Strategic Intelligence Monitor on Personal Health Systems – Phase 3

Approach for the research and field work

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Methodological approach

• Scoping integrated care

• Selecting cases among the EIP on AHA reference sites of ICT

• Selecting cases from the scientific and grey literature review
Methodological approach

• Scoping integrated care
Scoping integrated care

Integration NESt

Foci of integration

Types of integration

Levels of integration

Breath of integration

Degree of integration

Integration NEST

Scoping integrated care

Integration drivers

Comprehensive services across the care continuum

Patient focus

Geographic coverage and rostering

Standardized care delivery through interprofessional teams

Performance management

Information systems

Organizational culture and leadership

Physician integration

Governance structure

Financial management

Integrated care dimensions

Macro level (system)

Micro level (Clinical)

Meso level (professionals and organisational)

Levels of integration

Breath of integration

Degree of integration

Types of integration
Methodological approach

• Selecting cases among the EIP on AHA reference sites of ICT
Selecting cases

‘Theoretical’ or ‘Purposive’– ‘Convenience’ or ‘Snow ball’ sampling (representation and contrast)

• **Step 1**: we performed a wide search to identify cases. At this stage we neither applied the principles of representation and contrast, nor did we filter through the presence of the dimensions;
• **Step 2**: secondary sources were used for a preliminary analysis of these 18 cases and for the assessment of how they met the principles of representation and contrast;
• **Step 3**: we analysed the cases to assess the extent to which the facilitators were there
• **Step 4**: we checked regional coverage across Europe and classified cases according to the different typologies of health care systems (see table 3).
Selecting cases

‘Theoretical’ or ‘Purposive’ – ‘Convenience’ or ‘Snow ball’ sampling (representation and contrast)

1. **Healthcare** as starting point: services must involve institutionalised care i.e. the patient is actually treated in the healthcare system
2. **Integration** between at least two of the following: primary care, secondary care and tertiary care and social care.
3. **ICT** facilitating the integration
4. **Evidence** of contribution to enhance quality of care, quality of life and system efficiency
Selecting the cases

Survey questionnaire for case selection (supporting the selection and justification of cases - 130 experts and yielded 27 answers amounting to a 20.7% response rate)

• The definition of deployed Integrated Care services
• The nature of large deployment pilots
• Current funding conditions for deployed services
• The number of cases of deployed services likely to currently exist in Europe.
• Suggestions about further cases
• Assessment of the preliminary list of cases selected (i.e. known or not, stage of deployment)
The definition of deployed Integrated Care services

1. “ICT supported integrated care services are those that are offered as a standard service without the need for individuals to be enrolled into a pilot to benefit from the services. In other words any individual in any area (local, regional, national) where the service is provided can be offered that service. Moreover, a deployed service means also continuity of funding while a pilot would have an end date after which service provision is uncertain. Furthermore a deployed service does not have as the main objective testing like in a pilot but actual provision of care”

2. “Deployment pilots main objective is not testing but implementing deployed services and as such they are closer to mainstream provision of care than to a RCT pilot”

3. “Fully deployed integrated services are currently provided in Europe under different funding solutions but very few of them can be considered permanent and mainstreamed, so that under a strict continuity of funding condition very few cases could be considered as deployed services”
Selecting the cases

The definition of IC Deployed services proposed in the questionnaire is accepted, though with different degree of agreement;

The same level of agreement is registered with the fact that deployment pilots represent cases that are closer to deployed services than to RCT pilots; in this case just 4% of respondents slightly disagree.

About 92% of the respondents have an high degree of agreement with fact that permanent and mainstreamed funding for integrated care services is rare;
In your view, how many cases of fully deployed ICT supported integrated care services as defined above are present currently in Europe?

21% of the respondents think that in EC there are no more that 10 examples of IC Deployed services that are compliant with the definition we provided them.

The number of respondents believing that there are no more that 50 IC Deployed amount to 63%.
<table>
<thead>
<tr>
<th>FIRST WAVE</th>
<th>SECOND WAVE</th>
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<tbody>
<tr>
<td><strong>ARIA</strong></td>
<td>Self-care and family care support services provided through ICT installed at patient's homes</td>
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<tr>
<td><strong>BLMSE</strong></td>
<td>Borås municipality, Western Sweden (Sweden)</td>
</tr>
<tr>
<td><strong>BSA</strong></td>
<td>Diabmemory Breitenstein, Lower Austria (Austria)</td>
</tr>
<tr>
<td><strong>CARTS</strong></td>
<td>Dreaming Barbastro, Aragon (Spain)</td>
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<tr>
<td><strong>ETXEN ONDO</strong></td>
<td>GETAFE Madrid (Spain)</td>
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<tr>
<td><strong>TRIKALA</strong></td>
<td>Integrated care programme for older in- and out-patients</td>
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<tr>
<td><strong>GESUNDES KINZIGTAL</strong></td>
<td>MOMA/Maccabi Israel</td>
</tr>
<tr>
<td><strong>INAA</strong></td>
<td>Care model based on a multidisciplinary 24/7 advanced technology call centre for treatment of various chronic diseases (incl. remote monitoring)</td>
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<td><strong>MACVIA-LR</strong></td>
<td>Galicia (Spain)</td>
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<tr>
<td><strong>NEXES</strong></td>
<td>Renewable Health Carinthia (Austria)</td>
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<td><strong>OULU SELF-CARE</strong></td>
<td>VHA USA</td>
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<td><strong>PDTA</strong></td>
<td>Integrated care model for elderly veterans and their caregivers</td>
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<td><strong>SAM/BO</strong></td>
<td>Scotland (United Kingdom)</td>
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<td><strong>SOLE/FSE</strong></td>
<td>Scotland (United Kingdom)</td>
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<td><strong>SPARRA</strong></td>
<td>Scotland (United Kingdom)</td>
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<td><strong>TDP</strong></td>
<td>Scotland (United Kingdom)</td>
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**FURTHER INFORMATION**

1. Implementation of integrated home care services for COPD patients.
2. Improving cooperation between home care, elderly home care, primary care and hospital care to better coordinate care of the elderly.
3. Integrated care organisation offering health and social care services.
4. Screening, triage, assessment and treatment to reduce risk of frailty and adverse outcomes in community dwelling older adults.
5. Person-centred care integrated care model for elderly.
6. Telehealth/telecare services for chronic patients and the elderly and social services to all citizens.
7. Preventive care management for the whole local population with health assurance contract with AOK or LK.
8. Supporting the elderly to remain independent for longer periods in their own environment.
9. Innovative solutions through Living labs to improve care for chronic patients.
10. Integrated care services for chronic patients based on structured interventions addressing prevention, healthcare and social support.
11. Cloud services supporting integrated care services allowing the elderly to estimate their own well-being and manage their own health.
12. Anticipatory care planning for chronic disease management of patients (e.g. Dementia, Alzheimer).
13. Stimulating integrated health care initiatives amongst local health and social care actors through shared agreement protocol of collaboration.
14. Interoperable infrastructure enabling the development of integrated care services for the whole population of the region.
15. Local integrated care initiative based on personalised Anticipatory Care Planning actions supported by a population pre-screening model measuring personal risk of emergency admission in hospitals.
16. Funding and stimulating the implementation of telecare projects in local Community of health Partnerships throughout Scotland.
Cross case analysis

Four analytical axis

• Integration
• Role of ICT
• Funding
• Transferability
Cross case analysis

Four analytical axis

• Integration
Integration

Foci of integration

• **Entire** population (e.g. BSA; SAMBO);
• Vulnerable **sub-groups** (e.g. MACVIA; PDTA; ARIA);
• Patients with **complex illnesses** (e.g. CARTS, SPARRA).

Types/Level of integration

• **Functional**: to some extent back-office and support functions are coordinated in all the cases.
• **Organisational**: to some extent some kind of relationships between healthcare organizations is achieved in all cases.
• **Professional**: specially between General practitioners and Specialists, just few cases include social care professionals (ENTXEA ONDO and BSA).
• **Services**: benchmarking, screening tools and clinical pathways (BLSME; CARTS; SPARRA; TDP)
• **Normative**: new culture (BLSME, INAA)
• **Systemic**: BSA fully integrated health and social care area
• No funding integration
Integration

Degree of integration

• **Linkage**, the least-change approach, entails providers working together on an ad hoc basis within major system constraints

• **Coordination** is a structured, inter-organizational response involving defined mechanisms to facilitate communication, information-sharing and collaboration while retaining separate eligibility criteria, service responsibilities and funding

• **Full integration**, the most transformative combination, refers to a “new” entity that consolidates responsibilities, resources and financing in a single organization or system (eg. BSA)

Breath of integration

• **Similar** organizations/units at the same level join together (eg. SOLE, GPs-Paediatricians)

• Combination of **different organizations**/units at different levels (e.g. eTrikala social and health care; Gesundes Kinzigtal hospital, primary care, nursing home; SOLE administrative)
Cross case analysis

Four analytical axis

• Role of ICT
Role of ICT

**From back-office to front-office**

- Health Information Exchange and Interoperability are compulsory
- Health professionals (EHR and Tele-monitoring)
- Patients (PHR)
- Social care record?
- Management (Benchmarking)
- Different levels of scale: from local initiatives to regional deployment
Technology is an enabler

- Technological change without organisational change does not facilitate integration
- Organisational and Technological innovation go together.
- Health professional engagement
- Patients engagement as an excuse to facilitate coordination
- Integration could be achieved without technological innovation
Cross case analysis

Four analytical axis

• Funding
Funding

• From **research and innovation** funds to **institutional** funds at local and regional level

• There is a clear consensus about the **insufficient resources for integrated care**, thus national investments and funding programmes have not been a facilitator in most of the cases.

• It is clear that the technological components of the initiatives have been funded so the problems may arise with regard to the **maintenance of the initiative**.
Incentives to foster organisational innovation are more difficult to implement because these incentives need to be linked to reimbursement models, which requires setting-up new regulatory framework or adapting existing ones.

The lack of power to align service funding and incentives does not allow ensuring equitable distribution for different services or levels of services.

In most cases, teamwork happens on a voluntary basis, not as the result of new funding mechanisms.

Sustainability? Regulatory framework
Cross case analysis

Four analytical axis

• Transferability
Transferability

- Transferability depends on who is leading: local-regional; health professional-managers (policy makers).

- Integrated care is embedded within the health and social care system: transferability is most likely to happen within the same type of institutional setting.

- Transferability can not be isolated from the regulatory framework. There are not plug-and-play options.
• Health Information Exchange and Interoperability: **ICT may facilitate transferability**, specially at a local/regional level.

• Technological transferability vs. Organisational transferability: **customization is a must**

• From transferability to benchmarking and **benchlearning**: sharing lessons learnt and experience including what **did not work**

• **Concept and methods** could be easily transferred, but not implementation
Conclusions
Conclusions

• **Governance** mechanisms are the most important factor mostly as a facilitator but at times they can become a barrier.

• Strong emphasis on **reorganisation**; patient focus and engaged professional.

• Technological innovation are mainly driven by **interoperability**.

• Consensus among all the actors interviewed about the difficulties for international transferability of their experience due to the highly **context dependent nature** of both technological and organisational innovation.
Thank you very much for your attention

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