Patient Empowerment

A measure of patient empowerment received by the German Health Card

Katharina Spitalewsky, Medical Informatics of Heidelberg, Germany
Stefan Skonetzki, dmc digital media center GmbH, Germany
Maria Pritsch, Department of Medical Biometry, University of Heidelberg, Germany
Christian Kohl and **Petra Knaup**, Department of Medical Informatics, University of Heidelberg, Germany

Background: German Health Card

The patient is enabled to continuously check the data on the card. For this the introduction of the so called Health Card Terminal (HTC) is necessary.

Aims of the project:

- ⌘ improving the communication between all partners in health care (faster access, trans-institutional provision of data, better access for patients)
- ⌘ lowering costs (easier workflow for prescription, reducing prescription errors, avoiding double measures and faster access to emergency data)
- ⌘ **empowering the patient**.

→ It is unclear how patient empowerment can be measured.

Empowerment

Definition

Gibson (1991):

„empowerment is a process of helping people to assert control over the factors which affect their lives. This encompasses both the individual responsibility in health care and the broader institutional, organizational or societal responsibilities in enabling people to assume responsibility for their own health." [1]

Dimensions

Zenz developed 2001 a model of empowerment. It consist of four dimensions[2]. For our research we adapted it to **patient** empowerment:

Dimensions of Patient Empowerment

- Literacy

  competency which comprises several skills, which enable the individual patient to handle information competent, efficiently and responsibly. The patient can identify relevant information for his health in different contexts, he can understand, interpret and communicate this information.

- Creative power

  competency which enables to define individual aims, define strategies to reach these aims and to act according to these strategies. I.e. that the patient can influence decisions, discussion results or general changes.

- Independence

  Independence is the ability of a patient to make decisions concerning his health state and health care on his own.

- Self-efficacy

  With self-efficacy the patient is able to believe in skills to act independently with regard to his health

→ **Our core requirements for patient empowerment**

Prescription process

Involved processes (patient view):

- Consulting the physician
- Patient deletes the prescription - Action at the HTC
- Patient hides or reveals the prescription - Action at the HTC
- Reading prescription - Action at the HTC
- Dispensation
- No action
- Advice

→ The modelled process is not necessarily linear. Functions can be omitted or can be performed repeatedly

Workshop

Analysing the modelled process in a moderated workshop:

→ Which decisions of a patient could be expected?

→ Which influence have patient empowerment?

Matching the answers with the our core requirements resulted in two new requirements:

- Exogenous Empowerment

  Did the behaviour of the health care professional towards the empowered patient?
- Endogenous Empowerment

  How sustainable is the empowerment of a patient and is the patient motivated to critically reflect the treatment results.

IT-acceptance

The HCT is a new technology for the patient. Functionality or ease of use can improve the patient‘s behaviour and empowerment at the first time.

Items taken from the literature[3]:

- Compatibility
- Ease of use
- Information
- Perceived usefulness
- Relative advantage
- Satisfaction
- Voluntariness

Items for describing patient empowerment

The items resulting from the analysis in the workshop and items for measuring IT-acceptance were completed by items in the literature [4]-[15] and organised in four tables:

- Table A. Description of the population
  - e.g. gender, age, education, IT knowledge
- Table B. Description of medical background
  - e.g. satisfaction with quality of care, desire for more information
- Table C. Descriptive data of terminal use and usage
  - e.g. ease of use, respond time, no. of errors, compatibility
- Table D. Expected Empowerment
  - contains the six prerequisites

We divided the resulting list of indicators in two parts:

- objective data which can be assessed by analysing the **logfiles** of health card terminals
- subjective data from **questionnaire**

Questionnaire

For items witch cannot be measured objectively a questionnaire was designed. It consists of four parts and 39 items:

- Part A is demographic data of table 1,
- Part B Medical Background – table 2,
- Part C is attitude towards HCT and
- Part D is behaviour.

Most of the items of the questionnaire are requested by statements to be judged by the patient. For this personal judgement the 4-point Likert-Scale is used:

I agree - ... - I do not agree.

e.g. “I haven’t any problems to access my data.“

Measuring patient empowerment at the HCT

Summary:

- Controlled randomised trial
- Inclusion criteria e.g.
  - patient is older than 18 years
  - patient had not been deprived of his right of decision
- Two methods are used to measuring the items
  - Logfile
  - Questionnaire
    - was validated by 30 students and scientist which resulted in a reworked version of the questionnaire

Discussion

- A potential of the HCT…

  …is that additional information about the prescribed drug can be presented. If this information is presented and formulated in a way, which can be well understood by the patient, this could positively influence patient compliance [15].

- But…

  of course, a restriction of our measuring methods is, that we can cannot guarantee that the empowered patient makes clinically sound decisions.

- Next valuation phase:

  When the German Health Card and the terminals are available we will validate our approach in the real setting of patients using the HTC.

- The aim of our further research is to present individualized information about the drugs during HTC encounter and to analyse if the patient is empowered by this.

→ **To measure patient empowerment precisely and to finally define the indicators that determine patient empowerment, further research is necessary.**

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Address for correspondence

Petra Knaup, Department of Medical Informatics, Im Neuenheimer Feld 400, 69120 Heidelberg