ARMED
ADVANCED RISK MODELLING FOR EARLY DETECTION

Case Study: ***Dumfries and Galloway HSCP***

# Utilising activity data and predictive analytics to improve support for individuals with intellectual disabilities

**Dumfries and Galloway Health and Social Care Partnership has successfully utilised ARMED prevention technology to re-design night-time support for adults with intellectual disabilities. In this case study, we will be exploring how predictive analytics have led to improved sleep patterns, thereby reducing pressures on night-time support services currently in place for adults with intellectual disabilities.**

## The challenge

Dumfries and Galloway HSCP embarked on an ambitious project to review the overnight support services delivered to individuals with an intellectual disability, with the aim of improving wellbeing and social care outcomes for the individuals involved in the trial.

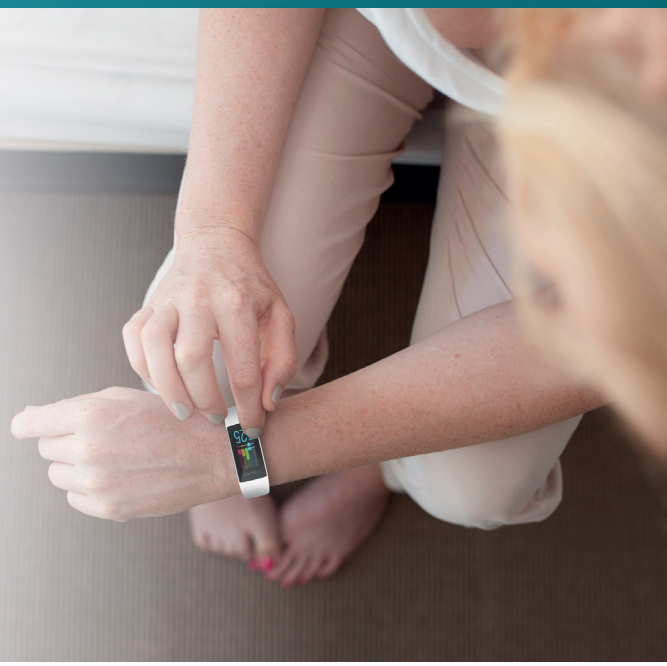
Alongside this, Keys to Life, Scotland's Learning Disability strategy, indicated inequity of opportunity for individuals with an intellectual disability. These included:

- Limited access to daytime activities
- Increased social isolation
- Greater health inequalities than the general population
- Risk averse services
- High number of people accessing overnight support

Dumfries and Galloway HSCP were keen to embrace innovative digital technologies to ensure better outcomes for health, housing, and social care. To enable this, they collaborated with the ARMED team to utilise data and cutting-edge predictive analytics to support the decision process for better interventions to help improve the wellbeing and social care outcomes for people with intellectual disabilities.

*"Using the ARMED solution has given us new insight into behaviours that has helped us prioritise resources. It has given our clients information that has encouraged them to become more active during the day, which in turn has helped bring about more restful sleep. ARMED is supporting us to improve wellbeing and provide person-centred care."*

**Barbara Aitken**, Professional Lead for Social Work for the Community, Dumfries and Galloway HSCP



# The solution

Developed by HAS Technology, ARMED (Advanced Risk Modelling for Early Detection) combines pioneering predictive data analytics modelling, wearable technology, and Health & Social Care data. This innovative technology identifies and predicts factors that may impact on a care user's quality of life.

ARMED utilises Polar manufactured activity devices, strength grips, and body composition scales. These devices are used to monitor and measure key health metrics such as hydration, muscle mass, inactivity, and lack of sleep. Predictive analytics allow issues to be anticipated before they arise, demystifying this by providing a wealth of information to enable the client's care team to help provide a more tailored and effective support package.

# Improving sleep quality and activity levels

To improve wellbeing and social care outcomes, ARMED is supporting individuals to be more active during the day. By having access to key health metrics, the client support network became more aware of the clients' wellbeing and activity levels.

By reviewing this information, the care team are better able to tailor the activities and support for their clients. This has resulted in improved daytime activity levels thanks to clients becoming more active and engaged during the day which has significantly improved sleep patterns. This has meant less nocturnal activity, and less of a requirement for intervention from overnight support staff, whilst still ensuring that these vulnerable people are safe within their own homes at night.

Since implementing ARMED, Dumfries and Galloway HSCP has seen a reduction on the pressures placed on overnight services and have seen an improvement in clients' confidence. This has allowed clients to gain more independence, which is vital for their wellbeing.

# Informed decision making

Night-time support, particularly sleepover supports, can now be delivered based upon whoever has the greatest need. Dumfries and Galloway HSCP can use the learning from this trial on an ongoing basis to prioritise access to services. By utilising the conclusions drawn from the data-analysis provided by ARMED, Dumfries and Galloway HSCP can develop a model for the prioritisation and delivery of overnight support for adults with intellectual disabilities

ARMED
ADVANCED RISK MODELLING FOR EARLY DETECTION

If you would like to find out more about ARMED please email: **armedprevention@hastechnology.com**, or call **0121 308 3010**.