COMMENT

Telecare: enhancing patient care

In its purest sense, telecare is a reactive service that produces alerts when someone encounters a difficulty. These alerts can be automatically generated or user generated and sent to either a call centre or a mobile phone. The alerts are derived from sensors, which can be worn by the patient or placed remotely (in a bed, on the floor, on the wall, etc.).

Traditionally telecare has been associated with social care areas and its main emphasis has been on its use with older and disabled people. For nurses, this has meant that, with the appropriate use of telecare, people can be discharged from hospital earlier and cared for in the community because they are able to raise an alarm should one be needed.

The traditional telecare sensors, many of which are wireless, include the pendant alarm (derived from warden call systems); fall sensors; bed occupancy sensors; movement sensors, inactivity monitors, heat sensors, smoke sensors, flood sensors, wandering sensors, pull cords and medication (pill) dispensers.

Lately there has been an increase in devices added to the telecare portfolio. Epilepsy monitors were included as were GPS monitors used to track the location of people with cognitive impairments who left their homes. The epilepsy sensor and medication dispenser were a turning point in telecare as this marked the overlap between health and care, and thus telehealthcare (commonly known as telehealth) was born.

Telehealth uses sensors to monitor basic health conditions. Examples of telehealth devices are blood pressure monitoring, blood glucose monitoring, cardiac arrhythmia monitoring, asthma monitoring, and medication reminder systems. The advantage of telehealth devices is that they promote self-care by enabling patients to manage, have control and maintain their own health. When a condition is potentially out of the normal range, health staff can remotely recommend changes to medication or lifestyles to bring the condition back into the normal range.

Telehealth use means that patients no longer have to visit hospitals to have their readings taken and this in turn frees nurse’s time to concentrate on patients who do require attention and should decrease hospital-acquired infections within its users. Telehealth and telecare can provide real-time information on a patient’s health and so can prevent further complications as well as alert nurses to previously undiagnosed health conditions.

The rise of the ‘app’ (smartphone applications) is also playing an important part in the maintenance of health. Many apps are available that can integrate with telecare or telehealth devices allowing the mobile phone to be the sender of information or the alert. The smartphone, and the internet in general, are now becoming the first place people go to for health information, the nurse’s role in information provision is changing. The introduction of new ways of working and tablet computers and large smartphones (phablets) also impact on the nursing care pathway. Tablets enable information to be taken and digitally recorded at the source. Ideally, the nurse who is in the community can record the data on a patient and this information can be sent to other health or social care staff. In hospital, tablets and other smart recording devices will speed up recording information and the production of reports and provide and clear audit trail.

The Department of Health’s Whole System Demonstrator (WSD) project, along with the Technology Strategy Board’s Assisted Living Innovation Platform (ALIP), are two of the main sources of information on developments within this area. Both projects reveal that health and care are to change and become more digital in the near future. The new technology is a positive for nurses allowing them to remotely monitor people. The use of Skype and other voice over internet protocol (VoIP) software allow patients to connect with nurses virtually. The NHS is changing, work practices are changing and telecare and telehealth are among the first things to be introduced to support people in maintaining and taking control over their own health.

Online resources
R CN telecare page: http://tinyurl.com/cvh7ku
Queens Nursing Institute telehealth page: http://tinyurl.com/b2h3ku
Telecare Aware: http://www.telecareaware.com/
Telecare Services Association: http://www.telecare.org.uk/
Whole Systems Demonstrator (WSD): http://tinyurl.com/ cm2h3ku
Assisted Living Innovation Platform (ALIP): http://tinyurl.com/f2zrnik
VOIP and the NHS: http://tinyurl.com/d5xwpl
Tablets in healthcare: http://tinyurl.com/cb2yvbn

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