Cardiff and Vale RPB

Using data to deliver better outcomes: The new Safe@home Service

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In this Q&A, Sioned Owen, Partnership Senior Analyst in the Cardiff and Vale Regional Partnership Board team, discusses the new Safe@home service and the role data from the Regional Integration Sharing Site (RISS) has played in its development.

Sioned Owen, Partnership Senior Analyst

The RISS is designed to help you plan, monitor and evaluate your work. It brings together and links key, anonymised data from the Welsh Ambulance Service Trust (WAST), Cardiff and Vale University Health Board (CAVUHB) and Cardiff Council, and non-linked data from Vale of Glamorgan Council and third sector partners, for the purpose of identifying patterns or trends of service use as a whole health and care system.

These data-driven insights can be used to inform planning and decision-making, enabling you to improve care, predict demand, and measure the impact of service changes and new ways of working. Being online means the data can be easily accessed and viewed.

What is Safe@home?

Safe@home is a joint endeavour between CAVUHB, WAST, Cardiff Council and Vale of Glamorgan Council together with wider partners that aims to respond rapidly to urgent need, to support people safely at home and prevent the need to go to hospital.

How did you use data to inform the development of Safe@home?

Safe@home was quite broad in terms of the data and business intelligence requirements. The agreed starting point was to create a service that would be in a person's home, but we weren't sure what people we were going to support, or what benefit it was going to have.

I logged into the RISS and started looking for key patterns or trends in the data. I began at the start of the 'journey' of interest. In this case, it was emergency calls made to the WAST. I looked at the age profile of those who called, the different ways they were referred to emergency services, whether any of these ways were linked to an increased number of calls, and how the outcomes differed by referral sources and by age. Once I had a clear idea of the demand linked to WAST, I then looked at hospital emergency unit (EU) attendances and did something similar for the data relating to the other relevant parts of the health and social care 'system'.

When I looked more in-depth at the EU attendances data, I identified a large cohort of people who were arriving either by ambulance or other modes of transport and then returning home following their attendance, meaning they weren't admitted to hospital. The cohort we identified were people aged 70+ years referred by GP or emergency services. This posed a question: if we had supported this cohort at

home in the first place, could their conveyance to hospital, EU attendance or hospital admission have been avoided?

We sense checked our findings with some clinicians and people who worked in the EU to see whether they agreed with what the data was showing us. We also conducted an in-depth review into a sample of patient case notes to see why they were coming in the first place and test the hypothesis that we could support these people at home. The clinicians and case note review matched our findings, which verified our results. This resulted in the identification the target cohort.

How did you use the data to inform what the demand might be and the anticipated benefits of the service?

Once we had identified the target cohort, we worked with clinicians to estimate the number of people who could be supported by the new service, acknowledging that some of the attendances would be necessary and that hospital would be the right place for them. Using clinical expertise, we concluded that around 85% of people in the target cohort could be cared for at home.

Drawing on the historical demand from the target cohort and RISS's forecasting capability, we were then able to see the potential demand for the service over the next 12 months. Using the forecast charts and clinical expertise, we estimated that Safe@Home would support around 150 people each week, helping them to avoid an EU attendance, and prevent a further 20 people from being admitted to hospital.

Supporting these people to receive urgent medical care in their homes, instead of a hospital environment, is one of the key anticipated benefits of the Safe@Home service. Some other changes in the wider health and care system the service is hoping to contribute towards are a reduction in hospital conveyances to the EU for the target cohort and admissions to the Assessment Unit.

How will the RISS support ongoing monitoring and evaluation?

We are in the process of building a dashboard in the RISS to track the anticipated benefits of the Safe@Home service. It will include some key performance indicators, such as number of people supported, and wider system changes including the number of people from the target cohort conveyed to hospital by ambulance. All the agreed key data and charts will be held online in a central, easily accessible location for monitoring and review by the Safe@Home project team.

How did this information help the project team when they were formulating their plans?

I think that the data has always been a forefront in this project. All the decisions made in terms of who we should support, the workforce, opening hours and where we were going to base the service have all been informed by the data.

What key lessons have you learnt?

Firstly, that it's important to remember the RISS is one data source. It's a great place to start, but you also need to look at information outside the RISS. In this work we also requested and analysed data from Princess of Wales Hospital in case Cardiff and Vale residents were regularly going there for emergency health care and therefore, we were underestimating the total demand.

Secondly, presentation is really important. It's worth taking the time to understand what the data is telling you and pull out the key messages when you are presenting it. My approach is to use two or three key charts, so as to not overwhelm those I am sharing the data with. There are different types

of charts available too, which can help when trying to show different things. I used an s-chart when presenting data on activity to show the variation across the time period of interest, but used a pareto chart to show the distribution of EU arrival times to help inform the conversation on Safe@home opening hours. It's also easy to extract data from the RISS and consider alongside other data sources to analyse and potentially pull out other key messages.

Thirdly, you don't have to be a 'data expert' to use the RISS. It's quite intuitive. While there is a lot of information on there, it's all clearly labelled and presented. My top tip is to take your time to look around and familiarise yourself with where things are and the different pages. You can also save the most useful charts to your favourites, to effectively build your own repository of information that is relevant to you.

Find out more
Click here to find more about the RISS and how to gain access.

I feel like I may need some help to get the most out of the RISS. Who can I contact for help?
Your organisation will likely have people who can help you with data analysis and assist with accurately interpreting the data.