



What could the future of care look like with predictive care?

#### **Overview**

The emergence of predictive care analytics offers a tantalizing glimpse into the future. Predictive care, a novel approach fuelled by data-driven insights and advanced technologies, holds potential the transforming the landscape of health and social care as we know it. This article delves into the intricacies of predictive care, highlighting its potential impacts, significance for the people we support, and the profound implications it carries for the future of care.

#### What is predictive care?

As the health and social care sector embraces digital ways of working, the abundance of data that now exists can totally transform the future of the sector for those who receive care and support, and those who provide it.

Utilising historical data as well as known risk factors and truths about certain conditions, behaviours and incidents allows healthcare professionals to make more effective and more efficient operational and clinical decisions, predict trends and potentially prevent future incidents.

## Where is likely to see the biggest impact with predictive care?

There are several areas of social care that will benefit from predictive care.

In the NHS, falls cost approximately £2.3 billion per year and health professionals spend around 45,000 hours per year dealing with falls. Not only are falls costly to the NHS, but they are impactful on the lives of the people we support and their families. The older we are, the longer it can take to recover from a fall and the effects of a fall can include fractures, mobility impairment, reduced confidence and even fatalities.

With the capabilities of predictive care, care professionals could be able to predict when a fall is most likely to happen and put procedures in place to reduce the risk of a fall happening. Using data analytics and falls management technology, there is some capacity to map this information using historical data but the advancement of predictive care could mean we are able to achieve this in a more real time scenario than we do currently.

A study conducted in NHS hospitals in England, reported that 24,674 developed a pressure Injury between April 2015 and March 2016. When this study was undertaken, treating pressure sores cost the NHS more than £3.8 million every day. And with so many more people receiving treatment within the NHS, this number is likely to have inflated significantly. In care services, pressure injuries require intervention from external healthcare teams such as district nurses. Being able to potentially prevent pressures injuries through predictive analytics free healthcare can up professionals. Dehydration is a significant issue in care and hospital settings particularly for older people as is antibiotic reliance and resistance. Being able to predict the chances of dehydration and act before this can lead to a UTI and then antibiotics can have a huge impact on health and social care as a whole.

Predictive care may also be helpful in behavioural incidents. Where certain events can lead up to a incident of distressing behaviour, with predictive care this could be monitored and the likelihood of a distressing incident occurring can be tracked and procedures put in place to potentially avoid this happening. This not only benefits the care service with dealing with a potential emergency and the person supported in care from experiencing distress but also the care team. Further to this, distressing incidents may impact staff retention.

## What could this mean for people supported in care?

Predictive care could mean even earlier interventions in healthcare. With this comes potentially less invasive care and support and a higher chance of treatment success. It also means that there could be less of a negative psychological impact for people supported in care services. There is a risk of conditions snowballing as they can impact each other. Where a fall impacts a person's mobility, this can increase the risk of skin damage which in turn increases the risk of infection.

Predictive care has the potential to impact falls management, distressing behaviour and more which can lead to less distressing incidents. With less distressing incidents and the capability for early intervention, the result is likely to be happier and healthier people supported by care.

Predictive analytics may also be able to suggest the likelihood of a person developing medical conditions, such as cardiac problems, diabetes, having a stroke or COPD. With lifestyle changes and medical advice earlier in the process, some of these conditions may be delayed, lessened or even prevented entirely.

Keeping people mobile is proven to reduce the effects of other co-morbidities often associated with aging, and with a population more inflicted with long term conditions than ever before, managing these effectively is integral to maintaining a good quality of life. The outcomes of people supported by care are a huge focus in health and social care and the introduction of predictive analytics could be life changing and transform the potential outcomes for those receiving care.

# What could this mean for the future of health and social care?

Currently, data can be used to ascertain norms for the people you support and cohorts of people, cross reference this with known risk factors attributed to certain conditions and previous known adverse events and tying this information together in order to predict what could happen.

With the potential for predictions, the future of health and social care will be transformed from a reactive approach to a proactive one. Predictive care has the potential to better inform and guide care decisions by using real time data and create a care delivery model that suits the people being supported and their outcomes.

There are current challenges faced within health and social care that may benefit from the use of predictive care. Missed appointments and hospital readmissions for example. Where a person is identified as a risk to missing an appointment, due to reliance on patient transfers or are someone who has a habit of not attending, steps can be taken to attempt to counteract the risk by providing more support. hospital For readmissions, predictive care has potential to analyse who is likely to be readmitted to hospital and why, allowing this problem to be tackled before the person is readmitted, benefitting the service and the person at the same time.

Digital is transforming the sector at pace and as a result, the sector now holds a vast amount of data from an increasing number of sources. The rise in digital usage can be contributed to the COVID-19 pandemic that forced home working and required less contact methods of working. The pandemic also allowed predictive care to be tested through helping hospitals and trusts prepare for potential surges in hospital admissions. This information was also used to define public health strategies by local authorities and the government, advising on lockdown measures. This same information could be used to allocate resources to appropriate areas if a surge is imminent or a department has breached on their waiting list. The ability to share information between integration partners is another key aspect of predictive care. Integrating is key, without the ability to communicate between other organisations, information may be lost and form an incomplete overview of data.

The use of predictive care could reduce the strain on the NHS by better managing time, healthcare professionals and reduce high level interventions by analysing the data available.

The emergence of predictive care analytics paints a compelling picture of the future of healthcare. With the potential revolutionise diagnosis, treatment, and prevention, this approach holds the power to enhance outcomes for people supported in care and reshape healthcare systems. While there is still much to be addressed, the promise of predictive care shows a future where healthcare is not just about healing the sick, but about safeguarding wellness and quality of life for all.

#### The Nourish impact

Nourish allows you to make connections in the data recorded by your care teams, this is just a manual process at present. When information is recorded into Nourish, by using the reporting and dashboard features, you can begin to connect the dots of care notes and incidents. This gives you the ability to see what events lead up to an incident and if those events are logged again, you can act proactively to avoid an incidence, which can avoid any potential distress or external healthcare intervention for the people you support and your care teams.

Currently, using Nourish, care teams are able to look back through care notes and discover the events that led up to an incident, such as a fall, and monitor this for the future. If for example, a person has a fall, you are able to look back and see that they may have had their medication changed, they've become excessively thirsty and are taking more frequent trips to the toilet. This information, when predictive care becomes available, will be what shapes the predictions.

### How to get started with predictive care

Using a digital care planning platform is a simpler way to record and report on the data collected by care teams when delivering care. The reporting functionality will allow you to manually go through the data and make connections between events and incidents. Getting used to the manual process and working out what events may lead to an incident and how established risk and historical data go hand in hand will set you up for the introduction and advancement that is predictive care.