



HEARTS

IN THE AMERICAS Regional Workshop

Punta Cana, Dominican Republic
May 14-17, 2019



PAHO



**World Health
Organization**





HEARTS

IN THE AMERICAS
Regional Workshop

Blood Pressure Devices and Efforts for Blood Pressure Control

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PAHO



World Health Organization



Largest modifiable risk factor for CVD

Accurate BP measurement is among the most important medical tests

Lowering high BP will improve CVD outcomes

Essential products and investigations

Essential technologies/lab investigations	Tools
stethoscope blood pressure measurement device* measuring tape weighing machine (scale) glucometer blood glucose test strips urine albumin test strips urine ketones test strips	BMI chart
Add, when resources permit:	
blood cholesterol assay lipid profile serum creatinine assay serum potassium haemoglobin a1c urine microalbuminuria test strips	

*Validated blood pressure measurement devices with digital readings are preferable.

Validated = Accurate

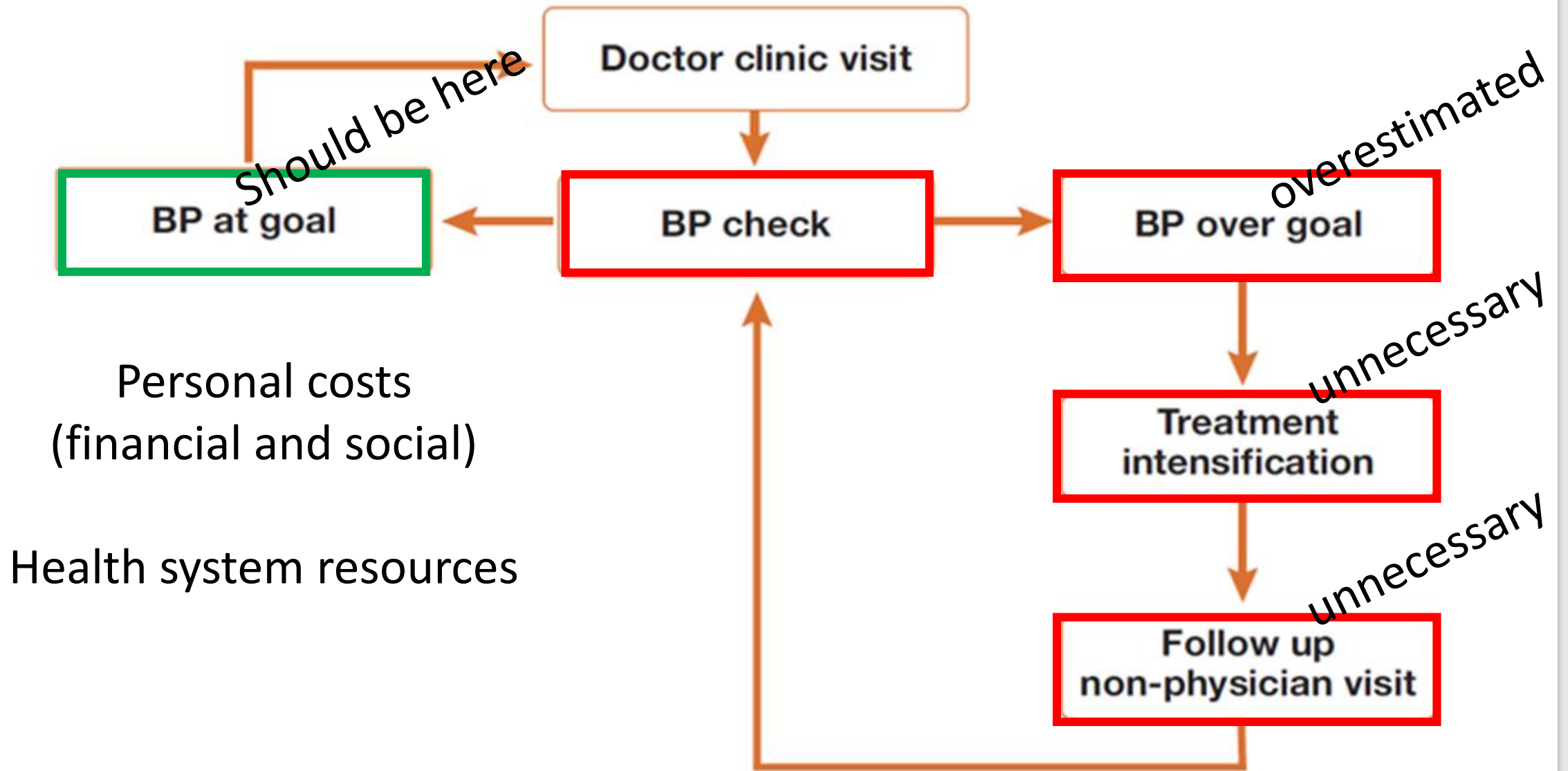
(more likely to be accurate)

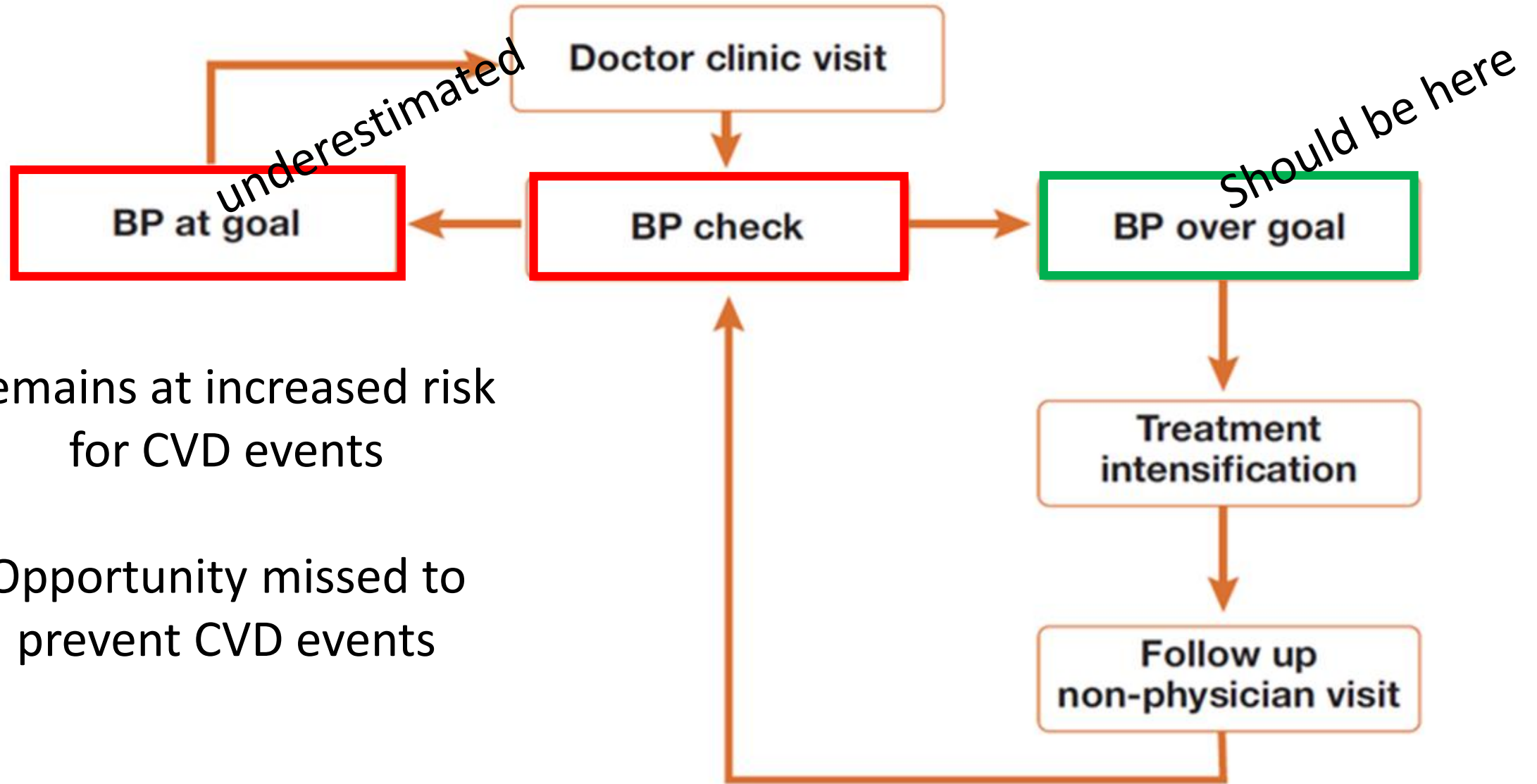
Approach to care of
individuals is highly
dependent on BP level

Hypertension diagnosis

$\geq 140/\geq 90$ mmHg

(2 visits, different days)





Each example of BP
inaccuracy.....

INCREASED COSTS
IMPAIRED HEALTH
OUTCOMES

Individual and Society



Technical package for cardiovascular disease management in primary health care



Systems for monitoring

Other possible effects within HEARTS...

Incorrect data

HEALTH FACILITY

SUBNATIONAL

NATIONAL



LEVELS

True effect of interventions?

Future planning?



Is it even a
problem in
the Americas?



Access to BP devices in different regions
Supply chains (online/retail)
Regulatory pathways
Personal use vs health facility level
Extent of home BP monitoring

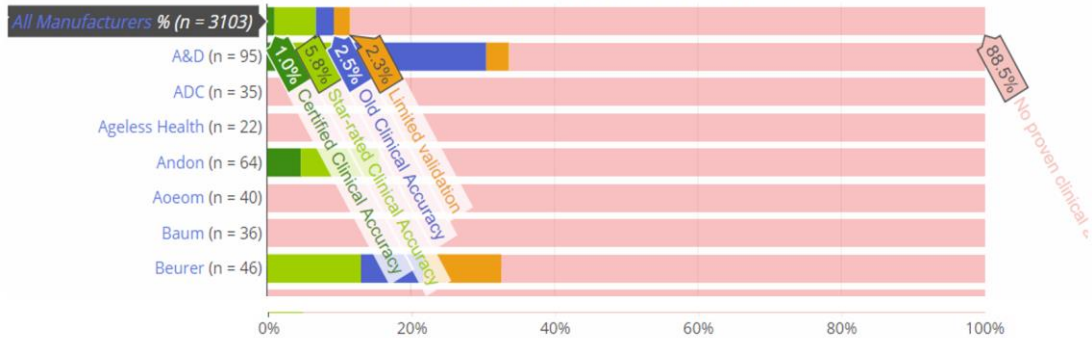
Availability of BP devices via worldwide online shopping?

Case study: Australia



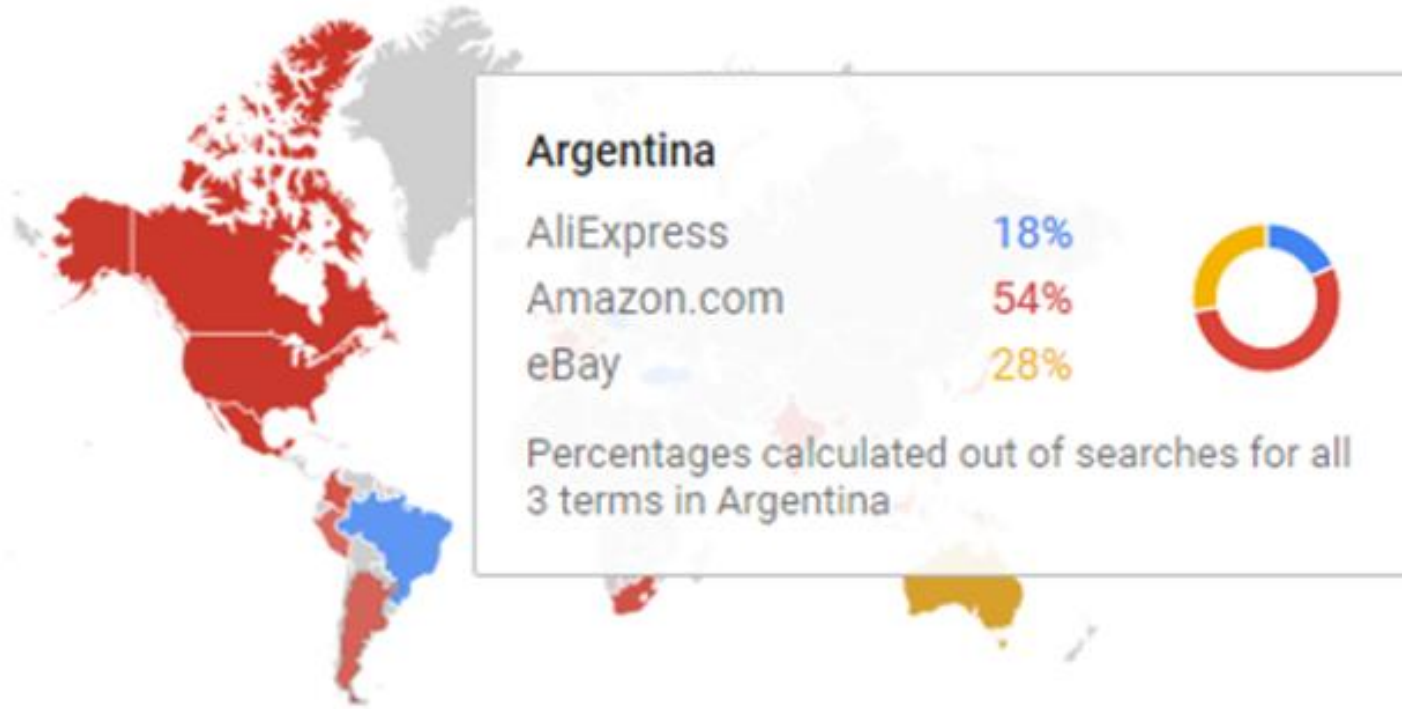
88.5% no proven clinical accuracy

Manufacturers with 20+ BPMs listed on Madaval
Percentage of Clinically Accurate Blood Pressure Monitors



50
from
972

ss ● Amazon.com ● eBay



AliExpress (popular in South America & Eastern Europe)

Top 25 BP devices
NONE VALIDATED

(13 upper arm/12 wrist cuff)

50,292 sales

\$13.60 USD

(average cost)



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