ACT: Assessment of telehealth and care coordination solutions

Workshop on the implemented practices identified in healthy ageing actions of the Health Programme

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http://www.act-programme.eu
Advancing Care Coordination and Telehealth (ACT)

“Identify ‘best practice’ organisational and structural processes supporting integration and implementation of telehealth in a care coordination context for routine management of chronic patients”

First time in Europe

- Five leading regions in four countries
  - Experienced in delivering telehealth / coordinated care
  - At least 3,000 CHF, COPD, DM patients per region
- Leading medical experts
- Fully aligned with EC strategy on active and healthy ageing
- Iterative improvement to arrive at a toolkit for care coordination & telehealth use across EU
  - Spread plan to 15-20 other EU regions
What ACT is not?

- Another Randomized clinical trial
  We aim at real life experiences, integrated into healthcare routine

- Another technology push initiative or a technology intervention
  We look at the problem from the people perspective. It is not a research on technology solutions

- A unique vendor push initiative
  Regions may have different solutions. It is about moving the whole concept of CC &TH
What are we evaluating?
ACT Regions and Programmes

- **Elderly**
  - REACT (Rapid Elderly Assessment Care Team)-Scotland
  - National program elderly care Embrace-Groningen
  - CREG telemonitoring: Case Manager Lombardi
  - PIPS: Case Management program Multimorbidity-Basque Country
  - Multimorbid patient management- BSA- Catalonia
  - Home safety service (telecare)-Scotland
  - eDiabetes / Effective cardio Asthma/ COPD (AC)
  - Telehealth-Groningen

- **Long term chronic care program**
  - 3 PPAC Disease Management programs (DM, HF, COPD), Oxygen Therapy Enhanced care T1DM-Catalonia
  - PIPS: Disease Management programs (DM, HF, COPD)-BC
  - CREG program Care coordination Lombardy
  - Post-discharge HF/COPD-Catalonia

- **Transitional care/ post discharge**
  - Reablement Service 24/7 crisis care-Scotland
  - Telehealth / telecare for HF –Basque Country

- **Patient self-care management**
  - Expert Patient Lombardy
  - Expert/Active Patient Basque Country (T2DM)
  - Early diagnosis (T2DM)-Catalonia

- **HEALTHY**
  - Ambulatory intensive care program
Added Value: Addressing the transformation not the technology

Telehealth potentially brings
- 15% reduction A&E visit reduction
- 20% emergency admission reduction
- 14% elective admissions reduction
- 14% bed days reduction
- 8% tariff cost reduction
- 45% mortality reduction


• Why is telehealth not fully implemented yet?
  – From pilots to implementation
  – Barriers in translating telehealth into routine care

• Telehealth needs to be integrated into a local care delivery process
  – Re-structuring towards care coordination
  – Education of care providers
  – Tailoring to disease state and acuity level
  – Patient self-care and adherence

Organisational and structural changes are needed

ACT Programme
Work Packages

WP5 – Stratification

Segment patient population based on risk

WP4 – Care coordination

Select intervention tailored to patient needs

WP3 – Evaluation

Engage for patient centered care

WP6 – Staff engagement & Patient adherence

Measure individual patient outcomes

WP7 – Efficiency & Efficacy

Measure total population outcomes

Prof. John Cleland

Prof. Josep Roca

Prof. Stan Newman

Prof. Stefan Stoerk
ACT: Assessment

- Evaluation Framework
- Indicators and surveys
- Selection of good practices
- Evaluation Engine
7.A.II.1: number of patients per disease, per age category
1. Number of patients diagnosed with COPD, age <60
2. Number of patients diagnosed with COPD, age ≥60 and age ≤75
3. Number of patients diagnosed with COPD, age >75
4. Number of patients diagnosed with DM, age <60
5. Number of patients diagnosed with DM, age ≥60 and age ≤75
6. Number of patients diagnosed with DM, age >75
7. Number of patients diagnosed with HF, age <60
8. Number of patients diagnosed with HF, age ≥60 and age ≤75
9. Number of patients diagnosed with HF, age >75

7.A.II.2: number of patients with 2 diseases, per age category
1. Number of patients diagnosed with COPD + DM, age <60
2. Number of patients diagnosed with COPD + DM, age ≥60 and age ≤75
3. Number of patients diagnosed with COPD + DM, age >75
4. Number of patients diagnosed with COPD + HF, age <60
5. Number of patients diagnosed with COPD + HF, age ≥60 and age ≤75
6. Number of patients diagnosed with COPD + HF, age >75
7. Number of patients diagnosed with DM + HF, age <60
8. Number of patients diagnosed with DM + HF, age ≥60 and age ≤75
9. Number of patients diagnosed with DM + HF, age >75

7.A.II.3: number of patients with 3 diseases, per age category
1. Number of patients diagnosed with COPD + DM + HF, age <60
2. Number of patients diagnosed with COPD + DM + HF, age ≥60 and age ≤75
3. Number of patients diagnosed with COPD + DM + HF, age >75

Diagnosis

Indicators

Questionnaires

Programme Directors

Frontline Staff

Patients

Key Drivers

Regional Dashboards

Key Outcomes
• Outcomes
  - Efficiency & efficacy
  - Patient adherence

• Stratification
  - Population

• Care Coordination
  - Organisation

• Engagement
  - Patient
  - Staff

Tools: Indicators and surveys
## Selection of good practices

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<th>Population diagnosis</th>
<th>BAS</th>
<th>CAT</th>
<th>GRO-COPD</th>
<th>GRO-EMB</th>
<th>GRO-EFC</th>
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<th>Source tools</th>
<th>EMR commercial</th>
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<td>Hopkins' ACG-PM</td>
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<td>CReG</td>
<td>SPARRA</td>
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# Example of Care Coordination analyses

**WP4/6 Surveys to Programme Directors**  
Programme A vs. Programme B from ACT

| CARE PROVIDERS COORDINATION | Frequent information exchange between care providers | Not frequent service and team meetings  
Social care does not play a prominent role |
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<td>PATIENT EXPERIENCE</td>
<td>Patients can book appointments, engage in daily self-monitoring</td>
<td>Have no access to their data and are not involved shared decision making in CC</td>
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<td>ORGANIZATIONAL STRUCTURE AND FUNCTION</td>
<td>Classical configuration of GP, nurses, clinicians, but also new roles such as case managers</td>
<td>Social care and home care are less frequent</td>
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<td>EVALUATION</td>
<td>Frequent evaluation, including achievement of financial targets, patient adherence, patient outcomes, staff performance, program outcomes</td>
<td>Does not make patient symptoms reporting review</td>
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# ACT Programme
First results
Disease Management vs Case Management Basque Country 2012

A&E figures double the amount in Case Management while Consultation figures do not: room for improvement
First results
Comparison of Population Intervention Plans in Multimobidity Basque Country 2012

Comarca Gipuzkoa organizational unit shows high number of consultations with lowest admissions and emergencies

* Tolosaldea organizational unit has a concerted hospital from which we could not retrieve any activity data.
Evaluation Engine

LimeSurvey

Drupal

Domain experts

Survey: Excellent: Good: Fair: Poor:

3/17/2015
The Evaluation Engine
What works and why: key drivers vs. key outcomes

Care coordination and telehealth deployment

Drivers

Key Outcomes

Values of Key Outcomes

Relation Key Drivers & Key Outcomes

Cookbook
The challenges in Assessment

- Harmonisation on coding information
- Harmonisation on multilevel intervention related to integrated care
- Lack of agreement on indicators:
  - Longitudinal evaluation
  - Integrated care interventions
- Availability of data

ACT Programme
Conclusions- Interim lessons learned

• We have learned how to identify **comparable elements of programs** that are different in scope and scale. We can already highlight elements in programs that are **candidates for good practices**.
• We have a powerful **evaluation engine** for the collection/analysis/comparison and visualisation of the data.
• Topics such as **availability and homogeneity of indicators** to be compared between programmes and regions need to be fine tuned. **Organisational barriers** in the process of data collection such as ethical issues and patient data processing issues, are time consuming although necessary.
• The partners are engaged proactively with ACT, we are all **learning by doing with the aim of a practical assessment toolkit** to promote the large scale deployment of care-coordination and telehealth.
Objectives B3 Integrated Care

Reducing avoidable/unnecessary hospitalisation of older people with chronic conditions, through the effective implementation of integrated care programmes and CDM models, ultimately contributing to the improved efficiency of health systems

Targets

- **By 2015:** Availability of programmes for chronic conditions/case management (inc. remote monitoring) serving older people in >50 regions, available to >10% of the target population

- **By 2015-2020:** Based on validated, evidence-based cases, scale-up and replication of integrated care programmes serving older people, supported by innovative tools and services, in >20 regions in 15 MSs
ACT Evaluation in the B3 action plan

Objective assessment tool for regions

Identification of gaps

Recommended good practices from other regions

Tailored recommendations/strategy

Benchmarking/Sharing knowledge with other regions
Alignment with the EC scaling-up strategy and EIP on AHA

- Guidance and Agreement of minimum dataset for evaluation of integrated care, innovation programs
- Alignment of assessment initiatives
- Funding for:
  - deployment of good practices in other regions
  - Implementation of the recommendations
- Embedding Continuous improvement and Learning into the Health and Care systems

ACT Programme
### ACT Affiliated Members

- **Affiliate Members (in progress)**
  - Netherlands: Foundation Zorg Binnen Bereik (ZBB). Amersfort Region
  - Sweden: Center of Technology in Medicine and Health (CTMH). Stockholm Region
  - Spain: Basque healthcare technology provider, Galician Region, Valencia-La Fe Region
  - Germany: Technical University of Dresden (TUD). Saxony Region, Brandenburg
  - UK: Northern Ireland Nation, Nottinghamshire/Nottingham city Region, Liverpool Region
  - SG: Eastern Health Alliance

At ACT we are open and willing to invite other regions to share our ambition and results.

- **Why might a region want to be an ACT programme affiliate member?**

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<th>Engagement as observer</th>
<th>Engagement as evaluation site</th>
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<tr>
<td>Access to programme results and participation in project meetings</td>
<td>in addition,</td>
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<td>Learn from the others’ good practice and experiences</td>
<td>• Access to the ACT evaluation engine and fully participate in the evaluation process and best practice selection</td>
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<td>Provide opportunities for collaboration leading to efficiently (re-) design and validate innovative care services and expand the services to larger population - with the same level of investment</td>
<td>• Get evidence and benchmarking of your solution under the review of the key international experts</td>
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<td>Enlarge your visibility at international level</td>
<td>• Combine evidence with all the evaluation sites</td>
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<td>Enable local industry to see a larger market, beyond the “local border”</td>
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<td>Engage political/industrial support</td>
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