2025 ALUCA Turks Life Insurance Scholarship
2nd runner-up

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AI and Claims Handling

Concerns raised in the February 2024 Global Insurance Law Connect Artificial Intelligence Report underscore that ongoing human oversight is a foundational pillar for insurers adopting artificial intelligence (AI). The report references the European AI Act, which requires human oversight to be implemented for high-risk AI systems in sectors such as insurance and financial services. However, beyond regulatory mandates, the report highlights broader ethical concerns—particularly around fairness, accountability, and transparency—that reinforce the need for meaningful and sustained human involvement. This raises a critical question: How should the ongoing role of human oversight in automated claims handling be embedded to ensure ethical, fair, and transparent decision-making?

Given insurers' legal and regulatory obligations to act honestly, efficiently, fairly, and transparently, this paper argues that human oversight should not be treated as a compliance checkbox. Rather, it should be elevated as a strategic and ethical priority that safeguards customer outcomes and reinforces trust in automated systems. After all, the sustainability of insurance is built on customer trust. To explore this, the paper will examine:

a. The role of human oversight in AI-driven claims handling for insurers;
b. The rationale for human oversight in the context of AI use;
c. Practical approaches to evaluating human oversight, supported by examples; and
d. Current industry initiatives that reflect evolving best practices.

When considering AI's role in claims handling, it is easy to focus on speed, automation, and data analysis capabilities. Achieving better operational efficiency, enabling faster document processing, fraud detection, and decision-making has made AI a highly attractive tool. However, research shows that human oversight remains indispensable—particularly in contexts where insurance is deeply personal and sensitive, and where values of fairness, honesty, and transparency are mandated by legal, regulatory, and industry instruments (Sudhabathula, 2025).

The table below briefly summarises the obligations insurers must adhere to. It is important to note that these obligations are technology-neutral, meaning they must be upheld regardless of whether technology is used.

Table 1:

Section 13 of the *Insurance Contracts Act* 1984 (Cth)	In relation to insurers' obligations Section 13 of the Insurance Contracts Act 1984 (Cth) imposes a duty of utmost good faith on both parties, including in the claims handling arena. ASIC has powers under section 14A to intervene if insurers fail to uphold this duty and this includes the world of AI assisted claims.
Life Insurance Code of Practice (2025) (the Code or LICOP),	In relation to the LICOP, insurers are required to act fairly, honestly and transparently, and to support customers experiencing vulnerability. The LICOP mandates clear communication, timely decisions and the right to challenge claim outcomes.
ASIC's Regulatory Report (REP 798)	ASIC reinforces that insurers' services must be provided efficiently, honestly and fairly regardless of the technology that is used. ASIC calls for human accountability, contestability of AI decisions and transparency in how AI impacts consumers.

While acknowledging the legal, regulatory, and industry obligations surrounding human oversight, Sudhabathula (2025) highlights the evolving synergy between AI and human judgment in the insurance sector. While AI excels at automating routine tasks and supporting decision-making, human oversight remains essential—particularly for interpreting complex claims, managing customer expectations, and ensuring fairness. Sudhabathula (2025) advocates for a hybrid model, where AI augments rather than replaces human decision-makers, a model shown to enhance both accuracy and customer satisfaction.

Importantly, the role of human oversight extends beyond operational efficiency to encompass ethical governance. Sudhabathula (2025), referencing Financier Worldwide's analysis, underscores the critical role of human involvement in bias detection and transparency frameworks. Human oversight ensures that automated decisions remain aligned with legal, regulatory, and ethical standards—an issue also raised in the February 2024 Global Insurance Law Connect Artificial Intelligence Report.

The research further notes that integrating human expertise into AI-enabled claims processes can still significantly reduce processing times while improving the quality of outcomes (Sudhabathula, 2025). The emphasis here is on quality—not just speed.

Although the study by Finger et al. (2025) focuses on healthcare, its insights into the ethical risks of AI algorithms are equally relevant to insurance. The authors stress that human input is essential at critical junctures to ensure fairness and ethical responsibility in decision-making. This highlights the need to identify specific points across the customer journey where human oversight should be embedded—an issue explored further in the practical examples below.

Without human oversight, the benefits of AI-enabled claims processes can quickly become risks—magnifying harmful biases, exacerbating disparities, and eroding customer trust. Thus, the role of human oversight must be viewed not merely through the lens of efficiency, but as a commitment to ethical responsibility, customer trust, and regulatory compliance, all while navigating the complexities of modern claims environments.

At the heart of claims handling is customer trust. Customers expect their needs to be understood, their information handled responsibly, and their claims assessed fairly. Filabi and Duffy (2021) reinforce this, arguing that trust must remain central when deploying technology in life insurance. They suggest that viewing big data through the lens of trust helps align the purpose of insurance—strengthening financial wellbeing—with long-term corporate sustainability.

In essence, human oversight is not just a regulatory requirement—it is a strategic priority that ensures AI is used responsibly and in alignment with insurers' obligations. It is the safeguard that prevents misuse and reinforces the human values underpinning the insurance relationship.

The Role of Human Oversight Can Be Summarised as Follows:

a. *Fairness and mitigation of bias:*

AI can unintentionally replicate biases in training data. Human oversight helps ensure decisions are equitable and just—particularly important given the personal impact of claims outcomes (Ferrara & Lord, 2024).

b. *Transparency and explainability:*

Customers have a right to understand the reasons behind decisions. Humans can communicate with empathy and interpret AI-driven outcomes in ways that preserve trust and support accountability in high-stakes domains like insurance (Cheong, 2024).

c. *Error detection and judgment:*

Human judgment is essential for assessing context—such as grief, financial hardship, or policy nuances. While AI may flag anomalies, it struggles with nuance. Devi (2024) notes that human oversight is necessary to interpret these complexities effectively.

d. *Regulatory safeguards:*

In Australia, human involvement is a legal requirement. Oversight ensures compliance with both ethical and legal standards (Frenette, 2023).

e. *Customer experience:*

Insurance is deeply personal. As Truong and Chen (2025) argue, human empathy and communication are irreplaceable—especially during emotionally charged moments. If AI falls short, the solution lies in better staff training, not in removing the human element.

In consideration of the role of human oversight, there are multiple practical ways human oversight can be embedded into the claims handling experience all which strive to uphold insurers' obligations of acting fairly, transparently, honestly, and efficiently. One approach is where insurers adopt mechanisms such as panels which involve 'human-in-the-loop (HITL)' and post-decision reviews. Frenette (2023) proposes that mechanisms such as panels adopt a human oversight approach which endorses a governance framework for maintaining human control over AI-led claims handling. Examples of a panel approach include:

a. *Human-led AI review panels*

These panels ensure fairness and mitigate bias by having AI-generated claim decisions reviewed by claims specialists trained in ethics and bias detection. The panel assesses whether the AI's decision aligns with fairness principles and can intervene if outcomes appear skewed or inconsistent. This promotes equitable treatment across diverse customer profiles and prevents systemic bias from going unchecked. In terms of claim decision review, Laux (2024) proposes a two-tier approach looking at first degree review (real time decision support) and second degree (post-decision review).

b. *AI outcome explanation panels*

To support transparency and explainability, dedicated customer-facing teams are trained to interpret and explain AI-driven decisions in plain language. These teams act

as a bridge between the algorithm and the customer, ensuring outcomes are communicated with empathy and clarity. This builds trust and reinforces accountability, particularly in complex or disputed claims.

Other practical ways human oversight can be embedded into claims handling include:

c. *Contextual claims escalation protocols*

For error detection and contextual judgment, AI can flag claims involving potential vulnerability indicators—such as grief or financial hardship—which are then automatically escalated to human claims handlers. These human handlers apply discretion and contextual understanding to ensure sensitive claims are managed appropriately. This approach aligns with regulatory expectations around vulnerable customers and supports nuanced decision-making (Hindawi and Modlin 2016).

d. *Human-led empathy touchpoints*

To protect the customer experience, human interaction remains critical in cases of particular sensitivity. While insurers may aim to be faster and more digitally connected, the "connected" aspect must include genuine human engagement. Empathy and emotional intelligence are irreplaceable when guiding customers through difficult times (Lanzkowsky, 2024).

e. *Embedded compliance checkpoints*

Any application of AI in claims handling must include embedded compliance checkpoints to maintain legal and regulatory safeguards. These checkpoints should be positioned at key stages of the claims process—such as initial assessment and final decision—where human compliance officers validate that outcomes meet standards set by ASIC, APRA, and the Life Insurance Code of Practice (LICOP). This reinforces insurers' commitment to care and compassion, particularly during customers' times of need—something AI cannot do alone.

The examples outlined above are not only innovative—they are also highly practical. They reflect a forward-thinking approach that challenges insurers to reimagine traditional claims handling in a way that aligns with evolving technologies and customer expectations. While AI introduces a shift from conventional processes, these examples demonstrate that innovation and practicality are not mutually exclusive. Rather, they offer actionable pathways for embedding human oversight in ways that enhance fairness, transparency, and trust—core obligations for insurers operating in a regulated environment.

In terms of current industry initiatives, EY has developed an Agentic AI claims assessment tool that integrates policy rules and claims philosophies. This tool is part of EY's AI Workforce Blueprint, which outlines how organisations—including insurers—can responsibly adopt AI within their operations. The blueprint emphasises that AI adoption is not merely a technology challenge, but a human leadership challenge. The agentic AI tool functions as a collaborative agent rather than an isolated algorithm. It assists claims assessors by automating routine tasks such as document summarisation and triage, generating transparent audit trails, supporting compliance requirements, and enhancing the customer experience through faster and more consistent service delivery. EY's approach aligns with the broader industry shift toward augmented intelligence—where AI supports, rather than replaces, human decision-making (EY Australian AI Workforce Blueprint, 2025).

PwC, in its article The AI Advantage for Insurance Leaders (2025), outlines an initiative focused on helping insurers transition from fragmented, manual processes to intelligent, connected operations powered by AI. The PwC–Microsoft alliance leverages PwC's strategic expertise and Microsoft's AI capabilities to address key industry challenges such as claims automation, data integration, customer experience enhancement, disaster response, and regulatory alignment. The initiative aims to transform legacy systems and represents a paradigm shift in how insurers operate.

Gallagher Bassett (GB) has also emerged as a leader in advancing AI-driven claims handling in Australia, promoting innovative proposals that balance automation with human oversight. One of their key initiatives involves the adoption of generative AI (GenAI), which is now used by nearly 9 out of 10 insurers (Carrier Perspective: 2025 Claims Insights). GenAI is applied across the claims lifecycle—including lodgement, triage, fraud detection, and customer communication—with a strong emphasis on improving decision-making through data analytics. GB stresses that automation is not a replacement for human judgment and advocates for a hybrid model, echoing the position of Sudhabathula (2025).

Improvement Opportunities for Insurers Using AI in Claims Handling include:

a. *Embedding human oversight to ensure fairness and regulatory compliance:*

Human oversight is essential for meeting legal, regulatory, and industry obligations. It must be embedded to detect and mitigate bias in AI-driven decisions, interpret complex or sensitive claims (e.g., involving vulnerable customers), and uphold compliance with ASIC and APRA expectations, including CPS 230.

b. *Improving data quality and governance for reliable AI outcomes:*

AI's effectiveness depends on the quality of the data it processes. Insurers must invest in data governance, integration, and cleansing to ensure reliable and explainable AI outputs.

c. *Enhancing the customer experience through AI-augmented human interaction:*

Customers still expect empathy and clarity. Human oversight plays a key role in delivering emotionally intelligent service. The opportunity lies in achieving an optimal hybrid model that combines AI efficiency with human empathy.

As insurers continue to embrace AI in claims handling, the role of human oversight emerges not as a regulatory formality, but as a strategic and values-driven priority. This paper has demonstrated that human oversight is essential to uphold the principles of fairness, transparency, honesty, and empathy. The practical examples and industry initiatives discussed reflect these values and recognise them as central to the customer experience.

Looking ahead, the future of claims handling lies in a collaborative hybrid model—where AI supplements human expertise rather than replaces it. Insurers have a unique opportunity to innovate responsibly by embedding oversight mechanisms that are both practical and forward-thinking. The challenge now is clear: which insurer will lead as a forward-thinking entrepreneur, reinforcing the industry's social licence using human oversight in AI-embedded claims handling to operate—fairly, transparently, efficiently, and honestly?

Reference List:

1. Sudhabathula, B 2025 'AI and human collaboration in insurance: Enhancing risk assessment and claims processing', *International Research Journal of Modernization in Engineering Technology and Science* Vol.7, issue: 2, e-ISSN: 2582-5208.
2. Finger HJ, Rao RN, Rao D, Pendharker SS (2025) 'The ethical challenges of artificial intelligence (AI) algorithms in health care', Journal of Philosophy and Ethics, VOL 7, Issue: 2, DOI: 10.22259/2642-8415.0702001.
3. Filai A, M and Duffy S, (2021) 'AI, ethics and life insurance: Balancing Innovation with Access', The American College of Financial Services < https://www.theamericancollege.edu/sites/default/files/2023-05/ai-ethics-and-life-insurance-white-paper.pdf>
4. Ferrara, E., & Lord, T. (2024). Fairness and bias in artificial intelligence: A brief survey of sources, impacts, and mitigation strategies. Sci, 6(1), Article 3. https://doi.org/10.3390/sci6010003
5. Cheong, B. C. (2024). Transparency and accountability in AI systems: Safeguarding wellbeing in the age of algorithmic decision-making. Frontiers in Human Dynamics, 6. https://doi.org/10.3389/fhumd.2024.1421273
6. Devi, C. S. (2024, July 11). Leveraging artificial intelligence in claims processing: A balanced perspective. Claims Journal. https://www.claimsjournal.com/news/national/2024/07/11/324912.htm
7. Frenette, J (2023). Ensuring human oversight in high-performance AI systems: A framework for control and accountability. World Journal of Advanced Research and Reviews, 20(2), 1507–1516. https://doi.org/10.30574/wjarr.2023.20.2.2194
8. Truong, T. T. H., & Chen, J. S. (2025). When empathy is enhanced by human–AI interaction: An investigation of anthropomorphism and responsiveness on customer experience with AI chatbots. Asia Pacific Journal of Marketing and Logistics. https://doi.org/10.1108/APJML-10-2024-1464.
9. Libatique R, Nearly nine in 10 insurers in Australia use GenAI in claims – GB, 11 April 2025 < https://www.insurancebusinessmag.com/au/news/technology/nearly-nine-in-10-insurers-in-australia-use-genai-in-claims--gb-531797.aspx>
10. EY Australian AI Workforce Blueprint Research, 2025 Ernst & Young.
11. P'in N, Jagga A, Khandwalla M, The AI advantage for insurance leaders, 6 August 2025 < https://www.pwc.com.au/alliances/microsoft/ai-advantage-for-insurance-leaders.html>
12. Laux J 2023, 'Institutionalised distrust and human oversight of artificial intelligence: towards a democratic design of AI governance under the European Act', vol. 39: 2853-2866, issued 2024 DOI
13. https://doi.org/10.1007/s00146-023-01777-z.

14. Hindawi MA, Modlin CH, 2016, ‘A Framework for Managing Claim Escalation Using Predictive Modeling. In: Frees EW, Meyers G, Derrig RA’, eds. Predictive Modeling Applications in Actuarial Science. International Series on Actuarial Science. Cambridge University Press:261-289.
15. Lanzkowksy M, 2024 ‘The human element in claims: Why empathy still matters’, < ttps://32cc058f.isolation.zscaler.com/profile/a9a9068d-46f7-4fbb-b2f1-dfbbcda904f0/zia-session/?controls_id=74e7c812-4b31-470f-863b-a28a6fff3039&region=syd&tenant=8b780c8ac93e&user=04ccfc3bd1b1a03202ff1db8f192da18cd35dd3a4db14>