According to the fourth and the fifth Thai National Health Examination Survey during 1999 and 2014, the prevalence of hypertension (HT) increased from 21.4% to 24.7% in 5 years. Also, the non-diagnosed HT in high blood pressure individuals and uncontrolled HT in treated patients were still high (44.5% and 40.3%, respectively). Recently, several national guidelines have recommended Home blood pressure monitoring (HBPM) as a screening-diagnosis and treatment-follow up tools for HT control in clinical practice. A randomized controlled study in Thai HT patients revealed that HBPM could improve the rate of uncontrolled HT in elderly patients significantly at one year follow up.

Home Blood Pressure Telemonitoring (HBPT) has shown the benefit over usual office blood pressure measurement in HT control in recent systematic review. Therefore, the HBPM device with the internet interface will possibly solve the problem of manual record and report. As well, it will help to improve HBPM training since we can remotely track the usage of HBPM device and collect all the data from all hospitals nationwide.

To assess the effectiveness of HBPT on implementation of HBPM into clinical practice, we conducted a program call “TeleHealth Assisted Interventions: Home Blood Pressure Monitoring Nationwide Pilot Project (THAI-HBPM)”. We invited 84 hospitals across the country. One physician and two nurses per hospital attended the 2-day HBPT training program (10th and 11th August 2016). The HBPT device (Uright TD 3128 and Uright telehealth program: www.taidoc.com) was provided and started the HBPM program on 12th August 2016 with academic support and technical support from our division and the device company. We also set up a two-way communication between each participant and the support groups on internet with “LINE” group and on-the-job video training on “YouTube” for reviewing our HBPM training materials. At 10th month after the training, we had the first 1,400 HBPM patient’s data available for the analysis of HT subtype and drug prescription patterns among Thai hypertensive patients. The details of data will be discussed in the symposium.

We concluded that the HBPM training for improving HT control in Thailand should be facilitated with telehealth system as online friendly, two-way education, and technical support for all physicians, nurses and healthcare personals.

Keywords: Hypertension, Telehealth, Home blood pressure monitoring