



National Health Care Institute



Sustainable Innovation in Health Care

eTELEMED 2018, ROME





National Health Care Institute

- Basic health care insurance package
- Improve quality in care
- Appropriate care
- Funding

Taking care of good health care'



HIGH TECH,
HUMAN TOUCH

UNIVERSITEIT TWENTE.

Faculty of Behavioral, Management and Social Sciences
Dept. Psychology, Health & Technology



Service organization for health professionals

- insurance
- consultancy
- finance
- HRM
- network
- education
- knowledge

vvaai business school
Anders leren kijken



MobileDoctors
M-HEALTH IN DE PRAKTIJK

#Trending 2018



- Internet of Things
- Analytics
- Edge computing
- 5G mobile broadband tech
- Block chain

E HEALTH

#Trending 2018



- Mainstream A.I.
- Virtual reality application
- Fail-as-a-Service visualisation tools
- Business culture as an obstacle
- Digital transformation inevitable

Innovation in health care



- Techno- utopism, singularity, transhumanism
 - Exponential disruption
 - Brilliant & failures
 - Time-to-market
 - Business models
 - Soft targets (behaviour, culture)
 - Innovation ≠ Improvement
-
- A background image showing a person in a white lab coat or medical uniform. The person's hands are visible, holding a tablet computer. The person is also holding a pen, suggesting they are taking notes or reviewing information. The background is slightly blurred, focusing attention on the person's actions.

Dutch situation



- Open system for innovation:
central role of health professionals and insurers
- Basic health care insurance:
effectiveness established in medical science and medical practice
- Conditional financing
- Innovation spaces et al.
- Additional insurance / out-of-pocket

High expectations +value



- Affordability
- Accessibility
- Effectiveness
- Efficiency
- Safety
- Quality



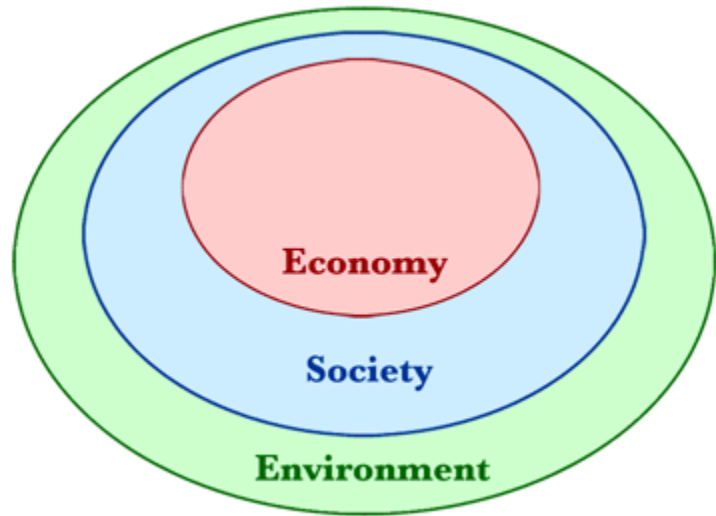
Urgencies



- Ageing and care-demand | multi-morbidities
- Self management | 'Health care is going home'
- Health care expenditures
- Digitalisation | 'From bricks to bytes'
- Health concept | From cure to prevention
- Consumerism
- Sustainability

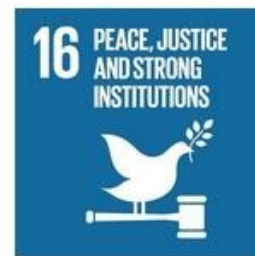
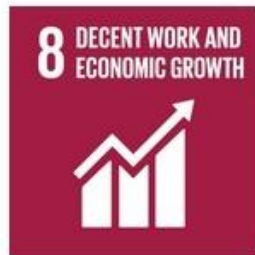
E-HEALTH

Sustainability





SUSTAINABLE DEVELOPMENT GOALS





SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

[Home](#) [About](#) [Goals](#) [Partnerships](#) [Take Action](#) [News and Media](#) [Social Media](#) [Watch and Listen](#)

3 GOOD HEALTH AND WELL-BEING



Goal 3: Ensure healthy lives and promote well-being for all at all ages

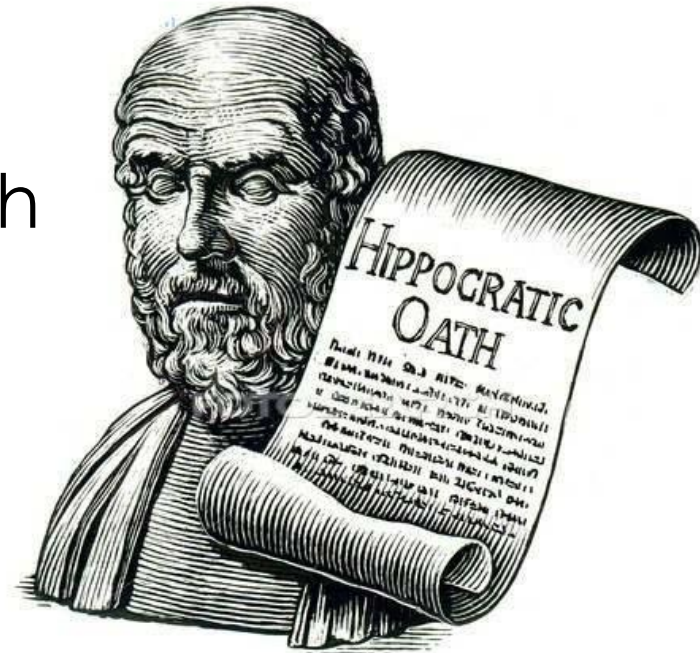
Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.





Health

- Climate change | Paris accords
- Health care industry
- Transformation to green health
- ***Primum non nocere***





do no harm

[Watch the Film](#) [Our Vision](#) [Join Us](#)



Climate change is a medical emergency

The health care sector has a moral mandate to respond and the power to be a tipping point towards a better future.



Examples

Some government initiatives: **Green Deals**

A quartermaster for green **HEALTH**

- Food
- Water
- Lower carbon
- Renewable energy
- Working clothes
- Circular economy
- Medical waste
- Transport
- Building: bricks-to-bytes
- Chemicals (non-toxic healthcare/MD)
- Waste reduction





In green health

- less waste =
- less costs =
- more quality =
- more patient satisfaction

Affordable, accessible, good care





- Leadership and public engagement
- Governance and commissioning
- Procurement
- Clinical and care models
- Communities
- Measurement
- Social value

Innovation and tech

health focus

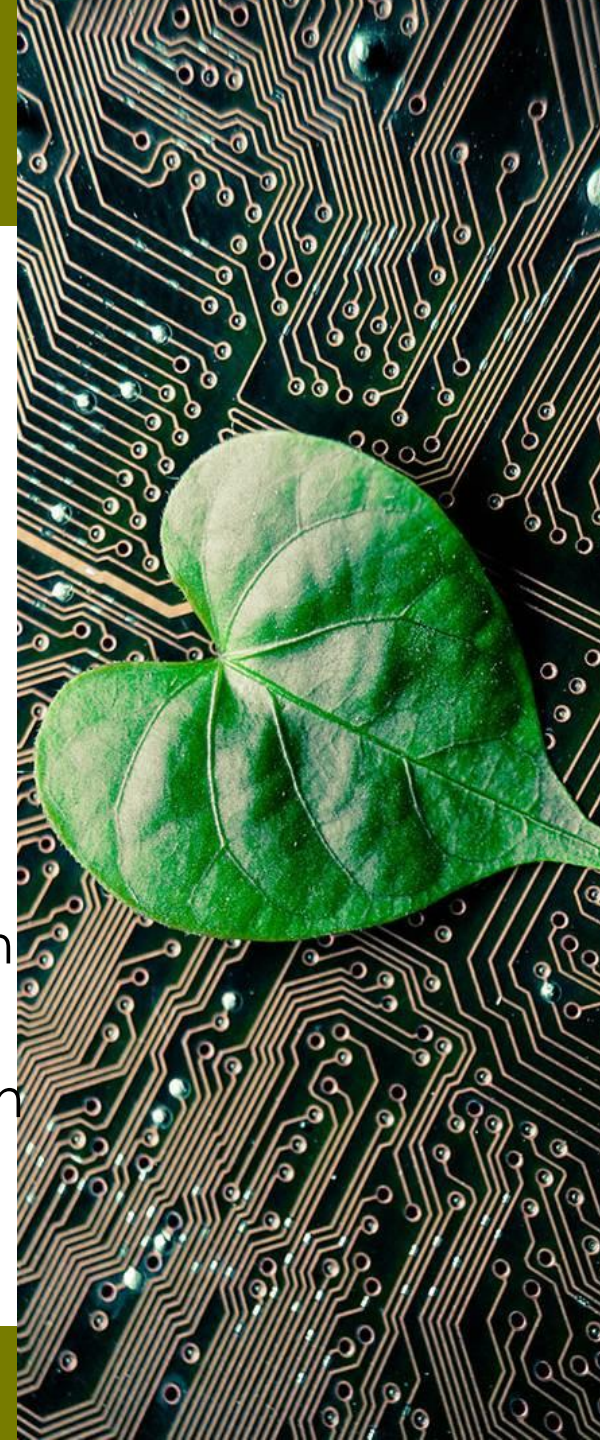
Slow adoption



- Financial issues
- Standardisation
- Unfamiliarity
- Vision / leadership
- Entrepreneurship / bussiness case
- Compartmentalisation
- Evidence base



- ❖ Proven technologies that reduce harmful environmental impact
 - > identify and adopt
- ❖ Innovation that reduces impact / costs; improves quality of care / health outcomes increases social value
 - > part of planning, governance, development, delivery of service: visible in the health care chain
- ❖ Gaps in research /obstacles for implementation are systematically addressed



To do



- Choose consciously
- Standardisation in data exchange
- Permanent education and training
- Awareness, communication
- Implementation research
- Scientific associations
- Appropriate care

Appropriate care



No *Needless Deaths*

No *Needless Pain or Suffering*

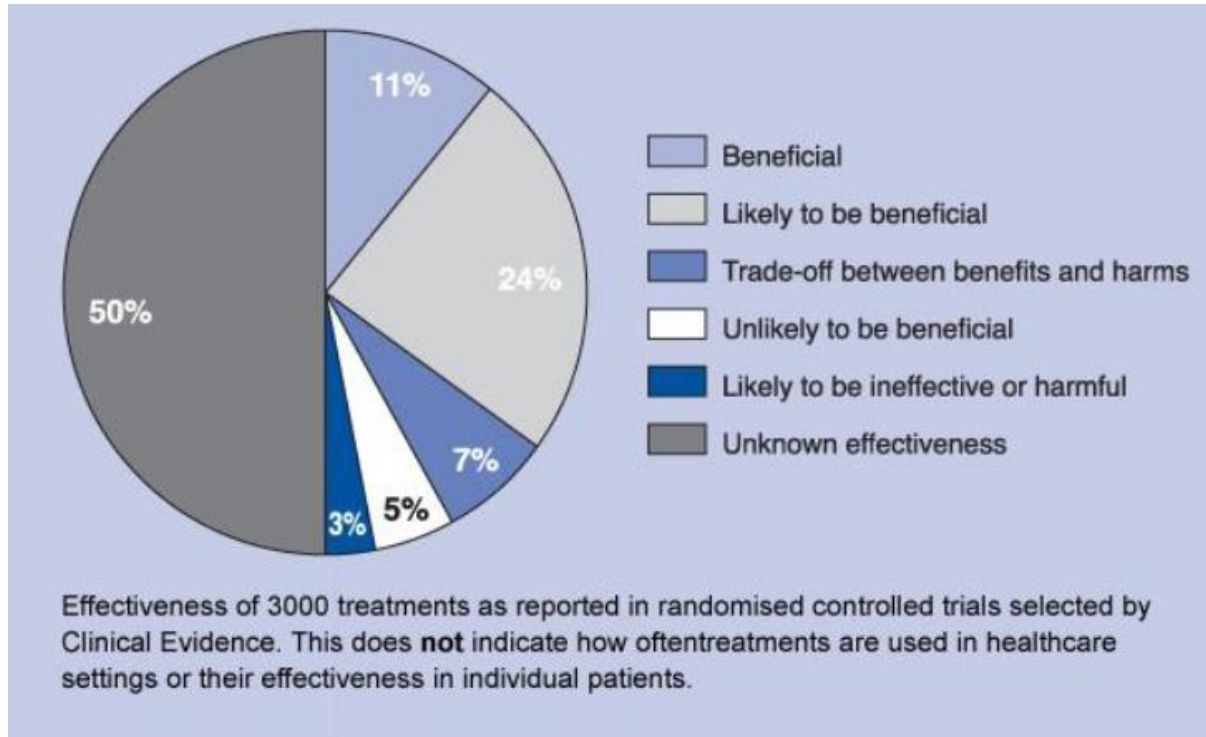
No *Helplessness in Those Served or Serving*

No *Unwanted Waiting*

No *Waste*

No *One Left Out*

Appropriate care



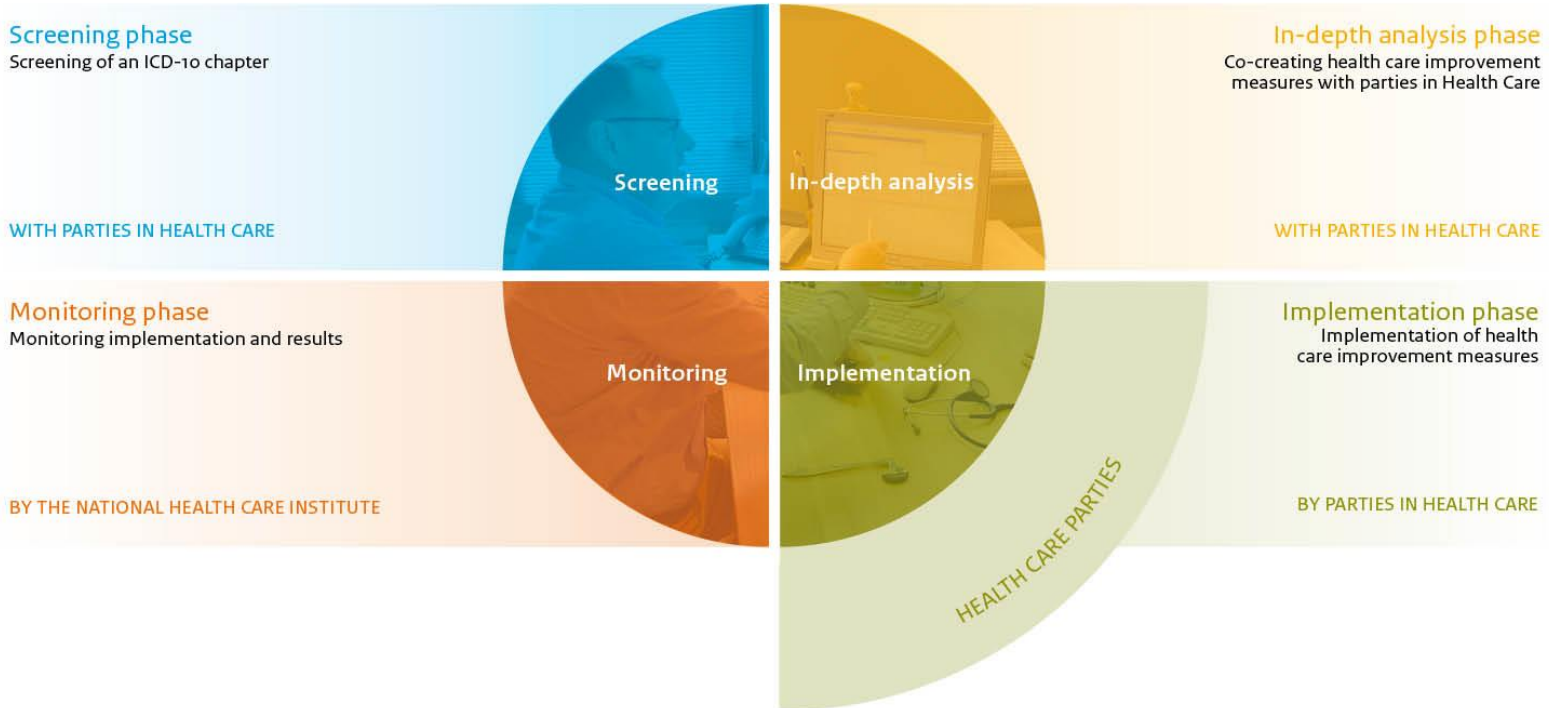
<http://clinicalevidence.com/x/set/static/cms/efficacy-categorisations.html>

Appropriate care



Methodology

Purpose: promoting appropriate care in the consultation room



Quality defect in innovation



- Bad coordination of care
- Poor patient information/data exchange
- Underuse of effective care
- Overuse of ineffective, **needless** care (20%)

Example: home telemonitoring cardiology (ICD)

- false positives
- greater workload
- pts think they are watched 24/7
- overtreatment

This is reparable/preventable!



- Understanding the problem
- Understanding organisational processes/systems
- Analyze demand, capacity, delivery;
- Choose the instruments for change
- Measuring impact of change.





Green health

- fits with preventive models and self management
- is appropriate care
- reduces waste
- reduces harm
- provides new business opportunities





 **CleanMed**
Creating Healing Environments

Europe
2018



Radboudumc
university medical center

Nijmegen | Netherlands
10th - 12th October 2018



Innovation => Quality improvement:

- patient included: quality first
- effectiveness rules
- no over-treatment / medicalisation
- feasible, cost-effective, necessary
- SUSTAINABILITY = appropriate care





Thank you!



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