Sustainable Innovation in Health Care

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National Health Care Institute

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

Taking care of good health care’
Faculty of Behavioral, Management and Social Sciences
Dept. Psychology, Health & Technology
Service organization for health professionals
- insurance
- consultancy
- finance
- HRM
- network
- education
- knowledge

Anders leren kijken

MobileDoctors
M-Health in de praktijk
#Trending 2018

- Internet of Things
- Analytics
- Edge computing
- 5G mobile broadband tech
- Block chain
#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
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
Sustainability
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*
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
Deliverables

In green health

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

Affordable, accessible, good care
Focus

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

Innovation and tech
Slow adoption

- Financial issues
- Standardisation
- Unfamiliarity
- Vision / leadership
- Entrepreneurship / business case
- Compartimentalisation
- Evidence base
Innovation and tech

- 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://clinicaledvidence.com/x/set/static/cms/efficacy-categorisations.html
Appropriate care

Methodology
Purpose: promoting appropriate care in the consultation room

Screening phase
Screening of an ICD-10 chapter

WITH PARTIES IN HEALTH CARE

Monitoring phase
Monitoring implementation and results

BY THE NATIONAL HEALTH CARE INSTITUTE

Screening

In-depth analysis

In-depth analysis phase
Co-creating health care improvement measures with parties in Health Care

WITH PARTIES IN HEALTH CARE

Implementation

Implementation phase
Implementation of health care improvement measures

BY PARTIES IN HEALTH CARE
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 telemontoring cardiology (ICD)
- false positives
- greater workload
- pts think they are watched 24/7
- overtreatment

This is reparable/preventable!
Appropriate innovation

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

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