



NHS Long Term Plan Improving Services Series

The life course pathways approach

1

NHS Long Term Plan key points

- patient focused (family focused) participation
- new model designed on **pathways**
- all parts in place and working well together (integrated)
- includes **proactive prevention** (anticipation)
- **population health management**
- clinical leadership
- ethos cooperation, not competition.
- integration community and primary care, physical/mental, 1^o 2^o 3^o
- meaningful measures, feedback, quality improvement

2

Why is this important?

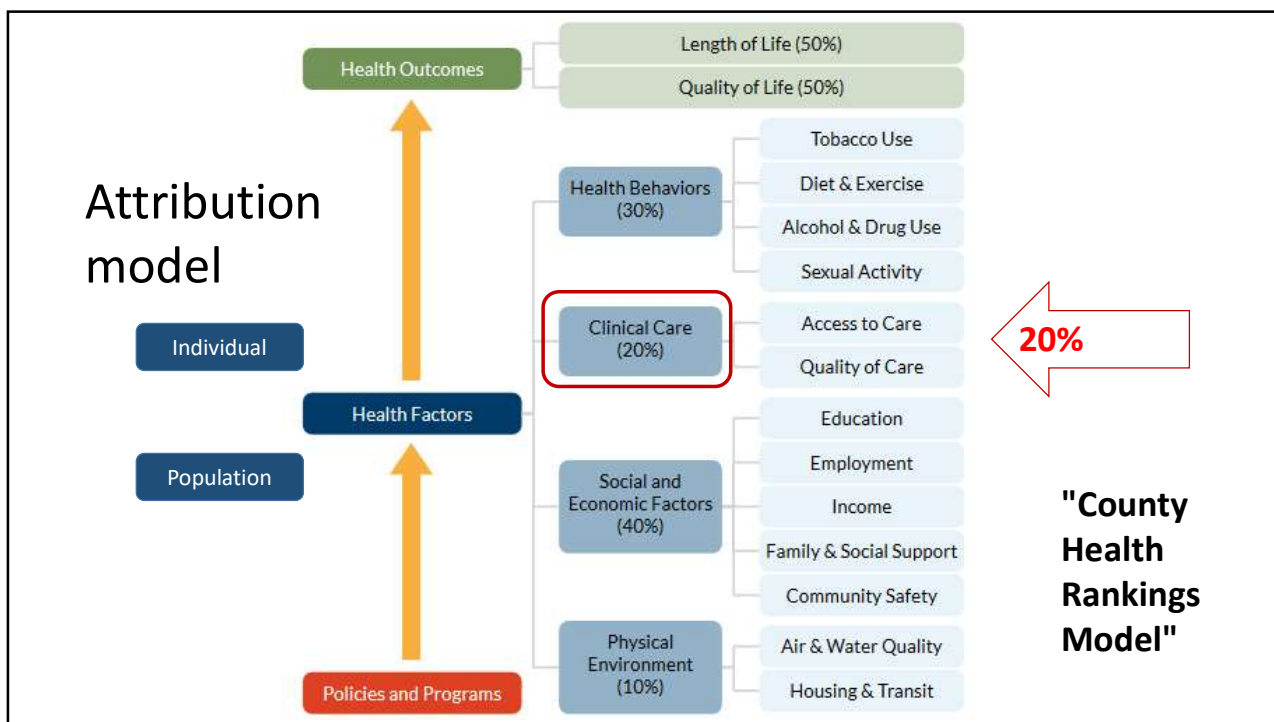
- Prevention is an essential element of service provision.
- Life course pathways represent cumulative prevention strategies over time.
- Improving lifestyles and health determinants contributes to improving equity and health outcomes of services.
- Fundamental to Population Health Management

3

Content and learning objectives

- Review understanding health and disease.
- Mechanism of action of determinants.
- Influencing lifestyles and determinants.
- Practical framework to plan/organise interventions.

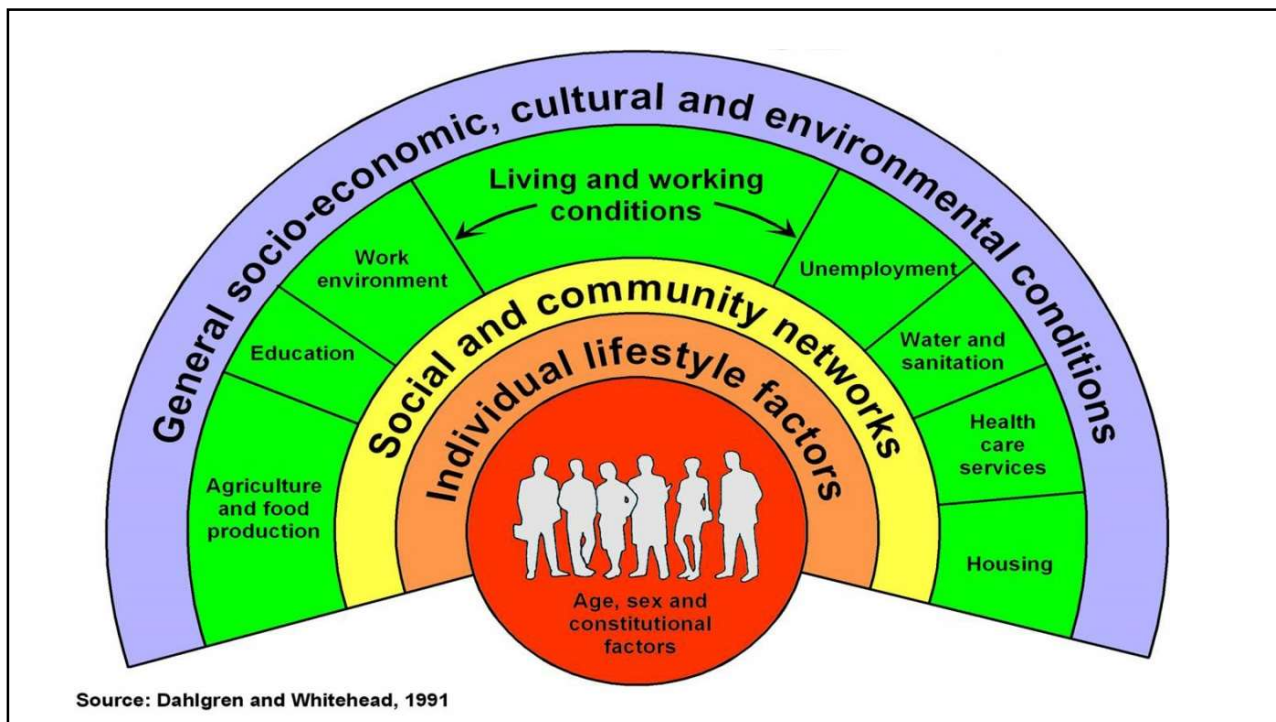
4



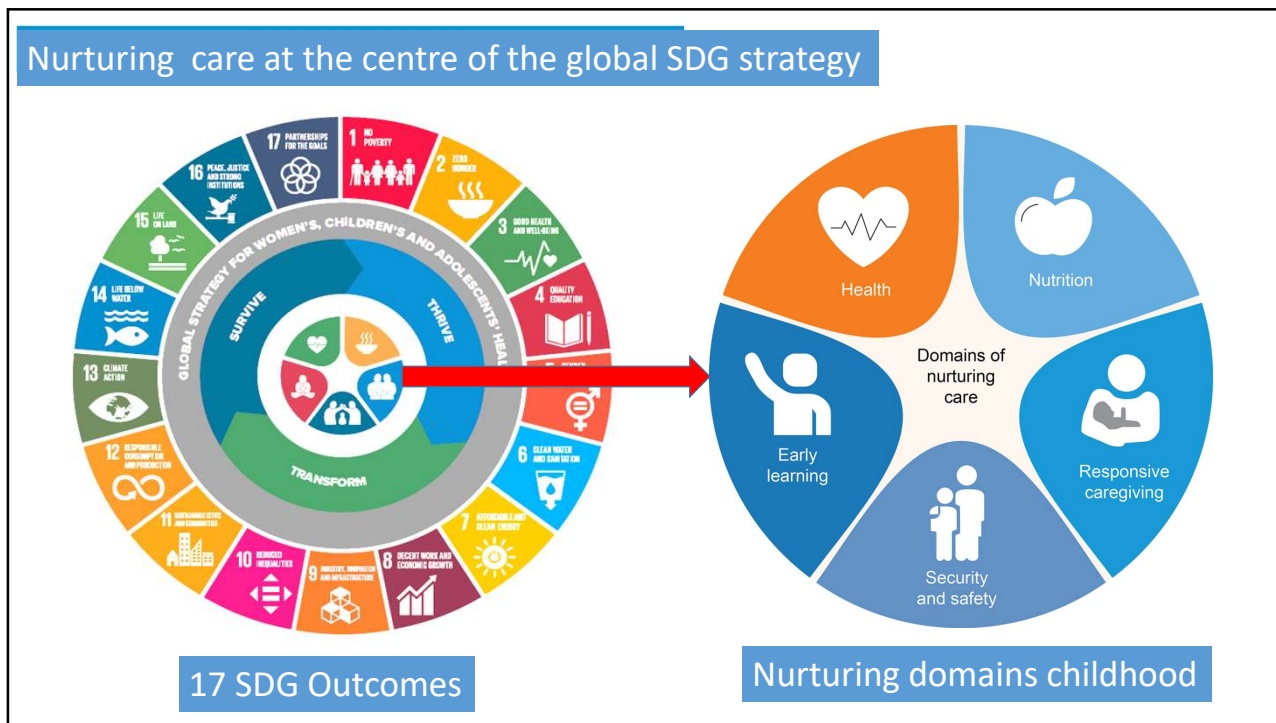
5

Understanding health and disease.

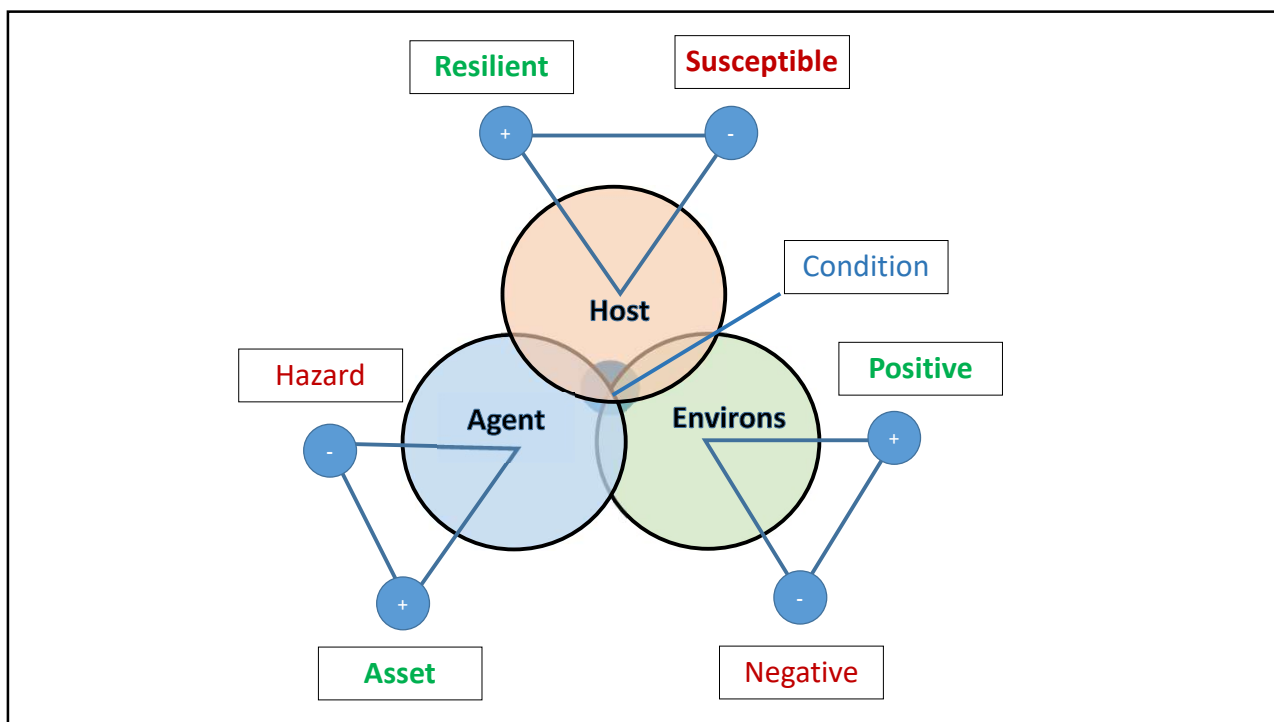
6



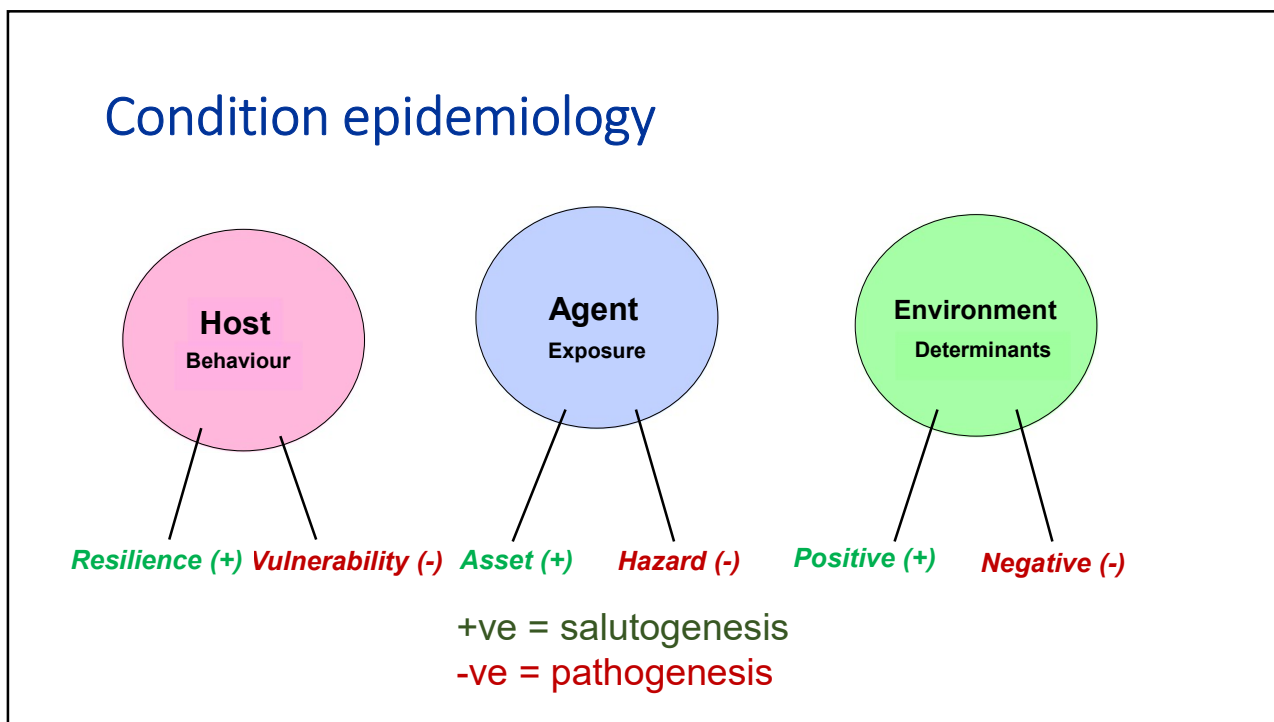
7



8



9

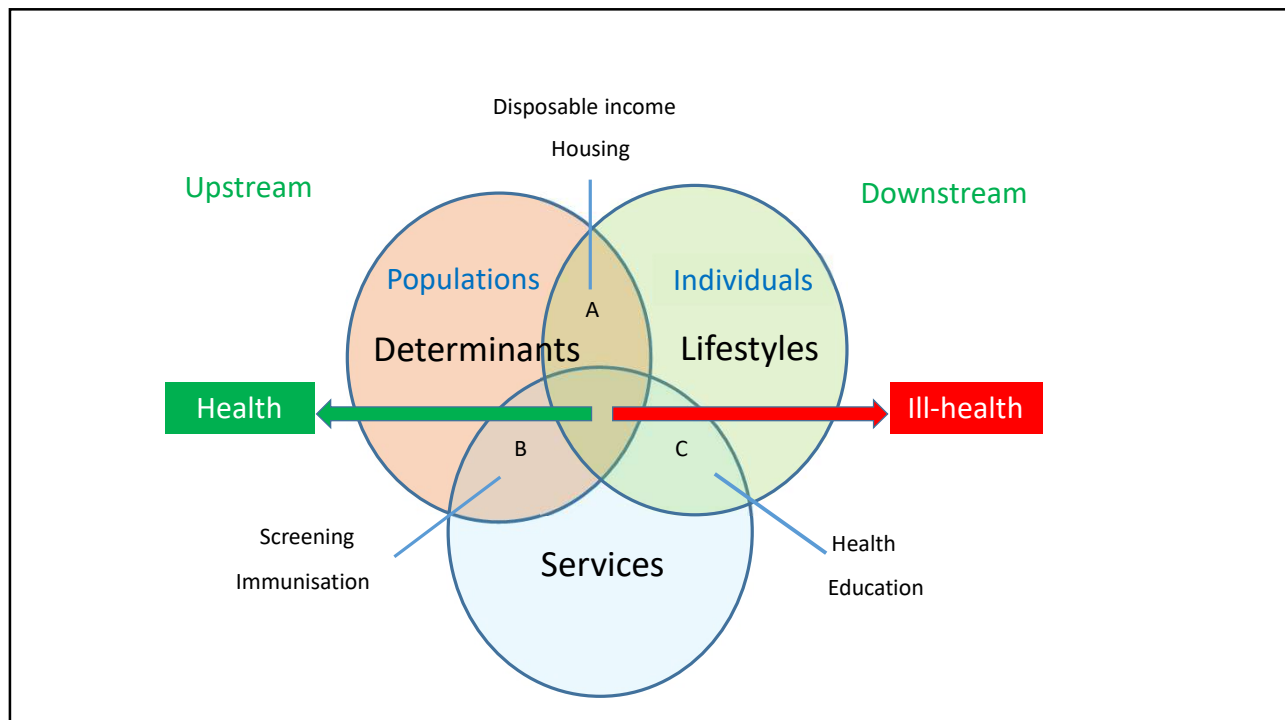


10

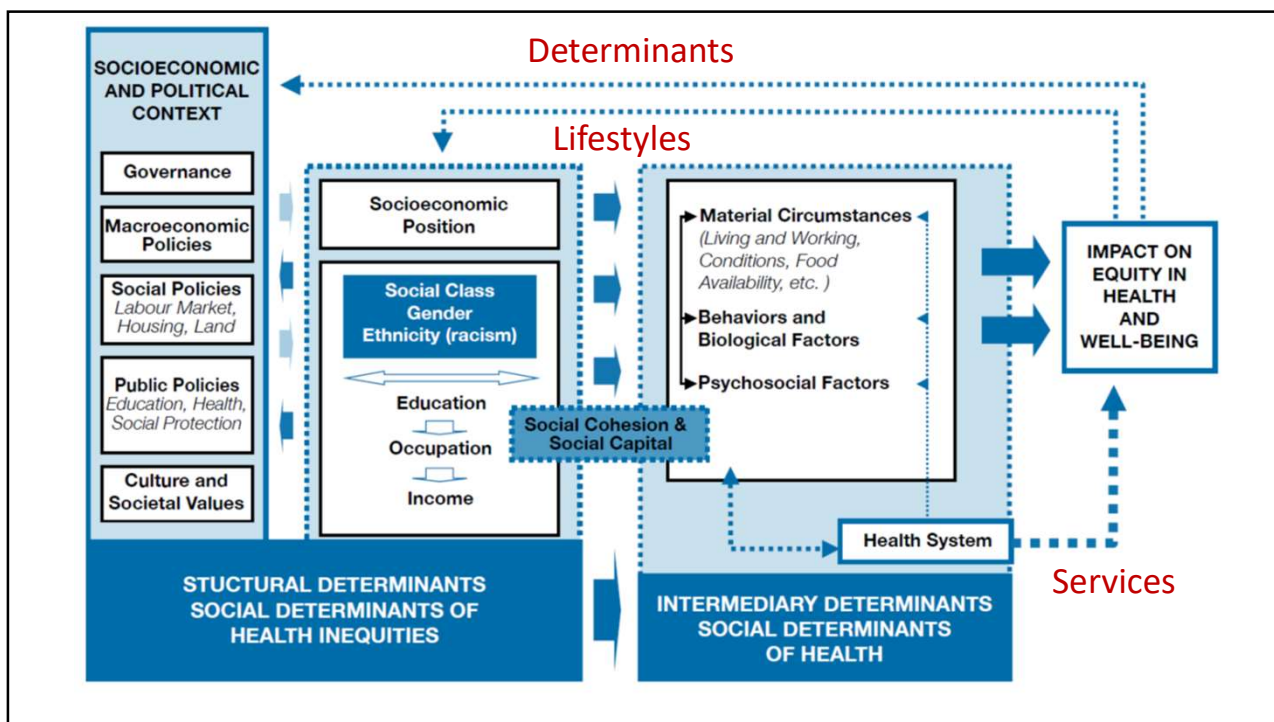
Haddon matrix for a road traffic accident Pathogenic

Haddon matrix			
	Human (host)	Vehicle (agent)	Environment (physical/social)
pre-injury	child behavior e.g. parental control	Vehicle condition e.g. braking capacity	visibility e.g. parked cars
injury	resistance to injury e.g. helmets	vehicle design e.g. sharp edges	street design e.g. road surface
post injury	Threat to life e.g. hemorrhage airway	Vehicle inspection (RTA investigation)	emergency response e.g. first aid abilities of passers by ambulance

11



12



13

Local planning - simplicity

		Environment		
		Lifestyle	Determinants	Services
Host	Child and family			
	Community			
	Society			

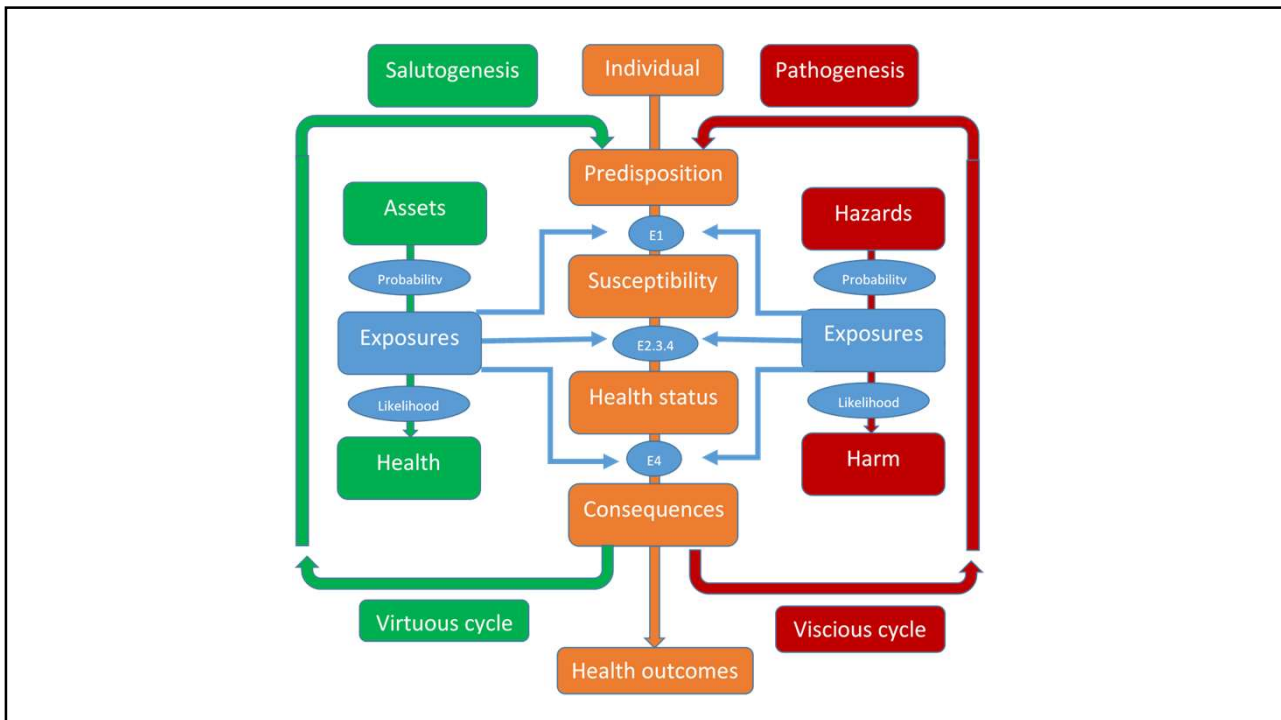
14

Mechanism of action of determinants

15

Exposure-effect	Biology and social status	Interve
Differential biology	Biological predispositions	
Differential exposure	Exposure (1)	Primary pr
Differential vulnerability	Resilience-vulnerability	
Differential exposure	Exposure (2)	Secondary prevention
Differential outcomes	Health-health problems	
Differential exposure	Exposure (3)	Tertiary pr
Differential consequences	Consequences (advantage/disadvantage)	

16



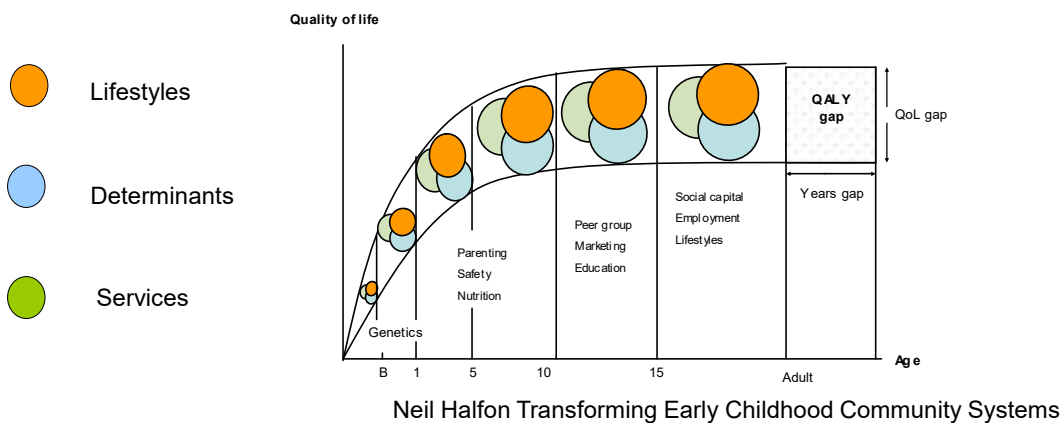
17

Critical periods for health factors

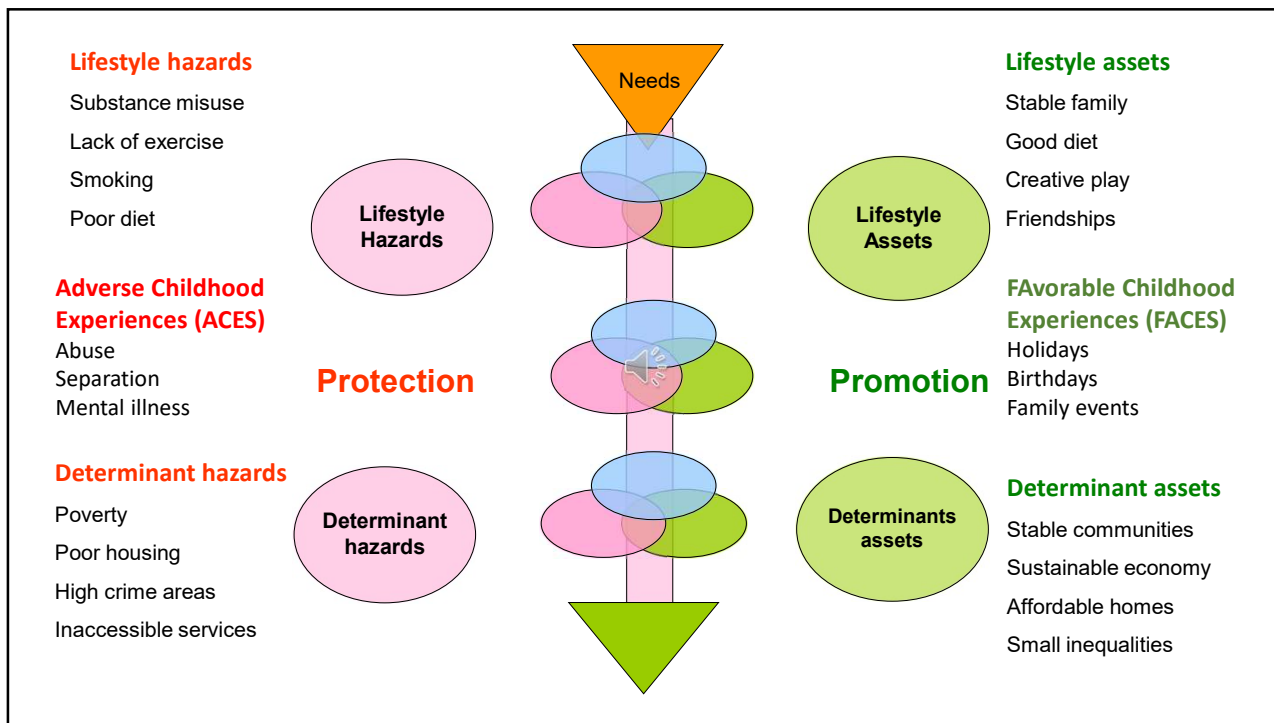
1. A single critical period model (alcohol or lack of folate in the foetus, ACEs)
2. A critical period model with later effect modifiers (infant language development)
3. Accumulation of risk with independent and uncorrelated hazards (injuries)
4. Accumulation of risk with correlated hazards (clustering, chains or pathways of risk (poverty)).

18

Life course pathways – health accumulation QALY gap



19



20

Influencing lifestyles and determinants

21

Priority -setting

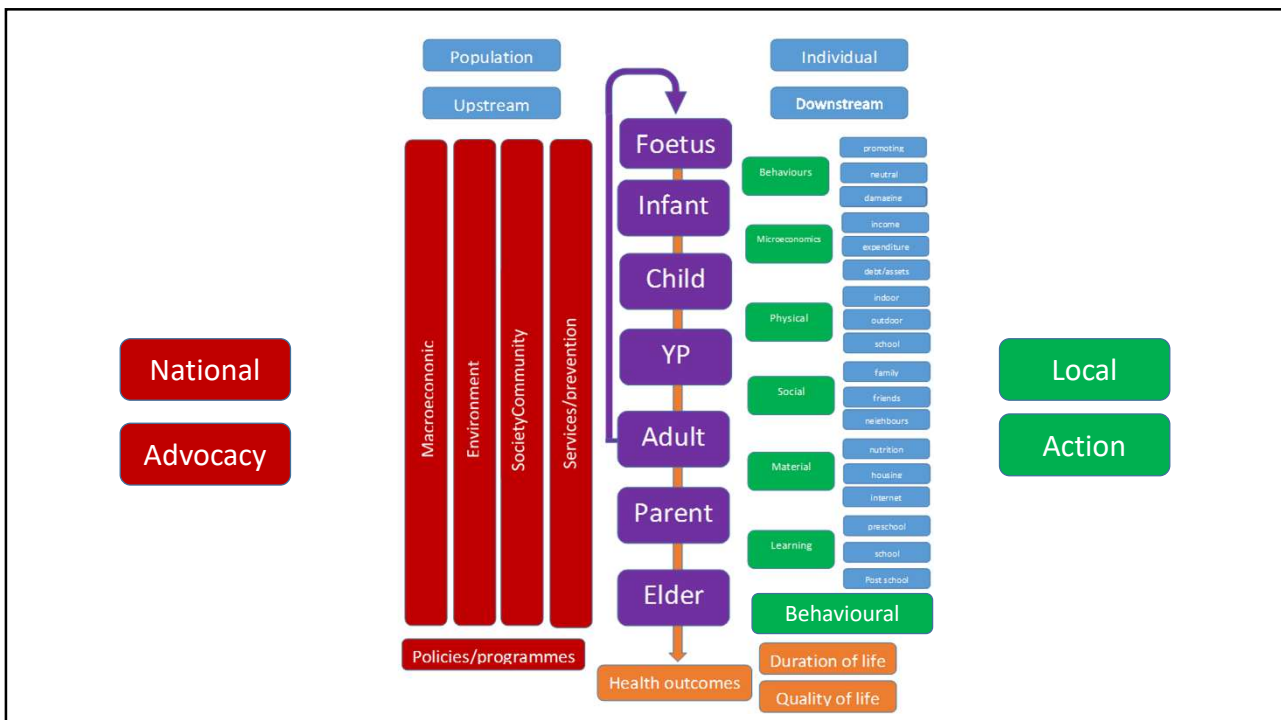
- the burden of disease within the population
- the evidence base for interventions
- large numbers of children or families affected
- the practicalities of delivering policy
- the overall costs and value
- strategic opportunities for collaboration
- and public acceptability.

22

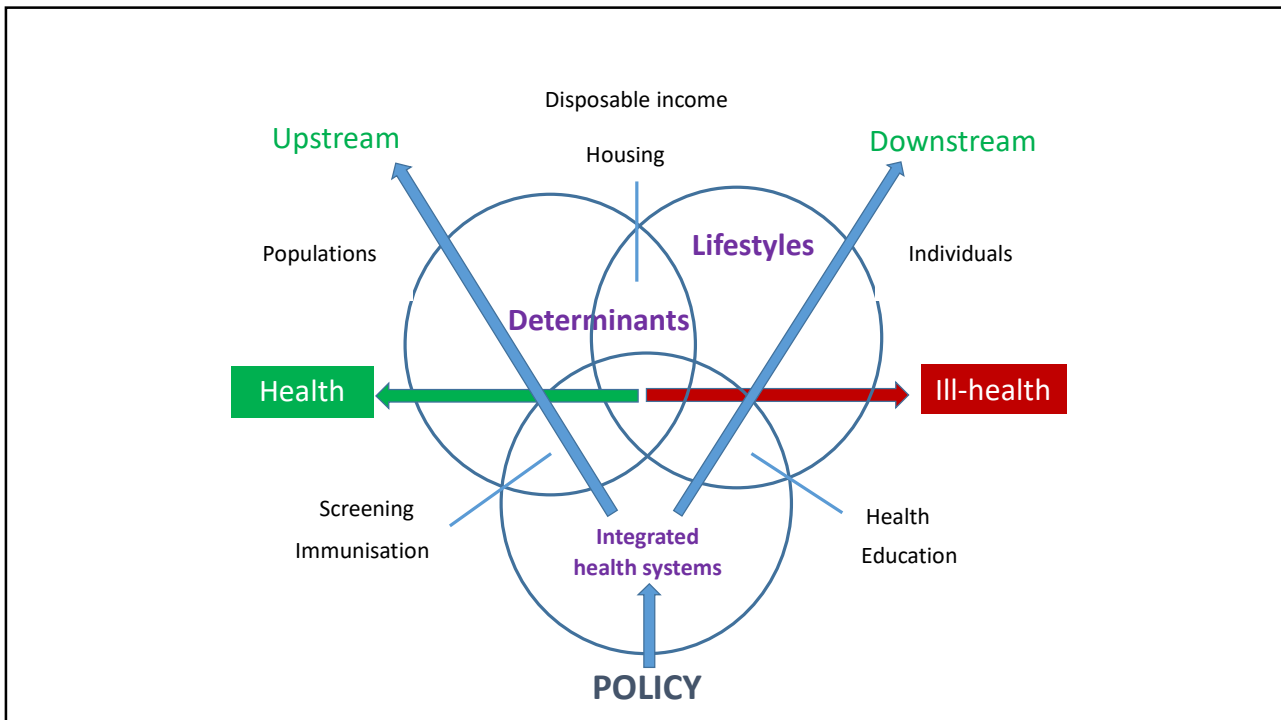
Govt. intervention

- Taxation
- Legislation-regulation
- Spending
 - Direct transfers
 - Providing services
- Information
- Values and culture

23



24



25

Influencing behaviours

- Lifestyles = patterns of behaviours
- Family/peer influence +++
- “Advertising”
- Cognitive Behavioural Therapy

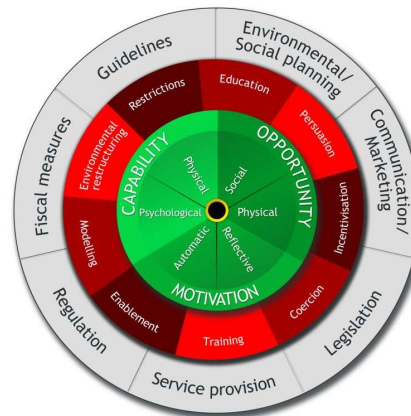
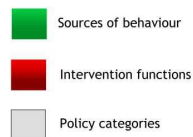
*Not impossible
but
challenging!*

26

Behaviour Change Wheel

For parents to make the healthiest choices for themselves and their children, they need:

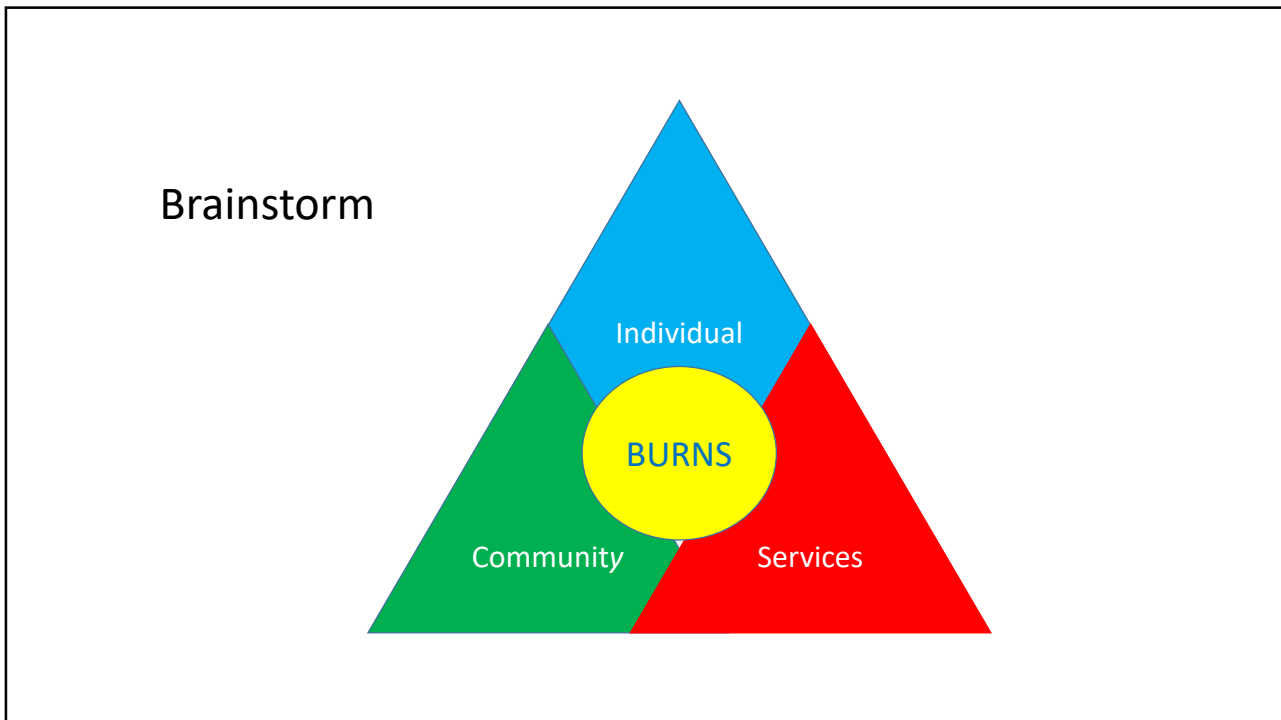
- Motivated
- Capable
- Opportunities



27

Practical framework to plan/organise interventions.

28



29

Simple matrix for planning interventions at a local level

	Lifestyles (Individuals)		Determinants (Communities)		Services (Health + others)	
	pos	neg	pos	neg	pos	neg
Child						
Family						
Community						

30

Burns prevention table

	Lifestyles (individuals)		Determinants (communities)		Services (health and others)	
	Positive	Negative	Positive	Negative	Positive	Neg
Child	"No" zones.	Behaviour	Fire resistant clothes.		Burn care.	
Family	Fire guards. Hot drink spills Oven guard. Smoke alarms. Bath temp.	Smoking at home.	CH temp control hot H ₂ O temp.	Smoking prevalence.	Healthy child programme.	
Community	Access to first aid.		Home heating. First aid courses.	Open fires.	Burn data.	

31

Summary

- Interaction between agents, a host and the environment.
- Each can be positive or negative.
- Interventions based on individuals (lifestyles)
- Interventions based on populations (determinants)
- A life course approach describes the cumulative effects of health factors
- Integrated health organisations contribute to both.
- Important that individual programmes reinforce each other.
- Don't forget equity of outcomes.

32



The end

Don't forget to read the paper on life course pathways

Next Minimod
Population health management