From Innovation to Integration: A Case Study of Digital Health Technologies in the Trentino Healthcare System

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Agenda

- Context
- Aim
- Methodology
- Results

Discussion
The aim is to explore a possible model of care in which DHTs and DTx complement and support education, prevention, and care of the Italian NHS.

- Workforce shortages
- Ageing population
- Lifestyles
- Chronicity

Barriers to innovation
Context II: Definitions & Examples

Electronic Health Record (EHR)
Televisits, telemonitoring

- In Italy: regional EHR

Clinical decision support

- ProFoundAi (breast cancer recognition)

Digital Therapeutics (DTx)

- Deprexis (mental health)
  - Kaia (back pain)
  - Meeva (autism)
Context III: Regulation

- Medical Devices Regulation
- General Product Safety Regulation
- Artificial Intelligence Act
- GDPR, Eu Health Data Space

1 Law proposal (C. 1208) 19ª legislature

- DTx as medical devices
- Interparliamentary group on digital health and digital therapeutics
  - Law Proposal C1208

• DiGA, 2019
• NICE criteria, 2019
• Mhealth, 2019
• Early Value Assessment, 2022
• PECAN, 2023
The potential of DHTs can only be realised when they are integrated into clinical practice.

- Regulatory requirements
- Reimbursement, pathways and pricing
- Organisational barriers
- Cultural and social determinants
Aim: A model for digital health uptake

The aim was to explore a possible model of care in which DHTs and DTx complement and support education, prevention, and care of the Italian NHS.
Methodology: Insider Action Research (AR)

**Practitioner-scholar:** research within own organisational context

**Context**

**Quality of relationships**

**Quality of the AR process**

REFLECT  PLAN  ACT  OBSERVE

**Outcomes**

Practical outcome: model

Intangible outcome: deeper understanding

Ongoing
Results I

FBK framework to guide the integration of DHTs and DTx in the Italian NHS, tailored to the specific context of Trentino healthcare system.

4 attributes:
Results II

RISK STRATIFICATION

1. Primary prevention
   Promotion of healthy lifestyle & education

2. Secondary prevention Evaluation

3. Chronicity-frailty-disability

4. Multimorbidity

5. Social determinants

Terminality

CARE PROVISION

- Pain management, palliative DHTs
- Telemedicine
- Disorder-specific DHT Guided DHTs
- Disorder-specific DHT Guided DHTs
- Unguided + guided DHT
- Unguided DHT

Increasing healthcare needs
Source: Author own elaboration
Results IV

Key milestones for DHT integration in care pathways

1. CE-certified DTx
2. Health Technology Assessment
3. Telemedicine platform
4. Standard rate (pricing)

* NRRP objective - in development
** criteria to be defined

Source: Author own elaboration
Discussion & conclusion

Effectiveness  Efficiency
Equity          Resilience

NEW regulation

Innovation ≈ social phenomenon

NEW conflicts

FUTURE RESEARCH

• How to prepare clinicians?
• Do we need new healthcare professionals?
• How to ensure patient engagement & adherence?
• Who & how will assess DTx in Italy?
• What criteria to establish the pricing of DTx?
• What alternatives to the centralised DiGA model?
Thank you

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