Gen AI can **design entirely new images**, from artistic creations to lifelike faces, without repurposing existing photos.

Audio
Trained on vast sound libraries, Gen AI can compose **music, ambient noises, and realistic voices**, revolutionizing music production

Text
Acting as a virtual writer, Gen AI produces narratives, such as **articles, summaries, translations, etc.,** training from diverse sources

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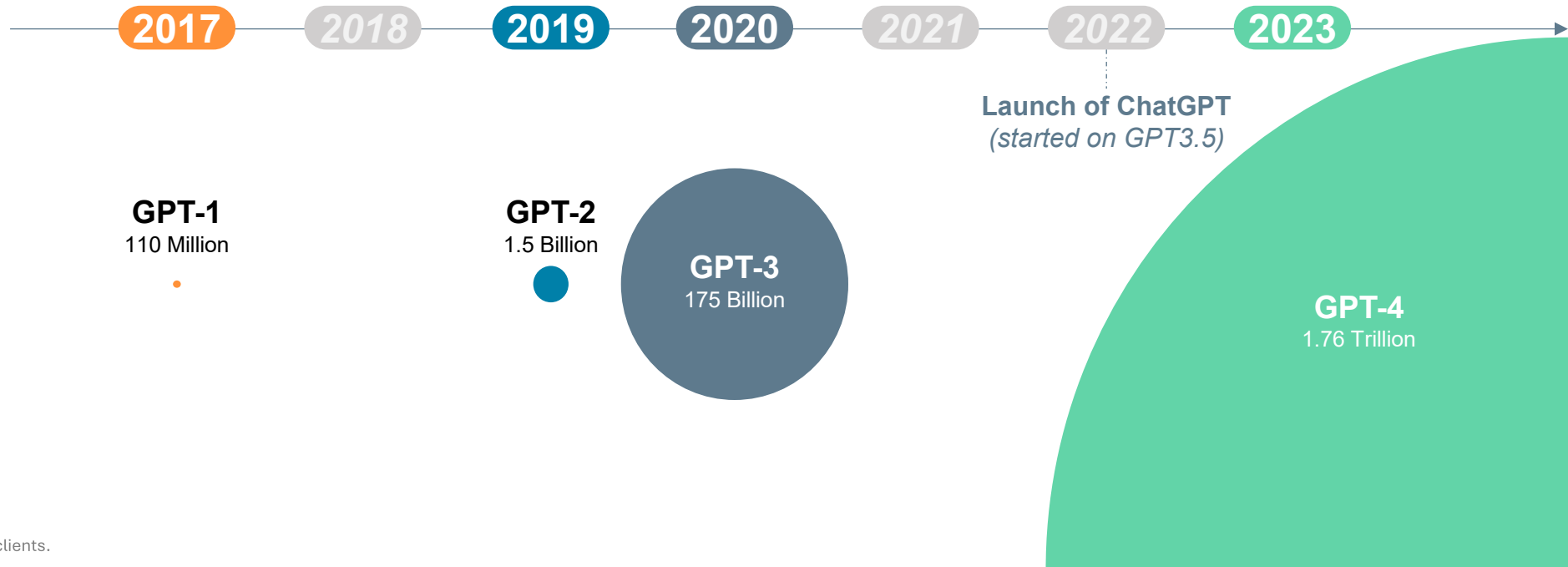
Since then, technology has never stopped progressing, and we are everyday blown away by how powerful AI is becoming

Generative Large Language Models

- Are trained to achieve one task: **iteratively predict the next word of a given text**
- This type of technology is significantly **more powerful and accurate at analysing and interpreting text** than previously available NLP models (based on Machine Learning)

The models are not new – but the tech is now mature enough to turn them into truly powerful solutions, based on a wide range of parameters

Number of parameters of Open AI's GPT models



2025

GPT-5
17 Trillion

x10 compared
to GPT-4

At SCOR, as in the rest of the industry, we immediately saw the potential to improve some of our key operations, especially for medical underwriting

High volume of applications to review

~100k

Applications handled by SCOR underwriters across markets each year (fac and treaty)

Focus on highly complex cases

~235

Average number of pages of medical evidence provided to SCOR for a single case

Up 50% vs. 2019

Significant challenges liked to UW across our global markets

Competition is fierce to **attract the best Underwriters' profiles**

The rise of automated underwriting has made it **more difficult to "train on the job"** through simpler cases

Lots of **legacy IT systems** have proved their worth… but often involve performing non-value-added manual tasks

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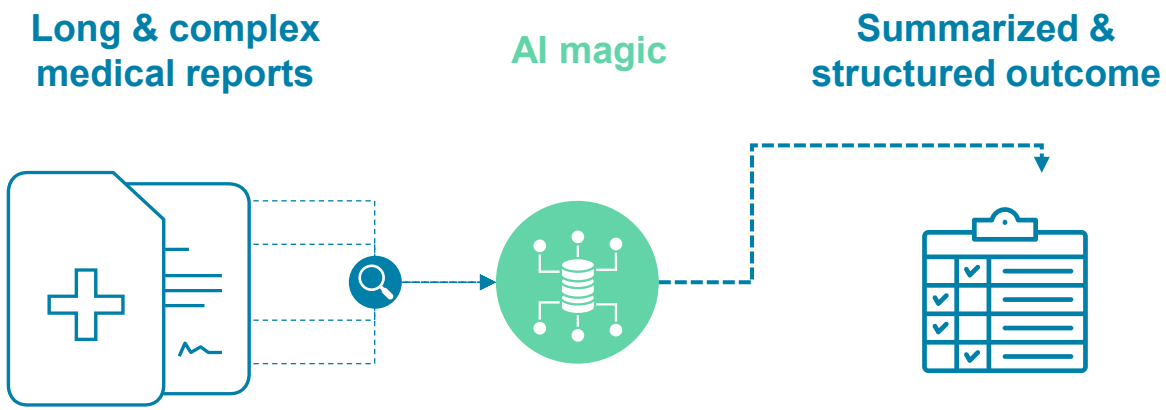
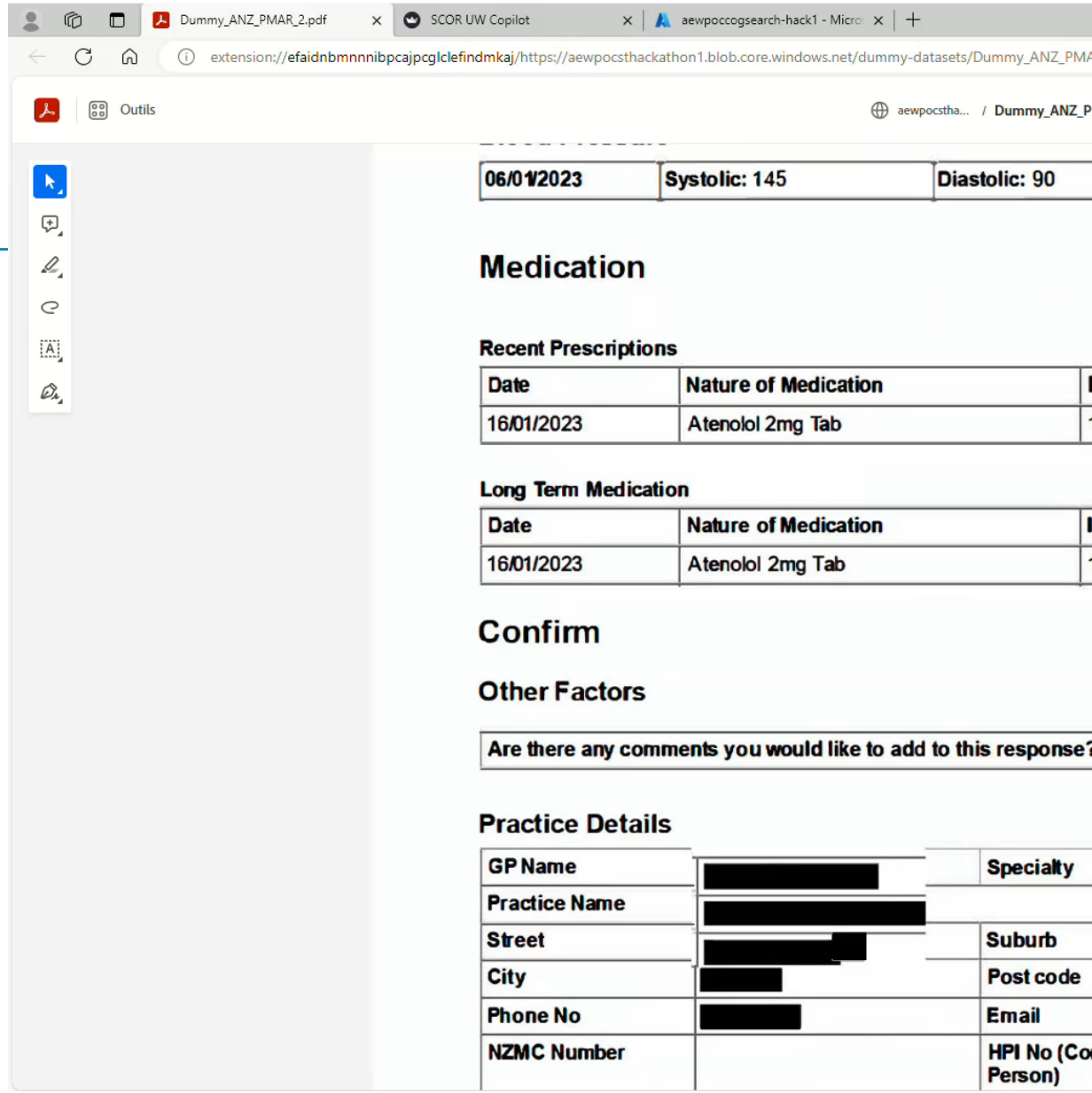
AI @SCOR

In 2023, we grouped together at a hackathon in Paris to build our first medical underwriting AI tool…

In 3 days, we had built a first tool helping us summarize and structure medical reports





But building an AI solution that brings meaningful efficiencies takes more than summarizing medical reports

Building an AI solution to support Medical Underwriting involves working along 3 axes, that are deeply interconnected

Accuracy

Absolute must for any AI solution to be adopted, to be optimized across several dimensions:

- Focus on extracting the **relevant information** for medical underwriting
- Focus on **getting that information right**

Involves using our (re)insurance knowledge to adapt AI to our use cases

Usability

Getting the right information is one thing – **showing it in a way that makes sense and brings value to the underwriter is another**

Building a **user-friendly interface** where underwriters can check AI generated content and find information easily is a must.

Involves building tech features that match and support underwriters' thought process

Integration

Underwriting processes are today **integrated into a wide range of tools and systems** that have taken years to build (rules engines, workbenches etc.)

While these systems can be rebuilt, AI solutions need to **integrate smoothly with these legacy tools** to boost adoption

Involves building capabilities that can easily be plugged into legacy systems

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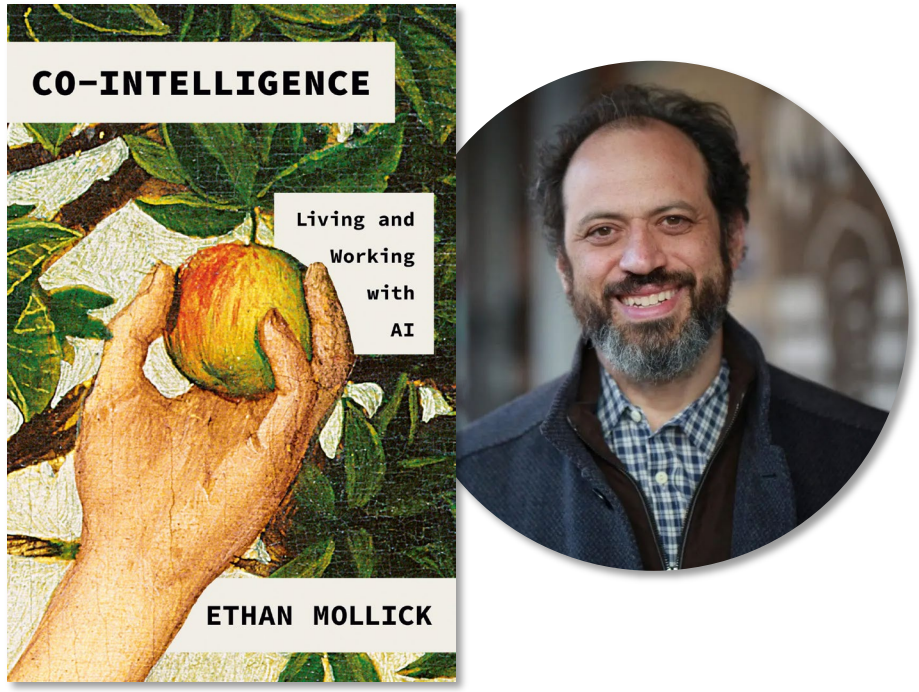
Beyond tech, AI is about transformation

Tech Alone Isn’t the Answer

"AI is not a magic box. It’s a force multiplier. If you design the system around it — workflows, roles, and oversight — it transforms what’s possible. If you don’t, it amplifies your existing mess."

— *Ethan Mollick[1], Co-Intelligence*



1. Ethan Mollick is a prominent academic and thought leader in the fields of AI, entrepreneurship, innovation, and education . Named as one of TIME Magazine’s Most Influential People in AI, he is currently Co-Director of the Gen AI Lab at Wharton School

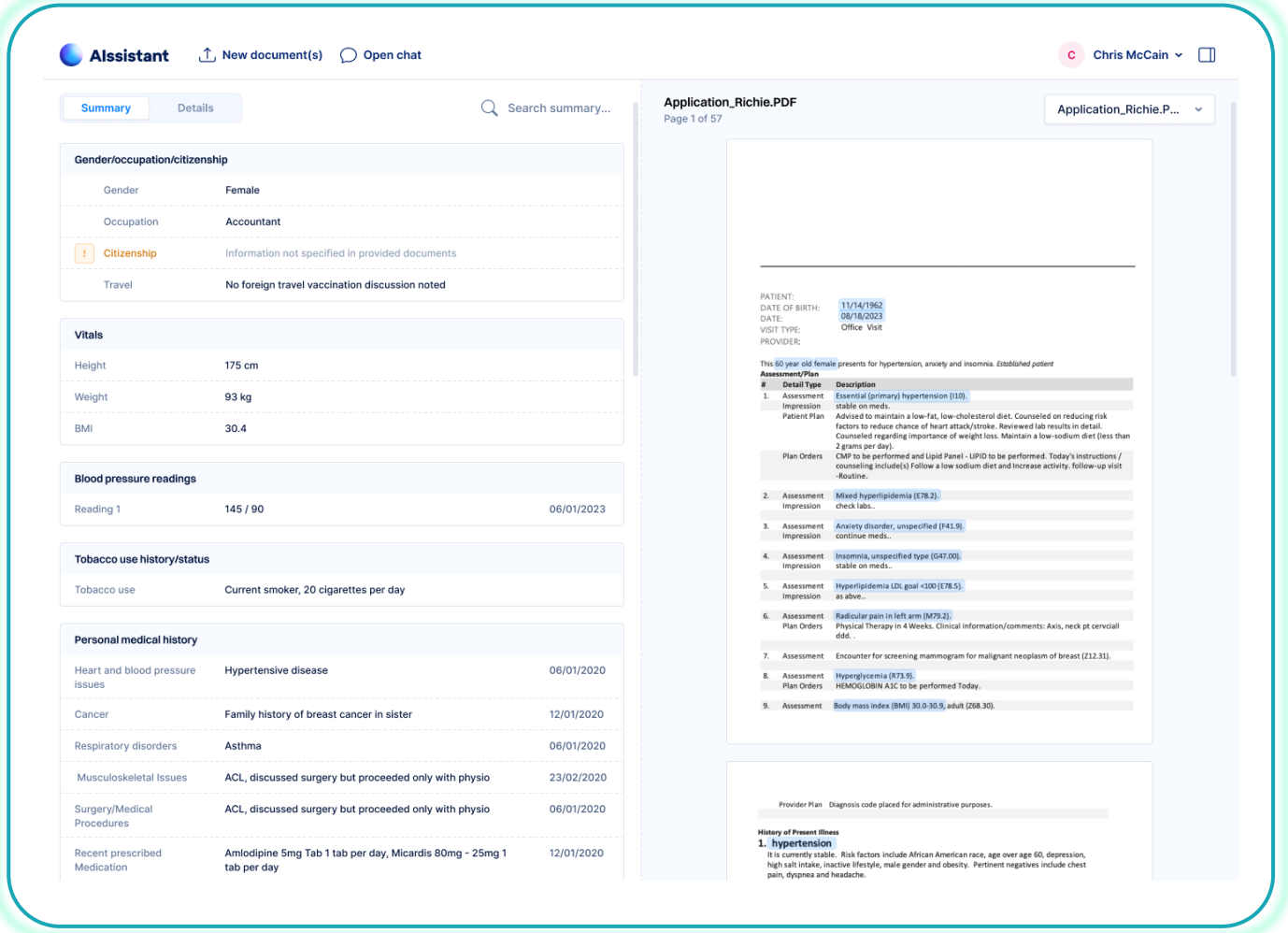
Sharing concrete example @SCOR?

Launched AI Assistant in 2024

SCOR's Generative AI-Based Medical Underwriting & Claims Management Assistant

Extracts and summarizes scanned and electronic medical reports, in a risk-controlled way.

AI Assistant

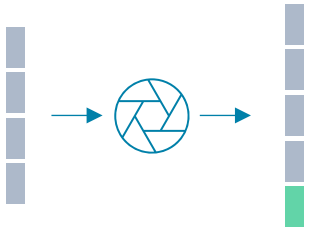
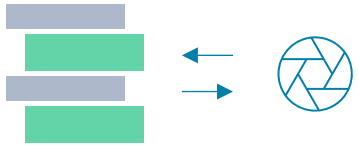
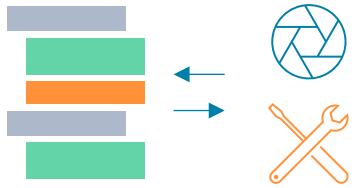
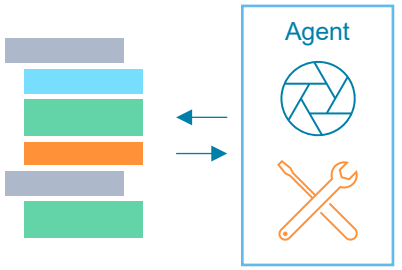
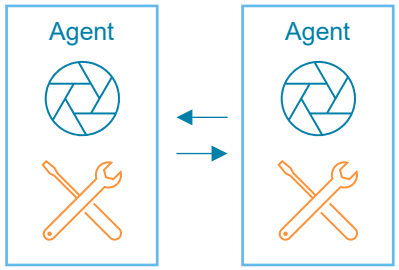


AI journey

In Life Insurance, it is more than a chat bot – it turns medical reports into structured outputs, specifically designed for medical underwriting & claims use cases

AI journey

AI Assistant

Token predictors	Chat-bots	Agentic Workflows	Autonomous Agents	Multi-agent systems
				
Original foundation models, simple next token prediction	Instruction fine-tuned foundation models, trained to chat with users	LLMs + if statements, trained for tool use & structured output, add a workflow system for constrained agents	Models trained to observe, reasons, plan, use tools and use resources to act as autonomous agents	Trained to communicate, share context across boundaries, align on goals, and coordinate plans
Timing: ✓ *Legacy*	✓ *Reality*	✓ *Starting*	⚠ *Still early*	✗ *Very early*
Productivity gains potential: ***baseline***	**5-10%**	**10-30%**	**30-50%**	**?**

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Introducing an example of GenAI industrialization in (re)insurance

Learning from AI Assistant & UWX – now used by all our medical underwriting & claims teams across our global markets

Combination of AI and (re)insurance expertise

Built by both our **AI** and **underwriting and claims** teams

Combining powerful **LLM models** (Azure/ Open AI) with knowledge from our **Underwriting Manual SOLEM** (description of key medical conditions)

~70% to 95% **Accuracy** achieved depending on fields

AI Assistant helps visualize and interact with key data points extracted from medical reports

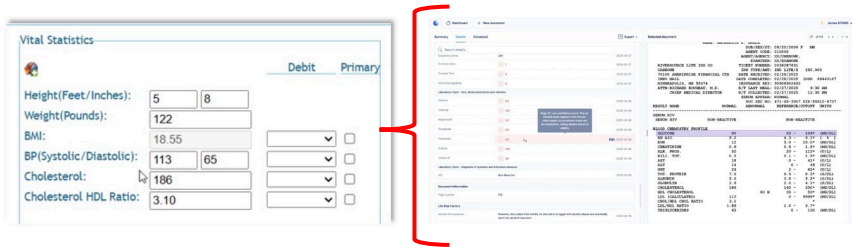
- **Key data fields** extracted from medical evidence, claims and application forms in a structured way
- **Handwritten text capability**
- **Multilingual documents**
- **User interface** listing key details/ fields extracted
- **Click through cross referencing** of content (access to sources in just a click)
- **AI Chat feature** to ask clarifying questions

AI Assistant is now used by 100+ medical underwriters at SCOR

>15k **Documents processed** by AI Assistant **each month**

>1m **Pages processed** by AI Assistant **each month**

Integrated within our UW & Claims workbench



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Introducing AI Assistant – gradually expanding to more use cases and fields

Personal Information
Age, occupation, travel, citizenship…

Live

Policy Information
Coverage, sum insured, product details…

Live

Vitals
Weight and height (BMI), blood pressure, cholesterol, diabetes…

Live

Lifestyle
Tobacco status, alcohol consumption, use of recreational drugs…

Live

Family History and Genetics
Medical history about family history and genetics (if permitted by market regulations)

Partly Live

Health Investigations
Medical tests and procedures, treatment, surgical interventions, symptoms, consultations with medical specialists, pending investigations...

Partly Live

Medical Impairments
Individual medical history (aligned with SOLEM impairments), organized per key risk category

Partly Live

Labs
Lab measures such as Prostate-Specific Antigen (PSA), Full Blood Count (FBC), Lipids, Liver Function Tests (LFTs), Renal Function Tests…

Live

Symptoms
Physical or mental changes that suggest the presence of a disease or a condition

Partly Live

Occupation

Live

Travel & residence

Live

+ Data from other documents than medical reports

Financial
Applicant's financial information (income statement…)

Partly Live

Application forms
Extracting key information from applicants' disclosures

Partly Live

Claims specific documents
Death certificates, claimant statement, payment request…

Partly Live

Past Claims history
Individual medical history (aligned with SOLEM impairments), organized per key risk category

Partly Live

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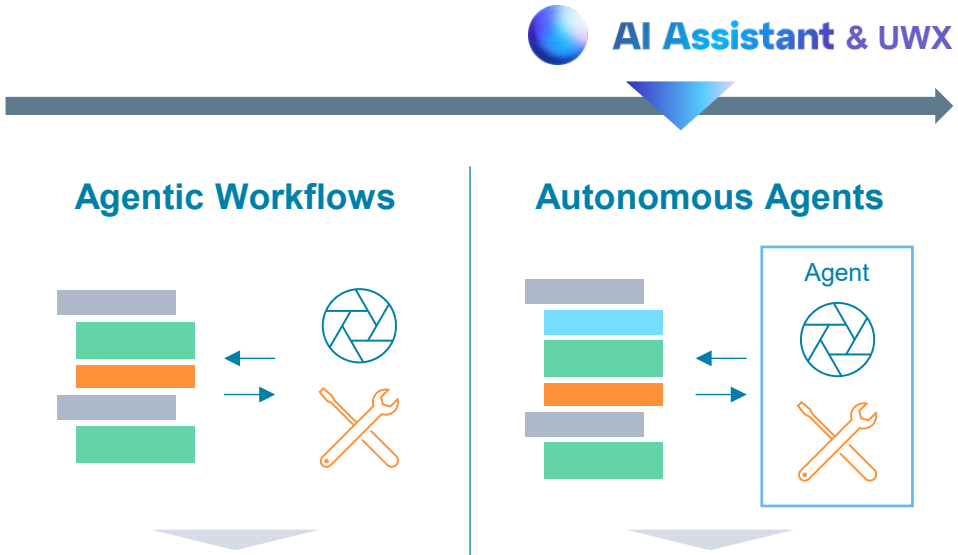
What is coming in the industry?

Future of UW Solutions – not only about plan or announcement, it is happening

Coming years are about taking GenAI to the next level and reinvent our Medical Underwriting solutions



	Agentic Workflows	Autonomous Agents
	LLMs + if statements, trained for tool use & structured output, add a workflow system for constrained agents	Models trained to observe, reasons, plan, use tools and use resources to act as autonomous agents
Timing	✓ *Starting*	⚠ *Still early*
Productivity gains potential	**10-30%**	**30-50%**

Example of what we start to observe @SCOR

Acting across our 3 key levers

Accuracy

Connection between our **Underwriting Manual** and our **AI solution** to achieve significantly **higher accuracy levels**

Usability

Building on the foundational data extraction and **providing risk insights, telling the story of an application** and truly providing value to underwriters

~~**Integration**~~
Reinvention

Go further than integrating AI into solutions to **build new AI-powered solutions**, where processes have been fully reinvented.

For instance, at SCOR, this means building a new UW Manual, fully embedded into a new UW Workbench

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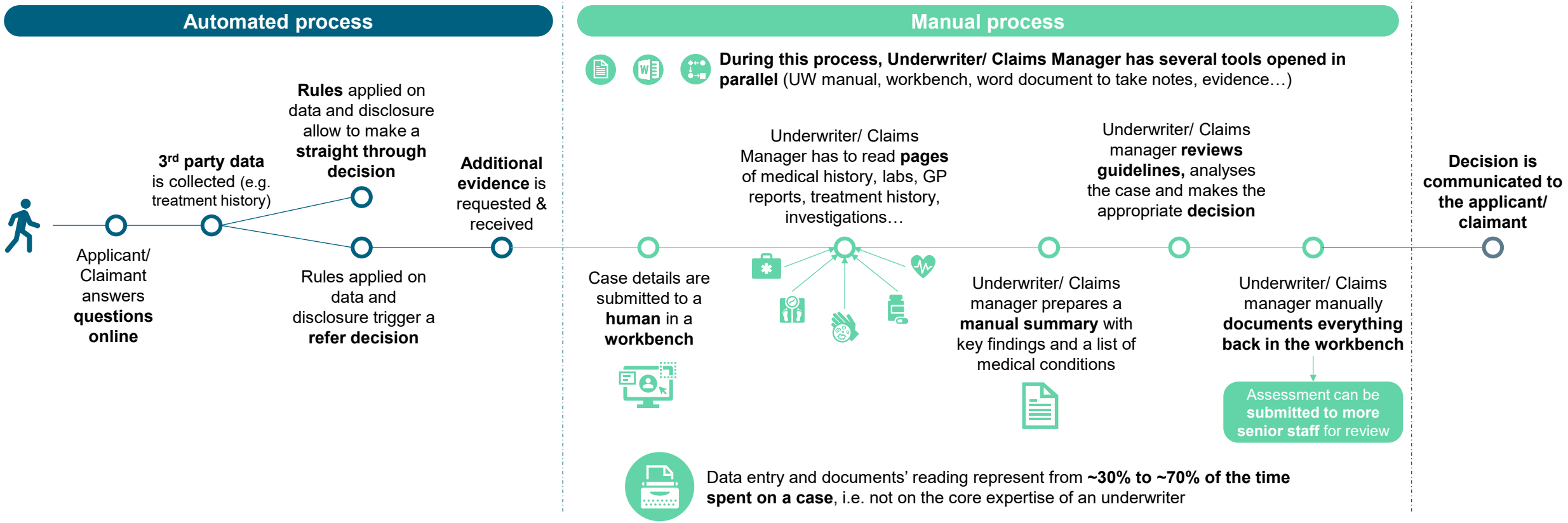
As is UW Process

AI Transformation is about moving away from a world of manual, fragmented UW & Claims operations…

Typical L&H underwriting & claims journey today



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Agentic UW Process

… to a world of “Delegated Underwriting” where AI sets the scene to accelerate human experts’ decision making

Delegated Underwriting & Claims journey

Data driven automated process

NEW **Augmented underwriting & claims process**

During this process, Underwriter/ Claims manager has only one tool opened, acting as a cockpit
Time is fully dedicated to the assessment of the case, lifting the burden of admin tasks. User gets support from the tool at each step of the assessment, reducing the risk of error.

Applicant/ Claimant answers **questions online**

3rd party data is collected (e.g. treatment history)

Rules and predictive models applied on data and disclosure allow to make a **straight through decision**

~90%

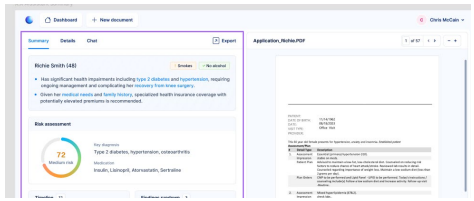
~10%

Rules and predictive models applied on data and disclosure trigger a **refer decision**

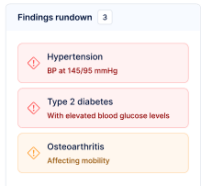
NEW

Additional evidence is requested & received from the applicant

A **summary of all the information submitted** (disclosures, 3rd party data, evidence…) is automatically built through AI



Risk flags are raised to help underwriters/ claims manager focus their review on the most meaningful items



Access to **guidelines** is granted **within the tool itself – with preselected decisions** on easiest risks

Assessment is finalized manually. Information is auto saved in the systems – a workflow can also be triggered

Decision is communicated to the applicant/ claimant

NEW

Data is collected and analyzed to improve the cockpit, enhance predictive models, identify early signs of poor portfolio performance (once checked with claims data…) etc.

At each step of the process, **additional questions can be asked by the Underwriter/ Claims Manager**, with answers provided by a **conversational agent automatically querying all the evidence provided as well as internal knowledge base**

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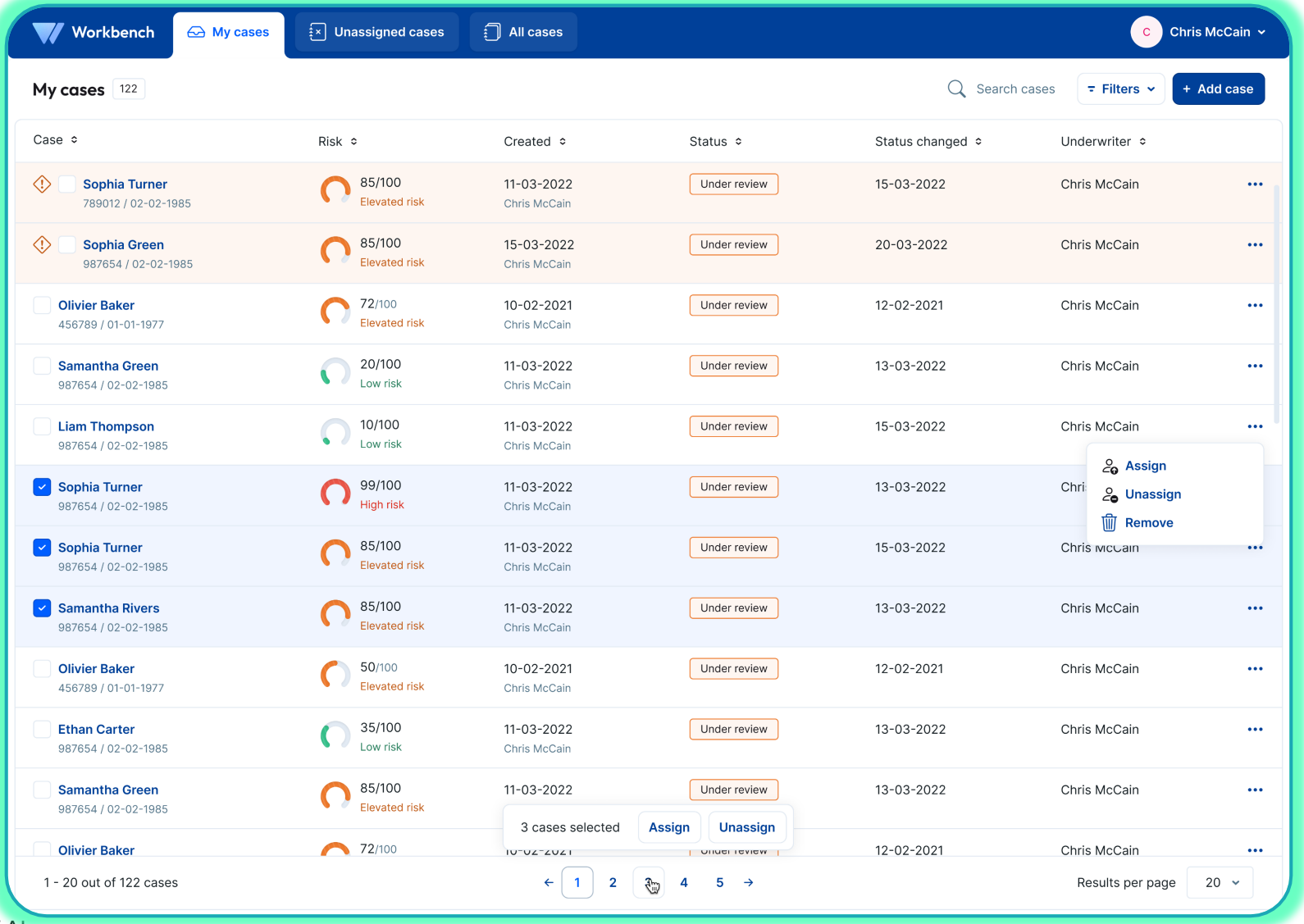
It is not only about AI but also about serving the primary focus: Risk Selection

For example, we do integrate the capability into the transformative process

AI-powered triage and prioritization of applications



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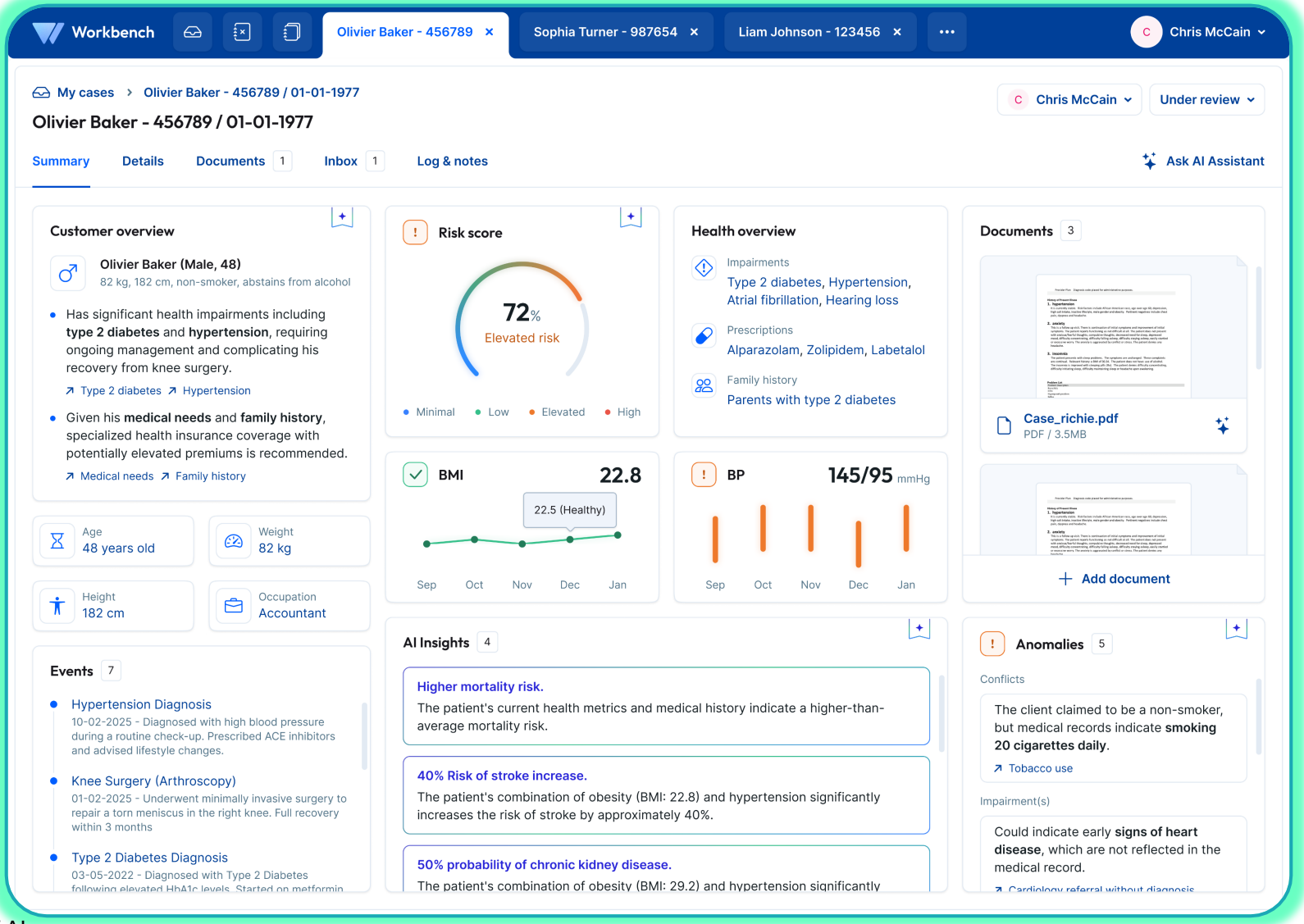
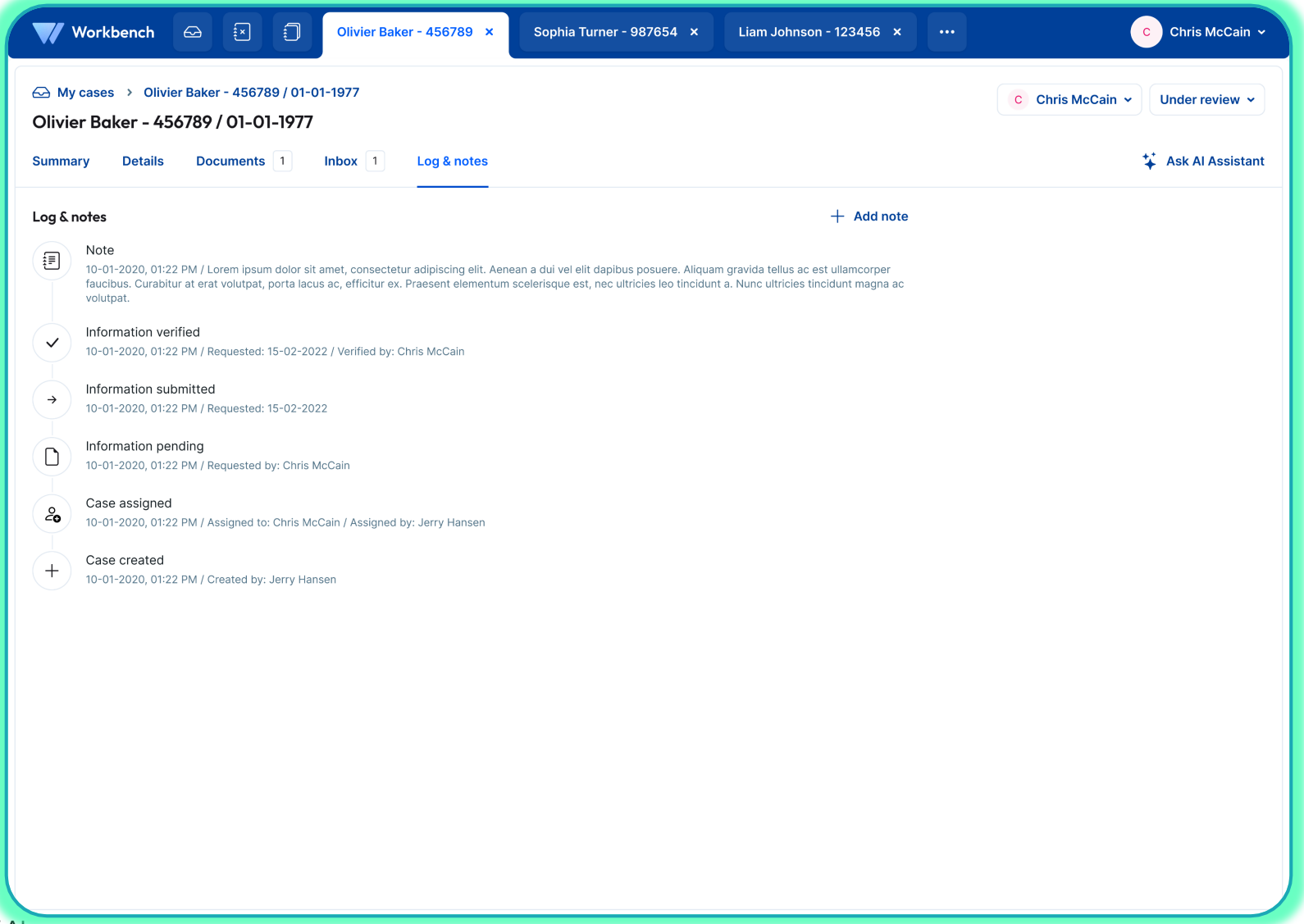
Augmenting risk selection for complex cases

AI-powered risk insights telling the story of the case



Transformation of the underwriting experience

Comprehensive audit trail



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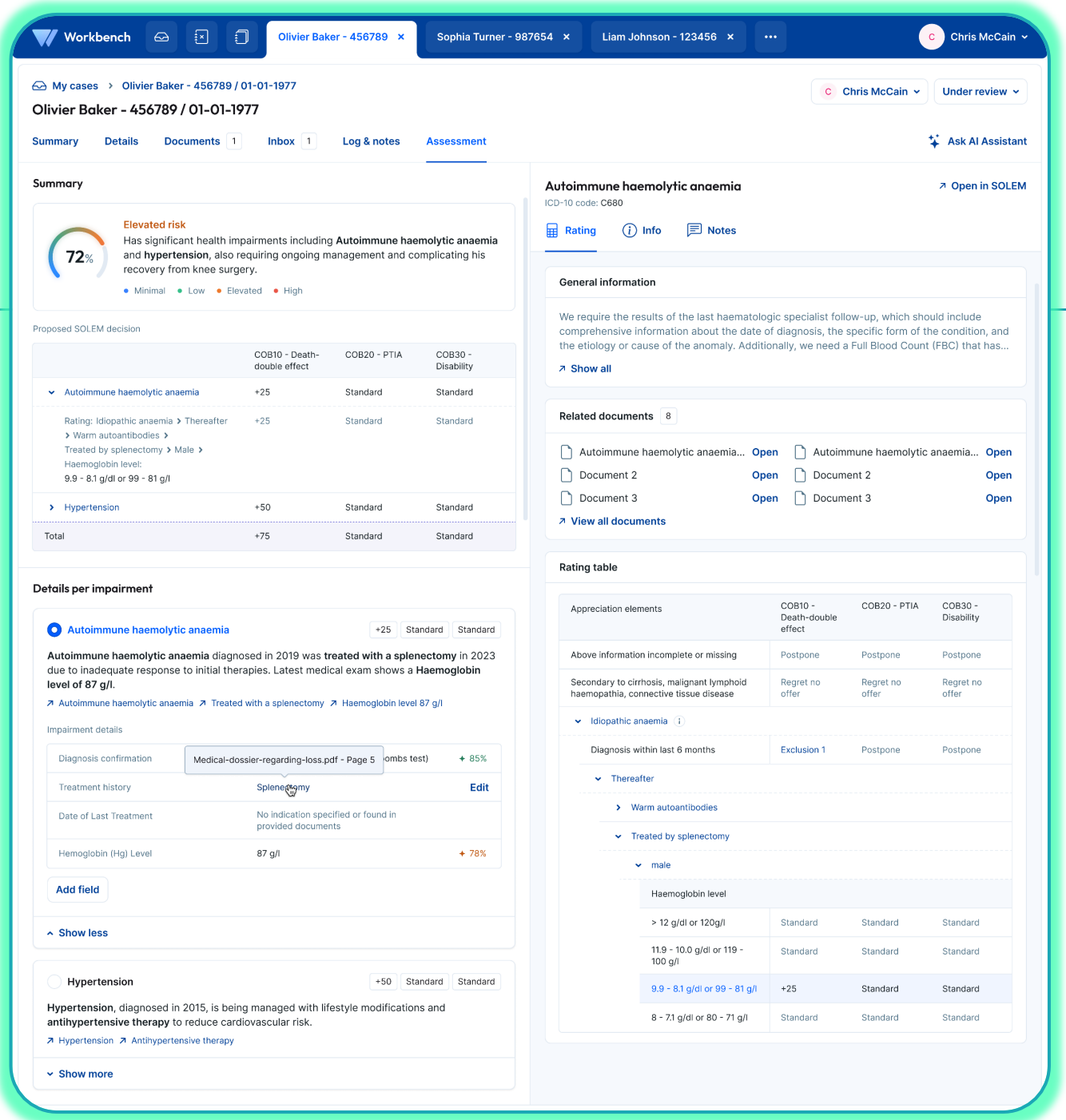
Example of SCOR's new UW Workbench

AI-powered assessment module, embedding our UW Manual



Moving from concept to reality

AI Transformation is also about tech

Underwriting manual risk knowledge allows to strengthen the relevance of AI Assistant insights…

Current AI Assistant capabilities

Focused on extracting a list of impairments, with no knowledge of which risk factors are linked to these impairments

A case is **referred to SCOR**

AI Assistant

Evidence is **analyzed by AI Assistant**

✓ Myocardial infarction
✗ Diabetes

Underwriter **reviews the case** and sees that **Myocardial infarction has been detected** as an impairment… but **not diabetes**, which is an insurable comorbidity

This was actually an **AI Assistant error** – Diabetes was indeed present in the case

AI Assistant capabilities, augmented with UW Manual knowledge

Focused on extracting a list of impairments, with no knowledge of which risk factors are linked to these impairments

✓ Myocardial infarction
✗ Diabetes

Myocardial infarction has been detected as an impairment… but **not diabetes**, which is an insurable comorbidity

? Diabetes

AI Assistant **connects to SOLEM**, checks for conditions associated to Myocardial infarction and sees that **Diabetes is one of them**

✓ Diabetes

AI Assistant double checks the evidence and spots Diabetes information

Connection to SOLEM allowed AI Assistant to:

1. Identify additional **useful data points**
2. **Display these data points in a way that is useful for the underwriter** (i.e. with Diabetes showing next to Myocardial infarction and not at the other end of the summary)

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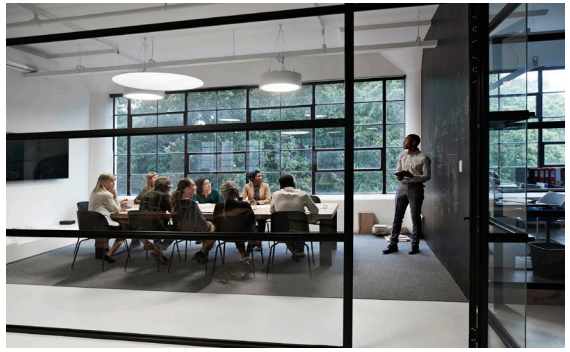
Conclusion

Challenges insurance industry has been solving

The promise of Generative AI is high, but it is moving quickly and needs considered adoption into business processes

Fast-moving environment



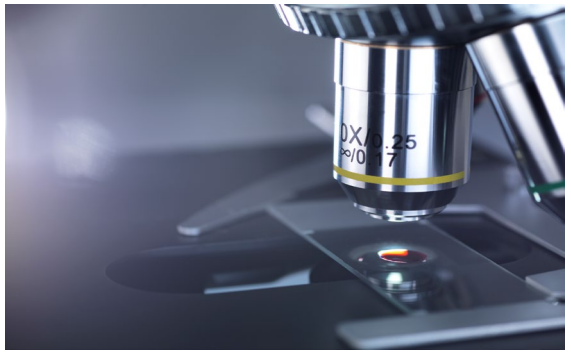
Management buy-in

Insurance specificities

Benefits > Costs?

Security

Guardrails



Testing