

# Summary and Overall Assessment (HBTM 20131104)

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## Introduction

This evaluation is based on the Swedish Dental and Pharmaceutical Benefits Agency (TLV) commission from the government to conduct health technology assessments of medical devices. An evaluation at the national level can shed light not only on the individual care providers, but also on society as a whole through the utilisation of the ethical platform. It is very important that decisions and recommendations do not rely only on the principle of cost-effectiveness, but also take into account the other prevailing principles, namely the principles of human dignity and of need and solidarity, in accordance with the Health and Medical Services Act (1982:763).

## Method and target group

Home blood pressure monitoring (HBPM) involves patients with hypertension measuring their own blood pressure at home with the help of an automatic blood pressure monitor. HBPM should be seen as a complement to blood pressure measurement at a medical clinic. HBPM should be used to monitor blood pressure treatment by those patients who have been assessed as both eligible for and motivated to use the method.

## Disease severity

Hypertension is a serious, often lifelong, treatable risk factor for cardiovascular complications. The risk of these complications increases continually along with rising blood pressure. The TLV assesses that the level of severity for patients who receive treatment for their hypertension is moderate.

## Patient benefit

For people with high blood pressure, HBPM is just as effective in guiding anti-hypertensive medication as measurement at a clinic.

The TLV assesses that the patient benefit is good. There is a prevailing certainty about the treatment efficiency of the method.

HBPM is advantageous for motivated patients because of the greater convenience and fewer visits to the clinic. The patient's participation in their care can have a positive impact on the treatment results, but can also be felt to be a far too great responsibility, which can lead to increased worry.

**Cost-effectiveness**

HBPM, as a complement to blood pressure measurement at a medical clinic, can be a cost-effective method for measurement and monitoring of blood pressure for patients with hypertension. In cases of mild hypertension, there is an associated increase in cost of SEK 16 per patient-year, while for patients with moderate and severe hypertension, this method is associated with cost savings for society as a whole.

However, there is great uncertainty in the data that support this analysis as it is entirely based on a retrospective collection of data from patient records. The results of the analysis are sensitive to a number of different factors and there is a need for follow-up studies in order to see how HBPM affects the use of resources and the frequency of clinic visits.

**Follow-up and evaluation**

In order to gain a broader picture of how HBPM is used in practice by different county councils, a larger survey study of different care levels and with regional distribution would need to be designed. It has not been possible to implement this within the scope of this project.

As there are no Swedish guidelines for the HBPM method, these would need to be drawn up.

**Overall assessment**

HBPM can be offered as a complement to blood pressure measurement at a medical clinic to patients who are judged to be both eligible for and motivated to use the method. Patients who are not judged to be motivated or who, for other reasons, chose not to use HBPM, must be able to continue having their blood pressure checked at a medical clinic. The ethical consequences of introducing the method are assessed to be minimal under these conditions.

The organisations responsible for healthcare may thus consider whether or not to introduce this method for motivated patients.