

## Multimedia Appendix 2: Barriers and facilitators categorized according to the model of Grol & Wensing and the model of McGinn.

Barriers and facilitators	Grol & Wensing [26]	McGinn [21]
<b>Innovation</b>		
<i>Barriers/facilitators</i>		
Guaranteeing privacy and security/Privacy and security		Privacy and security concerns
Lack of accessibility/Good accessibility	Accessibility	
Lack of attractiveness/Attractiveness	Attractiveness	
Lack of interoperability/Interoperability with EHR		Interoperability
Lack of perceived usefulness/Perceived usefulness		Perceived usefulness
Lack of tailored content/Content tailored to patients		Content appropriate for the users (relevance)
<i>Facilitators</i>		
Credibility	Credibility	
Participation of end-users during implementation		Participation of end-users in the design
Perceived ease of use		Perceived ease of use
Perceived usefulness		Perceived usefulness
<b>Individual professional</b>		
<i>Barriers/facilitators</i>		
Lack of knowledge/Having knowledge	Knowledge	Knowledge (main category)
Lack of motivation to change/Motivation to change	Motivation to change	Motivation/inertia to use EHR (readiness)/resistance to use the EHR
<i>Facilitator</i>		
Positive attitude	Attitude	Attitude (main category)
<b>Patient</b>		
<i>Barriers/facilitators</i>		
Lack of sufficient eHealth literacy/Sufficient eHealth literacy		
Negative attitude/lack of need/Positive		Patients' attitudes and

attitude/demand

preferences towards EHR

### **Social Context**

#### *Barriers/facilitators*

Negative attitude or opinion of colleagues in general/Positive attitude and opinion of colleagues in general

Opinion of colleagues

Attitude of colleagues about EHR

Negative attitude or opinion of medical professionals/Positive attitude or opinion of medical professionals

Opinion of colleagues

Attitude of colleagues about EHR

#### *Barrier*

Varying opinions about IT security

Opinion of colleagues

#### *Facilitators*

Varying opinions about implementation  
Early adapters

Opinion of colleagues

Good collaboration with colleagues

Collaboration

### **Organizational context**

#### *Barriers/facilitators*

Lack of suitable specialist staff/suitable staff

Staff

Lack of resources/sufficient resources

Resources

Resources available/Material resources (access to EHR)/Human resources (IT support, other)

Innovation-averse hospital culture/Innovation oriented-hospital culture

Culture of the networks (social context)

Innovation culture

#### *Barriers*

Adjusting organization of care processes is difficult

Organization of care process

Change in task and new responsibilities

Change in task

Lack of time and increased workload

Lack of time and workload

No strategic plan and lack of organizational priority/management support

Management (strategic plan to implement EHR)

Organization is not ready for implementation

Readiness

Structure of the organization

Structures

#### *Facilitator*

Communication to promote the portal

Communication (included promotional activities)

### **Economic and political context**

*Barriers/facilitators*

Financial difficulties/conducive financial arrangements	Financial arrangements	Financing of EHR/Financial support/Cost issues
Third-party dependency/Good collaboration with third parties		
Lack of generic guidelines	Policies	
Restrictions imposed by laws and regulations/ Facilitating law- and regulations	Regulations	
Supporting healthcare policies	Policies	Health care policies and socio political context

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