



Hypertension management



Using telehealth in the management of Hypertension

Hypertension key facts

- Hypertension is the most common chronic disease in the UK and can lead to disability and premature death through stroke, heart attack and heart disease¹
- 40% of adults in England and Wales have hypertension and this increases with age²
- One in three adults have high blood pressure. Poor blood pressure control is estimated to cause 62,000 unnecessary deaths per year³
- Chronic Heart Disease costs the health care system in the UK around £3.2billion a year⁴

Using telehealth in the management of hypertension

A comprehensive hypertension care programme which incorporates telehealth provides a key enabler in the improvement of the health and well being for patients, as well as facilitating a reduction in non-elective hospital admissions, A&E visits and supporting early discharge.

Telehealth enables individuals to manage their hypertension effectively at home and can result in early diagnosis of health related problems, empowering patients to take a more active role in their care. The collection of vital sign data, in addition to the answers to symptomatic health interview questions supports clinical staff when evaluating the patient on a regular basis.

Sources and further reading

1. www.medscape.com/viewarticle/521162
2. NICE and the British Hypertension Society, hypertension in England and Wales 28/06/06
3. www.nature.com/jhh/journal/v17/n7/abs/1001581a.html;jsessionid=2D928D40D13023D71113A6CADA5E1EDF
4. Health economics research centre, www.heartstats.org/eucosts

Measuring vital signs and health interview questions

Recommended medical devices which measure the required vital sign data for hypertension patients include pulse oximeters, weighing scales and blood pressure devices.

Health interview questions are answered which give an overview of how the patient is feeling and are based on established clinical guidelines (NICE, Map of Medicine) and have been clinically verified by health professionals. Once the patient takes their measurements and completes the associated health interview questions the information is then automatically transmitted to the **icp triagemanager™** clinical software platform which supports validation of data, monitoring of health status and triaging.

Signs and symptoms associated with hypertension

Hypertension is a condition in which the blood pressure in the arteries is chronically elevated. The main goal of treatment for hypertension is to lower blood pressure to less than 140/90 mm Hg.

It is well known that drug therapy for hypertension reduces the risk of cardiovascular disease and death. Telehealth can identify changes to a patient's blood pressure allowing health professionals to titrate medication to ensure a hospital admission is avoided.

Telehealth monitoring can help to stabilise a patient's condition making it easier for the patient to adhere to treatment plans and changes in their lifestyle.



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Medication management

Regular analysis of telehealth data enables clinicians to see any changes to a patient's vital signs and relate it to the medication compliance questions on their health interview session.

The patient's telehealth data trends and health interview question results, facilitate health professionals to titrate medication dose and ascertain the most appropriate time to take the medication and monitor any side effects.

The **mymedic** telehealth monitor can be configured to remind the patient both visually and verbally at the relevant times of the day to take their medication and provides appropriate advice dependent on patient responses to health interview questions.

Blood pressure management

By tracking a patient's weight and blood pressure levels, the **icp triagemanager** clinical software can track changes and initiate proactive care-management. Should a patient's blood pressure rise, the health professional will be alerted to the changes and will initiate proactive medication management.

Anxiety and stress

Hypertension patients can be susceptible to increased anxiety and depression. Through daily telehealth monitoring, patients learn to recognise their symptoms which brings them reassurance and reduces their anxiety levels helping improve their quality of life.

Tele-coaching and education

Once the patient's condition has stabilised, they are more receptive to coaching and education. By providing the right information, patients can learn to self-manage their hypertension.

It encourages a more proactive relationship with health professionals, where the patient understands what to ask when speaking with health professionals.

Telehealth solutions

The recommended telehealth medical devices that monitor vital signs and support self-management for a hypertensive patient includes

- Pulse oximetry
- Blood pressure
- Weighing scales
- Hypertension daily health interviews and regional QoL surveys at 3,6 and 12 month intervals



Telecare solutions

In addition, patients can greatly benefit from a telecare service which consists of a Lifeline Connect+ home hub and a range of appropriate sensors which are linked to a 24/7 monitoring service, enabling patients to access help and support at any time of the day or night.

[Lifeline Connect+ and pendant](#)



For more information call 01977 660479.

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