

Empowering clinical practice by integrating hypertension data via patient self-monitoring

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"Calculation of average blood pressure values collected by patient's daily self-monitoring can provide a more reliable assessment of overall blood pressure control" explains Alexis En, Marketing Director, at OMRON Healthcare Singapore



Hypertension, the leading modifiable risk factor for stroke, heart attack, and dementia, continues to cast a looming shadow over Asia. Shockingly, poor awareness and undertreatment prevail in many countries and regions, contributing to nearly [3.7 million deaths](#) each year in Southeast Asia, East Asia, and Oceania. In Singapore, 26 people are diagnosed with stroke daily and the number of stroke episodes are [expected to rise](#) as the population ages.

Recent research conducted by OMRON Healthcare Singapore has revealed that monitoring blood pressure at home significantly reduces the risk of stroke. Regular measurement is essential due to hypertension's asymptomatic nature. Individuals with a family history of hypertension or stroke may benefit from home blood pressure monitoring by tracking trends, identifying risks, and making informed health decisions.

Alexis En, Marketing Director, at OMRON Healthcare Singapore shares further insights.

- **What is the significance of early detection and management of hypertension in preventing stroke and heart attacks?**

Early detection and management of hypertension are crucial when it comes to preventing stroke and heart attacks. Hypertension is a major risk factor for these conditions, and being proactive in managing it can make a significant difference.

It's important to recognize that hypertension is a 'silent killer' and often shows no symptoms, which is why regular blood pressure monitoring is so vital. Home blood pressure monitoring has emerged as a valuable tool in this regard. By closely monitoring our blood pressure and promptly addressing any unusual changes with the supervision of your doctor, one can effectively manage hypertension and mitigate its risks. For instance, when diagnosed early, appropriate management strategies can be implemented under the guidance of the doctor — including lifestyle modifications (such as a healthy diet, regular exercise, weight management, and stress reduction) and medication if necessary. Hence, by controlling blood pressure within a healthy range, the risks of stroke and heart attacks, can be significantly mitigated.

- **What is the difference in effectiveness between home blood pressure monitoring and clinic measurements? How do they compare?**

Home blood pressure monitoring and clinic measurements offer distinct advantages, complementing each other in blood pressure management.

Clinic measurements usually provide a single snapshot of blood pressure at a specific moment, and while they are essential for professional evaluation, home monitoring offers significant benefits. Home blood pressure monitoring enables individuals to track their blood pressure over an extended period, allowing people to collect and record multiple readings easily. This allows for the calculation of average blood pressure values, which can provide a more reliable assessment of overall blood pressure control. As such, we are seeing doctors increasingly asking patients to monitor their blood pressures at home for further evaluation of treatment plans.

Beyond this, home monitoring empowers individuals to take control of their health and track their blood pressure in the comfort of their own environment. Connected digital blood pressure monitoring devices take it one step further — providing a user-friendly solution for monitoring blood pressure with the help of an app and thus providing the doctors with useful health data that they can act upon. OMRON's latest [data review](#) (November 2021 to October 2022) has demonstrated the effectiveness of home monitoring, with improvements in average Systolic Blood Pressure (SBP) observed over a 12-month period among hypertensive individuals who tracked their readings regularly with help from the OMRON connect app.

By combining both home blood pressure monitoring and clinic measurements, individuals can have a more comprehensive understanding of their blood pressure and make informed decisions in collaboration with their doctors. This holistic approach maximizes the effectiveness of blood pressure management and supports individuals in their journey towards better health.

- **How often is considered often enough in terms of blood pressure monitoring?**

The frequency of blood pressure monitoring depends on individual circumstances — for instance, whether the person has been diagnosed with hypertension, or how often their blood pressure fluctuates. It is important to determine the regularity of monitoring in consultation with a healthcare professional.

However, regular monitoring is generally recommended. Our data review underscores the advantages of regular monitoring, as it allows for early detection of potential health issues. It can also increase awareness of blood pressure control and motivate individuals to make lifestyle changes or adhere to medication regimens.

As a general rule, measurement twice a day — once in the morning after waking up, and once in the evening before sleeping is recommended. To establish trends, it is also recommended to measure at the same time of the day to limit the variables as much as possible. In particular, the 'BP Diary' function within OMRON connect app also demarcates blood pressure readings in the morning and evening so that users can see their own blood pressure trends at different times of the day. Moreover, the app offers an additional feature where users can conveniently view the average of BP data smoothly by month or week. This

allows individuals to track their blood pressure trends over a longer period and gain a better understanding of their overall blood pressure health.

- **Which segments of society in particular can benefit from regular blood monitoring?**

Regular blood pressure monitoring is beneficial for various segments of society, especially those at higher risk of hypertension and related complications. Those with a family history of hypertension and/or stroke should monitor their blood pressure regularly. Individuals with pre-existing medical conditions and older adults above 40 should also regularly monitor their blood pressure to manage any unforeseen risks.

That said, hypertension can affect anyone — regardless of age or background. Thus, we encourage everyone to monitor their blood pressure at regular intervals to proactively maintain their health.

- **OMRON Healthcare's "Going for Zero" vision – how can we do our part?**

OMRON Healthcare's commitment to achieving the "Going for Zero" vision of global cardiovascular and cerebrovascular events is deeply ingrained in our work philosophy. We actively contribute to this pledge by developing innovative, connected, and affordable digital blood pressure monitoring devices, along with a range of other health devices such as monitors with ECG measuring capabilities, body fat monitors, weighing scales, and more.

Our commitment extends beyond product development, and we collaborate closely with various medical associations to raise awareness about the importance of home blood pressure monitoring and provide device donations for blood pressure screening.

We firmly believe in the power of regular blood pressure monitoring and empowering individuals to take proactive steps in managing their hypertension effectively. Individuals can actively participate in their health management journey and join us in the important movement of "Going for Zero", while helping to spread awareness about the importance of blood pressure monitoring, stroke prevention, and healthy lifestyle practices within the community.

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