



## OPTUM POPULATION HEALTH MANAGEMENT: ACTUARIAL SERVICES — UNDERSTANDING RISK FROM SYSTEM TO PERSON

Optum®'s UK Actuarial Services team offers comprehensive solutions to provide strategic, analytical and operational support to the NHS to enable it to improve population health and manage risk across its services and organisations.

In line with the NHS Long Term Plan<sup>1</sup>, health and care systems are required to establish and embed population health management approaches, empowered by data and delivered in collaboration across multiple organisations. Population health management requires commissioners, providers and front-line professionals to use data to understand their populations in terms of segments aligned to health needs and to proactively identify local cohorts for targeted interventions.

Actuarial Services support Integrated Care Systems (ICSs) and Primary Care Networks (PCNs) to understand the health and care needs of their populations in terms of health needs, not only today but also in the years ahead. By applying actuarial tool box concepts, the future demand across the care settings within the system is modelled and quantified. By incorporating expert clinical input to the modelling process, captured via facilitated decision-making exercises such as the Delphi method<sup>2</sup>, the impacts on system resources of displacing demand by implementing Long Term Plan initiatives are tested and measured.

Optum's actuaries work alongside analysts, clinicians and NHS Subject Matter Experts to give you the tools and skills to develop, test and scale a broad range of population health management applications. We combine demographic, clinical, operational and financial data to analyse the past and present in order to develop understanding of future scenarios.

### System risk

Solutions to help NHS ICSs and PCNs understand and manage financial risk.

- **Strategic planning to support LTP goals**
- **Scenario Testing**
- **Quantifying Intervention Impacts**



*Actuaries measure the risk and probability of future events*

### Trend analytics

Solutions to help NHS clients enhance their trend analytics capabilities to understand the dynamics driving the health needs of populations.

- **Trend Reporting**
- **Benchmarking**
- **Trend Projections**



*Actuaries are strategic thinkers and problem solvers*

### Clinical risk

Solutions to help NHS clients improve healthcare provision by understanding and quantifying clinical risk within their populations.

- **Population Segmentation**
- **Risk Stratification**
- **Impactability Modelling**



*Actuaries are experts in risk management*

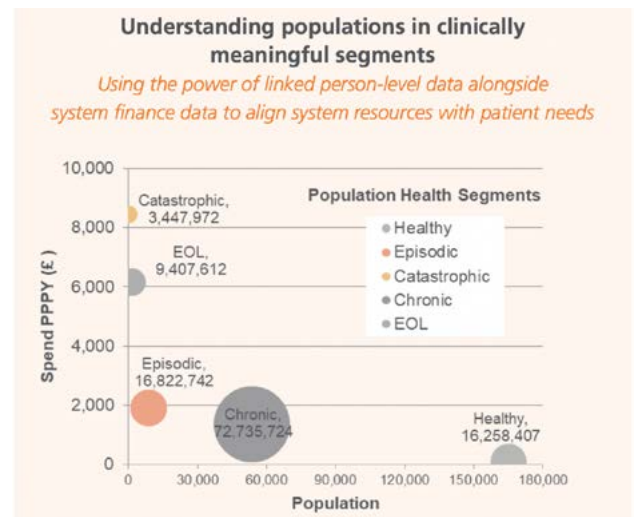
<sup>1</sup><https://www.longtermplan.nhs.uk/>

<sup>2</sup><https://www.rand.org/topics/delphi-method.html>

## OUR APPROACH

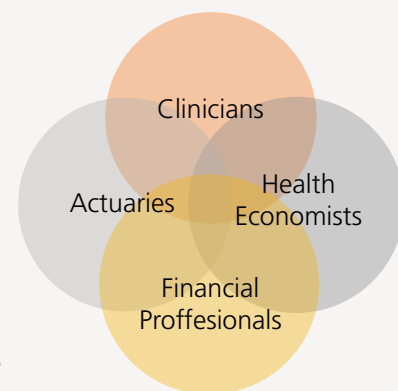
Adhering to actuarial and risk management control cycles, a typical assignment may proceed with these steps:

- Step 1:** Develop an unmitigated projection of demand for health and care services
- Step 2:** Identify services and population segments which are impactable
- Step 3:** Assess the potential impact of new interventions and project mitigated scenarios
- Step 4:** Compare unmitigated and mitigated projections
- Step 5:** Decide what to do with the estimated intervention impacts
- Step 6:** Embed the approaches and monitor the impacts



### Optum's actuaries collaborate seamlessly with other professionals in multi-disciplinary teams

- Highly trained statistics and data experts
- Bringing stakeholders together
- Regulated in the UK by a professional body in the public interest
- Thought leaders in the UK actuarial profession
- Deep understanding of health systems
- Experience running NHS Population Health Management programmes



## WHO WE ARE

Our purpose is to create and use actionable insight to help make the UK health and care system work better for everyone. We differentiate based on our clinical expertise, world-class technology and analytics, and practical operational experience working with the NHS, and internationally.



CLINICALLY DRIVEN

We are **clinically driven** and **exclusively health and care focused**. Everything we do is about helping health and care systems work better and improving outcomes for patients and populations.



DATA AND ANALYTICS

We are a **world-class technology and analytics company** and a **global leader in the application of data science**. We combine global best practice with **more than 15 years experience working with the NHS and local authorities**.



REAL-WORLD EXPERIENCE

We have **practical, real-world experience managing integrated health and care systems** around the world.

### Want to learn more?

Contact us on E: [info@optum.co.uk](mailto:info@optum.co.uk) T: 07887 570463 or [david.beddows@optum.com](mailto:david.beddows@optum.com)



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