

Terms of Reference for new Healthy Workforce Working Party

(In conjunction with the 'Guidance for Member Led Research Working Parties' and the Volunteer Induction Pack)

Working Party Research Topic/Title:	Healthy Workforce WP
Practice Area Research Committee Member Shadow:	Health and Care Research Sub-Committee (Member TBC)
Source of idea /"Initiator":	Health and Care Research Sub-Committee
Working Party Chair:	TBC

What issue is this research topic trying to address:

According to Lord Darzi's recent report on England's National Health Service, "the number of people [in the UK] who are economically inactive because of long-term sickness has risen to record highs." The report goes further: "At the start of this year, long-term sickness was the most common reason why people were out of the workforce, accounting for 30 per cent of the total or some 2.8 million people."

Long term sickness is clearly bad for the individuals affected and also bad for society. Aside from the obvious undesirable state of poor health for the individuals concerned, it generates unwanted impacts including:

- pressure on the nation's health system to support these individuals to recover;
- financial insecurity for the individuals and their families of being unable to work.

Income Protection (IP) insurance products were originally developed to provide security for people against the financial consequences of being absent from work due to accident or illness for periods beyond statutory sick pay. The insurance contracts are typically designed to start paying benefits at the point that statutory sick pay, or sickness benefits provided directly by the employer, reach their expiry date. In recent years, insurers have begun to offer health and rehabilitation services alongside the pure insurance coverage. These initiatives could have the double positive effects of reducing sickness incidence rates and also increasing recovery rates.

Within the IFoA, the Continuous Mortality Investigation (CMI) has produced, during several decades, many IP papers and IP claim inception rates and recovery rates tables for insured populations based on data provided by CMI subscribers. These are immensely useful for many actuarial applications, such as pricing and reserving IP portfolios. Some of these analyses have reviewed the 'cause of claim' (meaning the type of sickness) which have further potential applications, such as improving reserving methods and informing contract design. In addition to the 'cause of claim' analyses performed by the CMI, there is potential to build on the profession's understanding of IP rates by researching UK population surveys and datasets. For example, analysis of long-term sickness incidence rates within the general population could provide useful benchmarks for insured portfolios and provide insights on protection gaps amongst the population.

As such, the IFoA is setting up a Working Party to explore the potential for external data sources (i.e. data not held by the CMI) to enhance the understanding of long-term sickness and recovery rates within national workforce population. This aims to provide insights to the modelling of income protection portfolios and wider public health dynamics.

An analysis of trends in long-term sickness incidence rates in recent years would be highly valuable in the context of changing social and economic conditions in the UK and the Covid pandemic. The analyses should consider the derivation of income protection inception and recovery rates at population level for each year, as well as aligning results to the years of the most recent CMI IP investigation.

It is believed that the methods that actuaries have traditionally employed for understanding and explaining the dynamics of IP business have useful applications within the wider health system. For example, better understanding of the dynamics of people leaving and returning to the workforce at national population level could offer insights for projecting scenarios of the health status of the population and planning of health services and disability benefits. With this in mind, the WP should review the feasibility of using population-level health data to develop outputs in formats that would be useful for DWP, NHS and social care audiences in England. This would demonstrate the key responsibility of IFoA members to work in the public interest and demonstrate how standard actuarial techniques (IP experience investigations) can be very useful for public health organisations. It would show the value that actuaries can bring to working with anonymous health data by producing outputs that can support delivery of health services. Developing a better understanding of the sickness inception rates and recovery rates, split by factors including age and sex, and considering cause of sickness and services offered for recovery, would allow health services and public authorities to plan services more appropriately for the people who need those services the most. Additionally, these insights would also be invaluable for employers in many sectors of the economy in designing employee benefits packages for their specific workforce.

Note that where CMI papers and tables are available only to CMI subscribers, there may be a need to produce one set of outputs for this limited audience and another set of outputs for public domain.

<p>Who will be the audience for this research: <i>(We need to understand who we believe this research will be of interest to – to ensure we have an end consumer for the research)</i></p>	<p>Publications for the public domain should be relevant for public health researchers and policymakers, health and social care organisations, life and health actuaries.</p> <p>Pricing Actuaries setting assumption for designing and pricing IP products; valuation actuaries for reserving for in-claim policies.</p>
<p>What are the time scales of this research:</p>	<p>18 months initially</p>

What do we see as being the output/deliverables of this research:

Produce a WP paper for the public domain, focusing on UK workforce health, demonstrating how well-established actuarial techniques for developing experience studies of Income Protection portfolios, such as the healthy-sick-dead multi-state model, can be applied to national population data. The aim is to derive sickness inception rates and recovery rates by age, sex and other relevant factors. 'Sickness' could mean long term absence from work but the WP should explore a range of definitions which are of interest to both income protection business and population health modelling.

1. To review literature of UK workforce health and long-term sickness absence rates, including methods for defining states (e.g. active at work; not working due to ill-health) and transition rates between these states.
2. To review the data sources that could be used for deriving sickness inception rates and recovery rates. This would review:
 - o publicly available datasets (aggregated, anonymous data);
 - o the feasibility and value in working with secure research datasets (person-level anonymous data) that could be accessed by the WP through agreements with external data owners such as academic institutions, the UK Government Department for Work and Pensions and NHS organisations. If this feasibility exercise is positive then proceed to deliverables 4-7, otherwise go to output 3 next.
3. Perform a gap analysis of data sources needed for deliverables 4-7 and make proposals for how these could be developed.

4. To estimate population sickness and recovery rates based on datasets from Step 2 in order to provide benchmarks for income protection portfolio sickness rates. (requires the data to cover at least the same time periods as the most recent CMI IP investigation so either 2007-2016 for alignment with the IP11 tables or 2017-2019 for alignment with latest CMI review)
5. To estimate sickness and recovery rates split by health condition to understand the impact of specific diseases/conditions on the overall IP rates. This requires the data to cover at least the same time periods as the most recent CMI IP investigation so either 2007-2016 for alignment with the IP11 tables or 2017-2019 for alignment with latest CMI review.
6. To estimate sickness and recovery rates (i.e. rates of returning to work), split by health condition, and considering combinations of health conditions, from the datasets in step 2.
7. Assessing the current industry definitions of eligibility for IP payments and conditions covered by insurance products and identifying which public datasets are most insightful (e.g. conditions typically diagnosed and treated in primary care rather than hospitals).

<p>What previous work has been done in this area recently, within the profession please email libraries@actuaries.org.uk, other professions/academia:-</p>	<p>Lord Darzi report on NHS: Independent investigation of the NHS in England - GOV.UK (www.gov.uk)</p> <p>CMI Working Papers and IP incidence tables and papers, including:</p> <ul style="list-style-type: none"> • Working Paper 72: Analysis of Individual Income Protection Experience, 1991-2009, by Cause of Sickness (2014) • Income protection investigation Institute and Faculty of Actuaries <p>The Health Foundation: How can the next government improve the health of the workforce and boost growth? - The Health Foundation</p> <ul style="list-style-type: none"> • <i>"Linking health, employment and benefit records would significantly improve our understanding of health and employment trends. This would help to better target policies, particularly given the increasing complexity of health need. Doing so should be a priority for the new government."</i> • <i>"The Statutory Sick Pay system in the UK needs reform. Payment levels remain extremely low compared with peer countries, eligibility criteria exclude many people who are on non-standard job contracts and it provides little incentive for employers to act to retain staff. Over the longer term, the next government should review the Statutory Sick Pay system more fundamentally but, as a minimum, payment levels should be brought in line with the National Minimum Wage and the lower income threshold abolished."</i> • <i>"There is also a lack of robust data to identify people's health and employment needs. Linking administrative data sources can enable better policy design and more effective targeting of resources."</i> <p>The Resolution Foundation: Britain has a bigger, but sicker, workforce than previously thought • Resolution Foundation</p> <p>Jon Minton: https://jonminton.quarto.pub/simulating-the-impact-of-changes-to-health-on-economic-status-using-multinomial-logistic-regression-and-the-uk-household-longitudinal-study/</p> <p>ABI report: Closing the evidence gap: how insurance supports good health and productivity</p> <p>UK Government Public Consultation: Occupational Health: Working Better (2023)</p>
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	UK Government paper: Health is everyone's business - Government response to the consultation on proposals to reduce ill-health related job loss (July 2021)
Will 3 rd party data be used? If so a protocol will be developed to support you	An initial task for the WP will be to explore the feasibility and value of getting access to 3 rd party data. For example, data from DWP, NHS England, Integrated Care Boards or Local Authorities. An initial objective of the WP would be to define the data specification and data sources.

<p>Proposed membership:</p> <p><i>The IFoA is registered as a Data Controller in terms of the Data Protection Act 1998. The contact details provided (i.e. names and email addresses) will be shared among the members of this working party, the Practice Area Research Committee and the relevant Practice Area Board in relation to the research topic detailed above. The information provided will be used for the purposes of facilitating the completion of the proposed research. The IFoA will not pass your personal information to any other third party without your consent. If you would prefer that your details are not shared in this way, please contact a member of the Practice Executive (practice.executive@actuaries.org.uk)</i></p>	<p>The roles of Chair, Deputy Chair and Members of the WP will be advertised in the usual way.</p> <p>Ideally IFoA members with experience of performing experience studies, especially those familiar with CMI methods</p> <p>DWP & NHS data, analytics and strategic planning experts and leaders</p>
Additional volunteers required:	None
Frequency and type of meeting:	Monthly and virtual meetings. Typically, subgroups of the WP would meet more regularly (once responsibilities and work has been allocated amongst the WP) to progress the work with high momentum.
Engagement with external stakeholders – Public Affairs will support and arrange for you	TBC
<p>IFoA resource and support required:</p> <p><i>The Practice Executive and Research and Knowledge teams can offer various levels of support during the life of your working party; however we would ask that a member of your working party be responsible for keeping minutes or action points from each of your meetings.</i></p> <p><i>It is important that the working party provides updates to the Practices Manager on an on-going basis, preferably after every meeting. This will ensure that the Board and other committees are kept informed of the work of the working party.</i></p>	<p>TBC: possibly data platform for hosting the data; possibly funding to pay for the datasets.</p>

Legal Issues to Note

Intellectual property issues

As our members and the wider public will appreciate, we want to ensure that the work produced by our working parties remains the intellectual property of the IFoA and not of individual members, their employers or of the working party itself. This means that that work can be used and disseminated by the IFoA to its members, stakeholders and the wider public to advance all matters relevant to actuarial science and promote the work of the wider actuarial profession.

The IFoA is very grateful to the members and their employers for the time, effort and work which is devoted to the working parties for the shared benefit of all members and the public. However, we also appreciate that employers may have their own intellectual property rights in that material – or even license it to/from third parties – and we need to make sure that the working party is not using that material without the employer's, or third party's consent. Members should remember that they need to get the consent of their employer or relevant third party to bring that material to the working party to use.

In recognition of the support provided by individuals and their employers, all material which is permitted to be used will, of course, be credited – noting the sources or contributors by name in the final work product generated by our working parties. Employers can also raise their own profile by allowing staff to sit on working parties and to have their firms acknowledged as supporting contributors in the final products.

The IFoA has some very short consent forms for our members to use if they do wish to use their employer's or a third party's work which will enable the Executive to compile a list of contributors to be referenced in the final work product. Please approach your relevant Practices Manager for more details. Again, the IFoA cannot provide members with advice in relation to intellectual property law and members may need to consult their own in-house lawyers or external legal advisers about this if they are in any doubt as to their obligations or if they have any concerns.

Further guidance

- The [UK Intellectual Property Office](#) has some helpful guidance for members on basic intellectual property issues.
- The World Intellectual Property Office's website also provides some [helpful guidance on intellectual property matters](#).

Competition law issues

It is the IFoA's policy to comply with competition law – this applies both to the IFoA itself and to our members. Some working parties will come across competition law issues due to the nature of their research work. Members who are on such working parties must be aware of this issue and be prepared to take steps to avoid any breach of the relevant competition laws.

We have produced an informative video clip which sets out some helpful guidance that working party members should bear in mind regarding competition law. However, we cannot provide advice to members, individual members may need to consult their own in-house lawyers or external legal advisers about this if they are in any doubt as to their obligations or if they have any concerns.

For members who are interested, the IFoA has also produced a short note on competition law issues which may impact our working party members. (See Appendix B, page 15)

Further guidance

The Office of Fair Trading (OFT) investigates competition law issues and has some [handy guides](#) which members might find useful.

The OFT also mentions the [Competition Pro Bono Scheme](#) which offers some free legal advice to individuals and businesses who believe that their rights under competition law have been infringed or who are concerned that they may be in breach of any relevant laws. Members may also find this useful.

Conflicts of Interest

Consider any conflicts of interest issues which might arise by virtue of a member's membership on the working party and which might breach the [Actuaries' Code](#) provisions