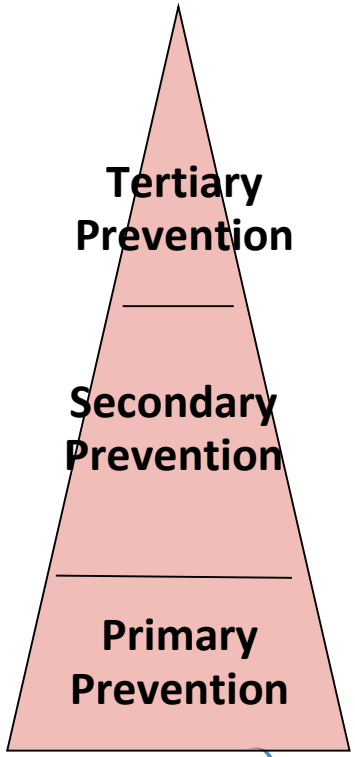
NCD control in a global health perspective: Public health and health systems strengthening approaches

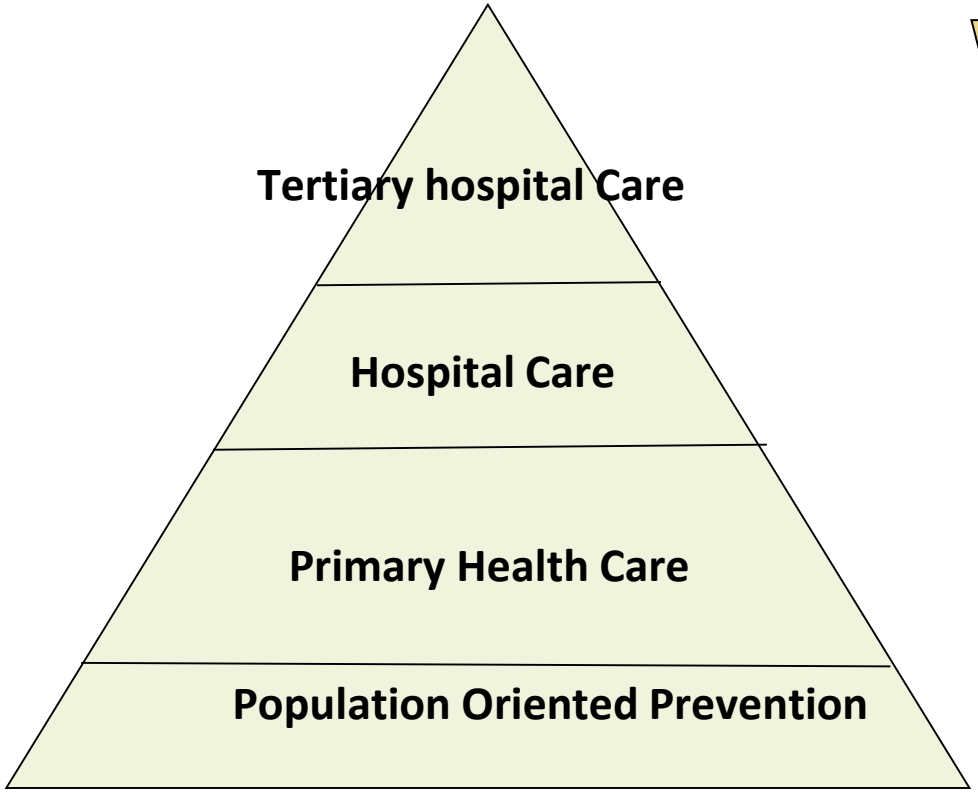
Presented by: **Kaspar Wyss, 28 September 2023, Prishtina "Hotel Emerald"**

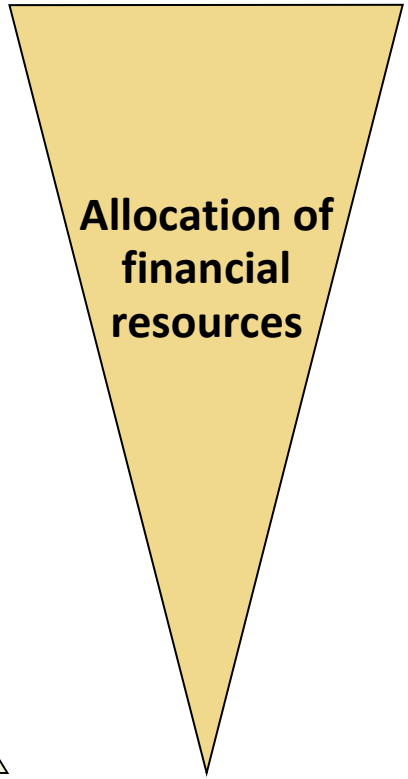
2023

Swiss TPH

Public health perspective on relative weight given







Time to re-think NCDs

Infectious diseases

- Public health interventions have been largely implemented in 19th century (piped clean water, safe foods supply, rodents control, adequate housing, easy access to acute care & antibiotics, etc)
- Further improvement in Public Health policy generally is converging with global commercial and other multisectoral determinants
- “Laisser-faire”, “business as usual” response is often ok for improved health outcomes
- Crucial role of treatment

NCDs

- Trends in global trade and environment is favorable in some instances: food variety supply, physical activity opportunities, etc
- However, strong global economic and marketing forces favor unhealthy behaviors (tobacco, automated mobility, inexpensive calorie-dense food/beverages, urban pollution, etc)
- Need to address NCD determinants with strong Public Health policy again commercial interests (except for health care for NCD: more is more profitable)

Strategies to prevent NCDs in the population "Primary prevention: avoid occurrence of new cases"

- **Reduce RF levels in all individuals: population strategy**
  - Create conducive environment enabling adoption of healthy lifestyle
  - e.g. legislation, tax, financial incentives by government
  - Small effect in individuals but large impact at entire population level
  - Does not require direct behavior change, can be rapidly effective
  - Often very cost effective (can even generate revenue: tobacco tax)
  - **"Good for all"**

- **Detect and treat high-risk individuals : high-risk strategy**
  - Screening (e.g. HBP, diabetes) and treat before complications occur
  - Large effect in few people but small impact at population level
  - Requires behavior change at individual level (compliance to drugs)
  - Often costly (drugs for years for lots of patients)
  - **"Good for some"**

Origins of risk factors

Contemporary and accepted risk factors (proximal)

- Lifestyle: exercise, obesity, diet, stress, smoking
- Treatments: blood pressure, cholesterol, diabetes

Root risk factors (distal)

- Agricultural policy/food availability
- Mobility
- Social deprivation
- Climate change
- Fiscal policy eg tobacco
- Industrialisation/urbanisation

Types of interventions for primary prevention / health promotion of NCDs

1. Educational interventions - often limited impact, still necessary
   - Media, school, workplace
2. Transportation policies (change environment)
   - Limit the role of automobile (and increase use of buses): promote walking/cycling
   - Build health promoting cities and environments
3. Improve food supply (change environment)
   - Improve food manufacturing: “reformulation” (salt, trans fat, sat fats, sugar, etc)
   - Increasing availability (subsidies) and reduce cost (tax reduction) of healthy foods
   - Promote healthy food choices and limit marketing of unhealthy foods to children
4. Economic policies: incentives and disincentives
   - Tax on tobacco, sugary foods, alcohol, etc.
   - Differential taxes for energy dense foods/fruits-vegetables
5. Initiatives at the community level
   - Most effective when multifactorial and involving multiple sectors and community
   - Dose of intervention and duration must be sufficient (large) and long lasting

NCD control and the role of health services

	Non-health sector	Health services
Primary prevention of NCDs	Actors outside the health sector have an important role to play	Some role, for example in terms education and behavioural change, screening
Secondary prevention	School health and others have limited role to play	Most interventions are health service related. PHC has an important role to play
Treatment/care of NCDs (including tertiary prevention)	Social sector has some a role to play	Most interventions are health service related **with an emphasis on PHC**

“Best buys” for NCD prevention and control in LMICs

Prevention Reducing the level of exposure to risk factors

Management Strengthen health care for people with NCDs

Risk factor / disease	"Best buy" Interventions
Tobacco use	– Raise taxes on tobacco – Protect people from tobacco smoke – Warn about the dangers of tobacco – Enforce bans on tobacco advertising
Harmful use of alcohol	– Raise taxes on alcohol – Restrict access to retailed alcohol – Enforce bans on alcohol advertising
Unhealthy diet and physical inactivity	– Reduce salt intake in food – Replace trans fat with polyunsaturated fat – Promote public awareness about diet and physical activity
Cardiovascular disease and diabetes	– Provide counselling and multi-drug therapy for people with medium-high risk of developing heart attacks and strokes – Treat heart attacks with aspirin
Cancer	– Vaccination against human papillomavirus of 9–13 year old girls – Screening and treatment of pre-cancerous lesions to prevent cervical cancer

Source: WHO 2013 and 2017

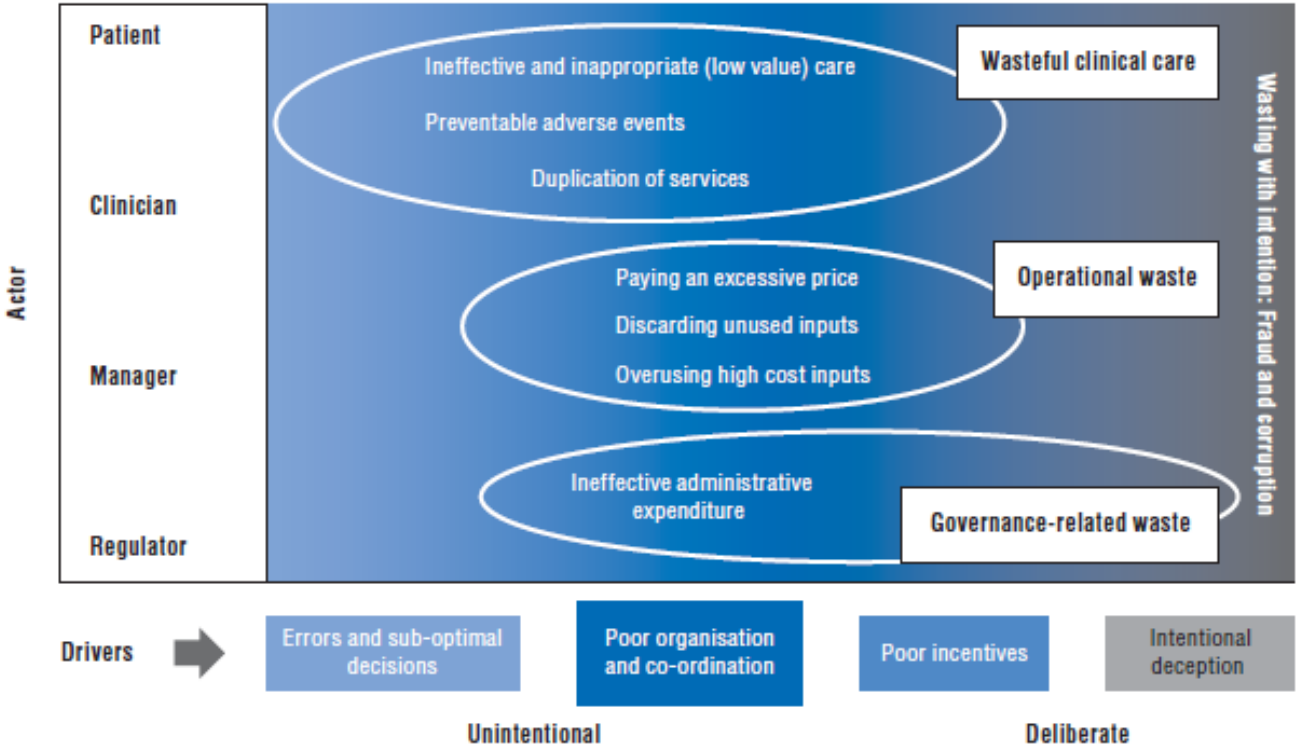
Treatment and care of NCDs

- The burden of disease, risk and cost-effectiveness lens have limits
  - May inadequately reflect political dimension and population demands
  - Often do not adequately reflect inter-connectivity between different determinants
  - Cost-effectiveness not easy or impossible to establish for many interventions

- Public health often classify secondary prevention and treatment as “individual” or “clinical”
  - Treat heart attacks with aspirin
  - Multi-drug therapy for people with medium high risk of developing heart attacks and strokes

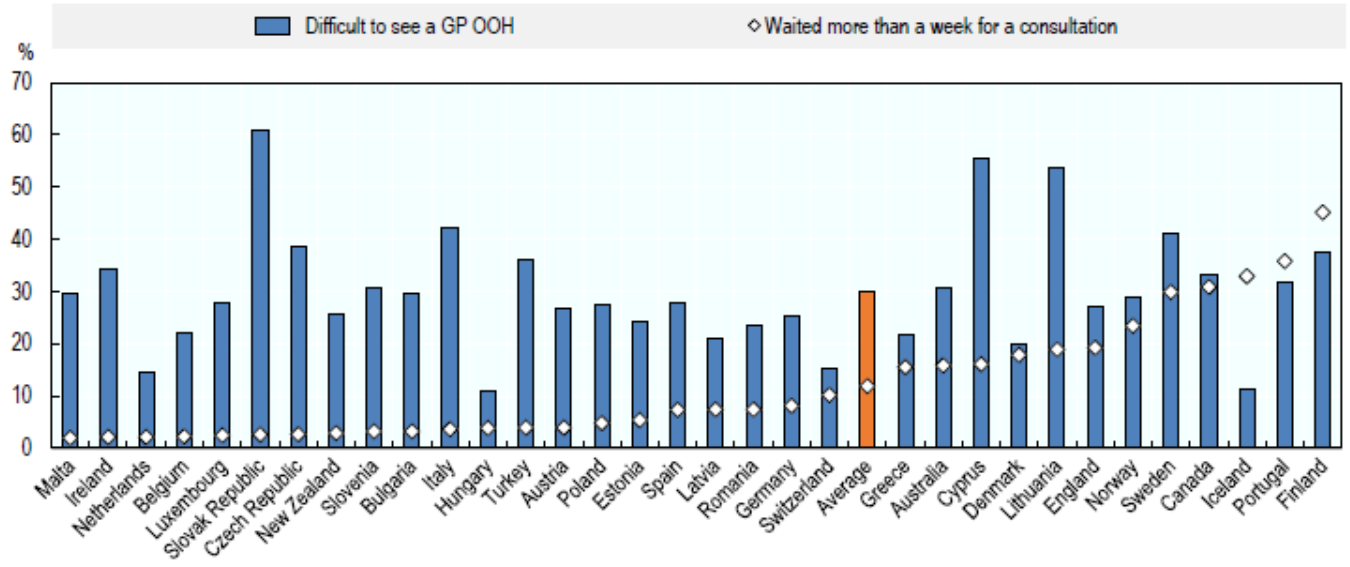
- But these interventions require health systems and services to deliver the interventions
  - **Typically single interventions will not do it and bundle of interventions are required in a systemic approach**

Categories of waste



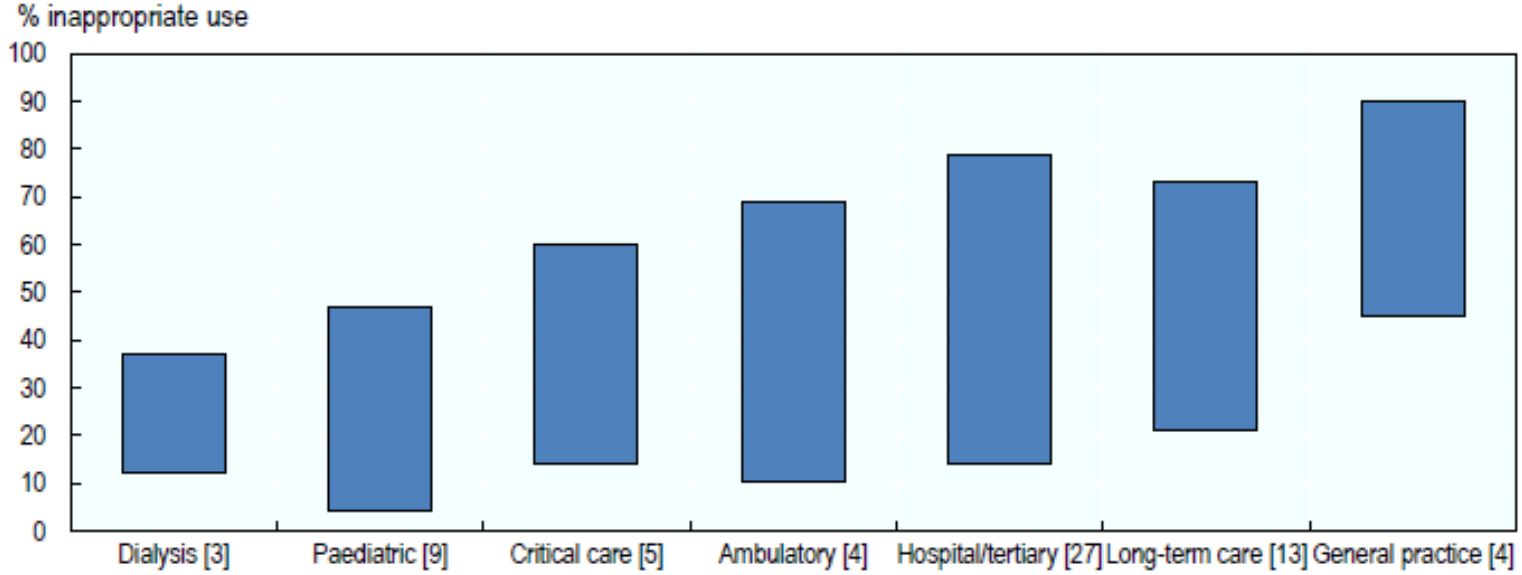
Source: Source: Tackling Wasteful Spending on Health, https://doi.org/10.1787/9789264266414-en

Accessibility of general practitioners: % of adult population who reported difficulties to see a GP out-of-hours



OECD 2020

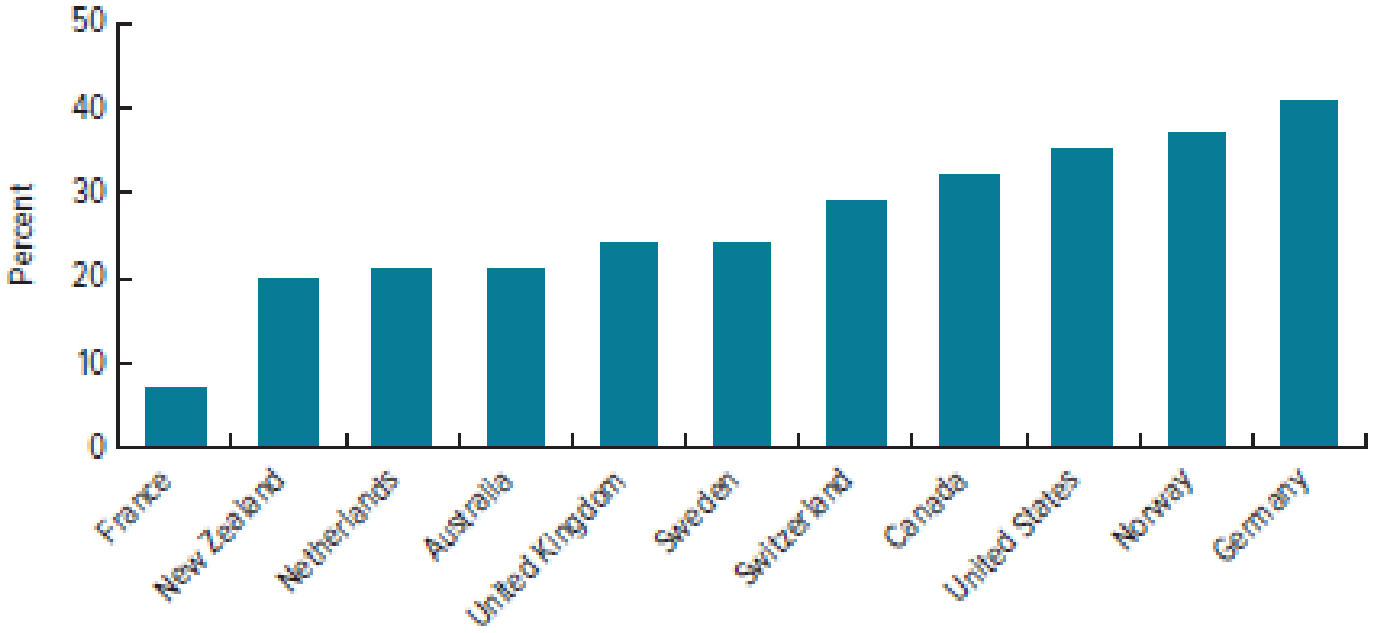
Inappropriate use of antibiotics in general practice is high



Note: Numbers in brackets indicate the number of studies used to determine the range of inappropriate use.

OECD 2020

Percentage of Adults Age 65 and older who experience problems with the coordination of their care



Source: WHO 2015

New models of primary health care delivery models

Panel B. Examples of services delivered and health professionals included	
Examples of services delivered	**Examples of health professionals included**
Prevention	General practitioners or family physicians
Health education	Registered or advanced nurses
Patient education	Community pharmacists
Self-management support	Psychologists
Curative services	Nutritionists
Disease management	Social workers
Specialist referral	Health counsellors
Care co-ordination	Other allied health professionals

OECD 2020

New models of primary health care delivery

Panel A. Name of primary health care organisations across OECD countries	
Countries	**Name of the primary health care organisation recently established**
Australia	Health Care Homes; Primary Health Networks
Austria	Primary care units
Canada	My Health Teams working with community health centres
Costa Rica	Basic Teams of Comprehensive Health Care (EBAIS)
Estonia	Primary care centres
France	Centres de Santé, Communautés Professionnelles Territoriales de Santé
Greece	Primary care facilities
Ireland	Primary care centres
Italy	Complex Primary Care Units (UCCPs)
Mexico	Health Centres with Extended Services
Norway	Intermediate care facilities
Slovak Republic	Integrated Primary care Centres
Slovenia	Primary care centres
Switzerland	Ambulatory Network
Sweden	Primary care centres
Turkey	Healthy Life Centres
United States	Patient-Centred Medical Home and Comprehensive Primary Care Plus

OECD 2020

France “centre de santé” : around 1’800 centres in 2021

Principles:

- Services are organised around general practitioners to help establish diagnosis (ex: medical imaging and biology), provide nursing and care (ex: nurses, physiotherapists, other community health workers, etc.) and specialised care or follow-up for patients (ex: rheumatology)
- Provide preventive actions for the local population (ex: immunisation, screening, education for health, etc.)
- Often also dentistry is provided as a specific part of primary health care
- Sometimes involved in medical education (resident physicians, student nurses, etc..)
- Average staff number per centre is 33 persons
  - 37% physicians
  - 10% dentist
  - 22% auxiliaries
  - 27% administrative staff

Australia health care homes: 129 centres in 2020

Objectives

- More effectively identify patients with high co-ordination and multi-disciplinary needs
- Improve the quality of care for people with multiple chronic diseases
- Enhance care planning, team-based care and care co-ordination
- Enhance patient empowerment and health literacy

Principles:

- One care team – the patient has a committed care team, led by a nominated lead clinicians.
- One shared care plan – with the support of the care team, the patient will develop a shared care plan. This plan helps the patient to have a greater say in their care and makes it easier for all the people involved, to co-ordinate that care.
- Better access and flexibility – with a care team behind the patient, there is better access to care..
- Better co-ordinated – the care team will do more to co-ordinate all care from the usual doctor, specialists and other health professionals.

Three main messages

- NCDs control relies in an important way on primary prevention and public health approaches often requiring action outside the health sector. But
    - The burden of disease and risk lens is not enough and there is also a high demand and need for health care services and systems so to «care» for NCDs

- Thinking beyond “simple” interventions and take into account of health systems and complex interactions between the different elements making-up health systems
    - No single magic bullet but need for systems approaches taking into account complexity

- Primary heath care (PHC) has essential role to play for NCD control. There is a need for
    - Strong commitment for increase funding
    - Health workforce development emphasing especially the role of nurses
    - New forms of health service delivery, namely integrated health service models