Survey WP 4 – People Empowerment

ABOUT THIS SURVEY

eHAction, a Joint Action to support the eHealth Network, is the third multi-annual work programme (2018-2021) of the European Commission. The main goal of eHAction is to promote and then the use of information and communication technologies in health development. From applications in the field to EU governance and strategies implementation.

Please find more information about the eHAction programme here: http://ehaction.eu/

This survey is being used as a research instrument for eHAction Work Package 4, led by Estonia and the Netherlands. The work of WP4 'empowering people' investigates the state of the art of people empowerment across MS with regard to the following topics:

Task 4.1 - mHealth and health apps reliability
Task 4.2 - Patient access and use of data
Task 4.3 - Digital health literacy
Task 4.4 - Telehealth

The results of this survey, combined with desk research, will be used for the two deliverables of the work package: a policy framework (D4.1) and a policy proposal (D4.2).

HOW TO COMPLETE THIS SURVEY

This survey consists of questions concerning the four topics of WP 4 People Empowerment.
We ask you to complete all the questions from the perspective of your country; if you do not know the answer please consult with (or pass on the survey document to) relevant experts.

ROUTING

In this survey the following routing will be used:

Thanking you in advance for your cooperation,

The eHAction WP 4 team

ABOUT YOU

Please answer the questions below regarding contact information to validate survey responses. If this survey is completed by multiple organisations, please tick which other organizations have contributed to this survey.

☐Ministry
☐National Competence Centre
☐University
☐ICT-organisation
☐Health care provider (e.g. hospital)
☐Patient organisation
☐Commercial/business
☐If other, please specify…

1. What is your country (and region if applicable)?

2. What is the name of your organisation?

3. How would you classify your organisation?

☐Ministry
☐National Competence Centre
☐University
☐ICT-organisation
☐Health care provider (e.g. hospital)
☐Patient organisation
☐Commercial/business
☐If other, please specify…

4. What is your name?

5. Please supply a contact email address:

6. Please supply a contact telephone number:

INTRODUCTION AMO MODEL

In order to visualise the state of play across MS regarding the level of people empowerment, the AMO model is used. The AMO theory suggests that there are three independent work system components that shape participant characteristics and contribute to the success of the system. These components are ability, motivation and opportunity.

As patient engagement is influenced by many factors which are investigated in the tasks of the WP, the model provides an approach to integrate the subtasks of the WP and compare different MS according to the level of patient empowerment. The AMO model is applied when designing this survey, as well as for analysing the results and providing the visualisation of the state of play across MS.

Below is an overview of the characteristics of the AMO model, these will be repeated above every page:

- o Ability – Ability refers to the knowledge and skills citizens need to have in order to be empowered. It is a function or capacity to perform, including different variables such as age, knowledge, level of education and energy level.
- o Motivation – Motivation captures the extrinsic and intrinsic motivation of the citizens. It includes how motivated citizens are to use mHealth/telehealth solutions and/or patient portals and how their motivation can be influenced. It is the willingness to perform, including variables such as motivation, job satisfaction, personality, values, and expectations.
- o Opportunity – Opportunity refers to the availability of and accessibility to solutions provided, as well as the involvement of citizens in the decision-making process. It includes an analysis of what kind of solutions exist and how available and accessible the solutions are to citizens. It includes variables such as working conditions, tools, materials, leader behavior, procedures and time.

Task 4.1 mHealth - (if and) how does <u>mHealth empower citizens</u> today?

mHealth applications can play an important role in the provision of health services and there has been a rapid development over the past years with currently 165,000 apps publicly available. mHealth apps facilitate people to manage their own health and support healthy living. mHealth supports citizens with health-related activities using text messaging, platforms, apps, sensors that track vital signs and health activities and cloud-based computing for collecting and analysing health data. mHealth serves a variety of purposes, the functions include diagnostics, event tracking, data collection, decision support, communication, and education.

7. Please provide up to three best examples from your country, how mHealth is used to increase the ability, motivation and opportunity of citizens **to take care of their own health**. Refer also to the user base of certain mHealth solutions – how many people are using these solutions? On which level are they implemented (e.g. national, regional, hospital-specific solutions)?

> **Example 1: mHealth increasing citizens' <u>ability</u> of being empowered**
>
> mHealth tools can improve citizens' health-related education and knowledge about illnesses. For example, in the US, mHealth apps are seen as valuable information sources for citizens with dermatologic conditions. Many dermatology apps exist that provide citizens with disease overviews and relevant educational materials.
>
> 7a. How does mHealth increase <u>the ability of citizens to take care of their own health</u>? Please provide examples from your country.

	Ability - refers to the knowledge and skills the citizen needs to have in order to be empowered. It includes the digital skills of citizens.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

> **Example 2: mHealth increasing citizens' <u>motivation</u> of being empowered**
>
> In the past years, people have started using apps to overcome obesity and to develop healthy dietary habits. It has been seen that the use of mHealth apps for improving diet and nutrition is associated with behaviour change through improved motivation and goal setting, desire, self-efficacy, as well the attitudes and knowledge. Integrating theoretical constructs for health behaviour change to the development of mHealth apps is seen as a successful method for increasing the motivation of citizens for taking the responsibility of their health and well-being.
>
> 7b. How does mHealth increase <u>the motivation of citizens to take care of their own health</u>? Please provide examples from your country.

	Motivation - captures the extrinsic and intrinsic motivation of the citizen.
1.	Description:

	Name:
	Objective:
	Hyperlink:
2.	Description:
	Name:
	Objective:
	Hyperlink:
3.	Description:
	Name:
	Objective:
	Hyperlink:

Example 3: mHealth increasing citizens' <u>opportunity</u> of being empowered

mHealth provides citizens with tools that help them manage their own health. mHealth tools can provide easy access to health information as well as help citizens gather the necessary information prior the doctor's visit, leaving more time for patient-doctor interaction.

7c. How does mHealth increase <u>the opportunity of citizens to take care of their own health</u>? Please provide examples from your country.

	Opportunity - refers to the availability of and accessibility provided.
1.	Description:
	Name:
	Objective:
	Hyperlink:
2.	Description:
	Name:
	Objective:
	Hyperlink:
3.	Description:
	Name:
	Objective:
	Hyperlink:

Task 4.1 mHealth in MS: Adoption facilitation and adoption barriers.

8. Can you describe if and how you work on **increasing mHealth adoption** within your country? Describe any measures you have taken or current initiatives. Please indicate for the different aspects of the AMO (ability + motivation + opportunity) model:

Example 1: Increasing citizens' ability to use mHealth solutions

Several factors affect the ability of citizens to use mHealth, this includes technological knowledge, digital health literacy, etc. In some countries, specific programmes exist to help citizens use mHealth solutions, including certain courses for citizens to learn using an app developed for their disease. For example, before going through hip surgery in Denmark citizens participate in hip-school and get an access to a mHealth app which guides them through the process prior and after the surgery.

8a. How does your country ensure that citizens <u>have the ability to use mHealth solutions</u>? If possible, please describe the impact of the measures you have taken.

Example 2: Increasing citizens' motivation to use mHealth solutions

It is known, that in order to use medical apps, citizens need to have the motivation to do so. Incentivizing measures have to be in place to support the adoption of mHealth. In the US, some health insurances and employer health packages motivate users to increase their step count with free gym access or other financial incentives.

8b. How does your country ensure that <u>citizens have the motivation to use mHealth solutions</u>?
If possible, please describe the impact of the measures you have taken so far

In order for mHealth tools to be empowering, citizens need to have the opportunity to use them. For example, people need to have smartphones and access to mobile Internet connection. Existing app catalogues, processes for mHealth verification and working reimbursement schemes increase the opportunity to use mHealth solutions.

8c. How does your country ensure that <u>citizens have the opportunity to use mHealth solutions</u>?
If possible, please describe the impact of the measures you have taken so far.

9. What are the main barriers and enablers for mHealth adoption?

Barriers

☐<u>Health system specific barriers</u>

    ☐Lack of readiness among key stakeholders:
        ☐healthcare providers;
        ☐patient organisations;

- [ ] communitites;
- [ ] other (please specifiy);
- [ ] Lack of enabling healthcare policy
- [ ] Conflicting priorities
- [ ] Privacy & Security concerns
- [ ] Lack of governance
- [ ] Unrealistic expectations for mHealth
- [ ] Conservative culture
- [ ] Medicolegal issues
- [ ] Non-existent strategy

- [ ] <u>Business case</u>

  - [ ] Cost-effectiveness of mHealth apps
  - [ ] Lack of reimbursement models
  - [ ] Lack of implementation support

- [ ] <u>User-related barriers</u>

  - [ ] Solutions not adapted for physicians
  - [ ] Perceived complexity and resistance from physicians
  - [ ] Lack of time and workload
  - [ ] Lack of technological knowledge among:

    - [ ] Citizens
    - [ ] Physicians

- [ ] <u>Application specific barriers</u>

  - [ ] Lack of evidence of clinical utility
  - [ ] Lack of integration & interoperability

- [ ] <u>Other, namely</u>

Enablers

- [ ] <u>Health system specific enablers</u>

  - [ ] Assessment frameworks in place
  - [ ] Observability (observance, control, verification of the solutions)
  - [ ] Communication and collaboration between different stakeholders
  - [ ] Materials resources (access to mHealth)
  - [ ] Human resources (IT support, other)
  - [ ] Training
  - [ ] Management (strategic plan to implement mHealth)

☐User-related enablers
    ☐Willingness to use among patients and providers
    ☐Provider's capacity
    ☐Awareness of the objectives and/or existence of mHealth
    ☐Familiarity, ability with mHealth
    ☐Agreement with mHealth (welcoming/resistant)
    ☐Support and promotion of mHealth by colleagues

☐Application specific enablers
    ☐Perceived ease of use
    ☐Compatibility (with work process)
    ☐Content appropriate for the users (relevance)
    ☐System reliability or dependability
    ☐Accuracy (improved OR errors, omissions, update)
    ☐Quality standard
    ☐Outcome expectancy (leads or not to desired outcome)

☐Other, namely

If possible, provide examples how is your country overcoming the main barriers.

10. Are there additional thoughts/ideas you want to share with us with regard to mHealth? Please describe below:
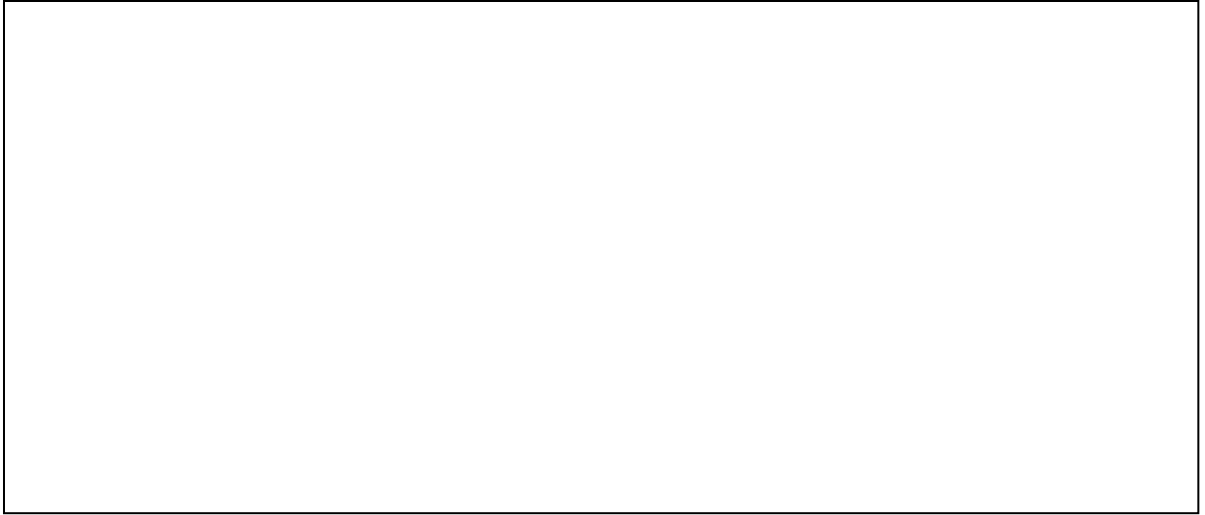
Task 4.2 Patient access and use of Data - (if and) how does patient access and use of data empower citizens?

In order for citizens to be true partners in health care, they should have access to their own health data which is commonly available in electronic health records (EHR). The scope for this task is limited to the accessibility for citizens to their EHR data and the usability of that data.

11. Please indicate how your country works on increasing patient access and/or use of health data. Can you do this by describing current national and/or regional programs and/or initiatives in the table below. Please complete the table for the different aspects of the AMO model.

	Ability - refers to the knowledge and skills the citizen needs to have in order to be empowered. It includes the digital skills of citizens.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

	Motivation - captures the extrinsic and intrinsic motivation of the citizen.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

	Opportunity - refers to the availability of and accessibility provided.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description:

	Name:
	Objective:
	Hyperlink:

Task 4.2 Patient access and use of Data - **how does your country increase the adoption of Patient access and use of Data?**

12. What enablers and barriers do citizens have regarding patient access and use of data? Indicate your priority for policy in your answer (number 1 is highest priority and so on).

Enablers	Barriers
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

13. Are there additional thoughts/ideas you want to share with us regarding patient access and use of data? Please describe below.

Task 4.3 Digital Health Literacy - (if and) how does Digital health literacy empower citizens today?

There is a distinction between the terms 'digital literacy', 'health literacy' and 'digital health literacy'. Health Literacy refers to the ability of citizens to understand, appraise and use their health information. Digital literacy refers to generic digital literacy skills around the use of technology in a variety of everyday tasks, including accessing and using one's own online data. When talking about digital health literacy the two terms are combined.

14. Can you describe if and how you work on increasing digital health literacy? Describe current national and/or regional programs and/or initiatives. Please complete the table for the different aspects of the AMO model.

	Ability - refers to the knowledge and skills the citizen needs to have in order to be empowered. It includes the digital skills of citizens.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

	Motivation - captures the extrinsic and intrinsic motivation of the citizen.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

	Opportunity - refers to the availability of and accessibility provided.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name:

	Objective:	
	Hyperlink:	
3.	Description:	
	Name:	
	Objective:	
	Hyperlink:	

Task 4.3 Digital Health literacy - how does your country increase the adoption of Digital health literacy?

15. What enablers and barriers do citizens have with regard to digital health literacy? And to what extend? Indicate your priority for policy in your answer (number 1 is highest priority and so on).

Enablers	Barriers
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

16. In what way do you involve citizens or patient organizations in your work regarding digital health literacy? (if not, please indicate so). Please describe below.

17. Are there additional thoughts/ideas you want to share with us with regard to Digital Health Literacy? Please describe below.
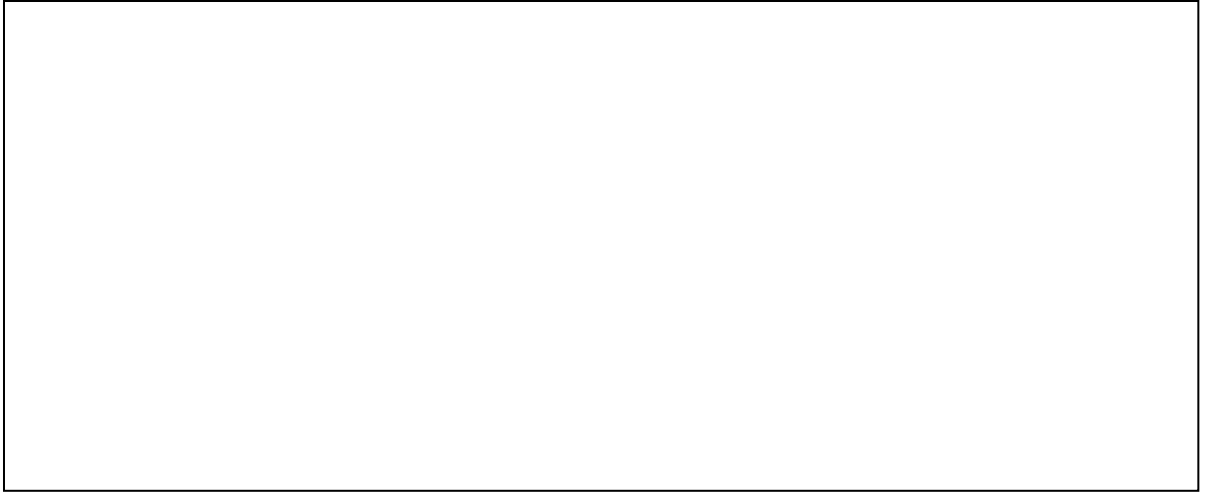
Task 4.4 Telehealth - (if and) how does telehealth empower citizens today?

Telehealth encompasses the delivery of healthcare services by all healthcare professionals through the use of ICT solutions to provide clinical and non-clinical services – preventive, promotive and curative healthcare services, research and evaluation, health administration services and continuing education of healthcare providers. Telemedicine services **allow citizens to interact with health professionals remotely for consultation or diagnostic purposes**. It improves the access to healthcare not only for people with reduced mobility but also for those living in remote areas.

18. Please provide up to three examples from your country, how telehealth is used to **increase the ability, motivation and opportunity of citizens to take care of their own health**. Refer also to the user base of certain telehealth solutions – how many people are using these solutions? On which level are they implemented (e.g. national, regional, hospital-specific solutions)?

> **Example 1: Telehealth increasing citizens' ability of being empowered**
>
> Telehealth makes it possible for citizens in need for a follow-up visit to connect to a doctor without going to a doctor's office. Minor medical conditions, such as a rash, can be handled without even seeing a doctor - positive examples are present in the US and Sweden. Citizens can connect to doctor via video connection and will be provided with needed information for managing the condition, or if needed, are referred to face-to-face visit.
>
> 18a. How does telehealth increase <u>the ability of citizens to take care of their own health</u>? Please provide examples from your country.

|	**Ability -** refers to the knowledge and skills the citizen needs to have in order to be empowered. It includes the digital skills of citizens.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

> **Example 2: Telehealth increasing citizens' motivation of being empowered**
>
> Accessing healthcare providers via video makes it easier and more comfortable for citizens, as well increases the satisfaction with the service which can improve the motivation of taking responsibility of one's health.
>
> 18b. How does telehealth increase the <u>motivation of citizens to take care of their own health</u>? Please provide examples from your country.

	Motivation - captures the extrinsic and intrinsic motivation of the citizen.
1.	Description: Name:

	Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

Example 3: Telehealth increasing citizens' opportunity of being empowered

Telehealth provides citizens with opportunities of connecting with physicians through multiple channels - it can make communication with healthcare providers easier. For example in Sweden remote neurology consultations lead to shorter waiting times to see specialists and to timely advanced medical care.

18c. How does telehealth increase <u>the opportunity of citizens to take care of their own health</u>? Please provide examples from your country.

	Opportunity - refers to the availability of and accessibility provided.
1.	Description: Name: Objective: Hyperlink:
2.	Description: Name: Objective: Hyperlink:
3.	Description: Name: Objective: Hyperlink:

Task 4.4 Telehealth - how does your country increase the adoption of telehealth?

Telehealth encompasses the delivery of healthcare services by all health professionals through the use of ICT solutions to provide clinical and non-clinical services. Telehealth is a term referring to remote healthcare, including services provided using telemedicine, as well as interactions with automated systems or information resources.

19. Can you describe if and how do you work on increasing **telehealth adoption within your country**? Describe measures you have taken and/or current national and/or regional programs and/or initiatives. Please indicate for the different aspects of the AMO model.

> **Example 1: Increasing citizens' ability to use telehealth solutions**
>
> Citizens need to have the ability to use telehealth solutions – campaigns, training, and support from the health system facilitate adoption of telehealth.
>
> 19a. How does your country ensure that <u>citizens have the ability to use telehealth solutions</u>? If possible, please describe the impact of the measures you have taken.

> **Example 2: Increasing citizens' motivation to use telehealth solutions**
>
> In the US, health care systems consider the planned use cases for telehealth solutions and which populations they suit best. Two or three attributes that motivate "early adopters" to utilize telehealth should always be defined, as well potential points of resistance to telehealth adoption should be identified - such as technology limitations or fear of losing privacy - and marketing messages should be planned accordingly. In some cases, equipping heavy health care users (such as citizens with multiple chronic diseases) with telehealth-capable hardware and software is considered. These high cost citizens are the most likely to benefit from frequent telehealth consults and providing them with necessary equipment can increase the motivation to adopt telehealth solutions and use those services.
>
> 19b. How does your country ensure that <u>citizens have the motivation to use telehealth solutions</u>? If possible, please describe the impact of the measures you have taken.

Example 3: Increasing citizens' opportunity to use telehealth solutions

Telehealth requires certain equipment (web cameras, microphones, computers). Several countries provide necessary equipment to clinicians to facilitate telehealth adoption. Easy-to-use telehealth platforms are provided for both, citizens and clinicians and reimbursement schemes of telehealth solutions are in place.

19c. How does your country ensure that <u>citizens have the opportunity to use telehealth solutions</u>? If possible, please describe the impact of the measures you have taken.

20. What are the main barriers and enablers for telehealth adoption?

Barriers:

☐ Inadequate coverage and payments/lack of funding
☐ Licensure
☐ Resistance to change
☐ Bandwidth
☐ Privacy and security
☐ Competing priorities

☐ Lack of legislation or regulations governing telehealth programs
☐ Digital skills
☐ Costs associated with Technology
☐ Data Accuracy and Ease of Use
☐ Lack of Technological Infrastructure in Underserved Areas
☐ Regulation
☐ Other

Enablers:

☐ Consumer demand
☐ Value-based reimbursement
☐ Health policies view the contribution of information and communications technologies as an essential and central component rather than an add-on for delivering healthcare services and improvements in health
☐ Keeping the user in mind
☐ Experimentation and clinical learning
☐ Experiencing patient and clinical benefits
☐ Frontline staff acceptance
☐ Other

If possible, provide examples how is your country overcoming the main barriers.

21. Are there additional thoughts/ideas you want to share with us with regard to telehealth? Please describe below.

Closing question: Patient Empowerment Framework

The Patient Engagement Framework is a model created to guide healthcare organizations in developing and strengthening their patient engagement strategies through the use of eHealth tools and resources.

22. Where would you indicate your country on the patient engagement framework from HIMSS? For more information https://www.himss.org/himss-patient-engagement-framework or see next page:

☐Inform me (column 1)

☐Engage me (column 2)

☐Empower me (column 3)

☐Partner with me (column 4)

☐Support my e-Community (column 5)

Please, describe below why:

PATIENT ENGAGEMENT FRAMEWORK

HIMSS FOUNDATION

National eHealth Collaborative

Inform Me

Information and Way-Finding
- Maps and directions
- Services directory
- Physician directory

e-Tools
- Health encyclopedia
- Wellness guidance
- Prevention

Forms: Printable
- HIPAA
- Insurance
- Advance directives
- Informed consent

Patient-Specific Education
- Care plan
- Tests
- Prescribed medication
- Procedure/treatment

INFORM AND ATTRACT

Engage Me + 📋

Information and Way-Finding
- Mobile
  - Nearest healthcare services
  - Symptom checker

e-Tools
- Pregnancy tracking
- Fitness tracking
- Healthy eating tracking
- Option to share progress and health milestones on social media

Interactive Forms: Online
- Patient profile
- Register or pay a bill
- Email customer service
- Schedule a clinic appointment
- Refill a prescription

Patient-Specific Education
- Care Instructions
- Reminders
  - Medication
- Preventive services
- Follow-up appointments

Patient Access: Records
- View electronic health record
- Download electronic health record

RETAIN AND INTERACT

Empower Me + 📋 + 💬

Information, Way-Finding, and Quality
- Quality and safety reports on providers and healthcare organizations
- Patient ratings of providers, hospitals and other healthcare organizations

e-Tools
- Care plan management
- Virtual coaching
- Online nurse
- Secure messaging

Integrated Forms: EHR
- Record correction requests
- Advance directives (scanned)

Patient-Specific Education
- Materials in Spanish
- Guides to understanding accountable care

Patient Access: Records
- Transmit patient record electronically
- Copy the patient or a healthcare designee when sharing electronic record
- EHR integrated with patient PHR

Patient-Generated Data
- Care experience surveys
- Symptom assessments
- Self-management diaries
- Patient-generated data in EHR
  - Questionnaires
  - Pre-visit
  - Health history
  - Demographics

Interoperable Records
- Integrated with health information exchange (HIE)
- E-referral coordination between providers
- Ambulatory and hospital records integration
- Images and video in EHR
- Commercial labs, radiology, medications

PARTNER EFFICIENTLY

Partner With Me + 📋 + 💬 + 💡

Information, Way-Finding, and Analytics/Quality
- Patient-specific predictive modeling
- Patient-specific quality indicators
- Patient accountability scores

e-Tools
- Wellness plan
- Advance care planning
- Coordination of care across systems

Integrated Forms: EHR
- Clinical trial records
- Immunization (public health)

Patient-Specific Education
- Materials in Spanish and the top 5 national languages
- Condition-specific self-management tools

Patient Access
- Publish and subscribe
  - Summary of care

Patient-Generated Data
- Shared decision making
  - Preference-sensitive care
  - Informed choice/consent
- Adherence reporting
  - Medications
  - Self-care
  - Wellness
- Home monitoring
  - Devices
  - Tele-medicine
- Directives
  - Advance
  - Physician orders for life-sustaining treatment
  - Intolerances
  - Allergies
  - Values
  - Preferences

Interoperable Records
- Integrated with clinical trial records
- Integrated with public health reporting
- Integrated with claims and administrative data

Collaborative Care
- Acute
- Long-term post-acute care
- Primary care
- Specialty

CREATE SYNERGY AND EXTEND REACH

Support My e-Community + 📋 + 💬 + 💡 + 👥

Information, Way-Finding, and Analytics/Quality
- Care comparison for providers, treatments, and medications
  - Costs
  - Convenience
  - Quality

e-Visits and e-Tools
- e-Visits as part of ongoing care

Integrated Forms: EHR
(replaced by interoperable collaborative care records)

Patient-Specific Education
- Care planning
- Chronic care self-management
- Reminders for daily care

Patient Access and Use
- Publish/subscribe for complete record
- Distribution of record among care team
- Patient-granted permissions
- Patient-set privacy controls

Care Team-Generated Data
- Shared care plans
  - Episodic
  - Chronic
  - End of life
- Team outcomes
  - Adherence
  - Costs
  - Quality

Interoperable Records
- Integrated with long-term post-acute care records

Collaborative Care
- Chiropractic
- Dentistry
- Alternative medicine
- Home

Community Support
- Online community support forums and resources for all care team members
  - Caregivers
  - Family
  - Friends
  - Clergy
  - Counseling
  - Services

| Aligned: Emerging Meaningful Use | Aligned: Meaningful Use 1 | Aligned: Meaningful Use 2 | Aligned: Meaningful Use 3 | Aligned: Meaningful Use 4+ |