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The Revolutionary Actuary

By Ashwag Alzahrani

In July of this year, Elon Musk, the chief executive officer of Tesla and Space-X, called for actuaries who are not satisfied by the slow changes in the insurance industry to join his insurance company.¹ The controversial CEO who is working to revolutionize transportation on Earth through electric cars and in space via rocket production, also promised to revolutionize the insurance industry by building Tesla insurance.²

Similarly, in 2016 a transformation started in Saudi Arabia—not only in the insurance industry but across all sectors: health, education, finance, manufacturing. ... This revolution started when the Saudi government released Vision 2030, for which the chairman of the Council of Economic and Development Affairs stated:

Vision 2030 is a bold yet achievable blueprint for an ambitious nation. It expresses our long-term goals and expectations and it is built upon our country's unique strengths and capabilities. It guides our aspirations towards a new phase of development—to create a vibrant society in which all citizens can fulfill their dreams, hopes and ambitions to succeed in a thriving economy.³

I believe that with this vision in place, the actuarial profession can grow significantly across all industries, not only traditionally but also progressively.

For instance, the health sector is undergoing a massive transformation that aimed to deliver substantial improvements in health care quality, efficiency and safety. This includes the restructuring of health care delivery in the public sector into accountable care organizations (ACOs), which will be funded through a capitated budget by an independent entity, and the Ministry of Health (MoH) will have a regulator role.



Currently, the health system is split into a two-tier system: the public system, which is operated, supervised and funded by the MoH and other governmental services; and the private system. The MoH provides 75 percent of funding for the total public health care, using a payment mechanism called “global budget.” The private sector is supervised by the MoH but is self-funded.

Saudi residents can access public health care services freely with no health insurance required, but if a resident visits a private health care facility, then they will either need private health insurance or pay out of pocket.

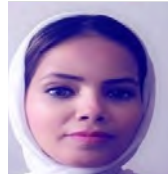
The urgent need for qualified health actuaries can be found across the sector. For instance, under the payer entity, actuaries can contribute to the following areas:

- design and build payment models, such as a risk-adjusted capitation model,

- design and implement efficiency metrics,
- design and build shared saving/losses models,
- design and cost the health benefits packages,
- assist in the coding and costing operation and diagnoses,
- assist in the enterprise risk management function,
- assist in the population health management through underwriting and
- develop other areas such as data analysis, data science, tele-health and so on.

In addition, actuaries participated this year in building one of the COVID-19 models that were presented to the top official leaders in the kingdom.

The need for revolutionary health actuaries will be significant in the coming years; this is one of the reasons I have decided to choose the health path of the Society of Actuaries. I am sure this path will equip me with the analytical and strategic skills that are in need in the kingdom. ■



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ENDNOTES

- 1 Sonnemaker, Tyler, and Graham Rapier. Elon Musk Says Tesla Is Creating a “Major Insurance Company” After Its Botched Rollout in California Last Year. *Business Insider*, July 23, 2020, <https://www.businessinsider.in/tech/news/elon-musk-says-tesla-is-creating-a-major-insurance-company-after-its-botched-rollout-in-california-last-year/articleshow/77132492.cms> (accessed September 10, 2020).
- 2 Simpson, Andrew. 2020. Tesla Invites Actuaries to Help It Create a “Revolutionary” Insurance Company. *Insurance Journal News*, July 24, 2020, <https://www.insurancejournal.com/news/national/2020/07/24/576871.htm> (accessed September 10, 2020).
- 3 Vision 2030. <https://vision2030.gov.sa/en>.