



Institute
and Faculty
of Actuaries

The IFoA Conference 2022

22-23 June – etc.venues, 133 Houndsditch, London



Institute
and Faculty
of Actuaries

AI and Automation in Life & Health Working Party

23th June 2022

Meet the working party

- Established in 2019
- Chair: Atreyee Bhattacharyya and Deputy Chair: Peter Murphy
- c. 15 working party members with a wide range of experience and expertise
 - Balint Bone, David Burston, Ronald Richman, Irfan Akhtar, Reza Hekmat, Dawid Kopczyk, Kanishka Jindal, Garima Gupta and others



Institute
and Faculty
of Actuaries

Aims of the working party

**Raise
awareness of
AI &
Automation
techniques**

**Review
current uses
In life & health
insurance**

**Provide
educational
resource for
actuaries**

**Investigate
potential areas
of future uses**



Institute
and Faculty
of Actuaries

What have we produced so far

Application of AI & Automation techniques
in life and health insurance



Paper published

Available on IFoA's working
party webpage

Presented at EAA actuarial
conference in 2020

Presented at Digital Actuary
Virtual Summit in 2020



Institute
and Faculty
of Actuaries

What have we produced so far

Application of AI & automation techniques in life and health insurance

Definitions

Working party's definition of AI

Applications of AI in life & health insurance

Mortality modelling

Personalised pricing

Predictive underwriting

Reserve approximation

Applications of Automation in life & health insurance

Increased demand

- Increased regulatory requirement, cost pressure, increased availability of storage and computing power, drive to reduce model risk etc.

Applications in

- Regulatory reporting, daily solvency monitoring, governance and compliance, automated data processing and manipulation etc.

Ethical and professional considerations

Pricing fairness

Data privacy

Explainable AI

Oversight & standards



Institute
and Faculty
of Actuaries

What have we produced so far

EHR Data Analytics
-Opportunities & Challenges



Presented at EAA actuarial
conference in 2021

Published in the Actuary
magazine in Feb 2022 edition

Survey on current uses of AI &
Automation techniques among UK
actuaries



Findings to be published in the
Actuary magazine (online
edition)

Short article on challenges of using
AI in capital management and ALM



Published as a LinkedIn blog
post



Institute
and Faculty
of Actuaries

Where to from here

- Upcoming article in the Actuary magazine on findings of the survey
- Upcoming article in the Actuary magazine on use of AI in predictive underwriting
- Creating educational and coding material for actuarial use (contingent on availability of members and resources)



Institute
and Faculty
of Actuaries

Questions

Comments

Please feel free to reach out at Atreyee.bhattacharyya@willistowerswatson.com or peter.murphy@royallondon.com



Institute
and Faculty
of Actuaries