



ASSA

ACTUARIAL
SOCIETY
OF SOUTH AFRICA

RESEARCH

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The role and prominence of research in the actuarial society of South Africa has been put under the spotlight over the past year. As a professional body the primary objective of ASSA is to enhance the substance and stature of the profession. As part of this Council embraced the concept of research being one of the foundational elements for the development of the profession. This probably holds true for most professions. ASSA is well positioned to play a prominent role in this regard for the actuarial profession in South Africa. Further, with the increased participation of ASSA in public policy debates, research is essential in formulating our contributions.

Research happens in many places. Insurers, reinsurers, asset managers, consulting firms and academic institutions are all examples of where research is conducted. Individuals in their private capacity also conduct research which often end up being presented at conventions or sessional meetings. The intention is not to replace or replicate this but rather to harness the skills, time and resources that naturally are involved already. The role of ASSA will be to complement all this activity with high level co-ordination to cover overlaps or areas not covered sufficiently.

To assist in formulating the research priorities for ASSA and to determine the approach to be taken, three categories of research have been identified:



A) CORE RESEARCH

This refers to areas that are close to the heart of our profession, e.g. CSI studies, HIV/AIDS modelling and the study of the demography of South Africa. This research will tend to become fairly detailed and specialized as the research is refined over time.



B) PUBLIC INTEREST RESEARCH

These are changing constantly, e.g. NHI and Covid-19. This type of research will often take us outside our traditional areas of expertise and requires the skill to translate our expertise into new areas to find pragmatic contributions that would be seen as valuable in a broader discussion.



C) AD-HOC RESEARCH

These topics are wide-ranging and covers topical issues that are close to our profession and our sphere of influence. Examples are topics related to product issues, advice, risk management, reinsurance, accounting and financial management.

This led to the need to understand the research landscape, to assess what research has been done and what is currently being conducted. This information is not only useful for ASSA but also for a wider audience and will be available through the **ASSA research portal** as a resource for all.

We believe there is latent capacity for research in our profession, with many individuals or organisations just needing some steer or guidance to start a project. Providing research ideas and / or mentoring and guidance may help unlock this potential and get many more people active. Not every piece of research needs to end up being published in a journal or presented at a convention – it is important to understand the destination of the research and the requirements that goes with this. This is a role that ASSA intends to fulfil.

Giving proper recognition for excellent research is essential. Some organisations have been very successful in elevating the prestige attached to research, which resulted in a high level of competition and hence quality of the work. Closely

linked to this is the need to foster research as a core activity of our profession. This involves building the appreciation and skills for research through the path to qualification and to encourage research as part of the post qualification activities.

In conclusion, the intention is not for ASSA to become a research house trying to cover the full spectrum of actuarial and wider fields. It will need to commission some research, be the driving force for other research but mainly allow entities that do research to continue and tap into this. The key will be to encourage collaboration with the outside structures and organisations that are involved in research and getting them to incorporate the ASSA agenda into theirs. This requires open communication on the research needs and the creation of a collaborative environment for various parties to work together. We hope and trust that actuaries throughout the spectrum will be open to such an approach. 

Article by Jannie Venter & Sandy Govender

Mobilising Actuaries to Contribute to Society through **PUBLIC INTEREST RESEARCH** - Lusani Mulaudzi

This newsletter aims to promote research within the Actuarial Society of South Africa (ASSA). ASSA has a vision to become a global leader in context-based solutions. To achieve this, ASSA's Council established the Public Interest Actuary function and recently contributed more towards research funding.

The Public Interest strategy was approved in the first quarter of 2021. This strategy focuses on three main pillars:

1) ESTABLISHING CO-CREATION OPPORTUNITIES WITH PUBLIC SECTOR STAKEHOLDERS.

2) MOBILISING THE ACTUARIAL COMMUNITY TO PARTICIPATE IN PUBLIC POLICY INITIATIVES MAINLY THROUGH CONDUCTING AND PUBLISHING RELEVANT RESEARCH.

3) PROMOTING GREATER USE OF ACTUARIAL SKILLS IN THE PUBLIC SECTOR.

Underpinning all these efforts is the need to do research. This is mainly because it is acknowledged that new contexts need to be well understood and that there may be a need to re-tool, re-skill and to re-purpose our skillset to be effective.

In our context, research is not restricted to academic research and should also be distinguished from proprietary research. We acknowledge that there is a significant amount of proprietary research that actuaries are engaged in. We also acknowledge that actuaries employed as academics do conduct research, but both the number of papers published, and coverage of possible actuarial topics need to improve. The focus of our research efforts is to enable co-creation opportunities by publicly disseminating knowledge that has the potential to make a positive public interest contribution.

We would like to see members doing research by proactively identifying relevant research questions or responding to calls for research public interest topics identified by ASSA.

What have we accomplished so far?

We have co-sponsored a research project into non-communicable diseases in South Africa. This was an unsolicited proposal and we agreed to participate because ASSA has an interest to participate in the development of high-quality evidence, to support resource allocation and decision-making, and the interplay between the supply and demand sides of the health system. Nine out of twelve briefs have already been submitted to ASSA by the research team that includes actuaries and public health consultants. Highlights from the research reports submitted thus far include the following:

- Disparities in access to health services still exist between and within provinces, with urban areas typically having better access to health services. This means that those in

rural areas are less likely to know their health status and any known existing chronic conditions are more likely to be poorly managed, given that it may be difficult or costly to attend the clinic regularly for check-ups.

- Limitations in publicly available data for the uninsured population makes estimating the prevalence of co- and multimorbidity challenging. However, survey data shows that approximately 11% of people have at least two chronic conditions. The prevalence of co- and multimorbidity is higher in women than in men, and three quarters of people with diabetes have a comorbidity.
- The incidence of cancer in South Africa is high and increasing. The high prevalence of HIV in South Africa also contributes to the high burden of cervical cancer and lymphomas, which are more prevalent in people living with HIV.
- The prevalence and severity of mental disorders appears to be on the rise in South Africa. South Africa's history of violence and oppression largely contributes to the poor state of mental health of the country. While mental disorders are caused by a variety and interaction of factors, the strong associations and overlapping risk factors between many mental disorders and other NCDs support the notion of tackling mental health together with other major NCD groups.
- Household survey data shows that both men and women perceived their health status to be far better than what objective measures showed. This shows the urgent need for community-based screening and testing for NCDs.
- Diabetes was once considered an uncommon disease primarily affecting the wealthy, with low-income countries largely unaffected. However, the combination of an ageing population and a rapid demographic and economic transition seen in LMICs (Low to Middle Income Countries), such as South Africa, has resulted in a substantial increase in prevalence, from 4.5% in 2010 to 12.8% in 2020. Whilst diabetes is classified as an NCD, it is often "communicable" in nature due to environmental, lifestyle, and genetic factors such as nutrition, physical exercise, and hereditary predispositions, which are often not a choice for individuals.
- Men are often unable or unwilling to seek out healthcare when needed, making them a key intervention group for health promotion and prevention messaging. Where resources are limited, we need to ensure our health promotion and prevention efforts are targeting the most vulnerable, which requires targeted policy for particular NCDs.

This work is ongoing, and more policy recommendations will be made in the final comprehensive report. The National Insurance Bill is silent on certain aspects such as the benefit package to be offered and a good understanding of the development of non-communicable diseases will enable effective planning.

The first commissioned public interest research report was published at the end of the first quarter of this year. This report unpacks the extent of medical malpractice in the South African public sector. Highlights from this research report include the following:

- Contingent reported liability of R111.5bn as of 31 March 2020.
- Between 1500 and 2000 claims are lodged annually.
- Contributing factors such as possible unethical conduct amongst departmental officials and attorneys, and inefficient and ineffective claims management system by departments of health.
- Cerebral palsy claims are the bulk of the total claims amount paid.
- Recommendations include setting up a compensation scheme, capping monthly caregiving costs for cerebral palsy claims and introducing medical malpractice speciality courts and assessors.

This research report has already generated interest amongst different stakeholders and the issues highlighted are being debated. Further areas of research have been identified and actuarial society members were given an opportunity to apply to conduct research into further areas of research.

Practice areas have continued to develop knowledge within their disciplines, and they also continue to give input to legislation with the assistance of the public interest actuary.

Going forward

Several public interest research topics were identified, and ASSA members were invited to apply to conduct research on any of the proposed topics. The proposed topics are as follows:

- a) Projecting changes in unemployment insurance risk factors in South Africa.

- b) Evaluation of RAF settlements amounts
- c) Designing an affordable, equitable, good-quality package of care for universal health cover in South Africa
- d) Analysis of the management of state contingent liabilities in South Africa
- e) Developing 'friend of the court' actuarial propositions to assist in public interest court matters
- f) Developing legislative and regulatory interventions for managing medical negligence cases against the state in South Africa

Only two proposals for b) and c) were received by 14 June 2021. Some of the topics may seem intimidating but we would like to encourage actuaries to tackle them. The first report that we require is mainly a collation of available information to assist with identifying more specific research problems and therefore not too difficult.

Different types of actuaries may consider taking on these topics:

- 1) An actuary starting a new solo venture and need a decent start-up project.
- 2) Established actuarial consultancy with experience in a related field but looking to branch out into a new 'niche' area.
- 3) An academic actuary looking for interesting and relevant topics.
- 4) Retired actuary looking for something interesting to do.

Some of the topics can be done by non-actuaries with some guidance by an experienced actuary and we would therefore encourage experienced actuaries to create such opportunities for their non-actuarial colleagues.

We look forward to more public interest research reports and engagements going forward. 

The COVID19 pandemic has sparked lots of debates around the world and the actuarial profession in South Africa has also been engaged in many debates. It became clear early in numerous debates that it is important to acknowledge the influence of ideologies in the way we engage with the world, the importance of emotional intelligence as well as the necessity to be adventurous to grow as a profession and to make a contribution in the public interest. In this 4 part video series, Lusani Mulaudzi (ASSA President and Public Interest Actuary), Jannie Venter (ASSA Council member and Research committee chair) and Marjorie Ngwenya (Former IFOA President) discuss how the actuarial profession can engage more effectively with the changing world and grow to serve the public interest more impactfully. **Click on the videos below.**



WATCH **PART 1** HERE

PART 1 : This introduces the panellists and provides background about the topic. The focus is on the mindset of actuaries especially when they venture into new contexts. The panellists discussed the need for actuaries to be more aware of their own ideologies and that of their clients in various contexts.



WATCH **PART 2** HERE

PART 2: The importance of emotional intelligence and generally an ability to engage with different types of people in different contexts is highlighted. It is important for individual actuaries to recognise this need and set personal development goals for themselves. It is also important for actuarial societies to enable this kind of culture amongst actuarial professionals.



WATCH **PART 3** HERE

PART 3: In this part the importance of research in the development of not only actuarial societies but societies at large is discussed. It is important that this combines aspects of nimbleness and broader publication to enable collaboration.



WATCH **PART 4** HERE

PART 4: Our profession exists to serve the public interest in various ways. In part 4 the panellists discuss the importance of this noble objective and the kinds of attitudes that are enablers and stumbling blocks to achieving this objective.