CONFERENCE

“Integrated services: organizational healthcare models in the framework of chronic diseases”.

ACT@Scale: Advancing Care Coordination and Telehealth at Scale

26-27 March 2018
Turin, C.so Regina Margherita, 174

Dr. Cristina Bescos
Philips
Since 1914 delivering game-changing innovations

<table>
<thead>
<tr>
<th>Year</th>
<th>Innovation</th>
<th>Year</th>
<th>Innovation</th>
<th>Year</th>
<th>Innovation</th>
<th>Year</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1915</td>
<td>Arga-lamp</td>
<td>1925</td>
<td>Metalix- X-ray tube</td>
<td>1926</td>
<td>Pentode</td>
<td>1931</td>
<td>Philora sodium lamp</td>
</tr>
<tr>
<td>1915</td>
<td></td>
<td>1925</td>
<td></td>
<td>1926</td>
<td></td>
<td>1931</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Lifeline AutoAlert</td>
<td>2011</td>
<td>HeartNavigator</td>
<td>2011</td>
<td>AirFloss</td>
<td>2012</td>
<td>Hue</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>2011</td>
<td></td>
<td>2011</td>
<td></td>
<td>2012</td>
<td></td>
</tr>
</tbody>
</table>
Four profound trends are shaping the future of health technology

- Global resource constraints
- Aging populations and the rise of chronic illnesses
- Increasing consumer engagement
- Digitization
At Philips, we take a holistic view of people’s health journeys, starting with healthy living and prevention, precision diagnosis and personalized treatment, through to care in the home – where the cycle to healthy living begins again.

Ready to take on the healthcare challenge
ACT@Scale

Start: March 2016
Duration: 36 months
Project Budget: 3.5 MEuros (60% funded)
Consortium: lead by Philips Healthcare (Germany)

Small scale tests
Limited evaluation and evidence
Focus on technology

Experiences in CC&TH

Evaluation Framework
Regional CC&TH programs
Evaluation Engine

EU Scaling-up
Transfer/coaching of good practices
Evaluation and Quality improvement

Experiences in CC&TH → ACT → ACT@Scale
ACT@Scale Objectives

• Demonstrate how the benefits of CC & TH can be successfully deployed at scale in real world healthcare settings

• From small pilots to routine practice
  – Healthcare regions are investigating how best to incorporate CC & TH services into care delivery, and how to scale up and incorporate to standard practice.

• Reaching large scale
  – Scaling-up encompasses making the services sustainable, providing them to entire populations, and engaging patients and practitioners.

• Transfer knowledge among key EU decision makers
  – Develop, test, consolidate CC & TH best practices that can be exchanged and leveraged by healthcare regions to expedite deployment of services at scale.
  – Promote European thought leadership at EU policy level and showing payers, practitioners and providers how patient care can be improved under restricted budgets.
ACT@Scale Aims

• **Aim: scaling-up integrated care programs**
  - Structured methodology (PDSA) for assessment, benchmarking and exchange of good practices of scaling-up
  - Transferability of good practices for scaling-up

• **Topics:**
  - **Stakeholder and change management.**
    • Achieve support and commitment
  - **Service selection.**
    • Appropriate level of distribution of health and care resources by dynamic needs of patients and populations
  - **Financial models and sustainability.**
    • Deliver at least equal quality of care at lower cost / better resources utilization
  - **Citizen empowerment.**
    • Total engagement of users / citizens to make the strategy self-sustaining
  - **Evidence.**
    • Collecting and measuring experience, status, progress and success of scaling-up
Programs

Basque Country:
Cluster: Multimorbid
Description: Multimorbid Population Integrated Intervention Program
Target group: Complex multimorbid patients

Cluster: Cardiac
Description: Telemonitoring services for Congestive Heart Failure
Target group: Heart failure patients

Cluster: Chronic Care
Description: Support for complex care management AASBE
Target group: Complex patients that require linking tertiary care with the community

Catalonia:
Cluster: Independent living
Description: Healthcare support programmes for nursing homes
Target group: Elderly living in institutionalised homes

Cluster: Chronic Care
Description: The Chronic Patient Program – Badalona Serveis Asistencials
Target group: Complex chronic and frail patients

Cluster: Chronic Care Management
Description: Services for promoting healthy lifestyles: physical activity - AISBE
Target group: Frail elderly patients

Northern Netherlands:
Cluster: Respiratory
Description: Asthma / COPD Telehealth service
Target group: Patients suffering from asthma and / or COPD

Cluster: Independent Living
Description: Embrace – Connecting health and community services
Target group: Patients suffering from asthma and / or COPD

Cluster: Cardiac
Description: Heart failure program
Target group: Complex heart failure patients

Northern Ireland:
Cluster: Respiratory
Description: COPD Telemonitoring Services
Target group: People with COPD

Cluster: Diabetes
Description: Diabetes Telemonitoring Services
Target group: People with diabetes

Cluster: Pregnancy
Description: Weight Management Telemonitoring Services
Target group: Woman with BMI over 39

Cluster: Mental Health
Description: Center for Telepsychiatry
Target group: Citizens eligible for telepsychiatric treatment

Cluster: Cancer
Description: VC for Relatives
Target group: Cancer patients and relatives

Scotland:
Cluster: Diabetes
Description: My Diabetes My Way
Target group: Diabetes patients

Cluster: Independent living
Description: Integrated care for subacute and frail older adults PSPV
Target group: Frail elderly patients

Cluster: Physical Activity
Description: Gesundes Kinzigtal
Target group: Citizens of region

Cluster: Pop Health
Description: Gesundes Kinzigtal
Target group: Citizens of region

Gesundes Kinzigtal:
Cluster: Physical Activity
Description: World of Fitness
Target group: Chronic patients

South Denmark:
Cluster: Physical Activity
Description: World of Fitness
Target group: Chronic patients

Cluster: Cancer
Description: VC for Relatives
Target group: Cancer patients and relatives

Cluster: Mental Health
Description: Center for Telepsychiatry
Target group: Citizens eligible for telepsychiatric treatment

Cluster: Cancer
Description: VC for Relatives
Target group: Cancer patients and relatives
Hypothesis

- Care coordination and telehealth can contribute to meet the “Triple Aim” goal in health systems
  - Improving the user’s experience
  - Improving population health
  - Better resource utilization

Quadruple aim

*Improved care team experience*
Evaluation Framework: Donabedian model

- Conceptual model for examining health services and evaluating quality of health care.
- Quality of care information drawn from 3 categories:
  - **Process** → drivers
    - Culture and professional cooperation
  - **Structure** → context of the program / health system
    - Resources, organization, …
  - **Outcomes** → IHI triple aim
    - Competence development, goal achievement
Collaborative methodology

The collaborative approach requires groups to come together periodically to learn change ideas and quality methods, and to exchange their experiences with making changes.

Stimulates rapid improvement

Disseminate good ideas

Boost learning skills

Key elements

- Topic selection
- Measurement and evaluation
- Purpose and expectations
- Expert recruitment
- Actions periods
- Learning sessions
- Enrollment of participating teams
Collaborative methodology

1st PDSA cycle

PLAN

ACT

STUDY

DO

2nd PDSA cycle

PLAN

ACT

STUDY

DO

ACT @ Scale
Change Management - Barriers

- Lack of leadership
- Pressure to produce short term results
- Stakeholder resistance

ACT@Scale
Stakeholders management at baseline

- Most of the programmes declared having a strategy to identify stakeholders, but in many cases they don’t have a detailed plan to identify and prioritize them.
- Usually no commitment nor risk assessment are performed.
- Most of them have an action plan oriented to maintain and increase stakeholders commitment.
- The process itself it's not assessed.

<table>
<thead>
<tr>
<th>IMPROVEMENT AREAS</th>
<th>OBJECTIVES</th>
<th>INTERVENTIONS</th>
<th>PROCESS INDICATORS (EIP-AHA B3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LACK OF EVIDENCE</td>
<td>- Create awareness success</td>
<td>- Collect methodologies to measure stakeholder involvement</td>
<td>- Identification and selection stakeholders’ implementation plan</td>
</tr>
<tr>
<td></td>
<td>- Engage all stakeholders</td>
<td>- Define, validate, share and execute an implemental planning</td>
<td>- Plan to maintain and increase stakeholders commitment</td>
</tr>
<tr>
<td></td>
<td>- Scaling existing services to new sites</td>
<td>- Multidisciplinary team representing all stakeholders and organizations</td>
<td>- Change Management’s methodology applied</td>
</tr>
<tr>
<td>LACK OF ENGAGEMENT</td>
<td>- Increase awareness among professionals</td>
<td>- Implementation strategy</td>
<td>- Involve stakeholders depending the implementation phase</td>
</tr>
<tr>
<td></td>
<td>- Discuss cooperation health care levels</td>
<td>- Improve the program phase</td>
<td>- Periodic assessments Stakeholders process</td>
</tr>
<tr>
<td>LACK OF SPECIFIC SERVICES AT NEW SITES</td>
<td>- Assess effectiveness TM programs</td>
<td>- Develop and implement coaching modules in different care levels</td>
<td>- Change management elements addressing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Step in the following integrated areas (depending phase developed)</td>
</tr>
<tr>
<td>INSUFFICIENT COORDINATION HEALTH CARE LEVELS</td>
<td>- Define and apply evaluation framework</td>
<td></td>
<td>- Involve stakeholders depending the implementation phase</td>
</tr>
<tr>
<td>POUR IMPLEMENTATION TM SERVICES</td>
<td>- Assess effectiveness TM programs</td>
<td></td>
<td>- Periodic assessments Stakeholders process</td>
</tr>
</tbody>
</table>


A multidisciplinary team where all sectors and organizations were represented has been created

An integrated sustainable pathway has been developed and validated

A training programs to improve healthcare professional's knowledge in integrated care pathway and stratification methods has been analyzed

An assessment framework and collaboration agreement regarding the indicators to assess cost-effectiveness and sustainability has been developed

### IMPLEMENTATION PROGRESS

<table>
<thead>
<tr>
<th>Process INDICATORS</th>
<th>2016*</th>
<th>2017**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder management</td>
<td>Planning Phase</td>
<td>Adaptation Phase</td>
</tr>
<tr>
<td>Organisational models</td>
<td>Developing Implementation Phase</td>
<td>Implementation Phase</td>
</tr>
<tr>
<td>Workforce development</td>
<td>Developing Adaptation Phase</td>
<td>Adaptation Phase</td>
</tr>
<tr>
<td>Stratification tools</td>
<td>Developing Implementation Phase</td>
<td>Implementation Phase</td>
</tr>
<tr>
<td>Integrated care pathways</td>
<td>Developing Implementation Phase</td>
<td>Implementation Phase</td>
</tr>
<tr>
<td>Financing and incentives</td>
<td>Developing Implementation Phase</td>
<td>Implementation Phase</td>
</tr>
</tbody>
</table>

*PM survey results
** DO Phase Analysis
Act Phase

To refine changes and to determine future plans

**Adopt**
The desired change is achieved.
Once improvement is affirmed, determine when the successful change can be reproduced on a larger scale

**Adapt**
Revise the change process.
Return to Plan, Do, Study, Act.
Repeat the test using a different method or by gathering different pre and post data

**Abandon**
The change exacerbated the old problem or created a new harmful problem.
Return to the Plan phase.

ACT @ Scale
8 tips for implementing collaborative methodology

Tip 3: ‘Be effective in running the collaborative meetings’.

Lessons learned
The collaborative meetings have to be chaired by experts in improvement methods and group dynamics to ensure motivation of the participants and the best use of their knowledge and time.

“Use facilitators to organize and lead effective collaborative meetings.”
ACT@Scale Consortium

- Philips Healthcare Germany (coordinator), Germany
- Osakidetza – Basque Country Health System, Spain
- KRONIKGUNE – Research Centre on Chronicity, Spain
- University Medical Center Groningen, the Netherlands
- Region of Southern Denmark, Denmark
- Agency for Health Quality and Assessment of Catalonia (AQuAS), Spain
- Centre for Connected Health and Social Care, Northern Ireland, Ireland
- Philips Electronics (Netherlands), the Netherlands
- Aristotle University of Thessaloniki, Greece
- City University London, School of Health Sciences, UK
- Universitätsklinikum Würzburg, Germany
- University of Hull, UK
- The Consorci Institut D'Investigacions Biomediques August Pi i Sunyer (IDIBAPS), Spain
- University of Dundee, Scotland, UK
- Gesundes Kinzigtal, Germany
- Optimedis, Germany
**Engage with us:** Collaborating partners

<table>
<thead>
<tr>
<th>Engagement as observer</th>
<th>Engagement as evaluation site</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access to programme results and participation in project meetings</td>
<td>• Access to the ACT evaluation engine and fully participate in the evaluation process and best practice selection</td>
</tr>
<tr>
<td>• Learn from the others’ good practice and experiences</td>
<td>• Get evidence and benchmarking of your solution under the review of the key international experts</td>
</tr>
<tr>
<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>• Combine evidence with all the evaluation sites</td>
</tr>
<tr>
<td>• Enlarge your visibility at international level</td>
<td></td>
</tr>
<tr>
<td>• Enable local industry to see a larger market, beyond the “local border”</td>
<td></td>
</tr>
<tr>
<td>• Engage political/industrial support</td>
<td></td>
</tr>
</tbody>
</table>
THANKS FOR YOUR ATTENTION

Dr. Cristina Bescos
Cristina.Bescos@philips.com
http://www.act-at-scale.eu
Integrated Services

Integrated services