



EPF eHealth Seminar

Brussels, 23rd January 2013

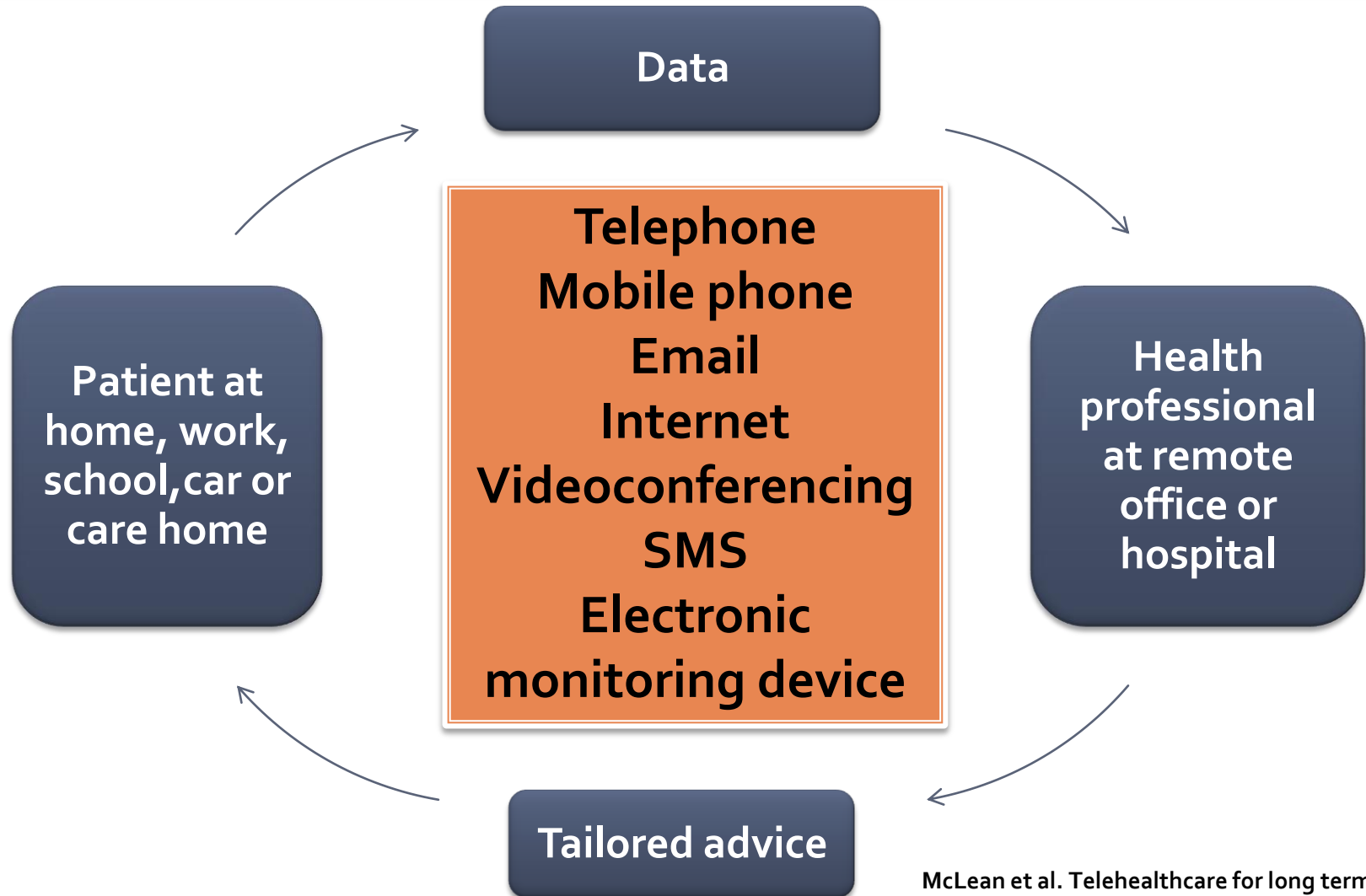
Assessing eHealth services: Patient Outcomes

Speaker: Anna Kotzeva, Catalan HTA Agency
Moderator: Walter Atzori, EPF

Objective of the workshop

- Explore methods for assessment of eHealth and telemedicine services
- Focus on patient outcomes
- Identify and discuss ways for patients to become involved in this area

Using technology to improve health



Using technology to improve health???

- Does it always offer benefit to our health?
- What type of benefit?
- For all patients with the same disease?
- Are there associated risks?
- At what cost?



ASSESSMENT NEEDED

Assessment approach for eHealth

Can we use assessment methods applied to drugs, for example?

Having in mind that:

eHealth and telemedicine services are considered **Complex Intervention** (affects all participants and processes)

For the patient it means a **new way of receiving healthcare** (diagnosis, prescribing, treatment, follow-up and advice)

Assessment methods

- **INITIALLY:** mostly **focused on one or few aspects** - related to the primary objective for establishing a telemedicine service (e.g. improved access)
- **LATER: global, multidisciplinary approach**
 - Institute of Medicine (IOM 1996, USA)
Field, M. (1996). Telemedicine: a guide to assessing telecommunications in health care. Washington D. C.: National Academy Press.
 - Bashshur et al. 2005
Bashshur, R.; Shannon, G.; Sapci, H. (junio, 2005). Telemedicine evaluation. Telemed. J. E. Health. (vol. 3, núm. 11, pág. 296-316).
- **SINCE 2010** – MAST, a multidimensional framework for assessment, as an **EU common rigorous methodology**
Kidholm, K et al. MAST(2012). International Journal of Technology Assessment in Health Care (vol. 28, núm. 1, págs. 44-51).

Development of MAST

Comprehensive process

Scientific evidence

- Systematic literature review



Stakeholder & users' opinion

- 2 Workshops (20+18 participants)



Overview of other models

- EUnetHTA Core Model
- Donabedian's model for quality of care
- Med Res Council on Complex interventions
- Wootton et al.
- Ohinmaa et al.
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MAST
(Manual & Toolkit)

Current application of MAST

5 European projects/14 European countries



SMARTCARE

United4Health

Recommended by:

British Thoracic Society (statement on respiratory care)
National Danish Strategy for Telemedicine

Adopted by 3 regions:

- Norbotten (Sweden)
- Veneto (Italy)
- Basque country (Spain)

Development of a French version

MEETIC: Modèle pour l'Evaluation (Economique) de la Télémédecine - by
Recherche Clinique Santé Publique, Paris

Structure and elements of MAST

The framework suggests 3 stages of assessment:



I. Preceding considerations

II. Multidisciplinary Assessment

III. Transferability of results

II. Multidisciplinary assessment

WHAT should be assessed?

DOMAINS

1. Health problem and characteristics of the application

Descriptive

2. Clinical effectiveness

3. Safety

4. Patient perspective

Evaluation by outcome
(systematic review OR
empirical study)

5. Economic aspects

6. Organisational aspects

7. Socio-cultural, ethical and legal aspects

Descriptive

Patient perspective

■ Key aspects

- Satisfaction
- Privacy issues
- Perceived utility / Acceptability
- Perceived effect on health status
- Perceived effect on access to care
- Perceived effect on care received

■ Patient views and expectations are influenced by:

- Feelings, comfort
- Interaction with professionals
- Convenience, timeliness
- Overall satisfaction
- Preference as compared with face to face interaction
- Professionals' competence and/or personal manner
- Views about the technology itself
- Usability of the technology
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4. L'ús de l'equip m'ha ajudat a millorar la meua salut.

3	2	1	-1	-2	-3
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5. L'ús de l'equip ha envait la meua intimitat.

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6. He rebut prou informació sobre l'equip.

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7. Tinc confiança en el correcte funcionament de l'equip.

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**Family and caregivers
INCLUDED**

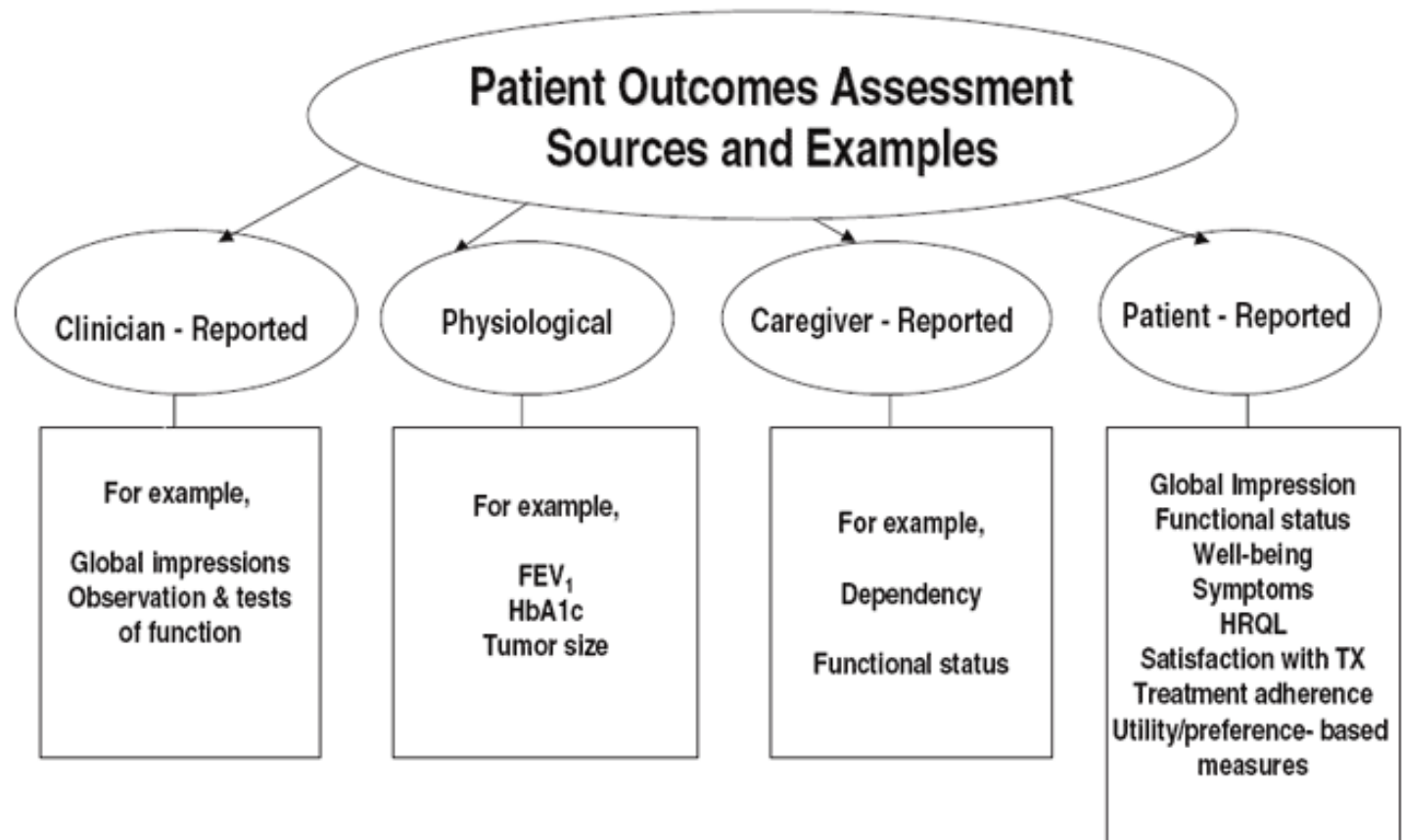
**Assessment to be
adapted to the
concrete intervention,
selecting outcomes**

Patient outcomes

All expected results of the intervention concerning the patient

Different sources ⇒

Different outcomes ⇒



Patient involvement in the assessment

Different ways to contribute:

- Providing information about the effects as a direct source

Patient-reported outcomes (PROs)

- Giving insight on patient needs and expectations, making sure views and requirements are integrated

Patient-important outcomes

Nobody knows better than the patient what is to live with the disease!!!

Patient involvement in the assessment

Patient-reported outcomes

Questionnaires where the responses are collected **directly from the patient** (self-reports)

Ex: SF-36, CAT, HAD scale,

Patient-important outcomes

Event that the patient **values high and can perceive its change directly**.

EX: improved QoL, less fatigue, less frequent disease relapse, prevented mortality, increased length of life.

NOT: laboratory parameters (blood pressure, cholesterol levels, hemoglobin) or imaging (bone density)

Collection of patient outcomes

Qualitative methods

- Interviews, focus groups
- Diary keeping
- Patients record and self-report of the symptoms

Quantitative methods

- Questionnaires
- Standard satisfaction survey
- Generic QoL measures (SF36)
- Condition-related standard QoL measures

Mixed methods

- Combination of qualitative and quantitative tools

Challenges for involvement in the assessment

- Feeling prepared?
- Enough knowledge of the existing possibilities?
- Aware of all factors which can influence patient opinion?
 - values and culture
 - family and caregiver
 - opinion may change in time
 - may be related to the professional involved...
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