



EMPOWER – Support of patient empowerment by an intelligent self-management pathway for patients

Workshop “7th Framework Program – funded eHealth systems for diabetes”

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<http://www.empower-fp7.eu>



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Patient Empowerment as the driving vision for EMPOWER

- | Patient empowerment is seen as an essential aspect of patient-centric care and is identified as a main element of change for improved quality and safety in healthcare. **Patient Empowerment engages patients to a greater extent in their healthcare process** so that disease management becomes an integrated part of their daily life
- | There are different ways strengthening Patient Empowerment
 - | e.g. ensuring participation of patients and citizen in decision-making processes, strengthening health literacy, providing self-management support, fostering patient-physician relationship

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- ⇒ **What do patients need to cope better with their chronic diseases as part of their daily life?**
- ⇒ **and how can that be supported by ICT?**



EMPOWER – Support of patient empowerment by an intelligent self-management pathway for patients



- | **Call & Work Programm:** FP7-ICT-2011-7,
Objective ICT-2011.5.3a Patient Guidance Services (PGS),
Safety and Healthcare record information reuse (STREP)
- | **Duration:** 36 months, February 2012 – January 2015
- | **Partners:**
 - | Salzburg Research Forschungsgesellschaft m.b.H. (Austria) - Coordinator
 - | Helmholtz Zentrum München (Germany)
 - | GO IN Integrationsmanagement- und Beteiligungs-GmbH (Germany)
 - | Università della Svizzera italiana (Switzerland)
 - | Software Research and Development and Consultancy Ltd. (Turkey)
 - | Intracom Telecom (Greece)
 - | Ministry of Health (Turkey)
- | **2 Pilot Applications**
 - | 1 pilot in Ingolstadt, Germany with a network of GPs and diabetes specialists
 - | 1 pilot in Ankara, Turkey with family doctors and clinicians

Objectives in EMPOWER



(1) Fostering self-management with adaptive and secure patient pathways

- | by including treatment goals and recommendations from physicians
- | Adapted to the patients skills, requirements and needs
- | Including disease-relevant information material and hints (EMPOWER Tips) as an intergrated part of the EMPOWER features

(2) Supporting behaviour changes with personalised action plans

- | by including services for personalised, long-term self-management goals realised by short-term activities

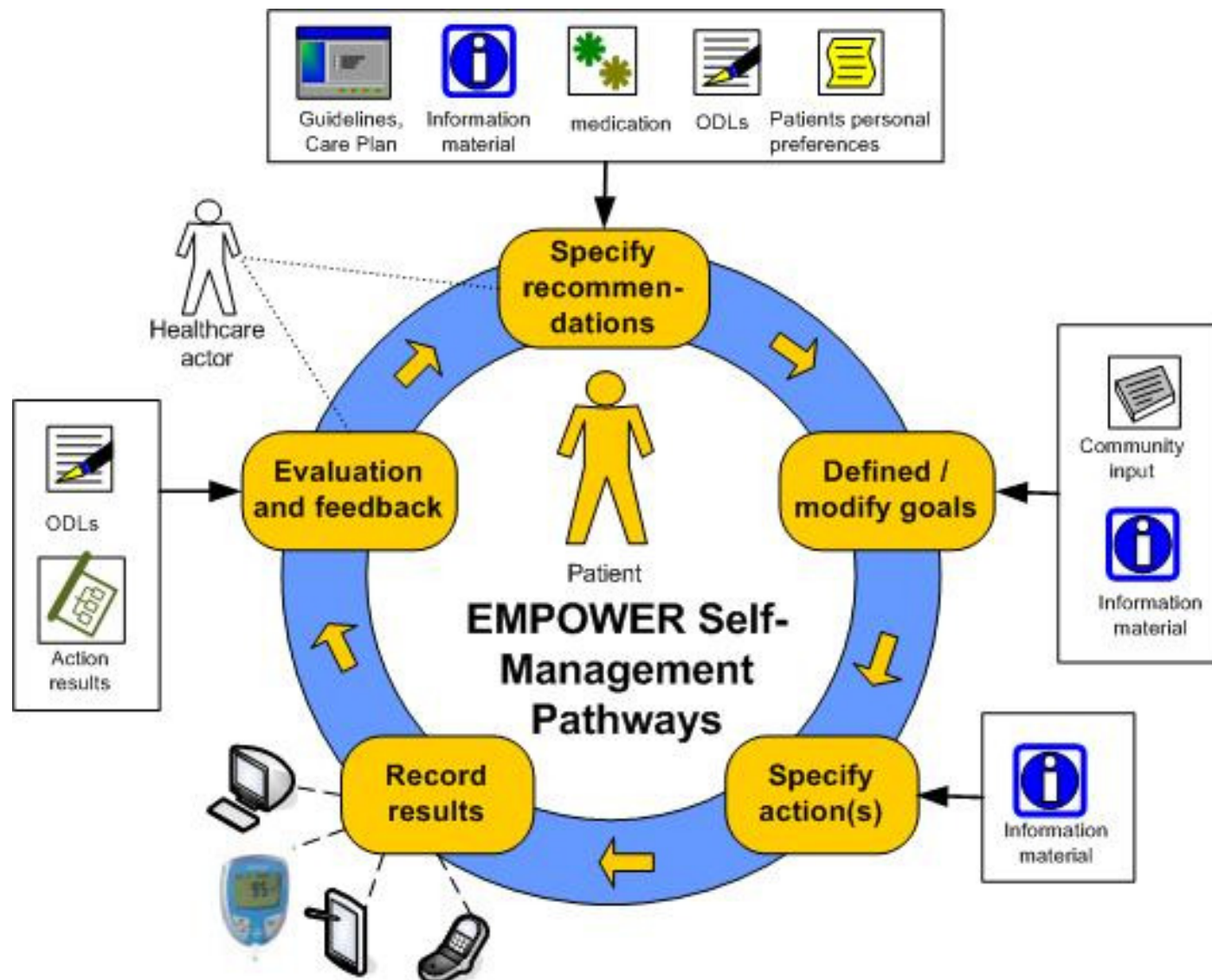
(3) Facilitating self-control by collecting patterns of daily living

- | Services for Observations of Daily Living (ODLs) about vital, physical and mental parameters and about physical and lifestyle activities

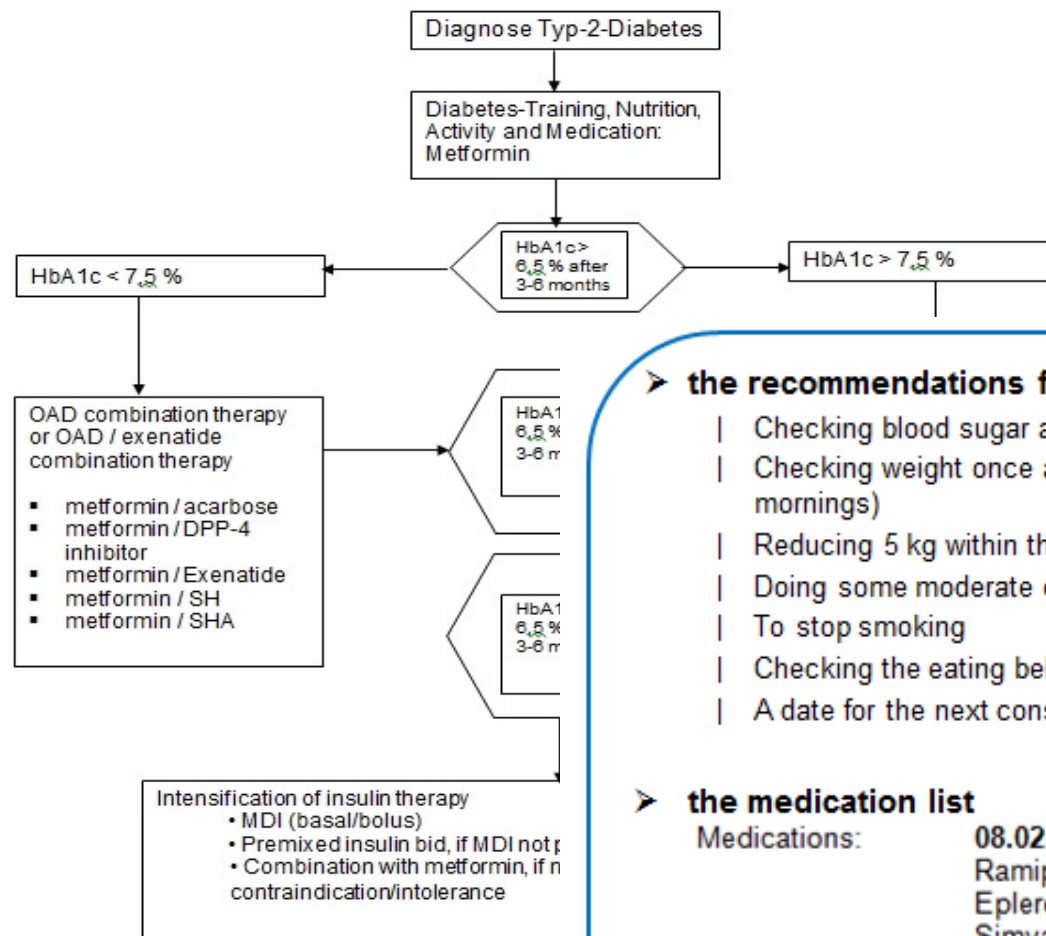
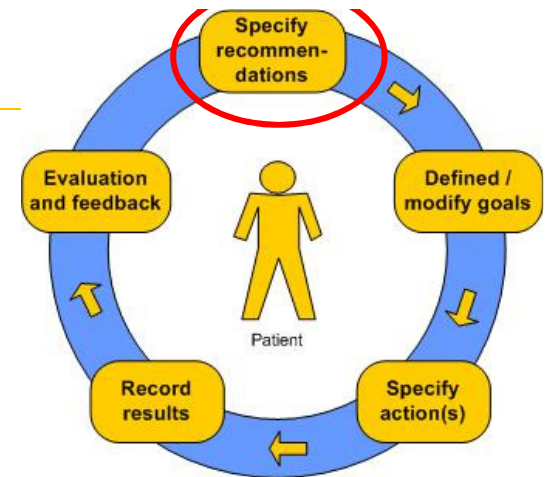
(4) Semantic interoperability with existing Personal Health Applications

- | by supporting semantic interoperability based on established standards such as ISO/CEN13606 information models

EMPOWER approach - supporting (self-)management of diabetes patients



EMPOWER - specify treatment goals & self-management recommendations



➤ the recommendations for self-management goals

- | Checking blood sugar and blood pressure daily
- | Checking weight once a week (preferably always at the same time, e.g. in the mornings)
- | Reducing 5 kg within the next three months
- | Doing some moderate exercises on a regular basis
- | To stop smoking
- | Checking the eating behaviour and changing it to a diabetes-compliant nutrition.
- | A date for the next consultation in 3 months

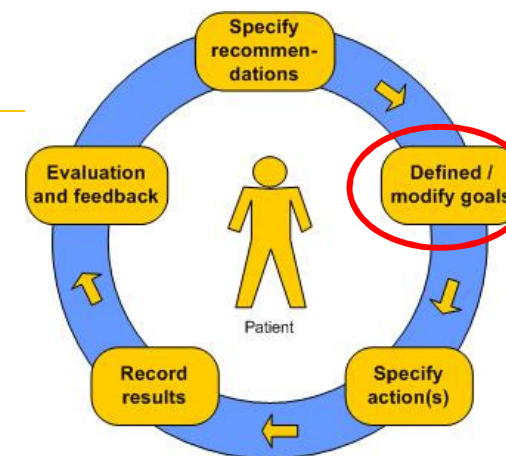
➤ the medication list

Medications:

08.02.2012

Ramipril 2.5 mg 1 x 1, at morning
 Eplerenon 25 mg 1 x 1, at morning
 Simvastatin 40 mg 1 x 1, at evening
 ASS 100 1 x 1, at lunchtime
 Carvedilol 12.5 mg 1 x 1, at morning
 Metformin 500 : 1 x 500 mg at night, 1 week 2 x 500 mg at night, after 7 days 2 x 1000 mg

EMPOWER - Define long-term goals



Please specify your personal self-management goals:

1. Select Recommendations 2. My Goal

Tips
At the beginning, select a treatment goal you can easily start with.
You can select none, or one or more treatment goals.

Choose a treatment goal for specifying your own, more detailed self-management goals

My recommendations for self-management from

<input type="checkbox"/> Date	Care Provider	Recommendation
<input type="checkbox"/> Wed Feb 08 09:36:00 CET 2012	Hans Schmidt	Take the medication
<input checked="" type="checkbox"/> Wed Feb 08 09:36:00 CET 2012	Hans Schmidt	Measure and record blood sugar
<input type="checkbox"/> Wed Feb 08 09:36:00 CET 2012	Hans Schmidt	Check your weight
<input type="checkbox"/> Wed Feb 08 09:36:00 CET 2012	Hans Schmidt	Change your diet
<input type="checkbox"/> Wed Feb 08 09:36:00 CET 2012	Hans Schmidt	Do some sports

[Next Step →](#)

Please specify your personal self-management goals:

1. Select Recommendations 2. My Goal

Tips
If it is difficult for you make goals, experiment with strategies that might help you.
You might share your goals with family or friends, health professionals, or use the Internet.
You might divide your goals into smaller goals that are more achievable for you.

Specify a goal

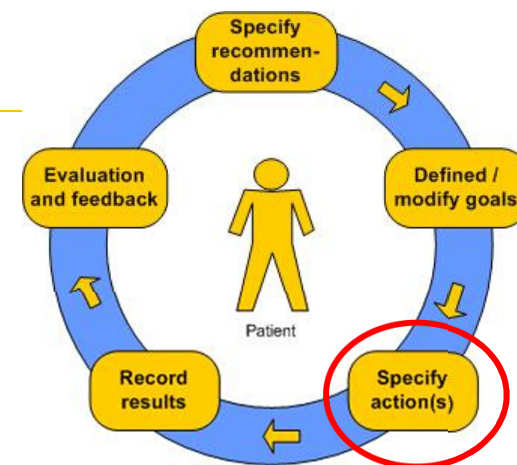
Goal Description

Describe any rewards or motivations that might help you achieve your goal:

Comments

[← Previous Step](#) [Save Goal](#)

EMPOWER – specify actions on a weekly basis



1. Activity

2. Associate Goals

3. Plan it

4. Save

Tips

Make a specific plan about w

Ask yourself:

Exactly what I'm going to

Name of the activity

Select an activity category

Please describe your activity

Blood sugar

1. Activity

2. Associate Goals

3. Plan it

4. Save

My activity:

For specifying activities you might find it helpful to k

Which personal goals are relevant to your activity?

☐ Date

My Goals

☐ Half-Marathon

☒ Blood sugar

← Previous Step

Next Step →

Blood sugar

1. Activity

2. Associate Goals

3. Plan it

4. Save

My activity:

Reminder

Current Schedule:

Mo Tu We Th Fr 08:30 - 09:00

Mo Tu We Th Fr 17:00 - 17:30

Weekdays:

Mo Tu We Th Fr Sa Su

Begin: 17:00

End: 17:30

Carry on until:

today

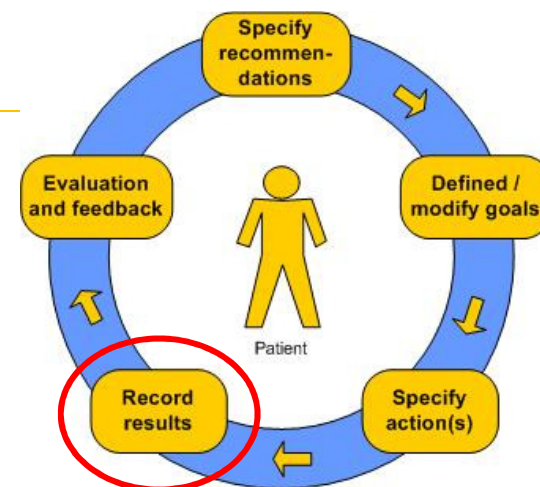
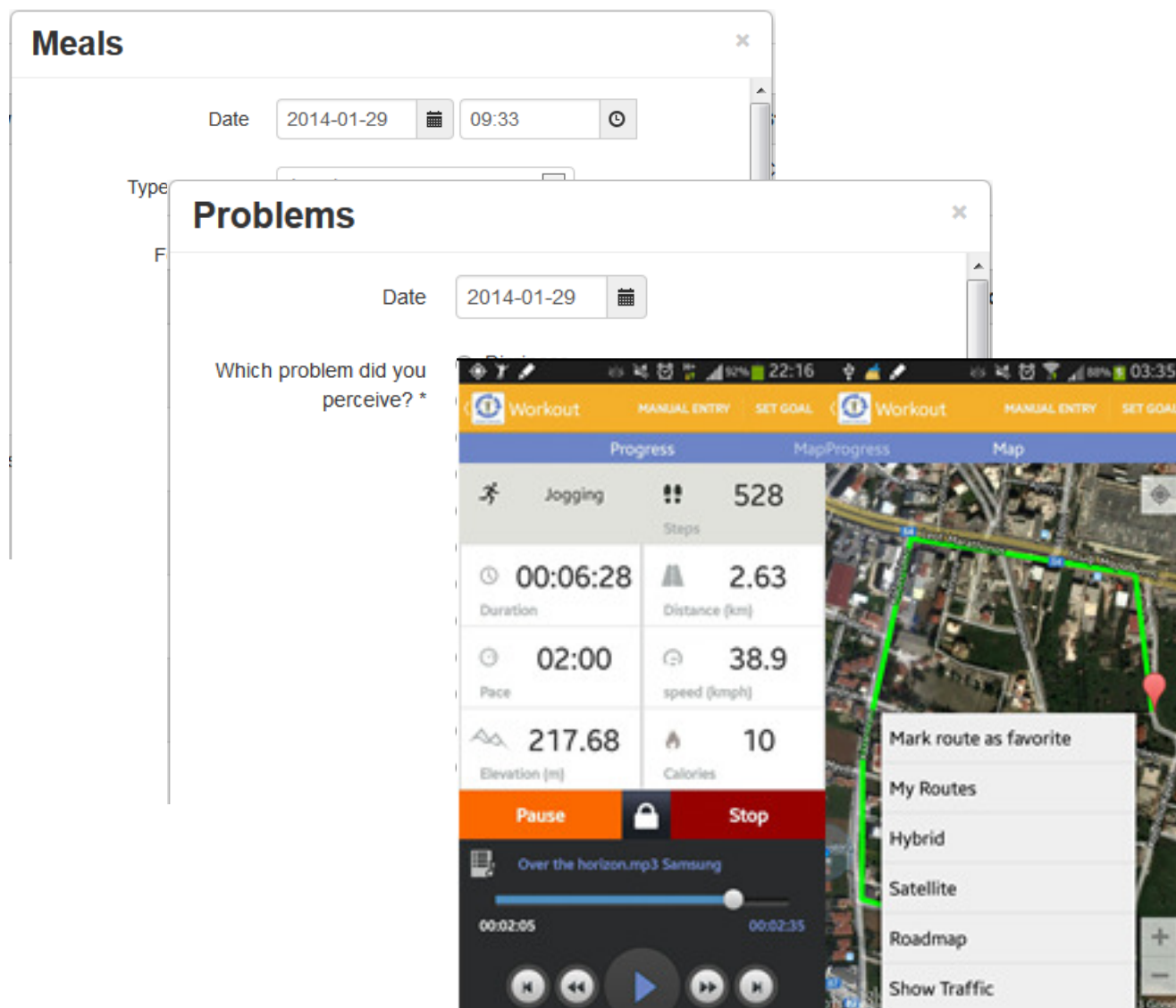
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Jan 27 — Feb 2 2014

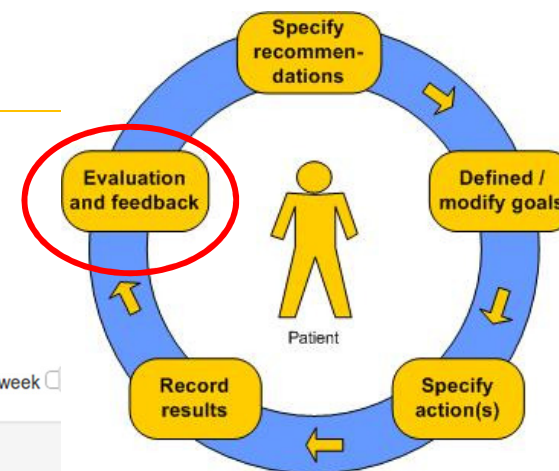
	Mon 1/27	Tue 1/28	Wed 1/29	Thu 1/30	Fri 1/31	Sat 2/1	Sun 2/2
all-day							
8am	8:30 - Blood s	8:30 - Blood s	8:30 - Blood s	8:30 - Blood s	8:30 - Blood s		
9am							
10am							
11am							
12pm							
1pm							
2pm							
3pm							
4pm							
5pm	5:00 - Blood s	5:00 - Blood s	5:00 - Blood s	5:00 - Blood s	5:00 - Blood s		
6pm							

EMPOWER – collecting data



Blood Glucose
Blood Pressure
Body Weight
Meals
Physical Activities
Medication
Mood
Problems
Sleep
Stress

EMPOWER – evaluation & feedback



Review Wed, Jan 22 - Tue, Jan 28, 2014

1 week

1-Check last week 2-Check Diaries 3-Activities Feedback 4-Charts 5-Goals Feedback 6-Update Action Plan for next week

Action Plan - Weekly Review, Step 1. Check your plan from last week.

✓ Complete ✗ Incomplete 🔍 Observ

🔍 **Cycling**
30 min.

✓ **Biking** Riding the bike going to work
30 min.

✗ **Biking** Riding the bike going to work

Review Thu, Jan 23 - Wed, Jan 29, 2014

1 week

1-Check last week 2-Check Diaries 3-Activities Feedback 4-Charts 5-Goals Feedback 6-Update Action Plan for next week

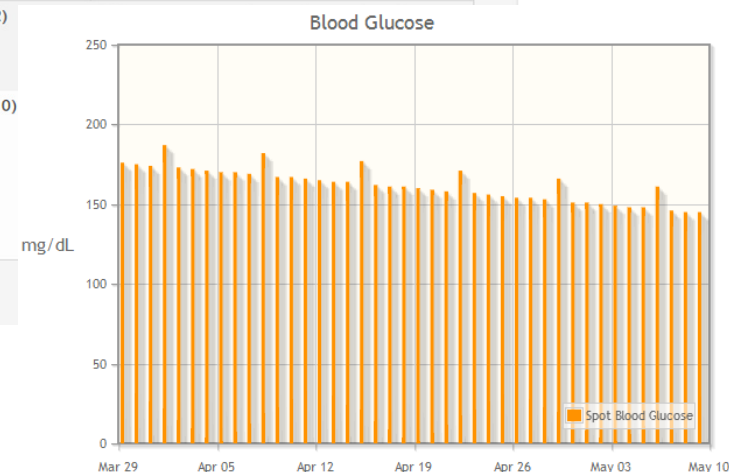
Action Plan - Weekly Review, Step 3. Activities Feedback.

Activity Feedback: 80% overall performance

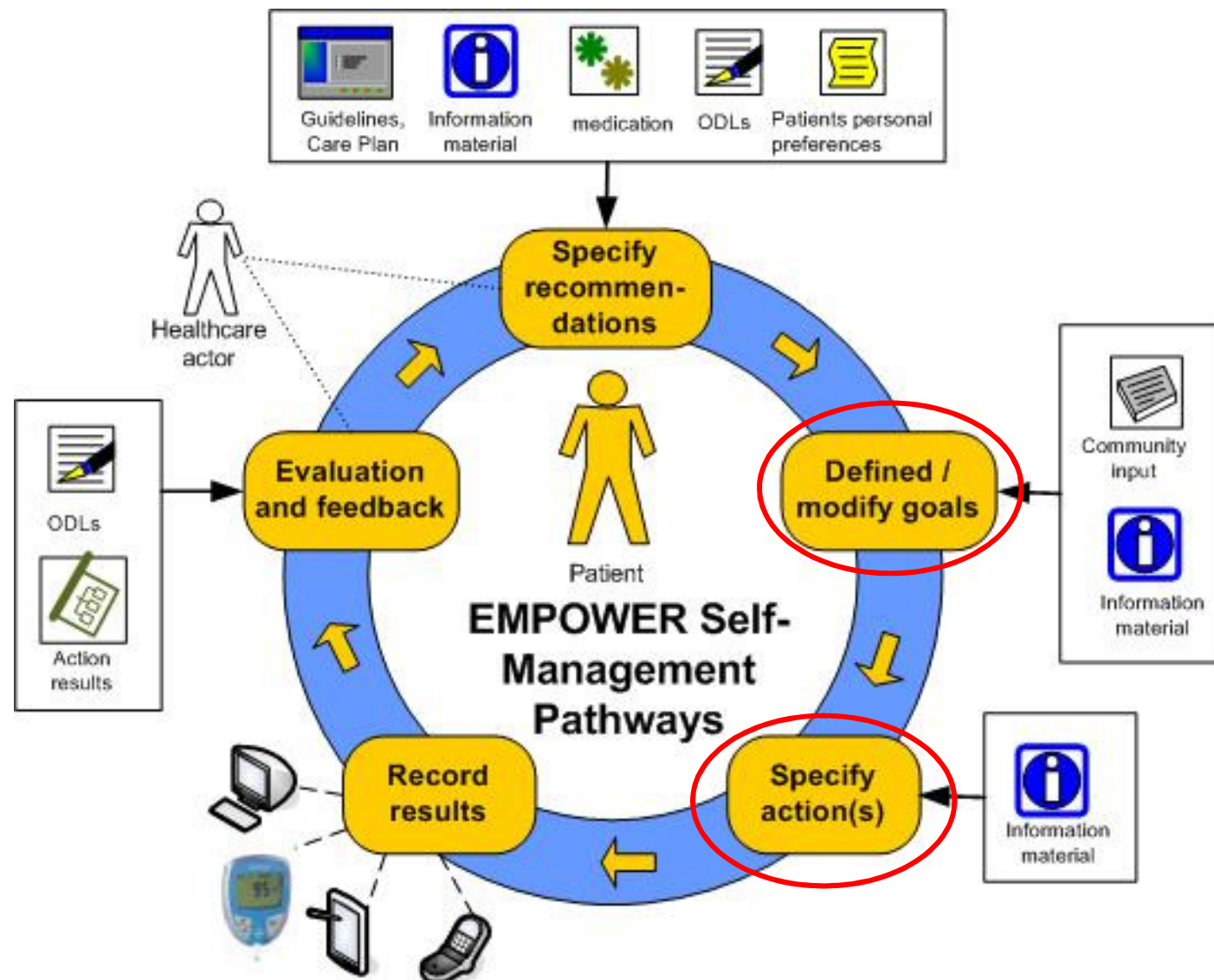
Your overall performance trend ↗

Activity	Performance	Tips
Jogging	50% (1/2)	
Blood sugar	50% (5/10)	

← Previous Step Next Step →



EMPOWER approach – planning the next week



And finally...

We cannot empower patients!

**We only can provide a framework
(tools, services, etc.) that makes it easier
for patients to empower themselves.**

Contact

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