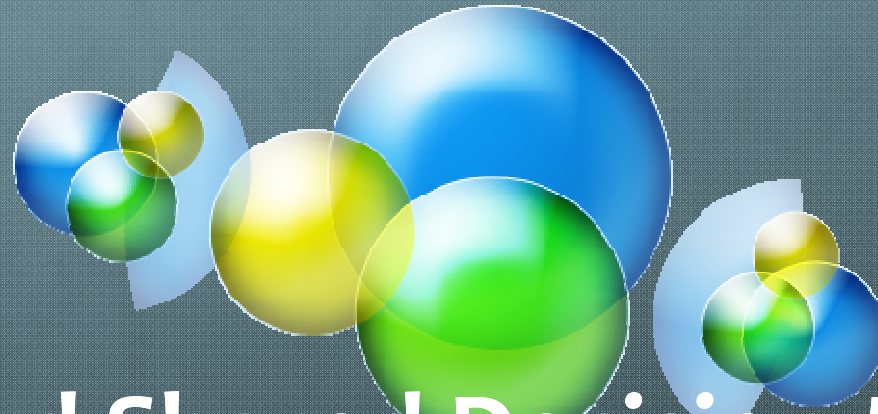




The project PRECIOUS has received funding from the European Union's Seventh Framework Programme under Grant Agreement n° 611366"



# MI and Shared Decision Making in chronically ill patients: is mhealth key for adherence?






**PILAR LUSILLA**



6th PAMI Conference  
Hotel Mercure Poznań Centrum  
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-  **INTRODUCTION: Patient adherence in chronic medical conditions**
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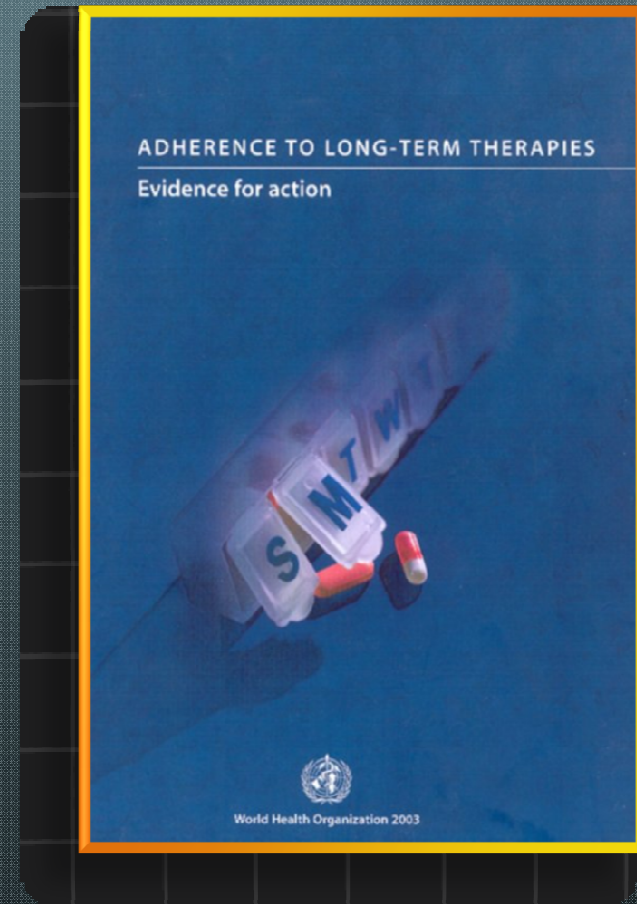
# Adherence to treatment & chronically ill patients

- 🌐 Doctors are highly qualified experts. But a very high percentage of patients do not follow their experts' recommendations.



# The challenge of poor adherence

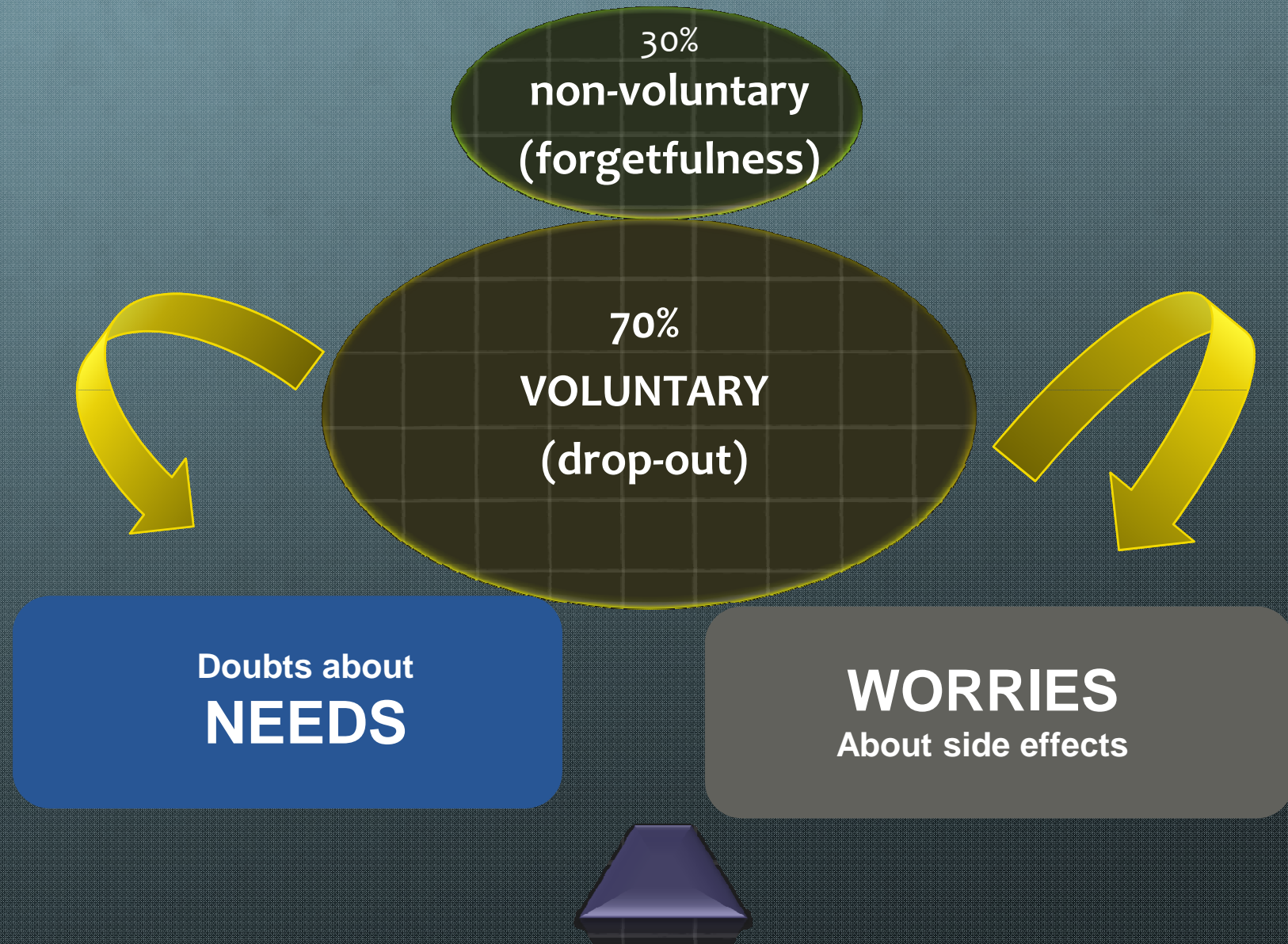
- 🌐 WHO: 30-70% of chronically ill patients are non-adherent to medical treatments and medical recommendations
- 🌐 Few of them inform their doctors, and not all doctors identify correctly the lack of adherence



WHO: Adherence to long-term therapies: evidence for action. 2003.



# Understanding poor compliance



J Behav Ther Exp Psychiatry. 2015 Jul 2;50:113-119. doi: 10.1016/j.jbtep.2015.06.005.

The therapeutic alliance and therapist adherence as predictors of dropout from cognitive therapy for depression when combined with antidepressant medication.

Cooper AA, Strunk DR, Ryan ET, DeRubeis RJ, Hollon SD, Gallop R.





# Patient Centered Care (PCC)



-  ASSOCIATED WITH:
-  IMPROVED PATIENT OUTCOMES
-  IMPROVED SELF-MANAGEMENT
-  PATIENT SATISFACTION
-  MEDICATION ADHERENCE



# Ethical principles of sharing decision making

-  Self-Determination Theory (SDT): our intrinsic tendencies (motivation) is to protect and preserve our well-being.
-  Relational autonomy: we are not entirely free, our decisions will always relate to interpersonal relationships and mutual dependencies



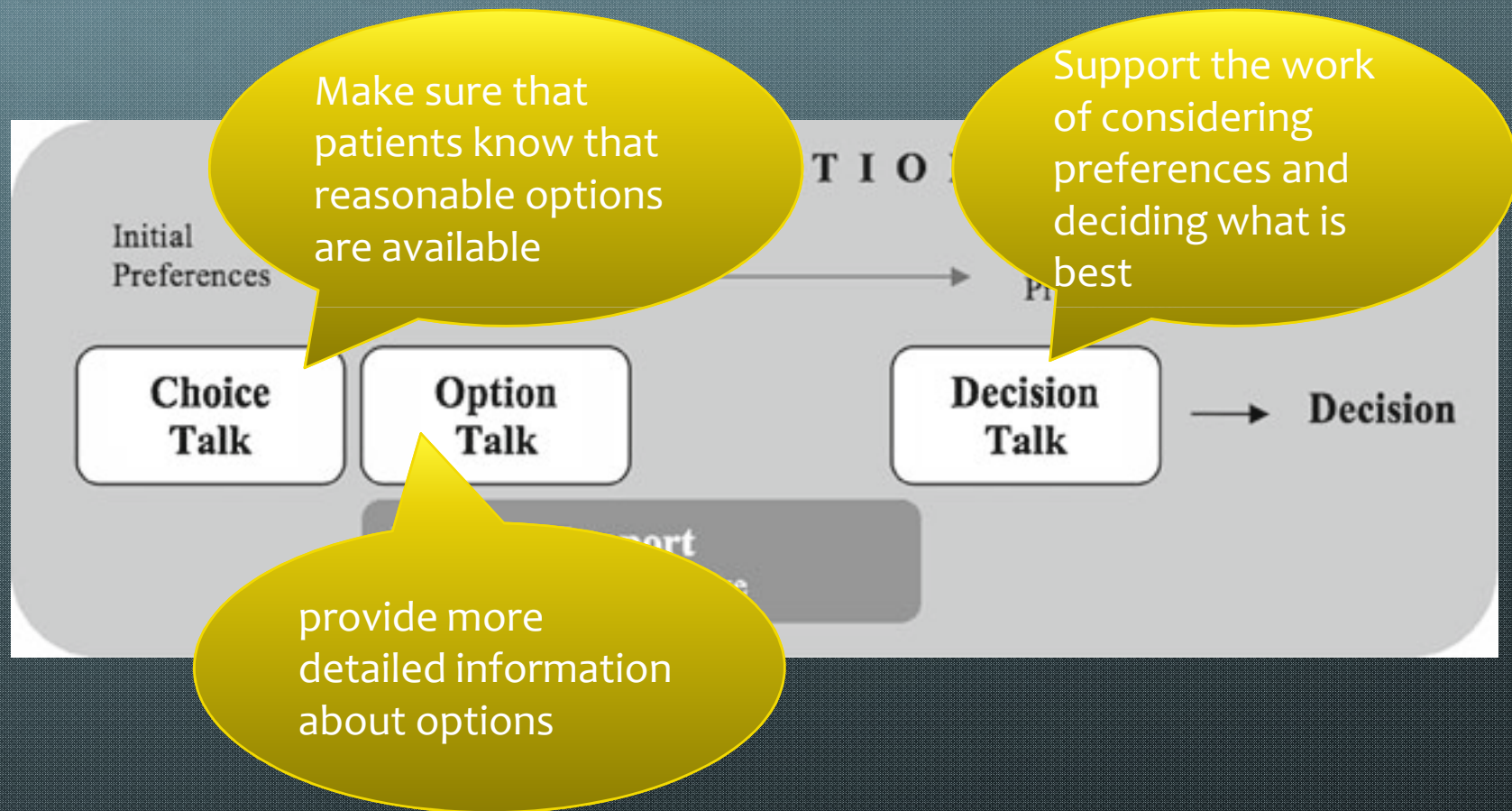
# SDM: Concept

- **“An approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options to achieve informed preferences”**

Elwyn G, Coulter A, Laitner S, Walker E, Watson P, Thomson R. Implementing shared decision making in the NHS. BMJ. 2010



# A 3-step model for clinical practice







# SDM and MI: similarities

- 🌐 Patient-centered orientation
- 🌐 Focus on engaging patients to explore their:
  - 🌐 Views and opinions,
  - 🌐 Options for treatment
  - 🌐 Management approaches from the patients' perspective
- 🌐 Similar communication skills: exchanging information, reflective listening, developing trust.



# Two complementary processes

## MI

-  Addresses ambivalence to change
-  The interviewer seeks to explore and understand the patient's reasons to change before setting out a plan of action.

## SDM



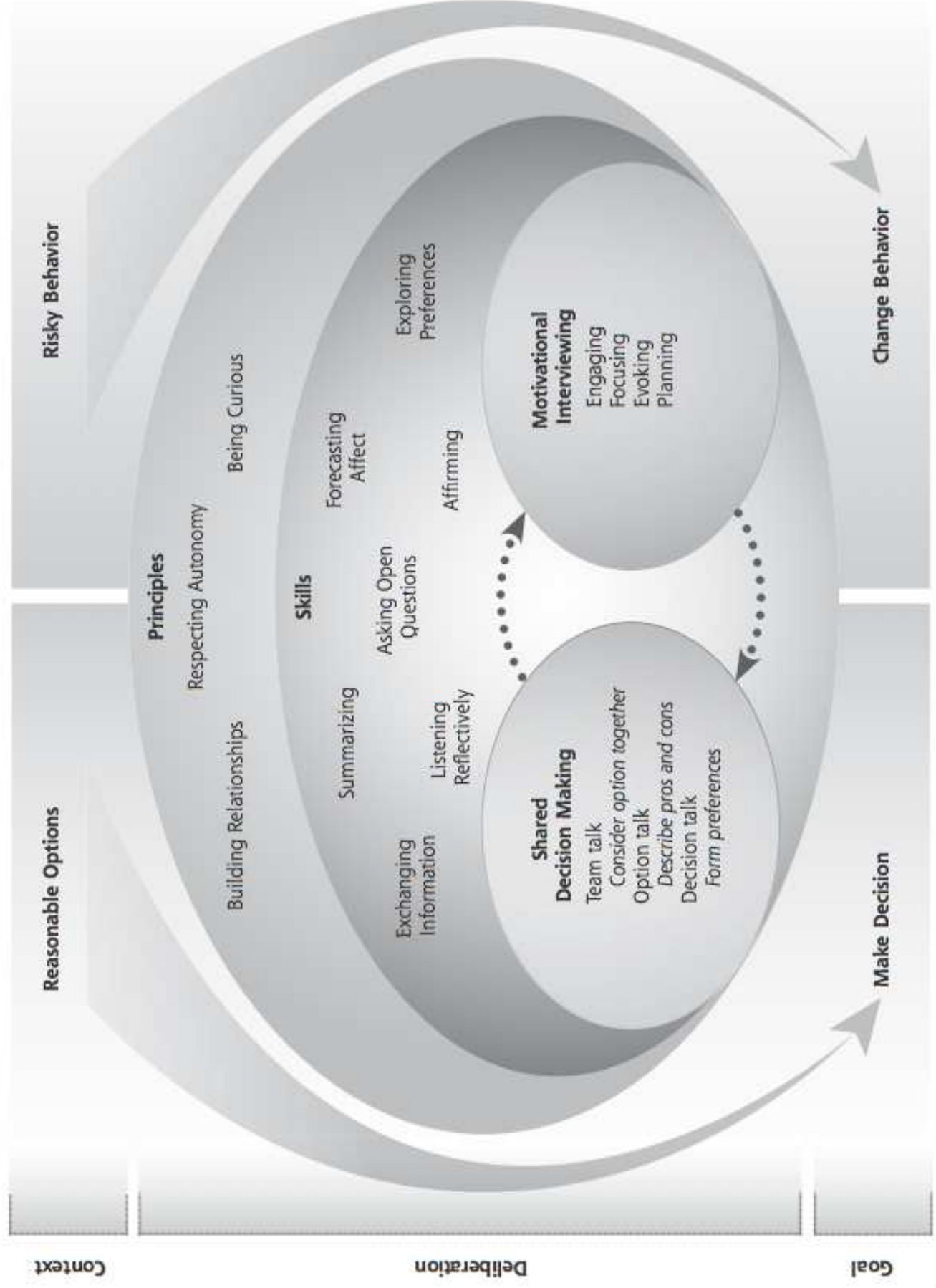
-  Strives to clarify treatment options
-  Help a patient to actively consider those options before supporting a journey toward informed, well-considered preferences and confident decision



Figure 3. The relationship of shared decision making and motivational interviewing.





# Key issues about mHealth

- 🌐 mHealth solutions can empower citizens with information and motivation to improve lifestyles and reduce chronic diseases
- 🌐 Patients can stay healthier, resources can be better utilised, lowering the costs of care.

Source: PWC, socioeconomic impact of mHealth 2013



***“Mobile health has the potential to deliver larger benefits than tele-health as it is more accessible than tele-health.”***

Horst Merkle,  
Roche Diagnostics



# Socioeconomic impact

June 2013

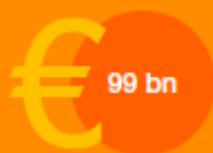
Executive summary [Pg 3](#) | Socio-economic impact of mHealth [Pg 6](#)  
Overcoming barriers to adoption [Pg 20](#) | Appendices [Pg 25](#)

## Socio-economic impact of mHealth

An assessment report for  
the European Union



mHealth could save 99 billion EUR in healthcare costs in the European Union (EU) and add 93 billion EUR to the EU GDP in 2017 if its adoption is encouraged.



Total healthcare  
cost savings in 2017



Private  
savings  
(23%)



Public  
savings  
(77%)



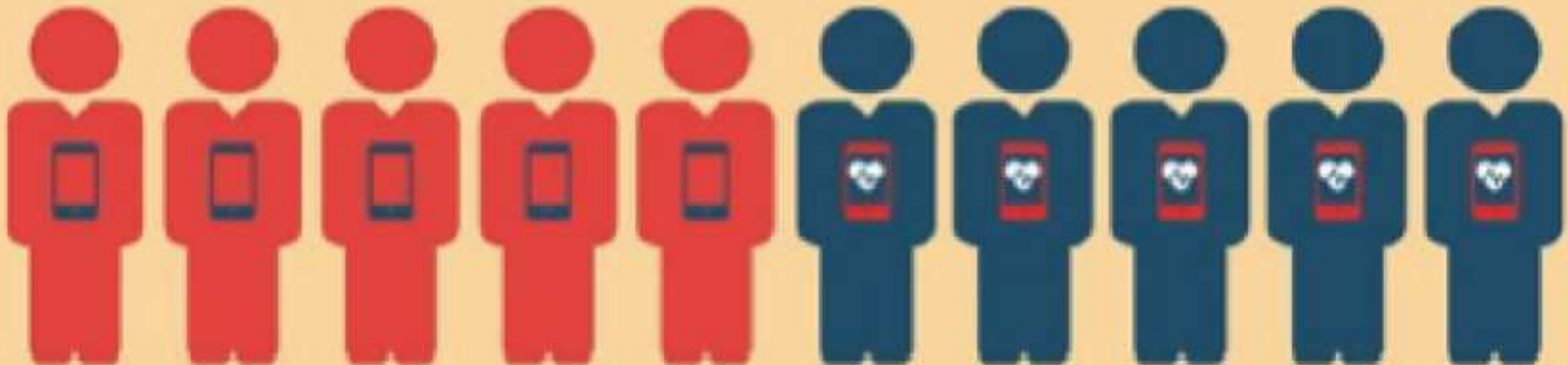
Total GDP addition  
in 2017

Source: PwC analysis



# Future perspectives

- 🌐 By 2017, 3,4 billion people worldwide will own a smartphone and 50% will use health apps



Source: PWC. Health'Research Institute. Top health Industry issues of 2015



# Mobile health app




mHealth app are becoming a regular part of care



86% of clinicians believe that mobile apps will become important to physicians for patient care management over the next 5 years





*“Finding a doctor or finding information is not so much a challenge. The major challenges are self-motivation and adherence. I think this is one of the major opportunities for mobile health where we can work with patients or users.”*

Bastian Hauck, Founder,  
Team Blood Glucose

So...  
An opportunity  
to MI and SDM?



Original Paper

# Development of a Fully Automated, Web-Based, Tailored Intervention Promoting Regular Physical Activity Among Insufficiently Active Adults: The FIT-IT Study Protocol

Friederichs et al. *BMC Public Health* 2014, **14**:212  
<http://www.biomedcentral.com/1471-2458/14/212>



## STUDY PROTOCOL

*Fit-IT: systematic development of a web-based computer tailored physical activity intervention, based on the FIT-IT study protocol*

Hebden et al. *Trials* 2013, **14**:75  
<http://www.trialsjournal.com/content/14/1/75>



Stijn AH F  
and Lilian

## STUDY PROTOCOL

## Open Access

'TXT2BFIT' a mobile phone-based healthy lifestyle program for preventing unhealthy weight gain in young adults: study protocol for a randomized controlled trial






Lana Hebden<sup>1\*</sup>, Kate Balestracci<sup>1</sup>, Kevin McGeechan<sup>2</sup>, Elizabeth Denney-Wilson<sup>3</sup>, Mark Harris<sup>4</sup>, Adrian Bauman<sup>2</sup> and Margaret Allman-Farinelli<sup>1</sup>

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# Conclusions

-  MI and SDM are two patient centered approach that can be useful for increasing treatment adherence
-  mhealth apps can play a relevant role to improve the health in the population as mobile devices are worldwide available.
-  An attractive format and a patient centered approach seems to be appropriate when a health app is designed
-  Although with limitation, MI principles and some MI strategies as well as SDM model can be adapted to an mhealth format.
-  More research is needed in order to find evidence-based feasibility and efficacy.