## Time-Traveling Through Data The New Frontier for Health and Social Care

## REVOLUTIONISING HEALTHCARE DATA ANALYSIS

The Health and Social Care sector has always been at the intersection of human compassion and cutting-edge technology. With ever-evolving challenges and increasing demands, healthcare professionals seek innovative solutions to transform their approach.

The signals from noise (sfn) collaborative engagement platform provides a new approach to exploratory data analysis and analytics by harnessing the skills and capabilities of clinical and operational teams in exploring and understanding what the data is telling them. Building a unified understanding of the 'why' teams can rapidly move to unified action.

Simply put, you cannot solve a problem you cannot see and with sfn's capability to investigate the data live in the room, answering the questions as the teams ask them, we have created an enhanced opportunity for innovation, service redesign and problem-solving. We move the system from anecdote to evidence.

sfn transforms data into a patient journey view using time as the unifying metric. It delivers a single data model, supporting exploration of the data backwards and forwards through time, so you can see how populations interact with the system to design appropriate models of care. Health is a complex system and when data is specified and selected in advance to provide simplified dashboards, essential insights can be missed and we risk only seeing what we expected to see.

Most systems are data rich, but insight poor and are under-resourced in data analysts. sfn enables that workforce-limited capability to be scaled as the platform delivers insights directly and other users can use the platform to interrogate time structured data live and experience the power of turning exploratory data analysis into predictive analytics. Many clinicians have used the platform to underpin clinical research, reducing the data processing time of their research from weeks to minutes.

sfn includes advanced modelling capabilities, taking users from insights to actionable changes that can be measured as new models are embedded, multiplying the opportunities for success. With the predictive power of the platform, the finance teams can ensure that investments are delivering the expected outcomes as they happen and realign if not. Clearly this supports agile forms of implementation not generally used.

## WHY IS IT A GAME-CHANGER?

We place the person at the heart of everything we do, using time as the unifying factor, ensuring person centred insights and innovation.

sfn demystifies data science by making exploratory data analysis and analytics accessible for everyone, fostering a collective understanding of how healthcare systems work for the patients and populations.

sfn addresses the data needs of clinical teams in a digestible format, facilitating group discussions and decision-making thus building trust in the data and in the teams.

It empowers collaborative leadership by making the invisible, visible and supporting the devolution of decision-making. It is much easier to empower teams when everyone is making decisions based on the same information that everyone can understand and see in the same way. sfn harnesses temporal power. While performance metrics and dashboards offer historical insights, this platform boasts a dual lens, focusing on both the past and the future but more importantly it moves beyond the 'what' to the 'why' which makes our predictive analytics more accurate

## TIME AS AN ALLY

The platform offers a predictive edge by leveraging temporal cognition - our inherent ability to mentally 'travel through time'. This allows healthcare professionals to plan proactively rather than reactively. Traditionally, predefined metrics and black-box tools have limited healthcare data analytics. This new approach offers flexibility, enabling frontline clinicians, professionals and operational teams to ask pertinent questions and explore the breadth and depth of data. It moves from a narrow, reductionist approach to a more holistic one.

Furthermore, there's a trust factor. Users understand the journey of the data and how it is analysed and used, fostering transparency and collaborative decision-making.

For 15 years, Lightfoot has been putting this kind of data analysis and analytics in the hands of front-line staff; becoming mentors, guiding health and social care systems to weave this analytical prowess into every facet of their operations – from strategy and planning to resource allocation, operational decisions, improvements, and real-time evaluation.

Supporting systems in several counties to sustainably "Bend the Curve." The overarching goal in our UK home? To amplify the voice and expertise of the NHS workforce and the people they care for, turning every challenge into a collaborative, data-informed solution.

