WORLD HEART FEDERATION®

Global CVD Roadmaps

WHF Roadmap for reducing cardiovascular premature mortality

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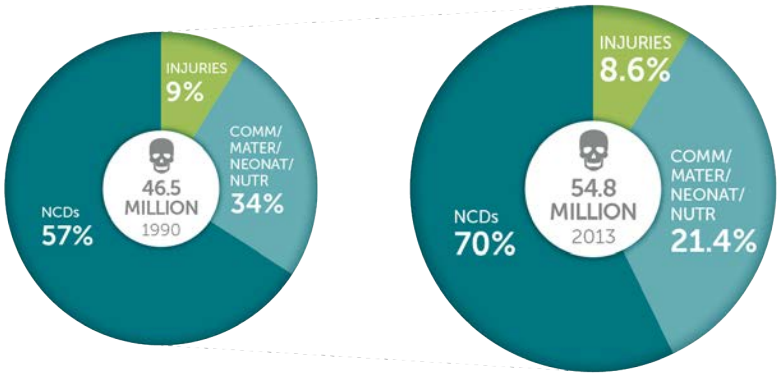
Outline

- Rationale
- Description
- Update on ouputs/activities
- Way forward
- Access

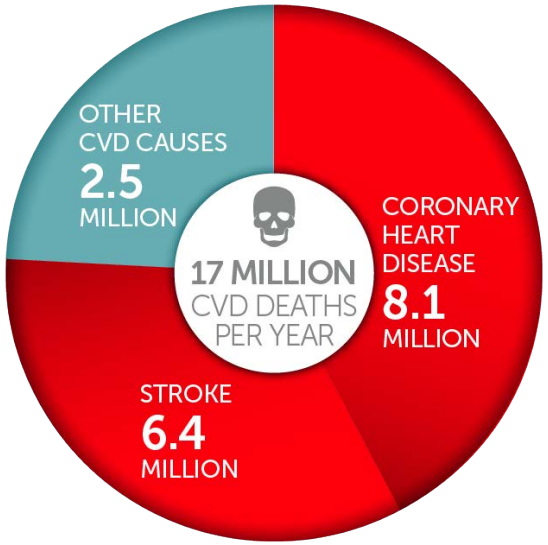
The global burden of non-communicable diseases (NCDs) and cardiovascular disease (CVD)

SHIFT OF CAUSE OF DEATH IN THE LAST 20 YEARS

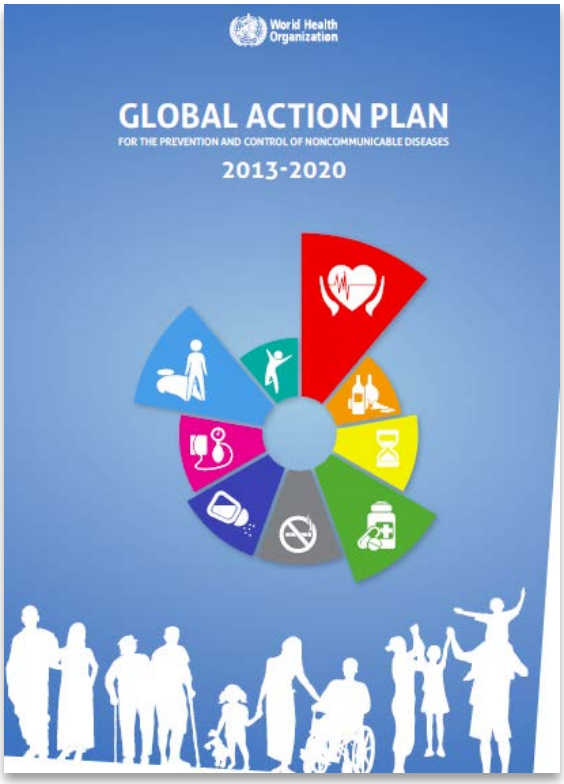


Worldwide, NCDs account for two thirds of global deaths

CVD alone causes 1 in 3 deaths globally,

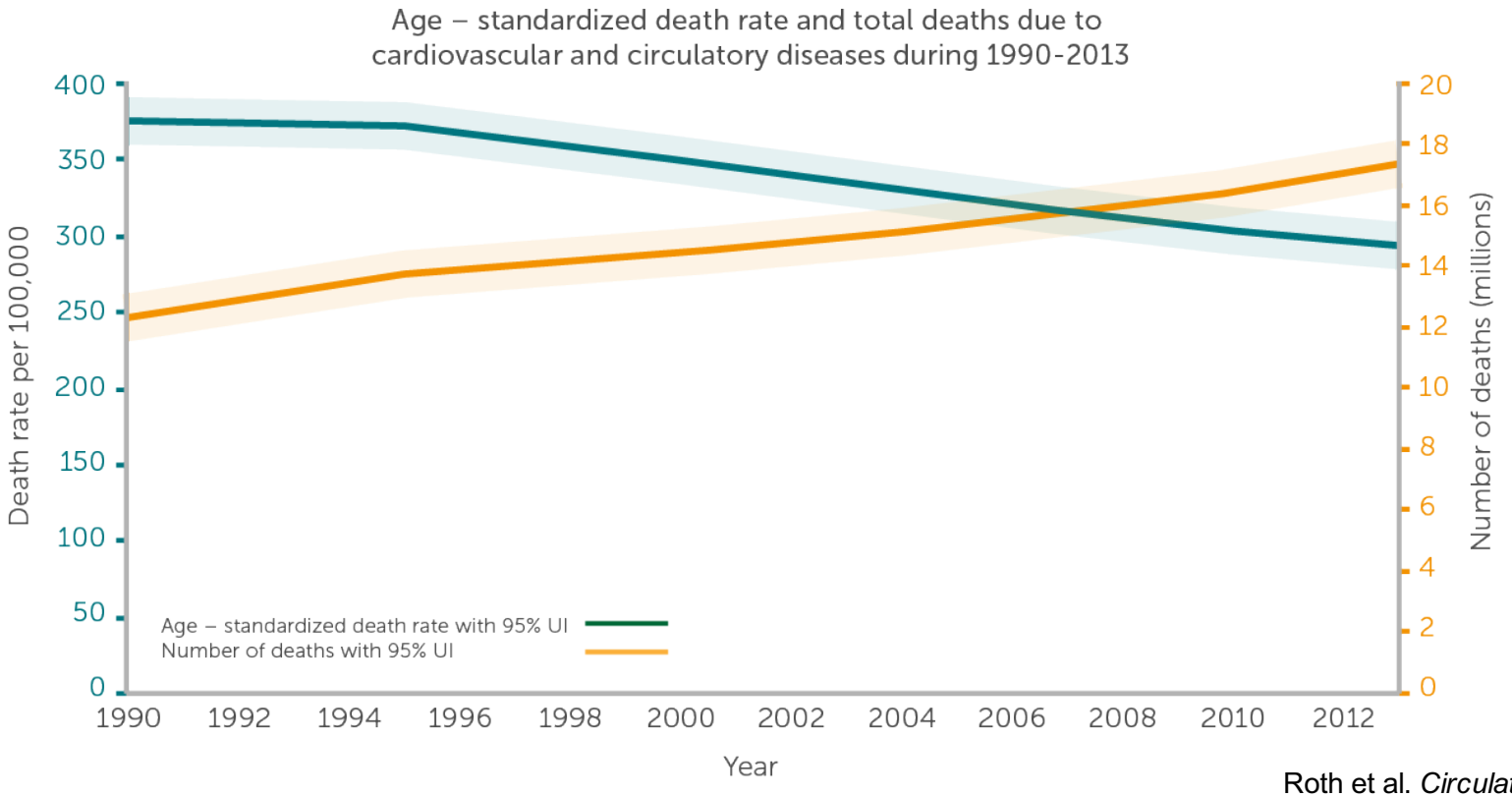


WHF Goal 25 by 25



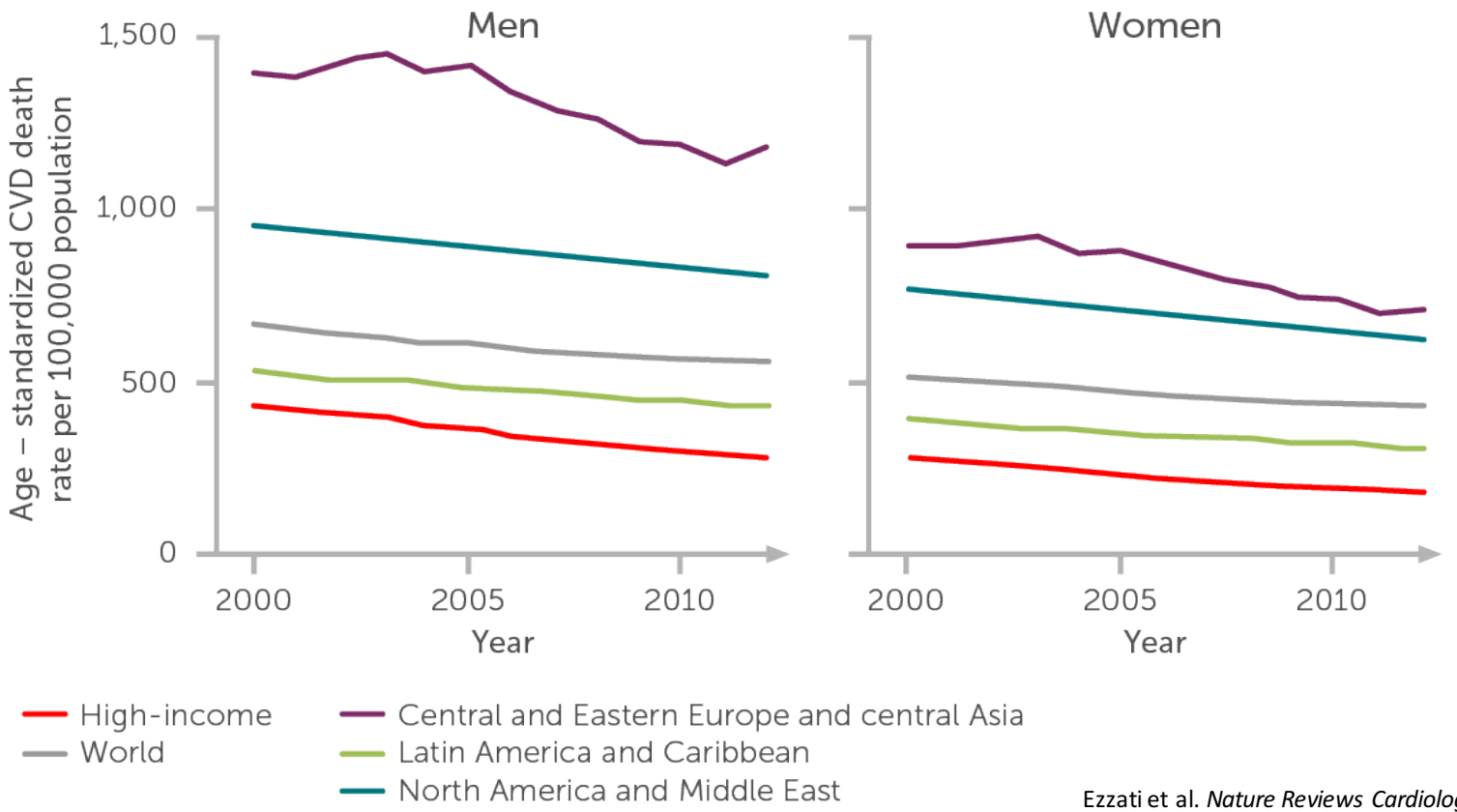
A **25%** relative reduction in risk of premature mortality
from cardiovascular diseases, cancer, diabetes, or chronic
respiratory diseases.

Absolute numbers are increasing but rate is decreasing



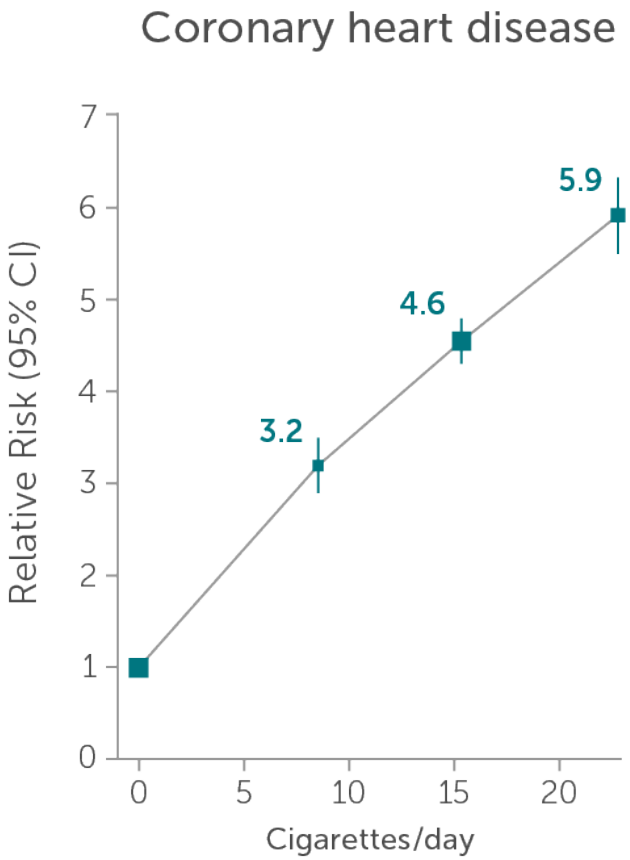
Roth et al. *Circulation*, 2015.

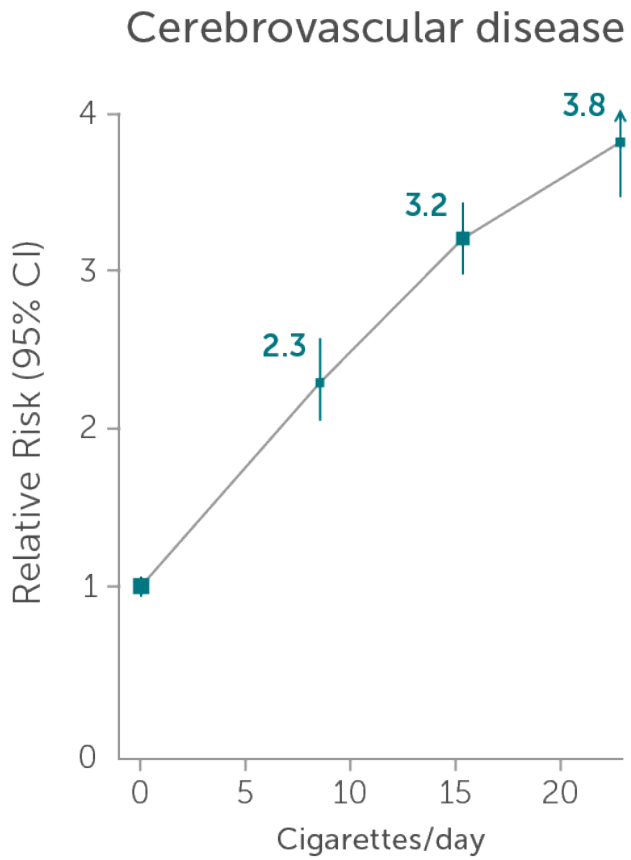
Trends in cardiovascular mortality



Ezzati et al. *Nature Reviews Cardiology* 2015

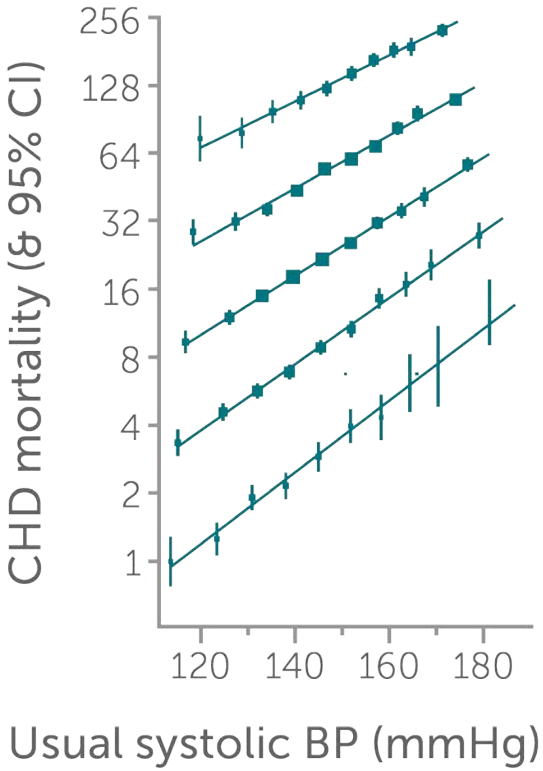
Smoking and vascular mortality





Lancet 2013;381:133

Hypertension and CHD mortality

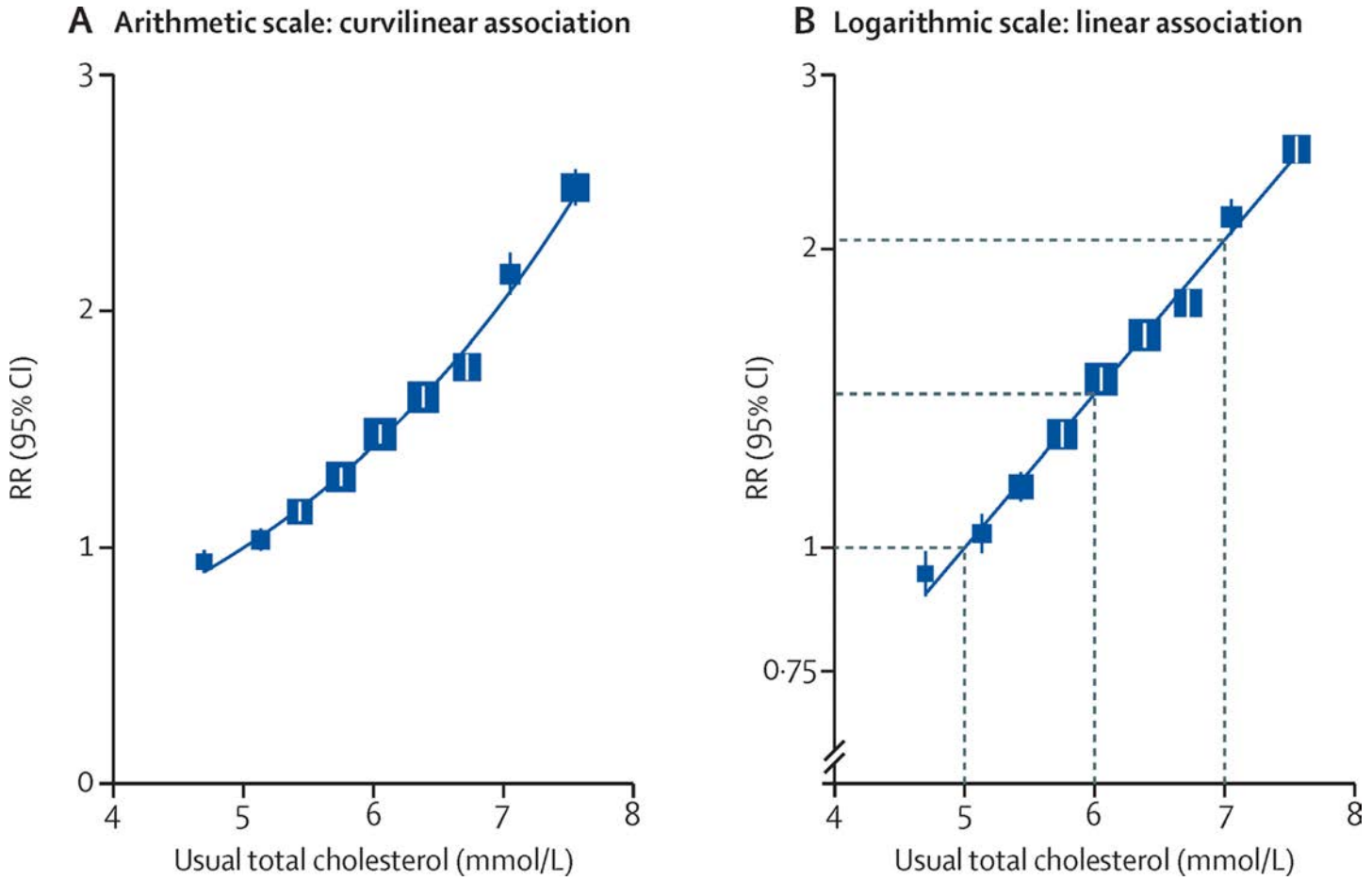


Age		
80-89	[illegible]	risk
70-79	[illegible]	risk
60-69	[illegible]	risk
50-59	[illegible]	risk
40-49	[illegible]	risk

At middle age a 20 mmhg difference in SBP associated with a twofold increase in CHD mortality

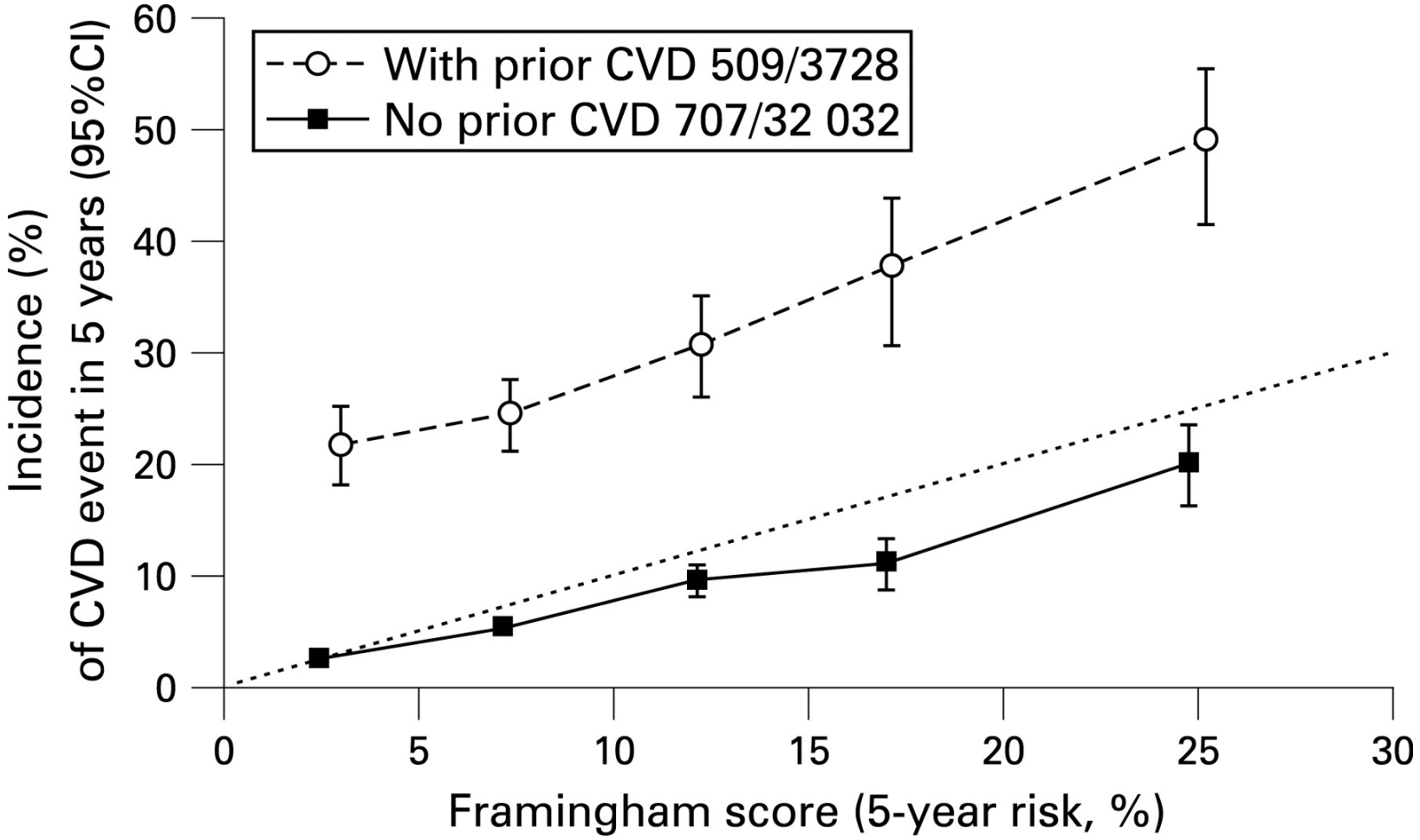
PSC, Lancet 2002; 360:1903

Cholesterol and CHD mortality



The Lancet 2016 388, 2532-2561DOI: (10.1016/S0140-6736(16)31357-5)

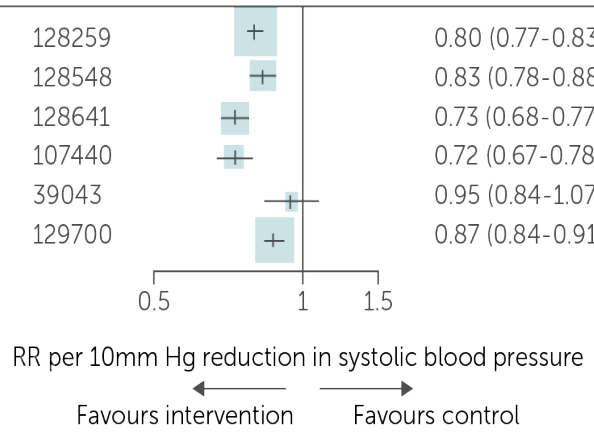
Estimated five-year incidence of a new cardiovascular disease (CVD) event by five-year



A J Kerr et al. Heart 2009;95:125-129

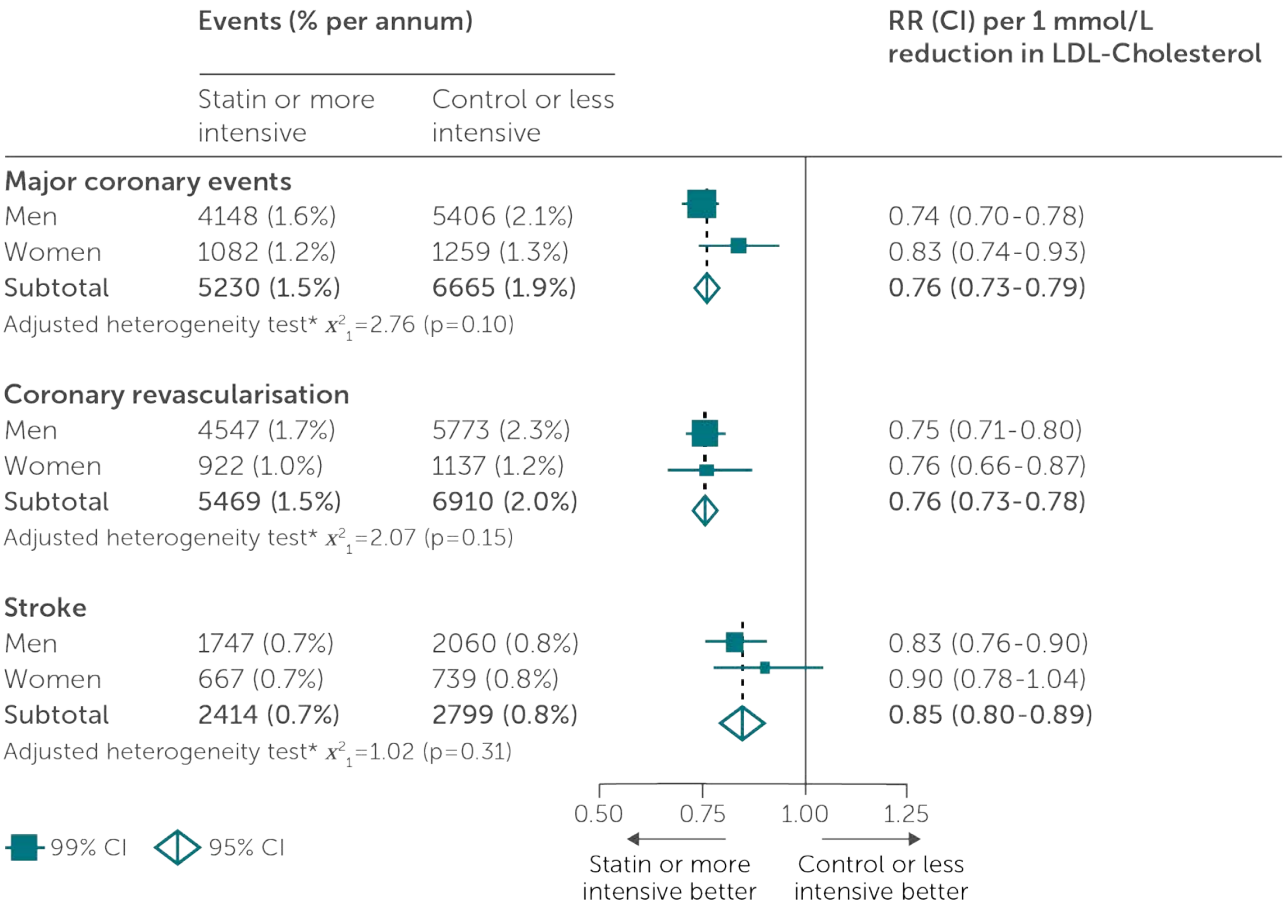
Hypertension treatment

	Studies	Intervention		Control		RR (95% CI) per 10mm Hg reduction in systolic blood pressure
		Events	Participants	Events	Participants	
Major cardiovascular events	55	13209	137319	14068	128259	0.80 (0.77-0.83)
Coronary heart disease	56	4862	136986	5301	128548	0.83 (0.78-0.88)
Stroke	54	4635	136682	5378	128641	0.73 (0.68-0.77)
Heart failure	43	3284	115411	3760	107440	0.72 (0.67-0.78)
Renal failure	16	890	39888	834	39043	0.95 (0.84-1.07)
All-cause mortality	57	9775	138298	9998	129700	0.87 (0.84-0.91)



Ethetad *LANCET* 2016

Effect of statins



CTT LANCET 2015

Secondary Prevention Treatments

	RRR	Event rate
None		8%
ASA	25%	6%
Blockers	25%	4.5%
Lipid lowering	30%	3.0%
ACE-inhibitors	25%	2.3%

CUMULATIVE BENEFITS 75% RRR

Yusuf LANCET 2002

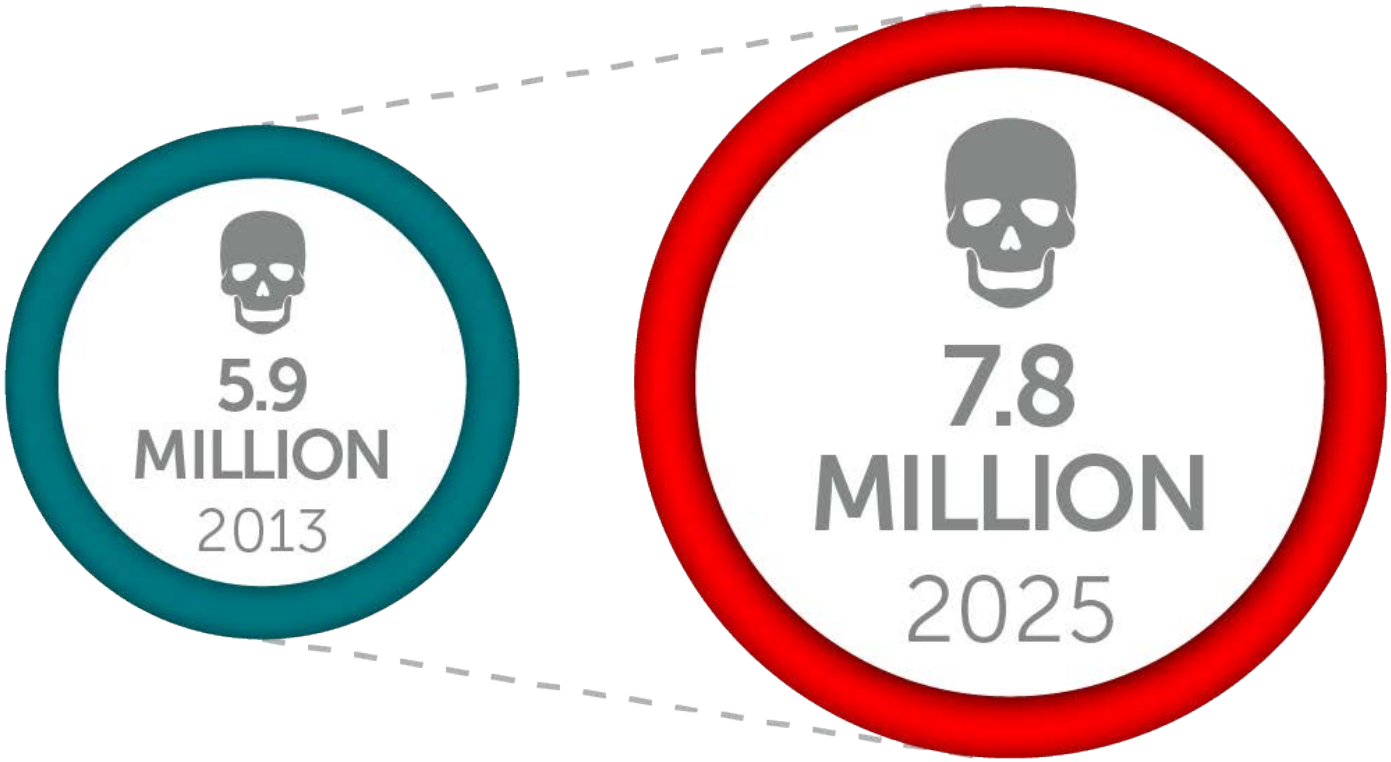
Trend is going down

We know the causes of CVD

We know how to treat these causes

So….?

Premature mortality

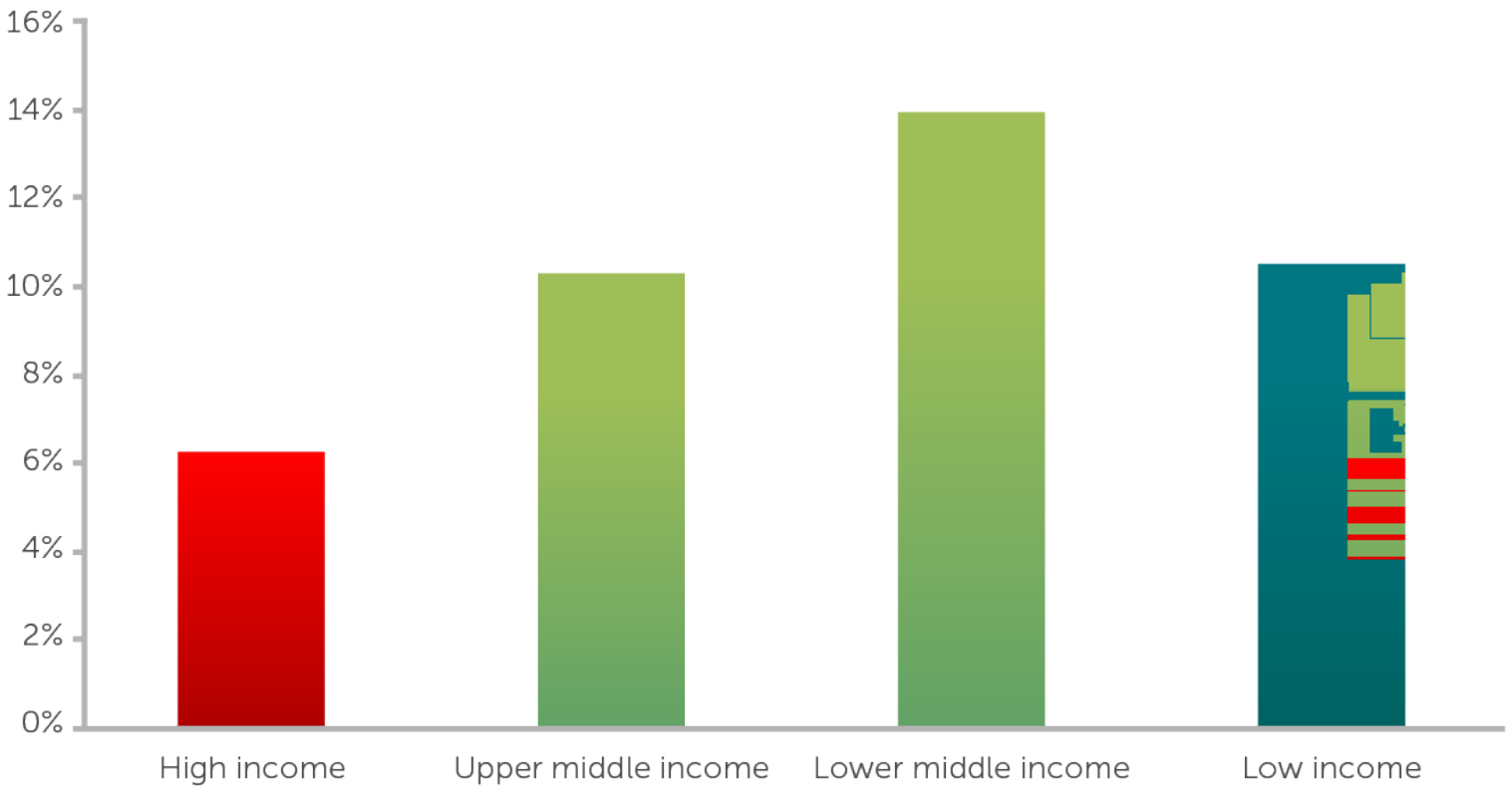


Roth et al. *Circulation*, 015.

The Global CVD Burden

Low- and middle-income countries (LMICs) are most affected
– 80% of CVD deaths take place in LMICs

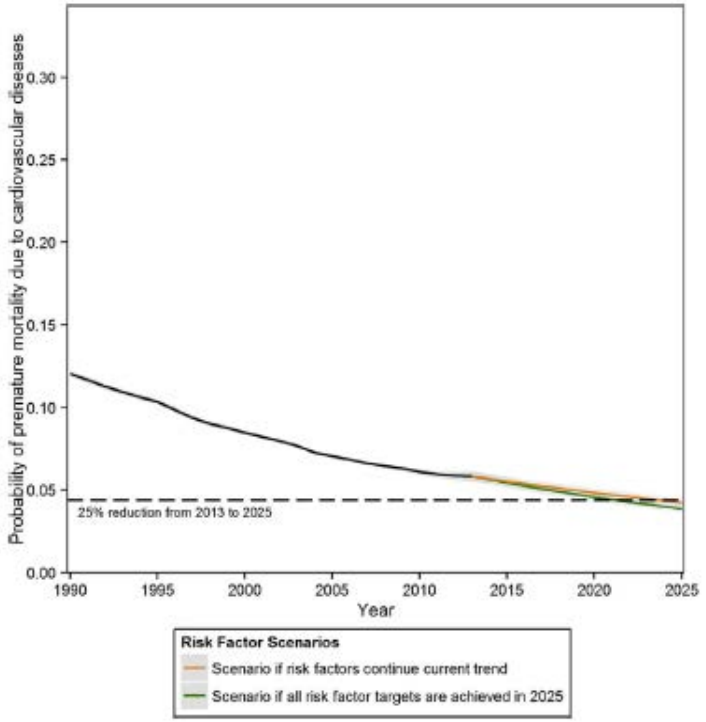
Probability of premature CVD mortality

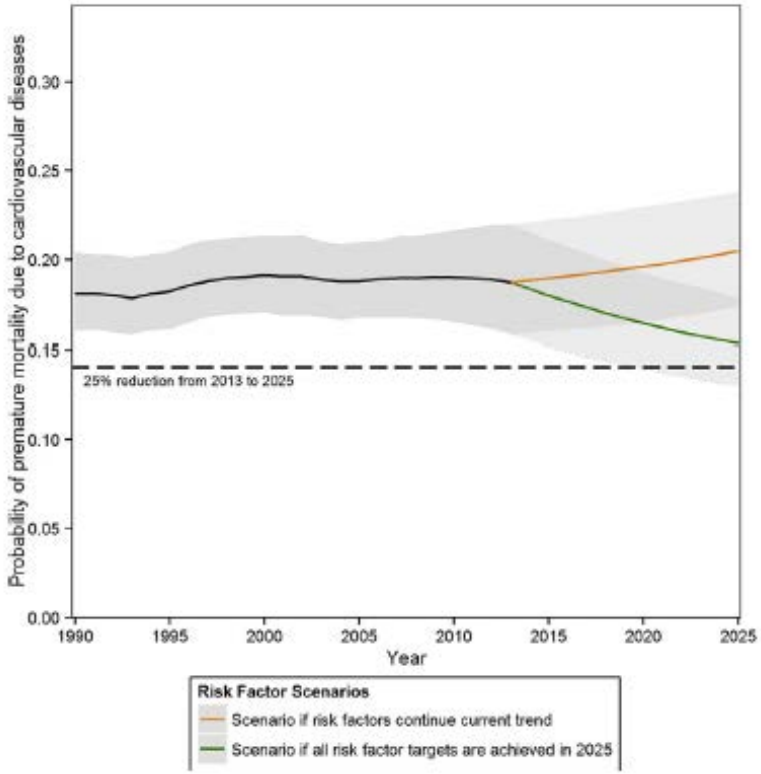


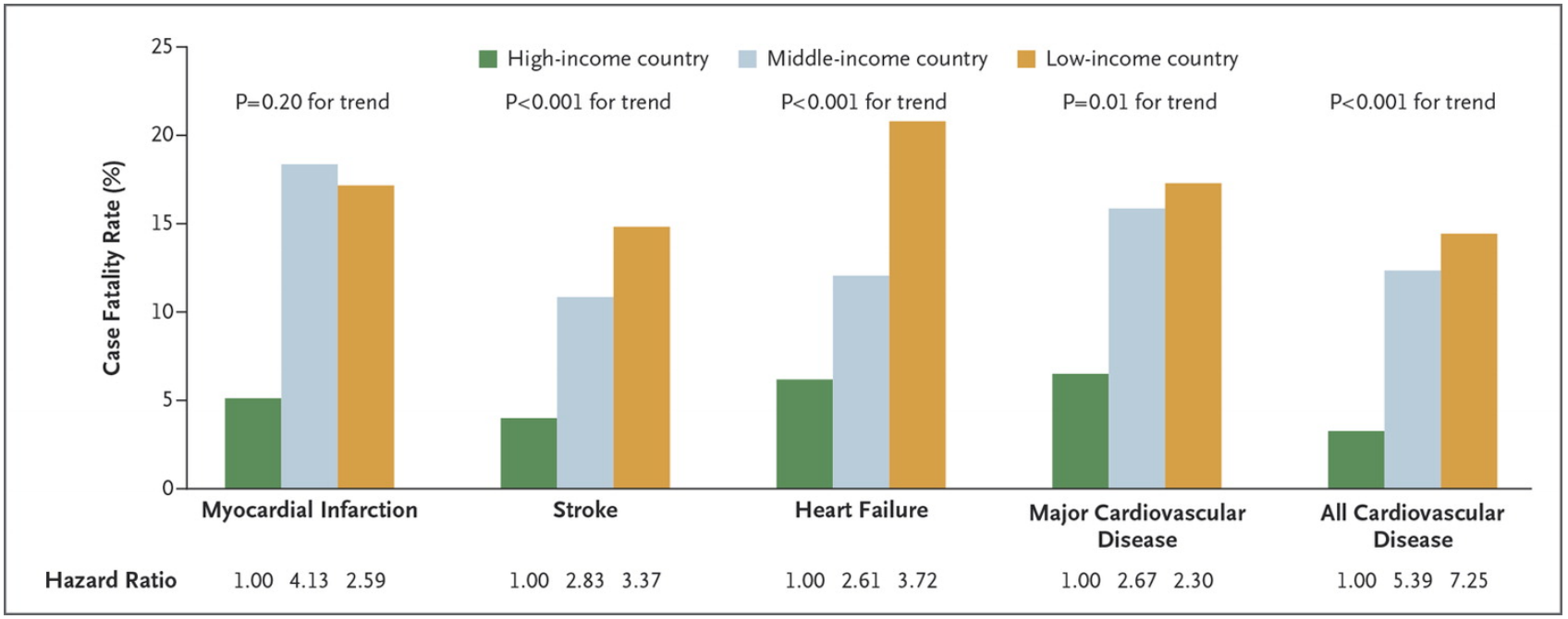
WHO 2012

Probability of premature CVD in men

High income countries versus South Asia (1990 to 2025)





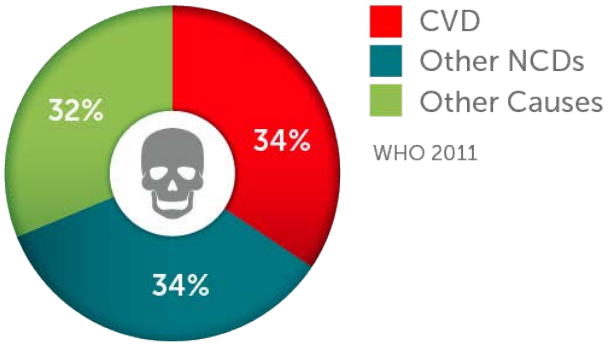


Yusuf S et al. N Engl J Med 2014;371:818-827.

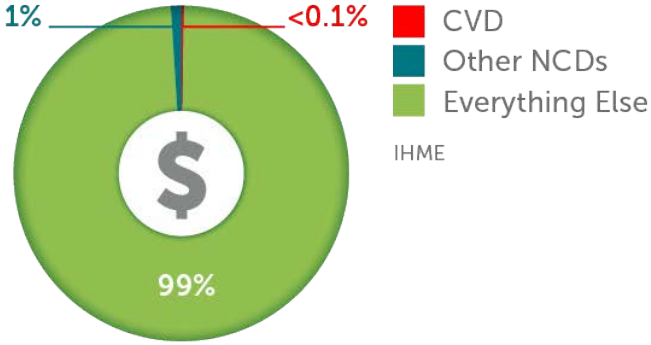
The NEW ENGLAND JOURNAL of MEDICINE

Lack of development funding

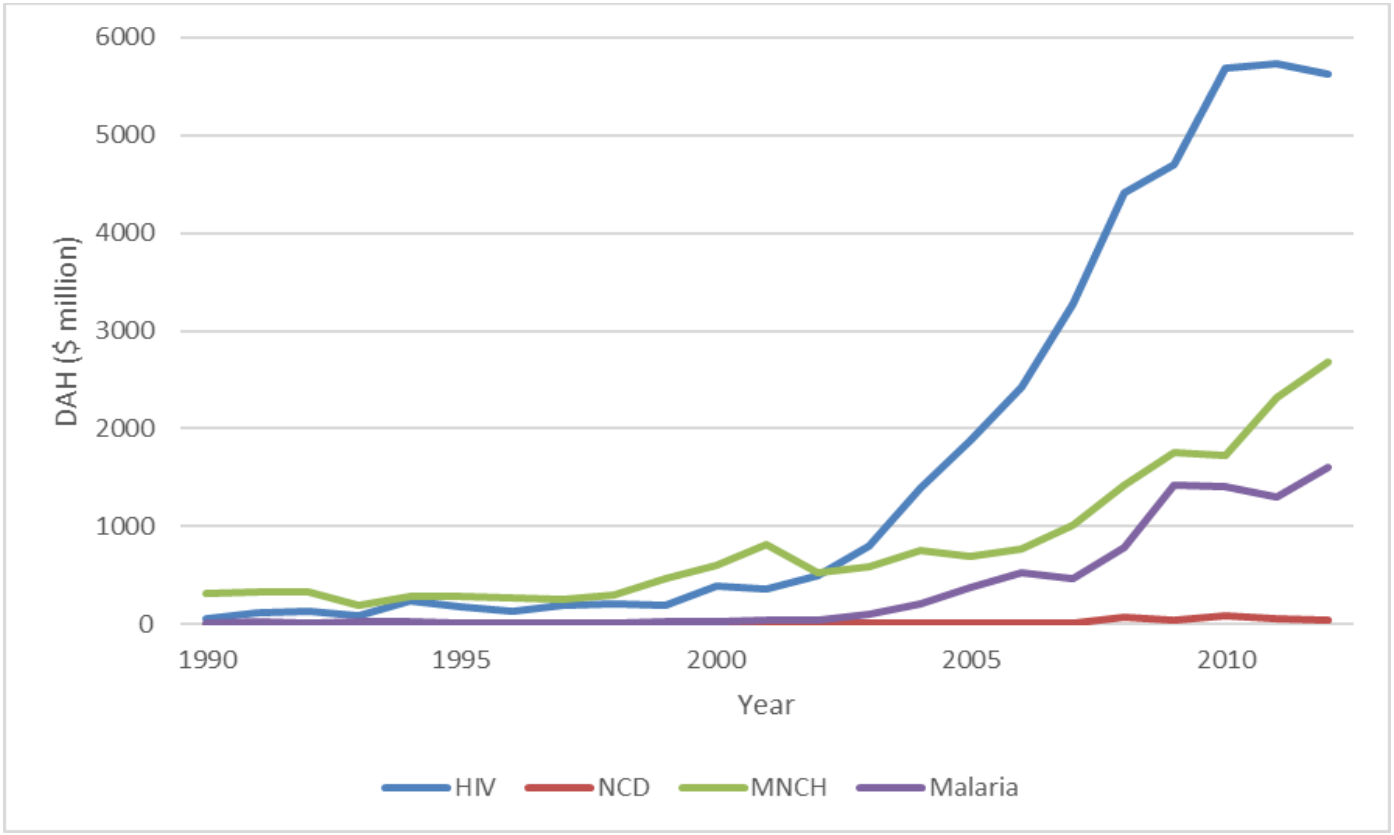
NCD MORTALITY VS OTHER



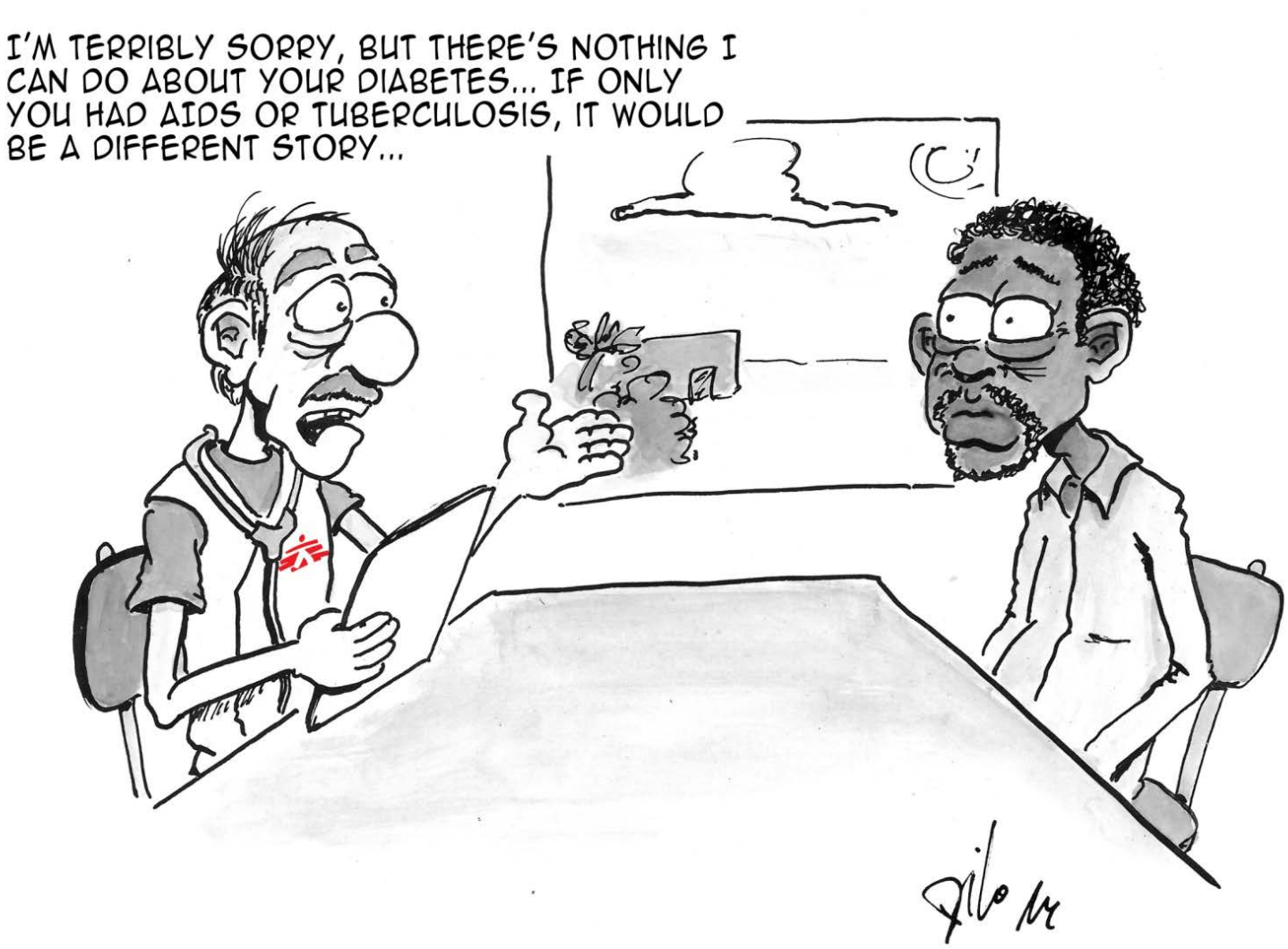
ODA FUNDING



Source: Global Burden of Disease Study 2010 (GBD 2010)



Source: Gheorge A calculations based on IHME Development Assistance for Health Database 1990–2012. http://ghdx.healthdata.org/record/development-assistance-health-database

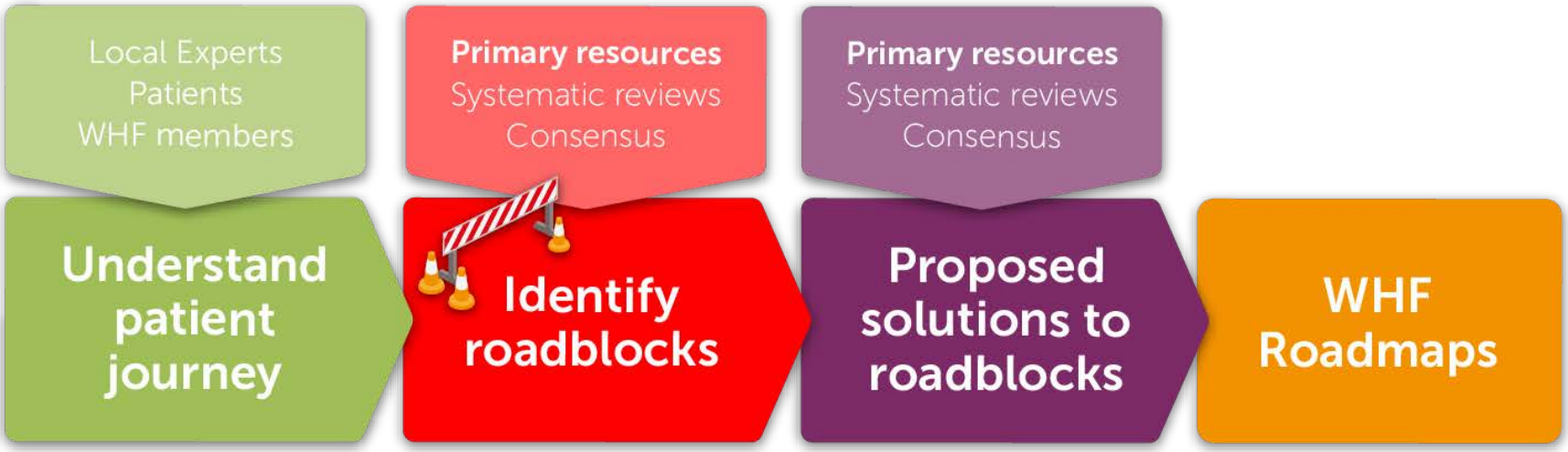

I'M TERRIBLY SORRY, BUT THERE'S NOTHING I CAN DO ABOUT YOUR DIABETES... IF ONLY YOU HAD AIDS OR TUBERCULOSIS, IT WOULD BE A DIFFERENT STORY...

WHF Roadmaps

- ✓ Focussed on easy identifiable causes of major cardiovascular events
- ✓ Cost effective, feasible and acceptable interventions
- ✓ Identify gaps and roadblocks for implementation
- ✓ Propose potential solutions
- ✓ Provide a process for adaptation
- ✓ Global space to update and learn about initiatives towards 25 by 25

“Getting what works to happen”

WHF Roadmap

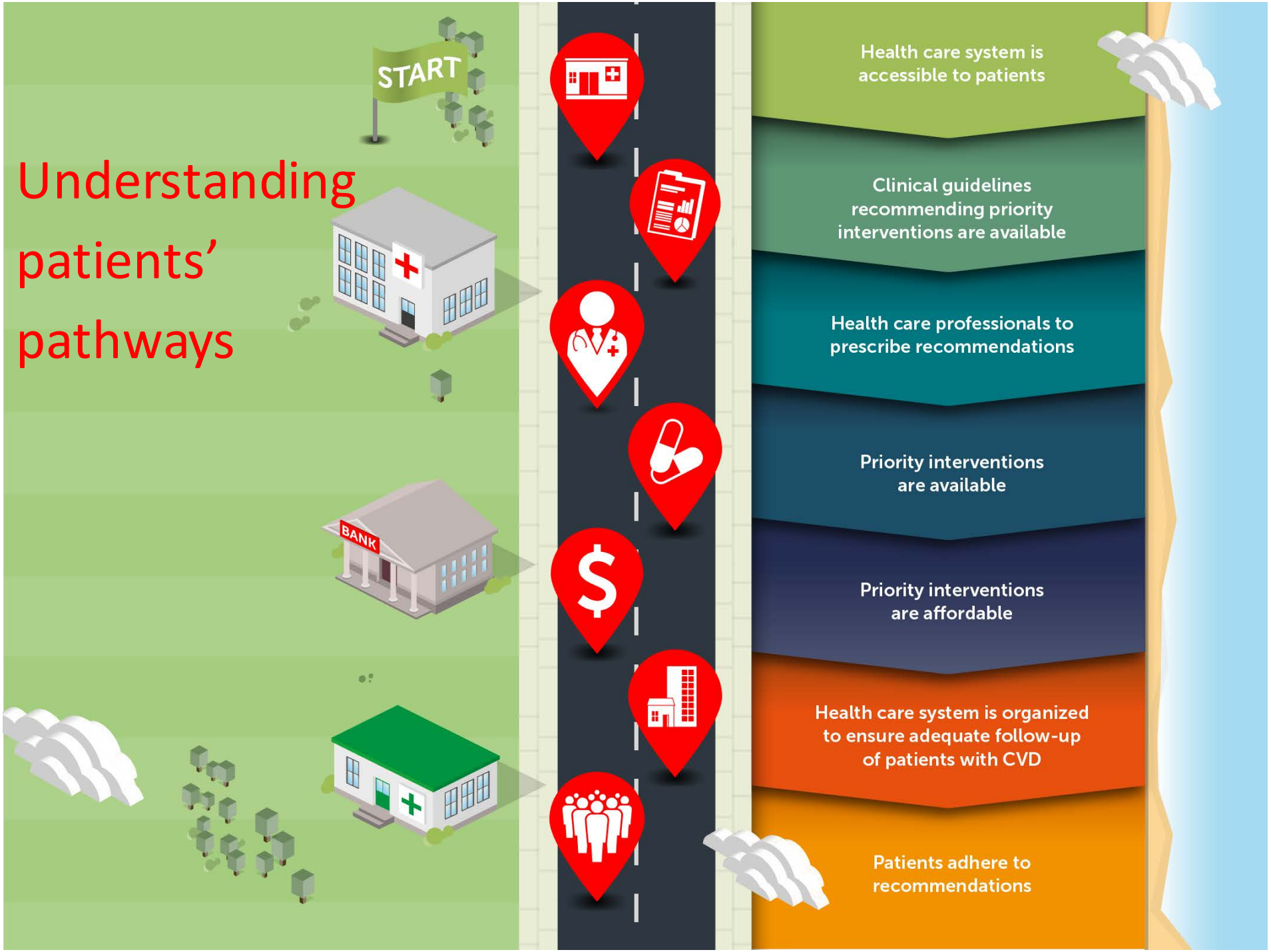


WHF Roadmaps

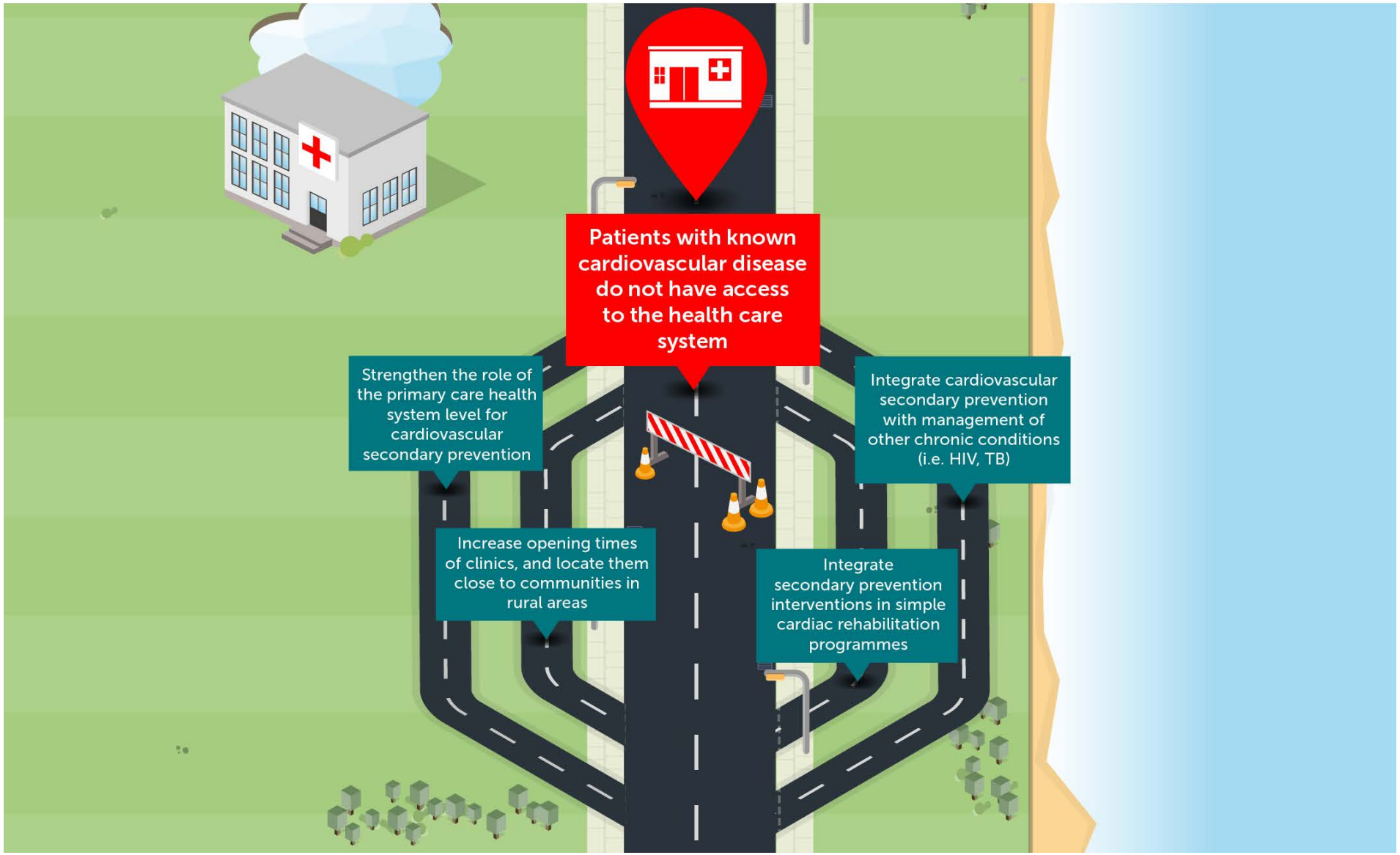
- Published
- ✓ Hypertension
- ✓ Secondary Prevention
- ✓ Tobacco
- ✓ Atrial Fibrillation
- ✓ Rheumatic Heart Disease

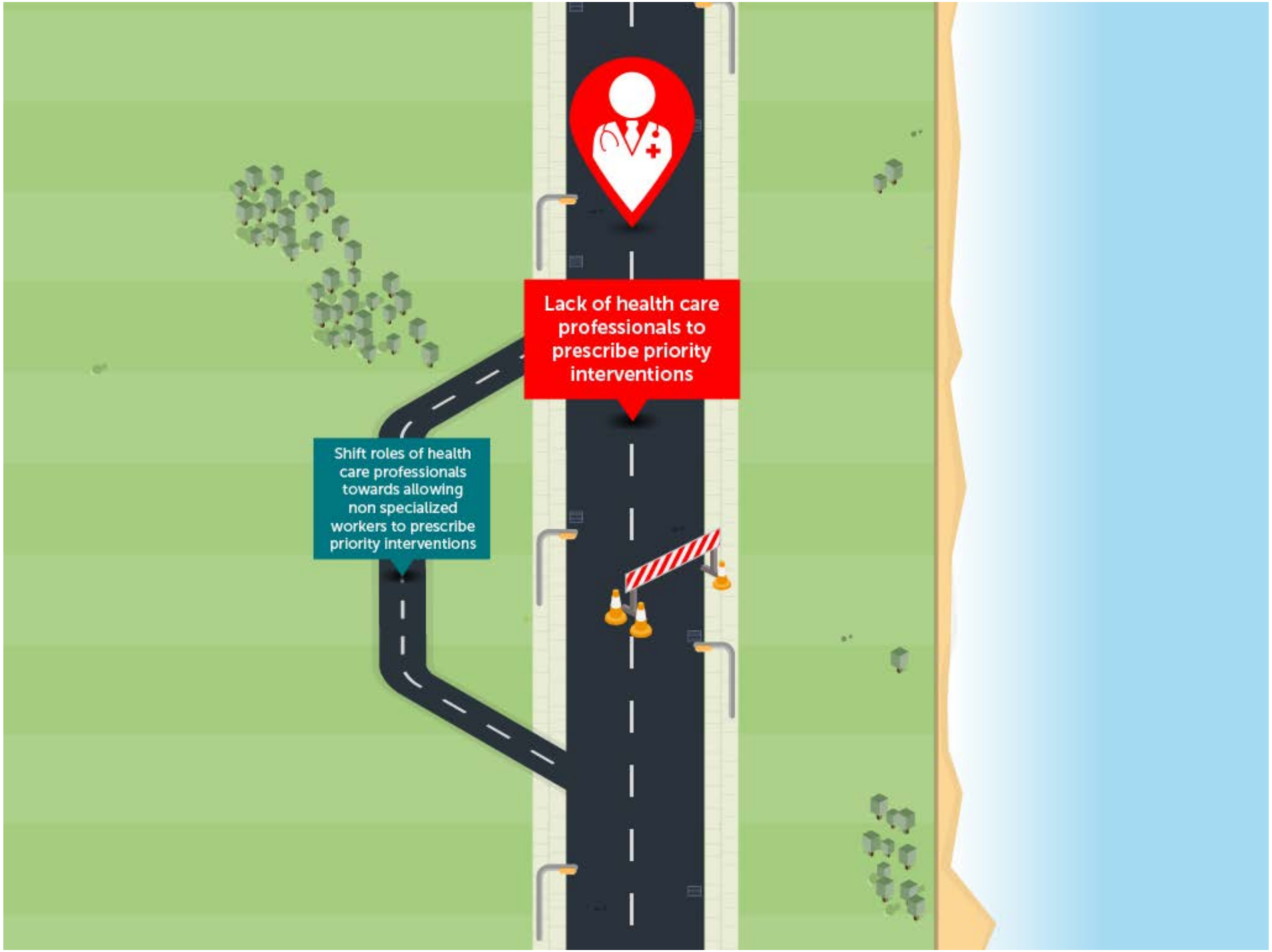
- In press
- ✓ Cholesterol

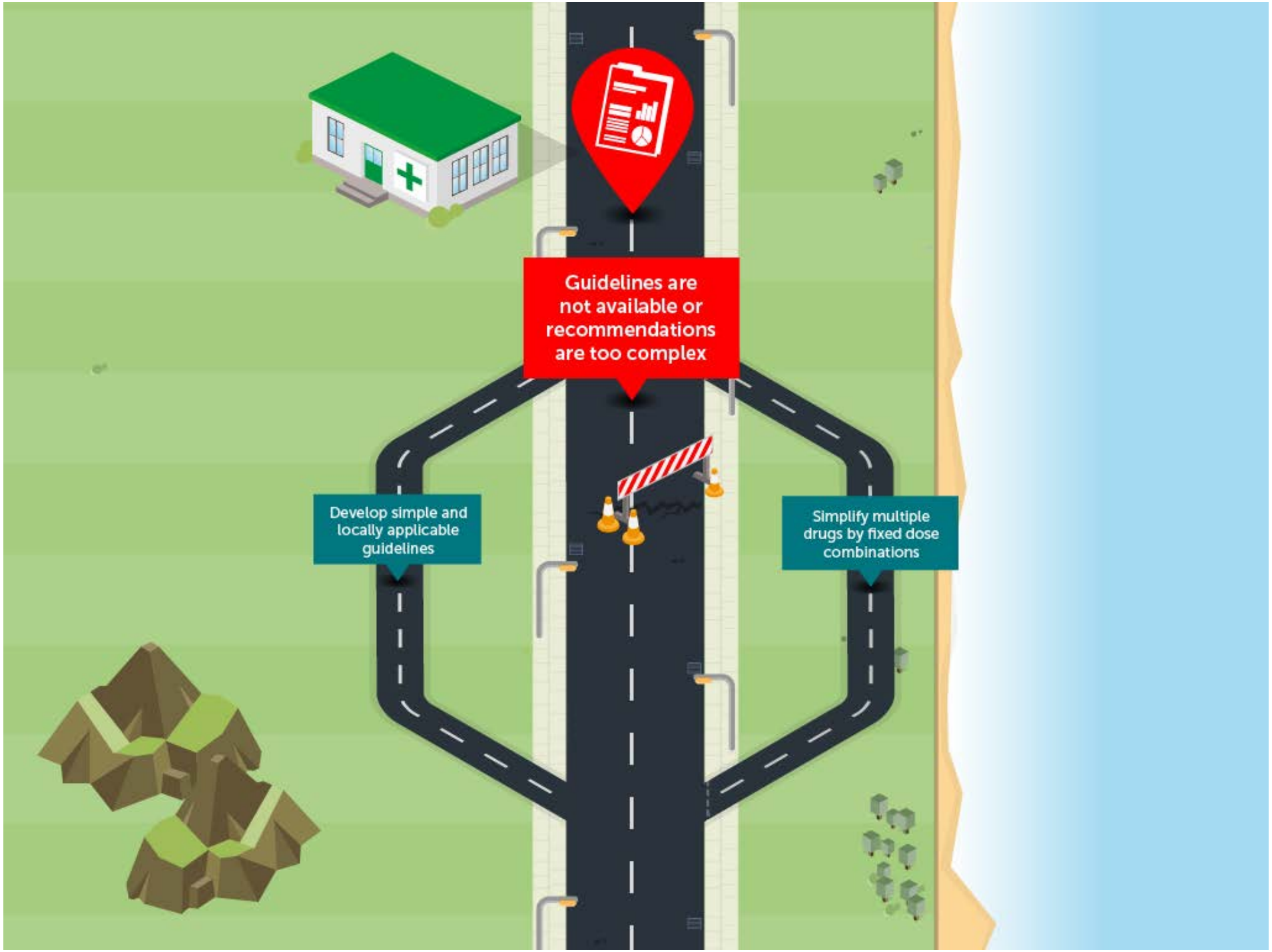
Understanding patients' pathways

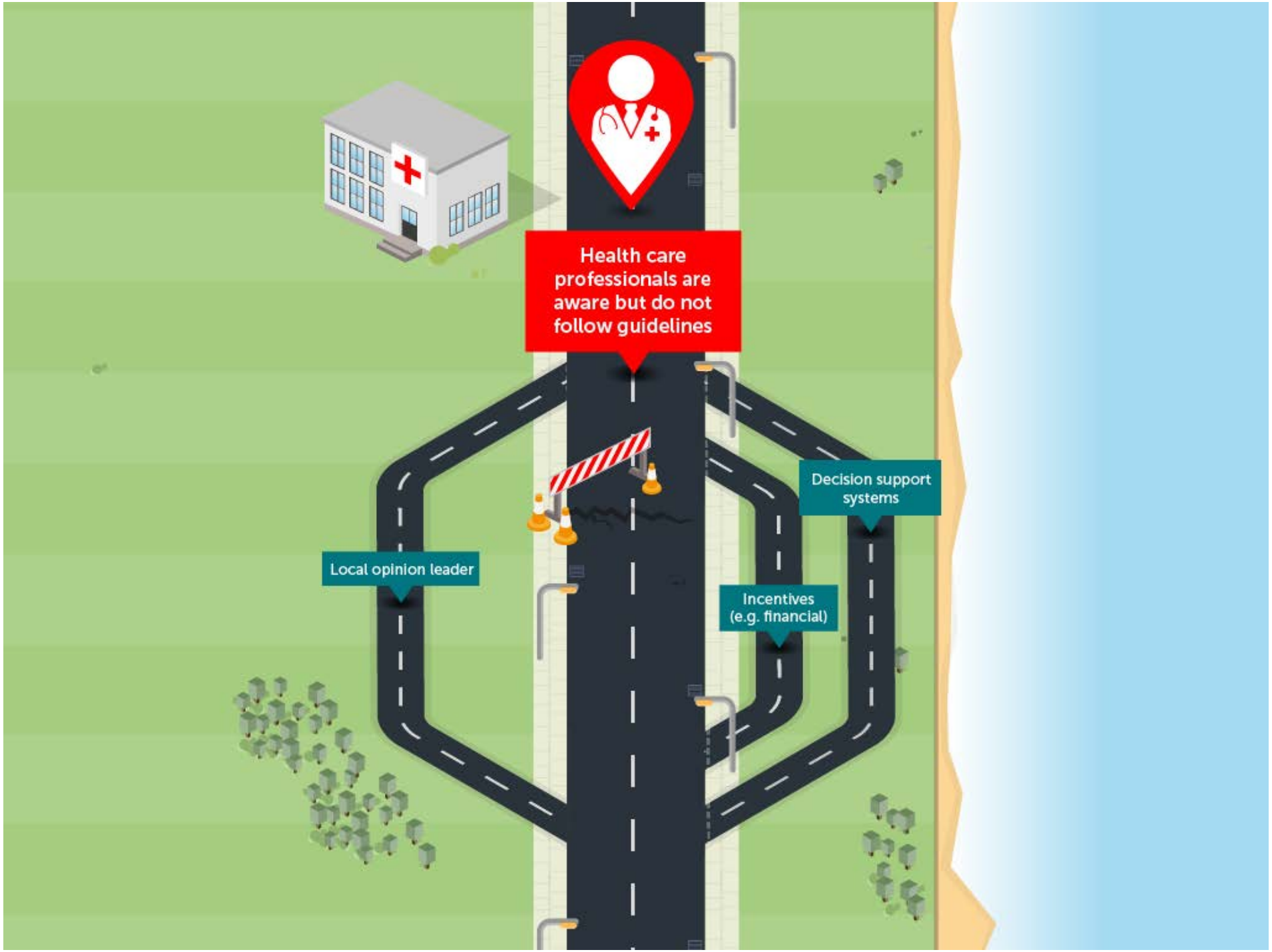


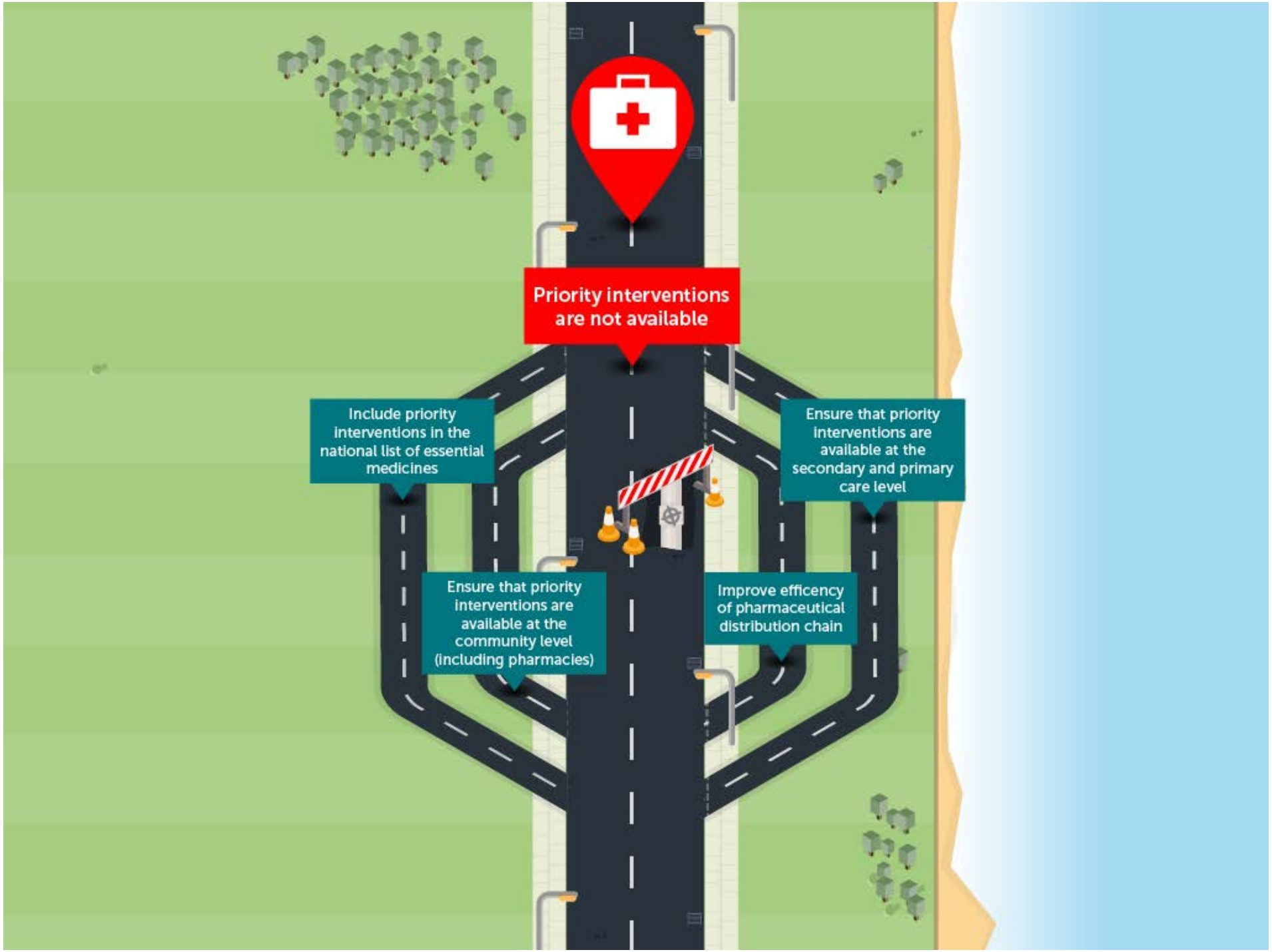
Roadblocks and posible solutions

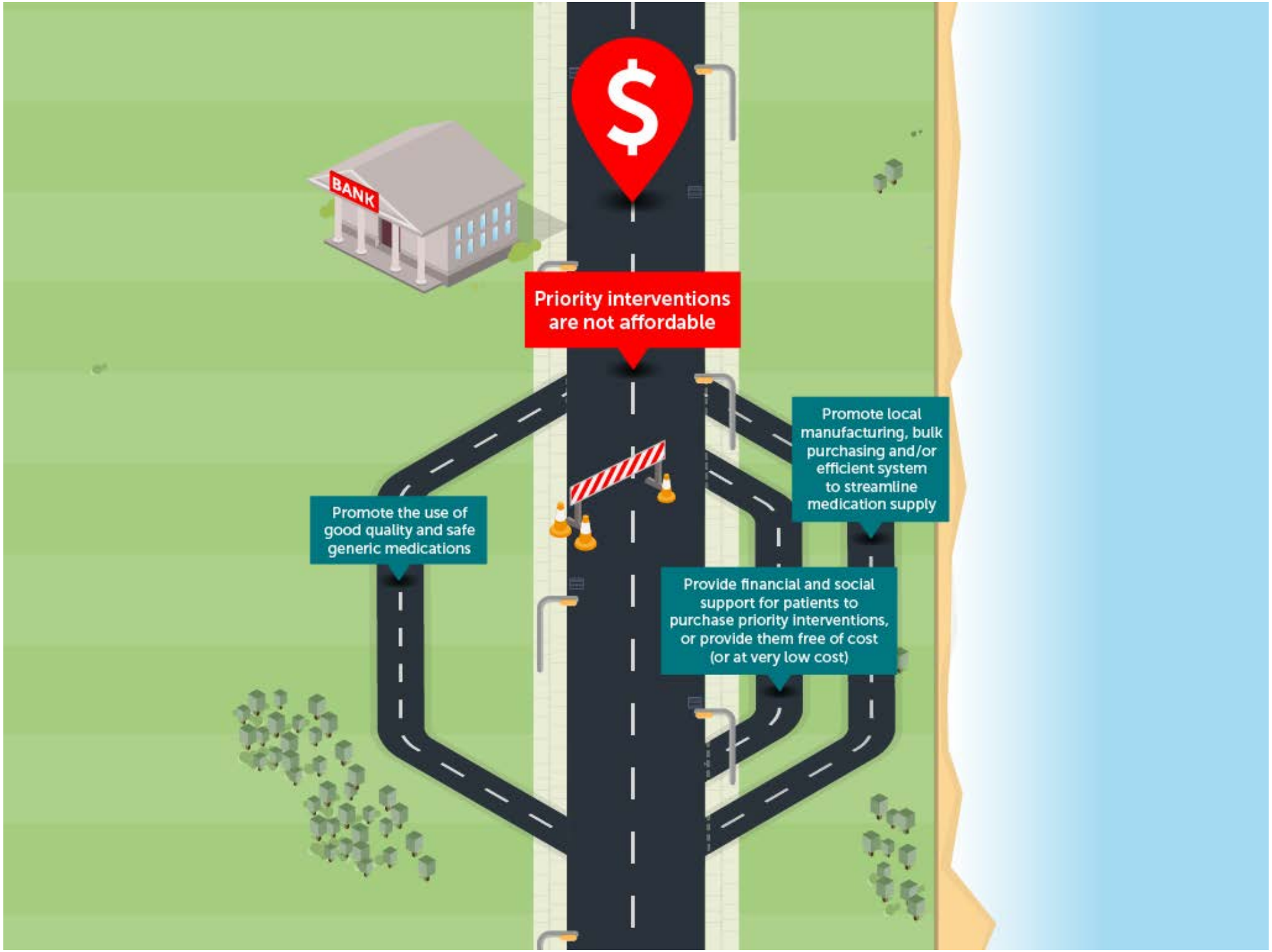


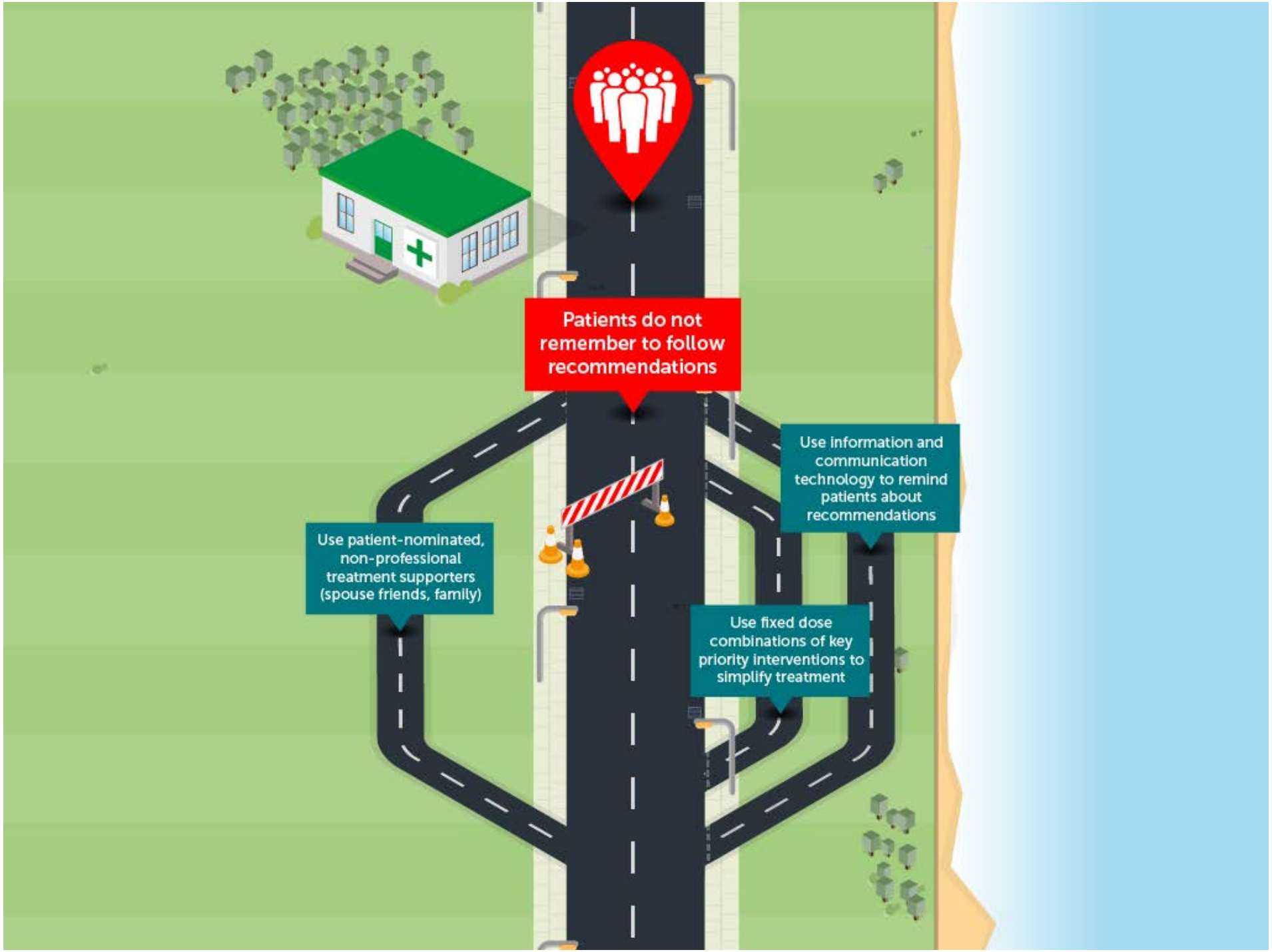

Lack of health care professionals to prescribe priority interventions
Shift roles of health care professionals towards allowing non specialized workers to prescribe priority interventions


Guidelines are not available or recommendations are too complex
Develop simple and locally applicable guidelines
Simplify multiple drugs by fixed dose combinations


Health care professionals are aware but do not follow guidelines
Decision support systems
Local opinion leader
Incentives (e.g. financial)


Priority interventions are not available
Include priority interventions in the national list of essential medicines
Ensure that priority interventions are available at the secondary and primary care level
Ensure that priority interventions are available at the community level (including pharmacies)
Improve efficency of pharmaceutical distribution chain


BANK
Priority interventions are not affordable
Promote local manufacturing, bulk purchasing and/or efficient system to streamline medication supply
Promote the use of good quality and safe generic medications
Provide financial and social support for patients to purchase priority interventions, or provide them free of cost (or at very low cost)


Patients do not remember to follow recommendations
Use information and communication technology to remind patients about recommendations
Use patient-nominated, non-professional treatment supporters (spouse friends, family)
Use fixed dose combinations of key priority interventions to simplify treatment

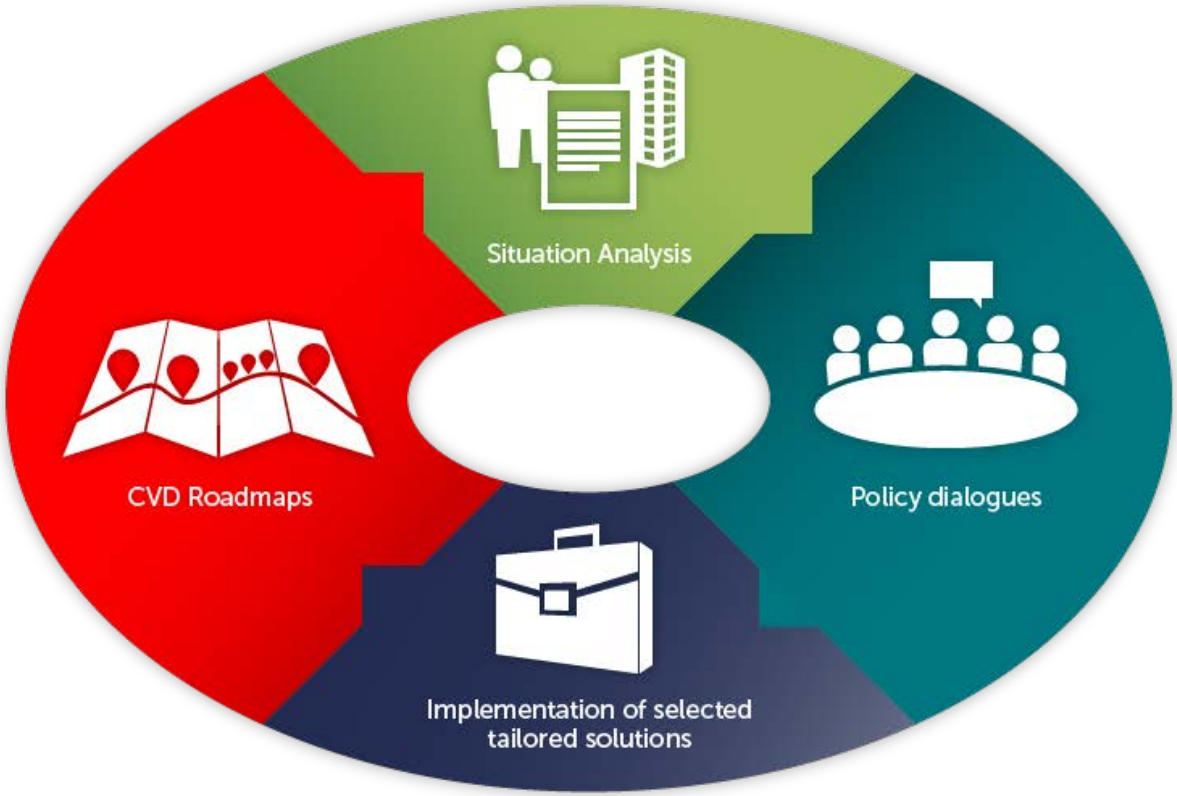
Summary of key recommendations

1. Build coalitions and partnerships across health disciplines, non-medical and medical organisations, and governments
2. Strengthen the role of the primary care providers for cardiovascular prevention
3. Share roles of health care professionals with trained non-physician health workers by allowing non specialized workers to prescribe priority interventions
4. Develop simple and practical guidelines
5. Provide opportunistic screening so individuals become aware of their blood pressure status
6. Use fixed dose combinations of key priority interventions to simplify treatment and increase adherence
7. Integrate strategies to strengthen health systems to provide support smoking cessation

Summary of key recommendations

8. Ensure that priority interventions are available at the secondary, primary, and community level
9. Promote the use of good quality and low cost and affordable generic medications
10. Provide financial and social support for patients to purchase priority interventions
11. Use information and communication technology to support clinical decision and to increase patients adherence
12. Develop simple, acceptable, representative, and timely information systems
13. Establish accountable governance structures from ministerial to the primary healthcare level (including national plans for CVD).

Adaptation at national level



Roadmap adaptation

- ✓ Detailed handbook for situation analysis
- ✓ Policy dialogues guidelines

- Piloted tools in Brazil and India
  - Multi-stakeholders meetings
  - Situation analysis
  - Policy dialogues

Moving forward

- ✓ Roadmap website
- ✓ Convening
- ✓ Global facilitator
- ✓ Engaging with members
- ✓ Aligning with EL
- ✓ Aligning and supporting WHO HEARTS Package

Access to care

a multidimensional concept based on the interaction between health care systems and individuals, in which the dimensions of availability, affordability, and acceptability interact to affect people's *empowerment*

McIntyre D et al 2009

Access to health care

Availability

the availability of good health services within reasonable reach of those who need them

Affordability

a measure of people's ability to pay for services without financial hardship

Acceptability

fit between provider and patient's attitudes toward and expectation of each other

Access to health care

Availability

Manufacturing

Forecasting

Procurement

Distribution

Delivery

Affordability

Government

Non Government Agencies

End-user

Acceptability

Global adoption

National adoption

Provider adoption

End user adoption

CAPE TOWN

SOUTH AFRICA

Thank You!

Universal Declaration of Human Rights 1948

Everyone has the right to a standard of living adequate for the health….. including….medical care

Alma-Ata 1978

"..essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals"

Universal Health Coverage

Universal health coverage (UHC) is the goal that all people obtain the health services they need without risking financial hardship

UHC is attained when people actually obtain the health services they need and benefit from financial risk protection.

Access, on the other hand, is the opportunity or ability to do both of these things.