

Telehealth Case Study



Sector: Residential Care
NHS Partner: Swansea Local Health Board
Application: Multi User Telehealth Programme

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The Programme Outline

As part of a wider pilot programme run by Swansea Local Health Board and led by the Chronic Conditions team to trial Telehealth, a local residential home was provided with a multi user Telehealth Monitoring Device. The aim of the programme was to identify what the benefits of using Telehealth would have on its residence, staff and local general practice that supports the residents within the home.

Prior to the programme commencing, local GP's were engaged by the Chronic Conditions team in order to raise awareness of the programme and the ways that it could be used within the community. One such general practice in the area, who worked closely with a residential care home, suggested that the device could be used to support their work. Heatherslade Bay Residential Care Home is located in a rural location in Swansea and accommodates up to 24 residents.

In early 2009, a Honeywell Genesis DM Telehealth Monitor was installed in the residential home, together with a multi-user swipe card reader.

The Chronic Conditions team reviewed all clinical notes and residents were asked to take a set of measurements (Blood Pressure, Spo2, Pulse) and answer a series of questions based on their clinical condition once a week (or more if deemed necessary). Residents were issued with an individual swipe card and a schedule was created for each resident, who on their designated day would swipe their card on the Telehealth device and take their measurements. All data was automatically transmitted via the homes telephone line and stored on a secure server. Data could be viewed via the web enabled Lifestream software application which could be accessed by the Chronic Conditions Team, the residential home and local general practice.

Data was initially viewed by the Chronic Conditions Team and information fed back to the residential home and local general practice when and if the residents data suggested there was a need for clinical intervention. However, once alert thresholds had been set around each resident's data, the matron at the residential home started to review the data daily herself. If a resident's data would exceed the set thresholds an alert would be triggered and the matron would contact the local GP. The GP would then be able to view the trend data via the Lifestream application on their PC in the practice and take appropriate action. All actions were recorded on the Lifestream application so that the Chronic Conditions Team could monitor and review on a regular basis.

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The Challenges

Prior to the Telehealth monitor being installed, and as none of the staff at the residential home have any medical training, when a resident would say they felt unwell the team would ask some basic symptom questions and would then call the local GP. The local GP would normally make a visit to the home to assess the resident. While much the same approach is still taken, the team at the residential home now have supporting data generated through the Telehealth device which can be provided to the GP to help them make a better assessment of the residents condition and determine the best course of action.

In one circumstance a patient who had recently been discharged from hospital, had woken feeling unwell with symptoms of increased breathlessness and poor mobility. Under normal circumstances the GP would be called out and without any other supporting data this may have resulted in a hospital admission. However, as the GP was able to view the patients data, together with the patient’s medication they were able to determine that the patients oxygen levels were within limits and it was felt that a visit from a District Nurse would be more appropriate than a hospital admission. As a result the resident was able to stay in their normal environment and the staff were reassured that he was receiving all the care that he required.

While always enthusiastic about the idea of using Telehealth within the home and the potential benefits that it might bring, there was some initial concern from the matron about where the device would be located, how much extra work it might create and the added responsibility surrounding gathering and reviewing the data. However, it

became clear early on to the team within the home that the device was compact and easy to use and that the extra workload was minimal. The schedule that the team devised meant that the numbers of residents taking measurements each day were staggered and that all measurements were taken by 11 am. This not only meant that the workload was spread across the week, but also that a house call could be arranged for the same day if required. As for the additional responsibility, Sharon the matron explains “I have no more responsibility; I now just have more information to pass onto the GP to help them identify the problem”.

The Programme Results and Outcomes

It is estimated that during the period that the monitor has been in the residential home, GP visits to the home have been reduced by up to 25%. The additional information generated through the Telehealth device has helped for better assessment of the resident’s condition, reduced unnecessary GP visits and helped determine the best course of action. In some circumstances, this has meant that a GP phone call has replaced the need for an actual GP visit.

In addition, staff, residents and the resident’s families have all gained a sense of reassurance from having the monitor in the residential home. Staff state that “we are not qualified nurses but we have learnt a great deal from using it [Telehealth monitor] with the residents”. Residents “feel more looked after” as they know that the GP has access to all of the information and it has now become part of their weekly routine. Resident’s family also gain a sense of reassurance. “The family feel like someone is keeping an eye on their relative, and that their health is not being resolved”.

Next steps and the future

The pilot has now ended, but the residential home is continuing to use the Telehealth monitor in conjunction with the GP practice and supported by the Chronic Conditions Team. The Chronic Conditions Team, who are successfully using Telehealth monitors in individual patients homes within the Swansea area, are hoping to expand the use of the multi user Telehealth device and are looking at placing a monitor into nursing homes within the Swansea area.

