European Institute for Health
2011 program

Work group 2:

Ubiquitous and cost effective technologies

(Could technologies provide European citizens a better access to healthcare?)

Universal and public health coverage is a fundamental of most European countries. But **recent trends jeopardize the underlying statement of an access guaranteed to the most appropriate cure for each individual**:

- On one side: the recent demographic, epidemiologic and economic curve have put lot of pressure on cost management, urging for transformations
- On the other side, new cure practices (robotics,..) or profile specifics treatment offer always new and greater perspectives (acceptability, life expectancy,..) while their "unit" costs of care is corollary soaring.

This situation may result in a growing asymmetry between public and private system, according to the practices a private insurance premium cover or not, coming in any event in addition to a base of solidarity

Three areas of investigation may be addressed to tackle this medical and economical challenge:

- How can technologies transform the way care is today delivered (how can we follow more patients and people within the same level of resources)? - *Productivity of the system* -
- How can technologies help improve the choice of appropriate medication and maximize the medical and economical impact? - *Efficiency of the system*
- How can new technologies or innovation reduce the cost of care? *Unit cost reduction*

1. How can technologies transform the way care is delivered today?

- **E-health or telemedicine** as online access to doctors, or digital imaging centers distant of the physicians offer new perspectives

- **The progressive loss of autonomy for ageing people** represents an important area of development for new technologies, starting with pure care and cure uses (health monitoring, home automation, medication observance control and surveillance) and enlarged to a wider scope of services (communication, social links, …)

- **Territorial inequalities in healthcare access are another issue new technologies can reduce** as a large and increasing discrepancy exists between cities and rural environment.

- Despite promising perspective, the financings and operating model is still to be found:

    - How to install tele-health centers providing the appropriate infrastructure (diagnoses, imaging,...) with remote specialists ? What financial outcome compared to the other outcomes (quality and cost reduction)?
    - Since countries face a lack of expertise, is there any possibility to make diagnoses by offshore physicians?

2. **How can technologies help improve the choice of appropriate medication and maximize the medical and economical impact?**

- The deficit burden for Healthcare systems **implies new types of decisions to be made** i.e. identifying the most appropriate cure to deliver with the greater medical and economical impact. It resonates as a difficult choice to make for physicians
    - For uncertainties reasons on the real effectiveness of the cure for a specific patient,
    - For governance issues since the medico-economic is sporadically and heterogeneously taken into account in the prescription today.

- **Meaningful use of EHR (Electronic Health Record), evidence based medicine and new predictive models can play a major role** in the decision making process either at physician level when he makes the decision or at the policy level to design the appropriate rules and protocols.

- It nevertheless implies a paradigm shift in a way medicine is delivered today :
    - Meaningful information are vital and most of the predictive solutions existing today fail
    - Providing data costs money
    - Sharing this information requires to navigate a complex and scattered health eco-system,
    - Confidentiality and privacy remain a very sensitive topic.

3. **How can new technologies or innovation reduce the unit cost of care?**

- Open innovation is based on the principle that innovation dynamics may benefit from a wider population, beyond R&D departments and basic research inside or outside the boundaries of the firm. A few leading international companies have leveraged this model.

- Open source reduces the intellectual property restrictions of an innovation. Software companies and non-governmental organizations involved in social business or in biotechnology have promoted this model.

- Both models aim to reduce costs (ideas and solutions for open innovation, copyright for open source) and to increase the number of “players” involved in value creation. In the health eco-system where innovation, cost efficiency, creativity and involvement are critical, it is worth evaluating the applicability of these models.

The work group will cover the following topics:

- **How to take advantage of innovation such as tele-health solutions in the European countries?**
- **How to integrate medico-economic factors in prescription and reduce the inequality of access to appropriate cure?**
- **How to promote models where new technologies are generating cost savings (Public Private Partnerships, incubators, value chains recomposition)?**

Organization and schedule

Approach

- Workgroups of 10 to 12 people will meet in during 5 monthly plenary sessions facilitated by external consultants (Accenture)
- Intermediate work group with smaller number of participants may be scheduled upon request

Outputs

- At the end of each monthly workshop, minutes and conclusions will be produced
- The results of the debates will progressively feed the final memorandum
- Results will be presented in Brussels at the European Parliament

Schedule

- The Kick-off session will take place on April in Brussels
- First objective will be to share and refine the scope and initiate the work plan for the next 4 monthly sessions
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Tools and support to workgroups

- Deep insights and documented analysis will be provided by our partnering universities (e.g.Technische Univesität Berlin, Paris Assas)
- A dedicated online collaboration tool allowing participants to exchange views and data between sessions will be available

Communication and Intellectual property

- Group members can communicate freely on their participation
- They will be owner of the study