

แบบสำหรับอสม. ใช้บันทึกการวัดความ

ดันโลหิต

โครงการการคัดกรองและวินิจฉัยความดันโลหิตสูงในชุมชน เพื่อการป้องกันโรคหลอดเลือดสมอง ด้วยการวัดความดันที่บ้านโดยใช้เทคโนโลยีสารสนเทศ

ชื่อ อสม..... โรงพยาบาล..... ผู้ดูแล อสม.....

วันที่เก็บข้อมูล	ชื่อ-สกุล	เพศ	อายุ (ปี)	เบอร์โทรฯ มือถือ หรือเลข บัตรประชาชน 13 หลัก	ที่อยู่	เวลาที่วัดความดัน	ผู้วัดความดัน	ความดันโลหิตที่วัดได้		ชีพจร	≥ 140/90 ให้เครื่อง BP ไว้	วันนัดรับคืนเครื่อง	หมายเหตุ
								ค่าบน	ค่าล่าง				
		<input type="checkbox"/> หญิง					อสม						
		<input type="checkbox"/> ชาย					วัดเอง						
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		<input type="checkbox"/> ชาย					วัดเอง						

การแปลผล HBPM จากโปรแกรม
Uright ใน
conecttelehealth.com
สมเกียรติ แสงวัฒนาโรจน์ พบ.

Japan Society of Hypertension 2014 guidelines.

Hypertension Research (2014) 37, 266–278

Untreated (No anti-HT)

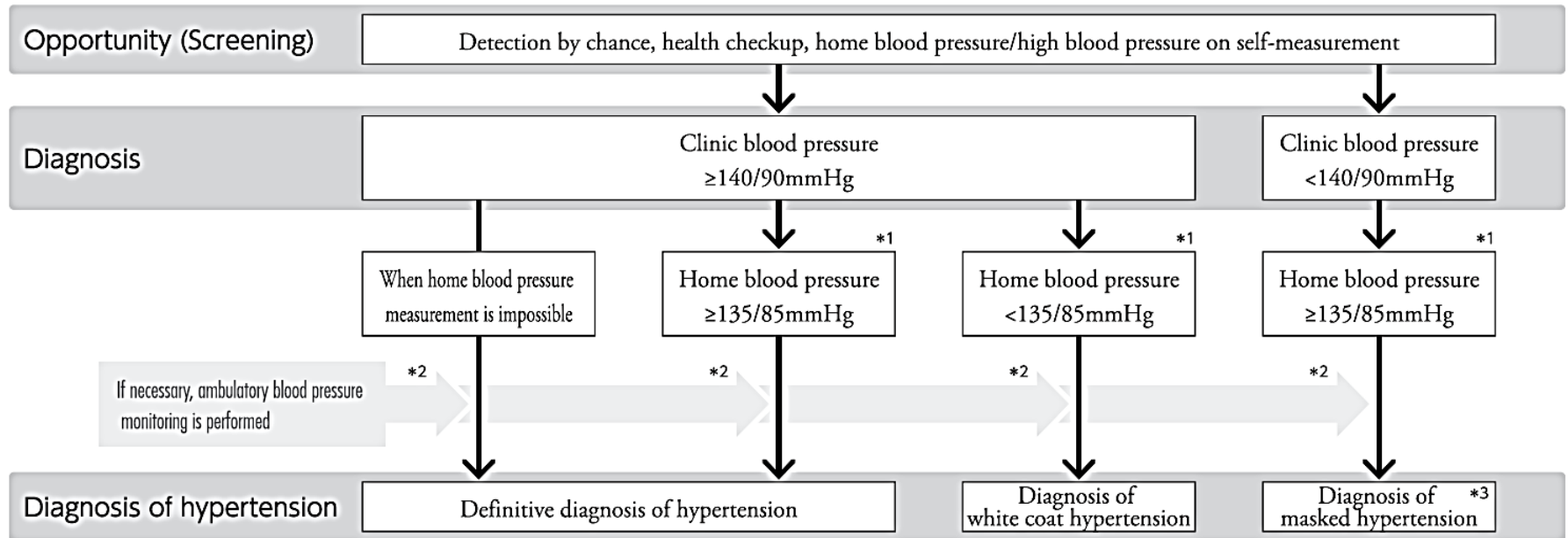
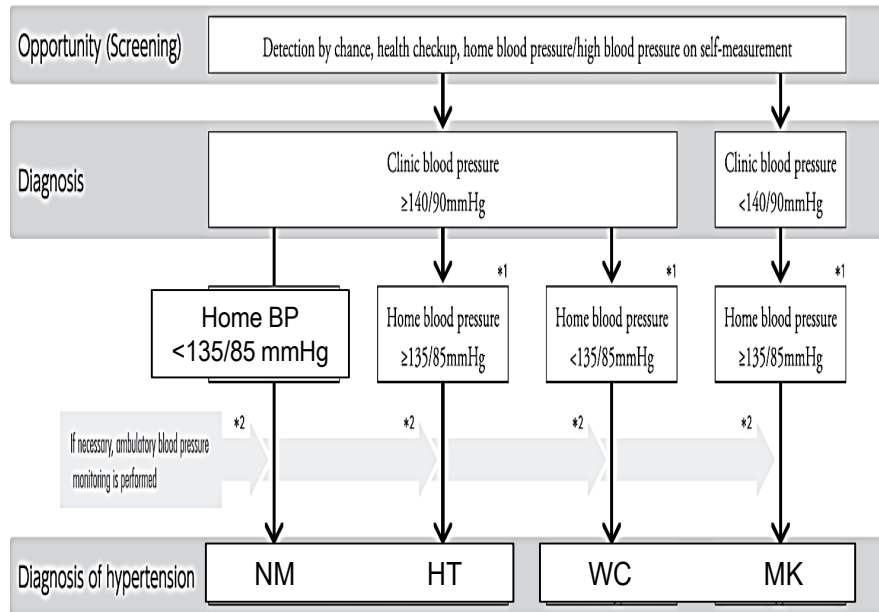


Figure 2-1 Blood pressure measurement and procedure for hypertension diagnosis. *¹When a clinic blood pressure-based diagnosis differs from a home blood pressure-based diagnosis, the latter should be predominantly adopted. The blood pressure obtained by self-measurement refers to that measured using an automatic sphygmomanometer located in a public facility or at the workplace/pharmacy. *²Criteria for hypertension regarding ambulatory blood pressure (ABP) include a mean 24-h blood pressure of 130/80 mmHg or more, a mean daytime blood pressure of 135/85 mmHg or more and a mean nighttime blood pressure of 120/70 mmHg or more. When ambulatory blood pressure monitoring (ABPM) is possible, patients meeting one of the above criteria are regarded as having hypertension or masked hypertension. When all values are below the above criteria, patients are regarded as normal or having white coat hypertension. Indication for ABPM is shown in Table 2-4. *³Although this diagnostic procedure is applicable for untreated hypertensive subjects, it must be considered that masked hypertension is also present in hypertensive individuals receiving treatment. A full color version of this figure is available at the *Hypertension Research* journal online.

Japan Society of Hypertension 2014 guidelines.

Hypertension Research (2014) 37, 266–278

Untreated (No anti-HT)



Treated (On anti-HT)

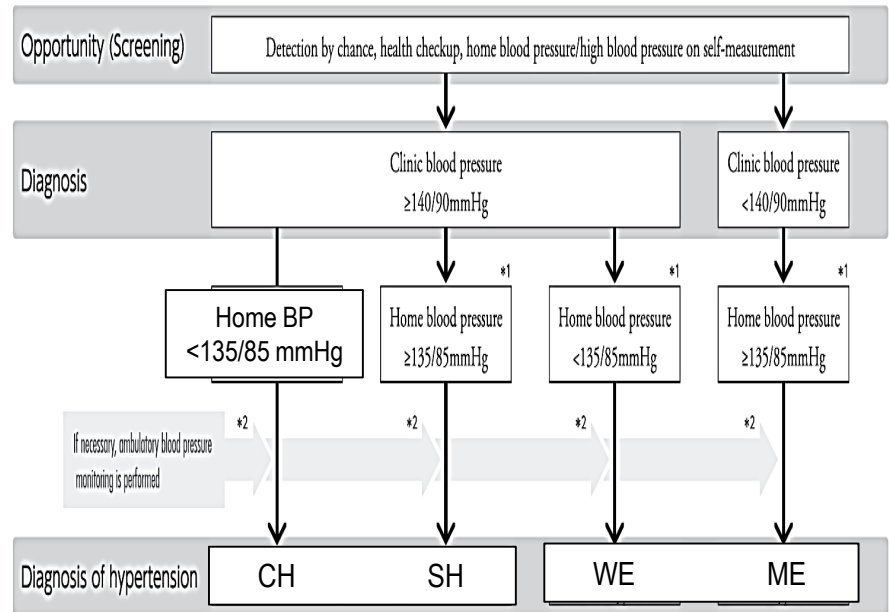


Figure 2-1 Blood pressure measurement and procedure for hypertension diagnosis. ^{*1}When a clinic blood pressure-based diagnosis differs from a home blood pressure-based diagnosis, the latter should be predominantly adopted. The blood pressure obtained by self-measurement refers to that measured using an automatic sphygmomanometer located in a public facility or at the workplace/pharmacy. ^{*2}Criteria for hypertension regarding ambulatory blood pressure (ABP) include a mean 24-h blood pressure of 130/80 mmHg or more, a mean daytime blood pressure of 135/85 mmHg or more and a mean nighttime blood pressure of 120/70 mmHg or more. When ambulatory blood pressure monitoring (ABPM) is possible, patients meeting one of the above criteria are regarded as having hypertension or masked hypertension. When all values are below the above criteria, patients are regarded as normal or having white coat hypertension. Indication for ABPM is shown in Table 2-4. ^{*3}Although this diagnostic procedure is applicable for untreated hypertensive subjects, it must be considered that masked hypertension is also present in hypertensive individuals receiving treatment. A full color version of this figure is available at the *Hypertension Research* journal online.

NM= Normotension

HT = Hypertension (HT)

WC= White Coated HT

MK= Masked HT

CH= Controlled HT

SH= Sustained HT

WE= HT with WC Effect

ME= HT with MK Effect

European Society of Hypertension

Guidelines for BP monitoring at home. Parati G. J Hypertens 2008;26:1505

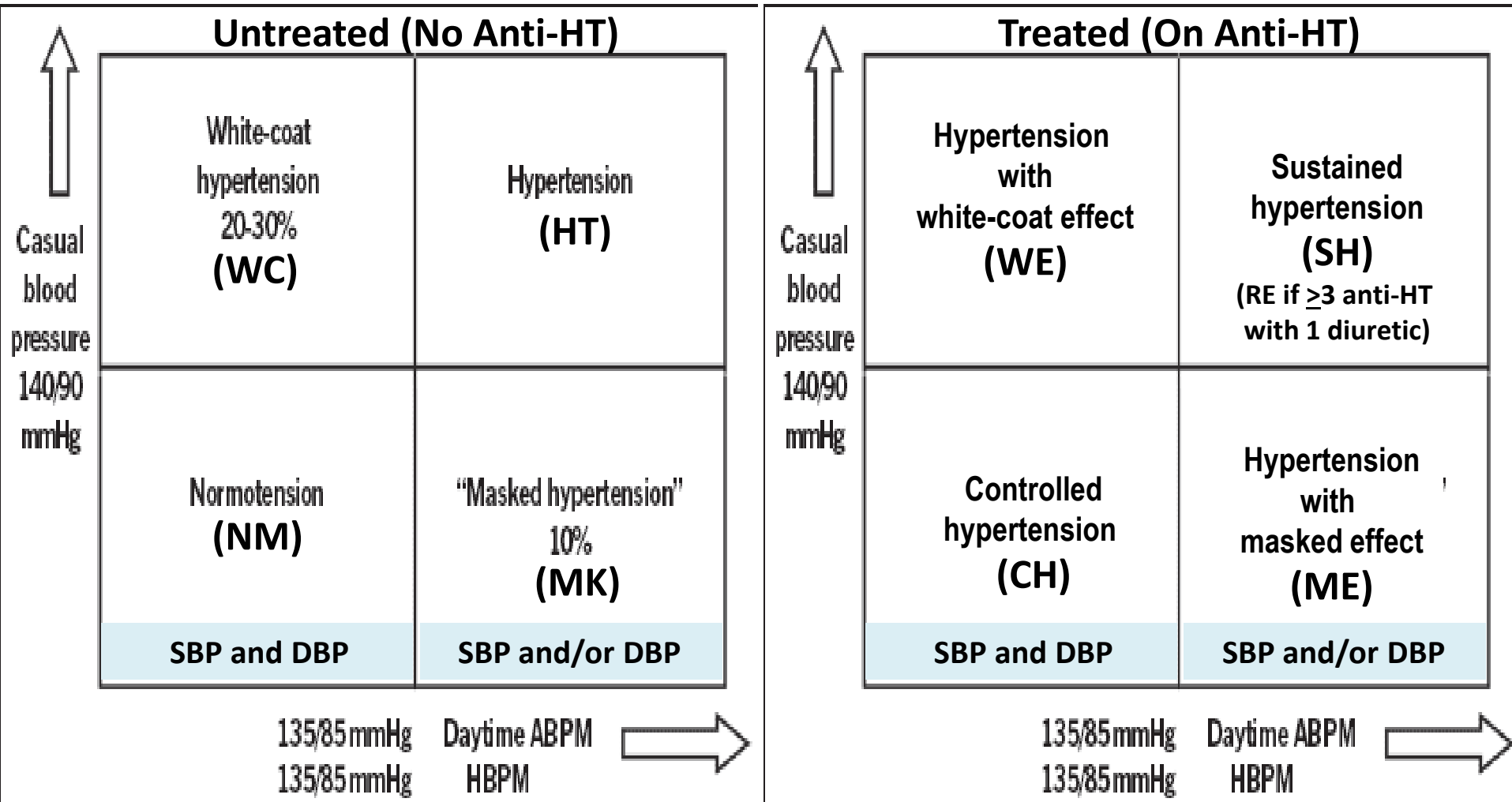


Fig. 1 - Diagnostic possibilities according to casual blood pressure measurement and by ABPM during daytime or HBPM.⁶⁷⁻⁶⁸

CODEs

- HT = HT_(No Anti-HT), SH = Sustained HT..(1D = on 1 Anti-HT)
- WC = White Coat HT_(No anti-HT)
- WE = HT with White Coat Effect _(On anti-HT)
- MK = Masked HT_(No anti-HT)
- ME = HT with Masked effect _(On Anti-HBP)
- RE = Resistant HT
- NM = Normotensive _(No Anti-HT)
- CH = Controlled HT _(On Anti-HT)
- Q = Question เช่น ขาดข้อมูลยา, ขาดCBP, ขาดHBP
- 2R = Long-term HBPM without randomization

European Society of Hypertension

Guidelines for BP monitoring at home. Parati G. J Hypertens 2008;26:1505

		Untreated (No Anti-HT)	
↑ Casual blood pressure 140/90 mmHg	White-coat hypertension 20-30% (WC)	Hypertension (HT)	
	Normotension (NM)	"Masked hypertension" 10% (MK)	
	SBP and DBP	SBP and/or DBP	
	135/85 mmHg	Daytime ABPM	→
	135/85 mmHg	HBPM	

- ตัวอย่างผู้ไม่ได้กินยาความดัน
- CBP 146/88 mmHg.
- HBP 138/86 mmHg.
- สรุป Dx:
CBP(SBP>140) +
HBP(SBP/DBP>135/85)
= HT

Fig. 1 - Diagnostic possibilities according to casual blood pressure measurements and by ABPM during daytime or HBPM. 67-68

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Guidelines for BP monitoring at home. Parati G. J Hypertens 2008;26:1505

- ตัวอย่างผู้ที่ กินยาความ
ดันฯ

- CBP 166/80 mmHg.

- HBP 156/88 mmHg.

X Dx by SBP: SH

X Dx by DBP : ME

- ✓ CBP >140 and / or

- ✓ HBP >135 **SH**

- สรุป Dx: ?

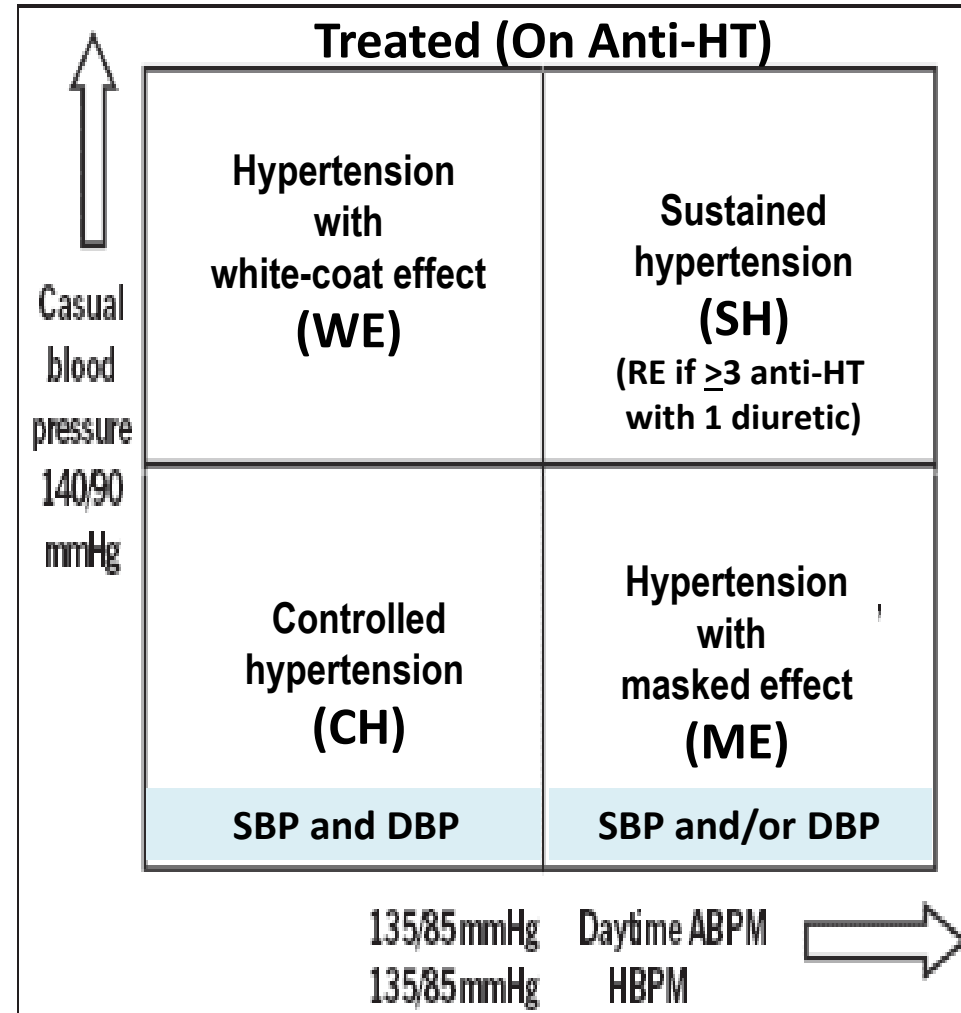


Fig. 1 - Diagnostic possibilities according to casual blood pressure measurement and by ABPM during daytime or HBPM.⁶⁷⁻⁶⁸

ตัวอย่างการแบ่ง HBPM เป็น ๘ กลุ่ม
ย่อยในโปรแกรม Uright telehealth

Case 1



King

[Patient Management](#) >> [Measurement](#) >> Data of Other Measurement Type

Patient ID : [3220200268...](#)

Name : นางสาวสุกร...

Birthday : 04/02/1963

▶ Blood Glucose Data

▶ Blood Glucose Diary

▶ Blood Glucose Chart

▶ Blood Pressure Data

▶ Blood Pressure Chart

▶ Temperature Data

▶ Temperature Chart

Data of Other Measurement Type

Query
Period

Date Range : All

From :

Query

Export

Print

Send Message

Tch (Unit : mg/dl)

No data

Add Data

TG (Unit : mg/dl)



- ▶ Weight/Body Fat Chart
- ▶ Abnormal Date Correction
- ▼ Data of Other Measurement
- Type

Add Data

HDL-ch (Unit : mg/dl)

No data

Add Data

Cr (Unit : mg/dl)

No data

Add Data

waist (Unit : cm)

<u>Measurement</u>	<u>Date</u>	<u>Test Result</u>	<u>Note</u>	<u>Delete</u>
	13/03/2017	86	ไม่มียา	Delete

Add Data

	119	68	71	<p>Mean HSBP = $(135.8 \times 17) + (133.5 \times 19) / (17 + 19)$ = 134.5 mmHg. (<135)</p> <p>Mean HDBP < 85 mmHg.</p> <p>Mean CBP = 147.3/93 mmHg.</p> <p>So. Dx: White coat HT, no Med. or WCOD</p>			141	79	79
15/03/2017	155	89	77				137	78	77
	164	100	80	132	75	76			
	171	97	78	137	81	77			
14/03/2017	127	75	79	143	82	80			
	124	76	80	150	86	81			
	126	75	79	162	92	83			
	127	78	82						
13/03/2017				146	87	86			
				① 150	95	86			
				143	90	86			
				① 150	100	86			
Average	135.8	79.5	75	147.3	93	86	133.5	75.8	79

Statistics	Wake-Up 03 ~ 08			Morning 08 ~ 11			Noon 11 ~ 14			Afternoon 14 ~ 19			Evening 19 ~ 03		
	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse
Average	135.8	79.5	75				147.3	93	86				133.5	75.8	79
Maximum	171	100	82				150	100	86				162	92	85
Minimum	119	68	69				143	87	86				118	68	74
Standard deviation	15	8.6	4				2.9	4.9	0				9.9	5.9	3
Count	17	17	17				4	4	4				19	19	19
Above Target	7	0					4	0					6	0	
Within Target	10	4					0	4					13	2	
Below Target	0	13					0	0					0	17	

Case 2

King Chulalongkorn Me x +

connecttelehealth.com/MeasureData/OtherPhyMapping.aspx?PageAutoID=15929#Menu=UL21B00&BMenu=IC21000

Weight Body Fat Chart

Abnormal Date Correction

Data of Other Measurement

Type

Add Data

HDL-ch (Unit : mg/dl)

Measurement Date	Test Result	Note	Delete
14/12/2015	63		Delete

Add Data

Cr (Unit : mg/dl)

Measurement Date	Test Result	Note	Delete
14/12/2015	0.85		Delete

Add Data

waist (Unit : cm)

Measurement Date	Test Result	Note	Delete
26/09/2016	94	Losartan 50 mg 2 เม็ด/วัน 3.00 บ/วัน Amlodipine 10 mg 1 เม็ด/วัน 1.41 บ/วัน รวม : 4.41 บ/วัน 26/09/16	Delete

Add Data

Search for anything

9:02 29/3/2560

05/10/2016	163	80	68																	
04/10/2016	154	78	85															148	76	80
03/10/2016	149	74	68															130	67	80
02/10/2016	141	74	76															125	69	81
01/10/2016	149	76	77															140	69	83
	148	77	79																	
30/09/2016	163	86	76															136	72	77
																		135	69	73
																		136	66	76
29/09/2016	153	78	74															148	72	72
Average	152.5	77.9	75															137.3	70	78

Dx: ?

Dx: 1. HT with masked effect 2 Meds. (ME2D)

Dx: 2. ?Obstructive sleep apnea(OSA)

Date Range:28/09/2016~28/09/2016 (Last 2 Week)

Measurement Date	Wake-Up 03 ~ 08			Morning 08 ~ 11			Noon 11 ~ 14			Afternoon 14 ~ 19			Evening 19 ~ 03		
	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse	Systolic Pressure	Diastolic Pressure	Pulse
28/09/2016							🚫 125	70	73						
							🚫 129	71	73				136	67	77
							🚫 132	73	74				130	67	77
Average							128.7	71.3	73				133	67	77



LINE: HBPM training