### Protocol on combination of medications for management of hypertension for grassroot's health facilities

(According to Guideline on management of hypertension for commune health stations under Decision No5904 /QD-BYT dated 20 December 2019 by the Minister of Health)

- 1. The protocol on combination of medications for hypertension is an example that easily to be implemented by commune health stations that have just implemented hypertension management program.
- 2. If the patients are transferred from higher levels (at stable stage with protocol that the medications are available at CHSs) then follow the protocol of the higher levels.
- 3. If hypertension level 2 then starting from steps 2 (combining 2 types of medications).
- 4. If there is only one type of medication then increase the dose util target treatment is met. If maximum dose used but targeted blood pressusre is not yet obtained then referring patients to higher levels.
- 5. Always educating and counselling patients for healthy lifestyles.
- 6. If targeted blood pressure is not yet obtained then checking the utilization of medications, chaging lifestyes and combination of medications.

## **Targeted BP** (measured at a health facility)

- Systolic PB: 120 mmHg to < 130 mmHg in people < 65 years old and from 130 mmHg to < 140 mmHg in people ≥ 65 years old, can be lower if possilbe.
- Diastolic BP from 70 mmHg to < 80mmHg.

# Step 1. Initial treatment HTN is confirmed and requested pharmaceutical treatment and there are no criteria for referral Actively changing lifestyle. Prioritization of application Step 2. Revisit after 4 weeks If BP are above targeted BP >5-10 mmHg, then: Combination of Step 3. Revisit after 4 weeks If BP are above targeted BP >5-10 mmHg, then: Combination of

### Step 4. Revisit after 4 weeks

If BP are above targeted BP >5-10 mmHg, then:

- Checking whether appropriate medications and dozes are used?
- Increase doze of combination medications
- Refer to specialist

Long lasting medications using 1 time per day are prioritized. Combination-fixed dose pills should be used. Paying attention to contraindication.

Amlodipine 5mg or Nifedipine retard 20mg

> Enalapril 5mg x 2 times, or Lisinopril 5mg, or Perindopril 5mg, or

Ramipril 5mg, or
Irbesartan 150mg, or
Losartan 50mg, or
Telmisartan 40mg, or
Valsartan 80mg.

Hydrochlorothiazide 12.5 mg, or Indapamide 1.5mg.

#### In each visit:

If targeted BP obtained or just < 5mmHg higher: Keep the same doze and actively changing lifestyle.

If Systolic BP <110mmHg in two visits: cut down to the dose before.

If side effects or abnormal seen, then contact HCWs immediately for changing medications or modifying doze