Monitoring and communication devices: the perspective of the patients

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Fields of activity

Projects: Evidence & Action

Capacity building: Stronger EFA

Advocacy: Visibility & Influence

Healthier environment, Access to care, Patient participation, Equality
Our values

EFA’s core values

Advocates at EU level for the needs of people with allergies, asthma and COPD;
Values all members equally;
Implements best practices;
Creates patient-driven projects;
Cooperates with healthcare professionals, scientists, other NGOs.
Membership

- Founded 1996
- 41 allergy, asthma and COPD patient organisations
- in 25 European countries
- Representing 500,000 patients in Europe
Uniting patient groups at the EU level
Sharing knowledge & best practices
Capacity building
Tools/Facilitation for policy change
Collaboration (among members and with other EFA’s partners, eg EPF, ERS)
• mHealth personalised asthma monitoring system
  ➢ empowering and guiding patients with asthma to manage their own health

• Real-time monitoring of the clinical disease to allow
  ➢ direct feedback to the patient at home or outdoor, without direct face-to-face contact in a healthcare setting

• A synergetic approach of ergonomic, compact and efficient
  ➢ sensor-based devices, in communication with a mobile device

A "personal mHealth guidance system“ empowering patients to optimize their treatment – FOR PATIENTS, WITH PATIENTS
myAirCoach optimal treatment

1. Diagnosis of asthma severity
2. Monitoring of patients’ environment
3. Monitoring of patients’ physiology
4. Feedback and support from virtual community platform
5. Personalised guidance to adjust treatment
6. Doctor monitoring and communication
7. Real-time doctor’s adjustment of treatment
Establishment of the **Advisory Patient Forum:**

- To provide **continuous feedback** from patient experts to other members of the consortium.
- To assure **inclusion of the patients’ perspective** across all project Work Packages.
- To ensure the asthma management models will address the **specific needs of patients** and will be understandable for the lay target group.

**22 adults with asthma from 4 countries**
Definition of **User requirements**
- Review of the questions to be used in focus groups for patients and health professionals
- Review of the consent form, participant information sheets, letters of invitation for focus group and survey

Input on **Test Campaign**
- Review of the methodology
- Review of the consent form and participant information sheets for test campaign

Feedback on **usability** (online platform, virtual community) and educational content (**3D instructions** for proper use of MDI inhalers)

**Lay summaries** and presentation to events
- Presentation on “Patient involvement in designing mHealth systems for asthma self-management” at [EASYM](#)

**Communication** activities
How to develop a user-centred system?

A mixed methods research study:

focus groups ➔ development questionnaires ➔ dissemination patients/HCPs

(identification of potential uses)

What asthma patients would like from mHealth system and what HCPs believe is useful

- Patients request mHealth system to monitor asthma over time and to collect data to present to healthcare teams
- HCPs prefer functions alerting patients to deteriorating asthma control and advising when to seek medical attention
- 46% of patients and 79% HCPs find useful to have an asthma action plan incorporated into mHealth system ➔ reason behind not apparent
- HCPs would like the system to provide instructions on how to manage their asthma in an emergency (73% vs 22% of patients)
- HCPs are more in favor than patients (76% vs 36%) of a system that can tell if changes to patient’s asthma medication has improved their asthma control
What are useful measurements for managing asthma?

- Measurements of lung function (peak flow, airway inflammation) and of breathing (breathing rate, cough) identified as helpful to maintain asthma control (71% and 64%)
- Measurements regarding environmental conditions were believed to be helpful for asthma self-management
- Measurements of medication adherence and inhaler technique should be integrated in the system according to most HCPs (vs only 45% of patients)

Acceptability and barriers

- Different requirements for different populations (children, elderly, severe asthma patients)
- The system may need to be personalised at an individual level
- Measuring numerous irrelevant parameters might discourage acceptance
- Limit the burden of inputting data ➔ make the system as automated as possible
- Concerns with subjective measurements, such as self-reported symptoms
- Interpretation of data as source of possible error ➔ automated system vs individuals?
- 76% of patients are willing to carry or wear an additional device; 72% are willing to keep an additional device at home ➔ but, this depends on the product design
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