IMPLEMENTING PERSONALISED ONCOLOGY

From Experimental to Mainstream: Stakeholder Elicitation Regarding the Implementation of Personalised Oncology in Dutch Healthcare.

Background

Cancer is responsible for 31% of the total death rate. It is a complex disease & every patient is unique. Standard of care treats most cancer patients the same. Personalised Oncology offers promising tailored treatments.

INTRO: The global evolution of Personalised Oncology (PO) provides examples of how state-of-the-art healthcare integrates into patients’ lives and serves as a precedent towards widespread future implementation (Singer et al., 2018). The implementation efforts of PO will result in durable clinical benefit, facilitate nationwide access to care and exploit future scientific and technological advances in cancer care (Janssens, Schuster, & Voss, 2018).

PROBLEM: Current initiatives do not contribute to the health of the vast majority of Dutch cancer patients. Many significant barriers to mainstreaming PO exist and implementation is hampered (Joosten et al., 2016): therefore, the healthcare system is not exploiting its potential.

AIM: Develop actionable insights on the implementation of Personalised Oncology in Dutch healthcare by analysing value assessments of stakeholders following allocative decision-making criteria for implementation.

Theoretical Framework

EVIDEM model for value assessment

Quantitative appraisal → Qualitative appraisal

Need for intervention
Comparative outcomes
Type of benefit of the intervention
Economic consequences
Knowledge of the intervention

Quantitative data

Need for intervention
83% high disease burden of cancer

Type of benefit of the intervention
31% PO-based therapy will cure the patient

Knowledge about intervention
54% not enough supporting scientific evidence

Feasibility contextual criteria

High costs and no investments > no direct cost-benefit relation
No leadership > no mandate of stakeholders > no one feels responsible
No data governance > no interoperability > no rules in data (re)use

Only qualitative data

Number of patients is growing > ageing population
Difficult to cure > cancer is N=1
Lack of drugs > unclear rules for administering off-label therapy
No treatment is also a treatment > QoL is important > severe side-effects
Few implementation of knowledge > no valuation of implementation quantity > wrong incentives in science

“...you will need a radical approach that proves Personalised Oncology really has a therapeutic effect on the patient, rather than shifting the burden of proof. Only then the majority will follow.”

Conclusion & Recommendations

The national implementation of Personalised Oncology will not be feasible yet. To support its effectiveness within cancer care, the healthcare system and all stakeholders have to understand the use of PO and proof its benefit in a clinical setting.

Recommended approach:
Create mandate and take leadership within the PO debate. Launch a foundation or an institute to accelerate cancer care. Why? To treat today’s patient with tomorrow’s care.

Invest & take leading position in genomic research via big data based analysis of Real World Evidence (RWE) (n=1, n=1, n=1)

Develop a platform to mine global treatment options based on PO and match patients to existing therapies

Be responsible for the burden of proof by treating patients with PO-based care; arranged in one clear patient journey