Quality circles as a model for cross-sectoral quality development?

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SGAIM SSMIG SSGIM
Schweizerische Gesellschaft für Allgemeine Innere Medizin
Société Suisse de Médecine Interne Générale
Società Svizzera di Medicina Interna Generale
Swiss Society of General Internal Medicine

Conflict of Interests

Researcher at the institute of Primary Health Care (**BIHAM**), University of Bern

Tutor and trainer for facilitators, member of the quality committee **SSGIM**

Head of the Swiss Forum for Quality Circles

Head of the EQuiP working group for ‘structured small group work in PHC’

Teacher (undergraduates and trainees)

General Practitioner at Medbase medical center in Wil

Quality Circles

What do quality circles do?

«KNOWLEDGE»

«KNOWLEDGE IN PROFSSIONAL ROLE»

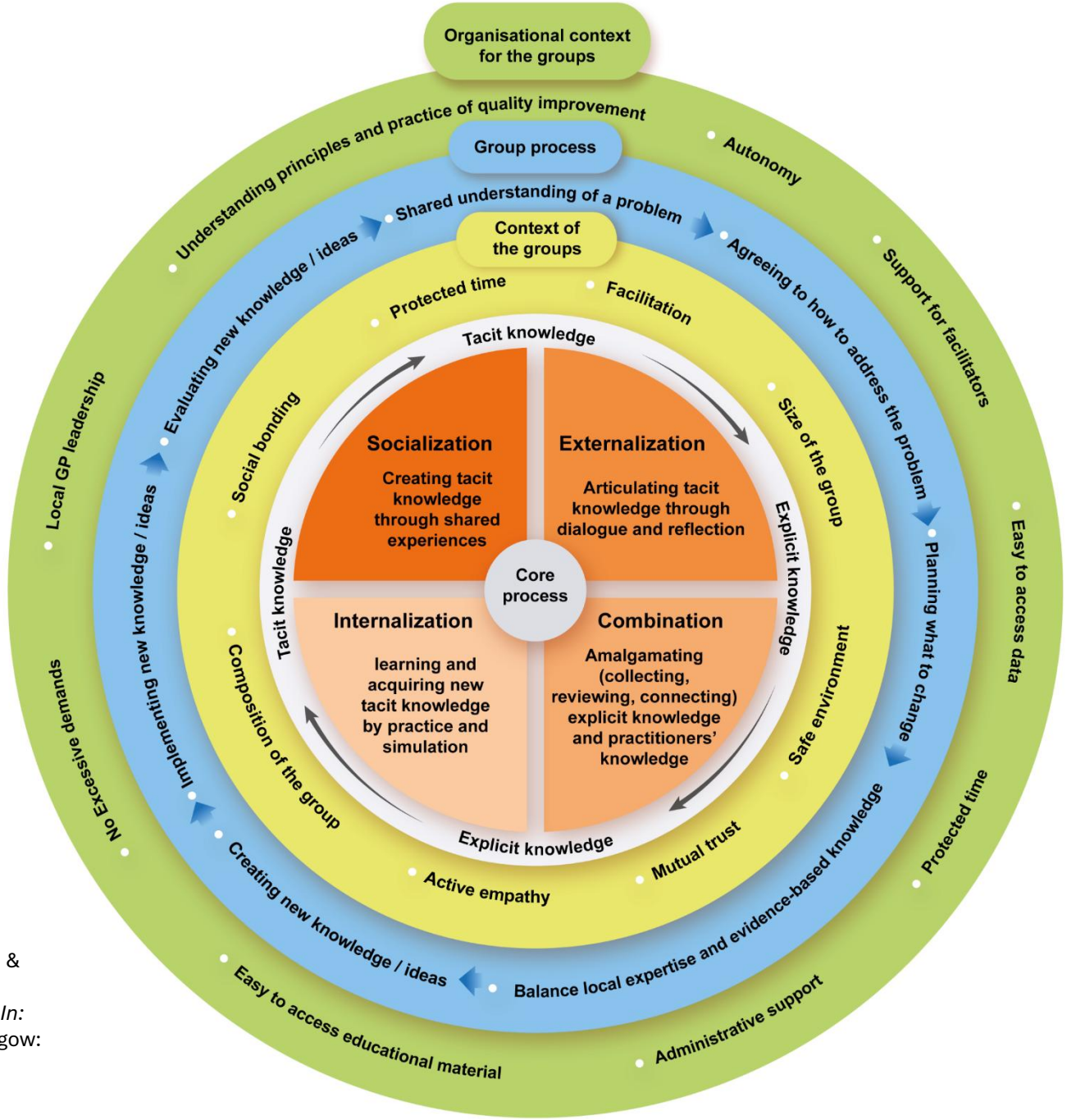
«FACILITATING USE OF KNOWLEDGE IN PRACTICE»
- *change of context*

"Continuous improvement is better than delayed perfection" (Mark Twain)

QC: a complex program

… in groups	• of medical professionals on an equal-footing, self-regulating and under the guidance of a trained facilitator
… on quality improvement	• in the knowledge that our appreciation of a service (i.e. quality) is complex, multi-faceted and therefore dependent on the service users or stakeholder group
… focused on one topic	• based on academic evidence and experience
…continuously	• meeting at least eight times a year for one or two hours
… using didactic methods and tools	• such as debates, contentious discussions, reaching a consensus, peer consulting, peer reviews, brain-storming, role play, reflective thinking, raising awareness of emotions, self-monitoring, professional reprocessing of patient situations, purposeful use of local experts, learning through repetition
… in a professional way	• rediscovering our professional role
… to improve quality through learning cycles	• as quality is dynamic within a learning system, and can therefore be promoted and developed through their use

Layers of context



ROHRBASSER, A., GUTHRIE, B., GILLIES, G. & MERCER, S. 2017. Collaborative Quality Improvement in General Practice Clusters. *In:* CARE, S. S. O. P. (ed.) *Briefing Papers*. Glasgow: Scottish School of Primary Care.

- ‘Need for autonomy and obligation’
- ‘Being embedded in a QI system’
- ‘Feeling they have a say’
- ‘Participants know what to expect’

Rohrbasser A, *et al*. *BMJ Open* 2022;12:e058453. doi:10.1136/bmjopen-2021-058453

Organisational Context:
policy and regulations

Responsibility for QI

QI embedded in a system

Professional self-regulation

Organisational Context: *professional societies*

Lectures on basic principles in QI

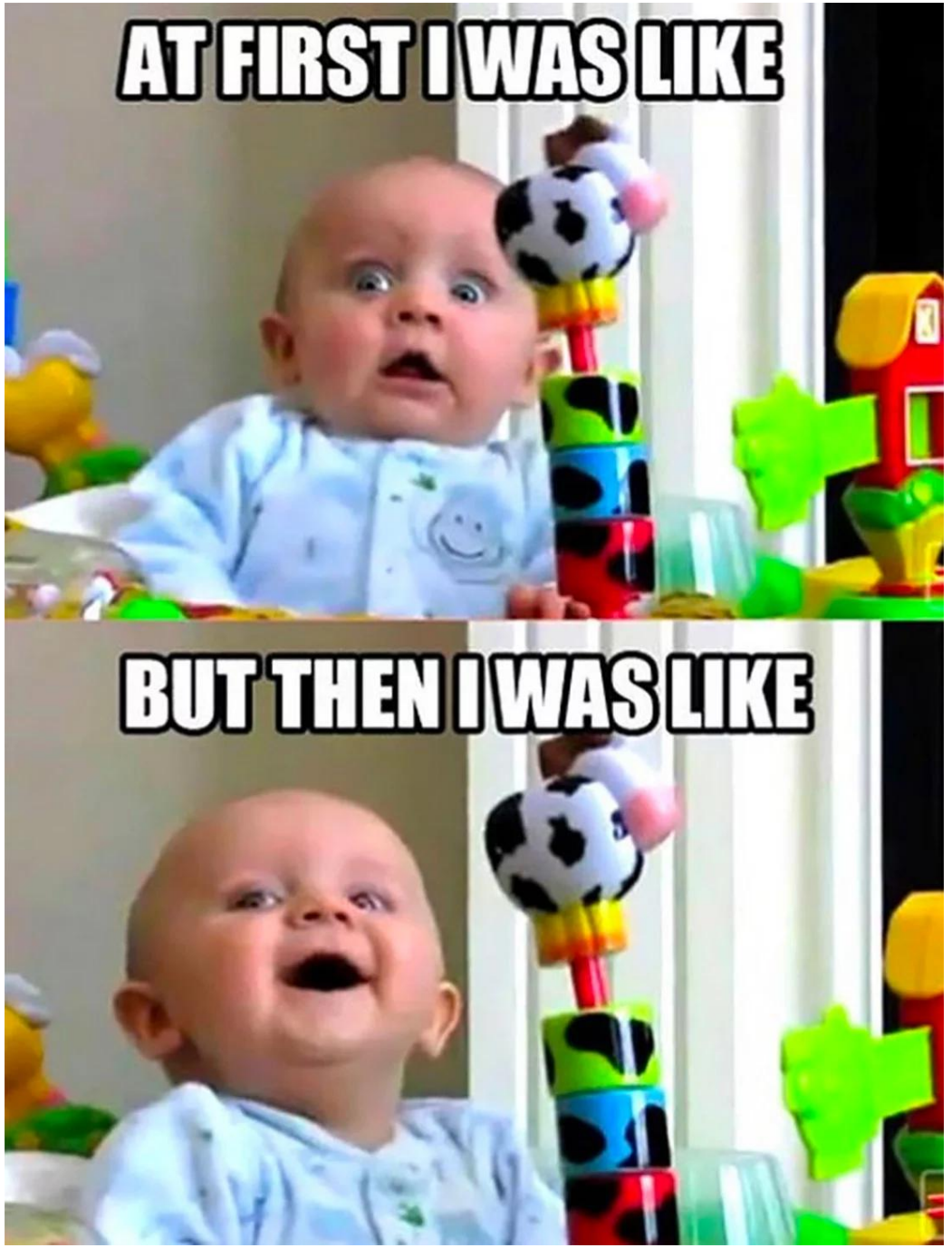
Training and mentoring facilitators

Provision of evidence-based material

Help with data collection

Easy access data on practice performance

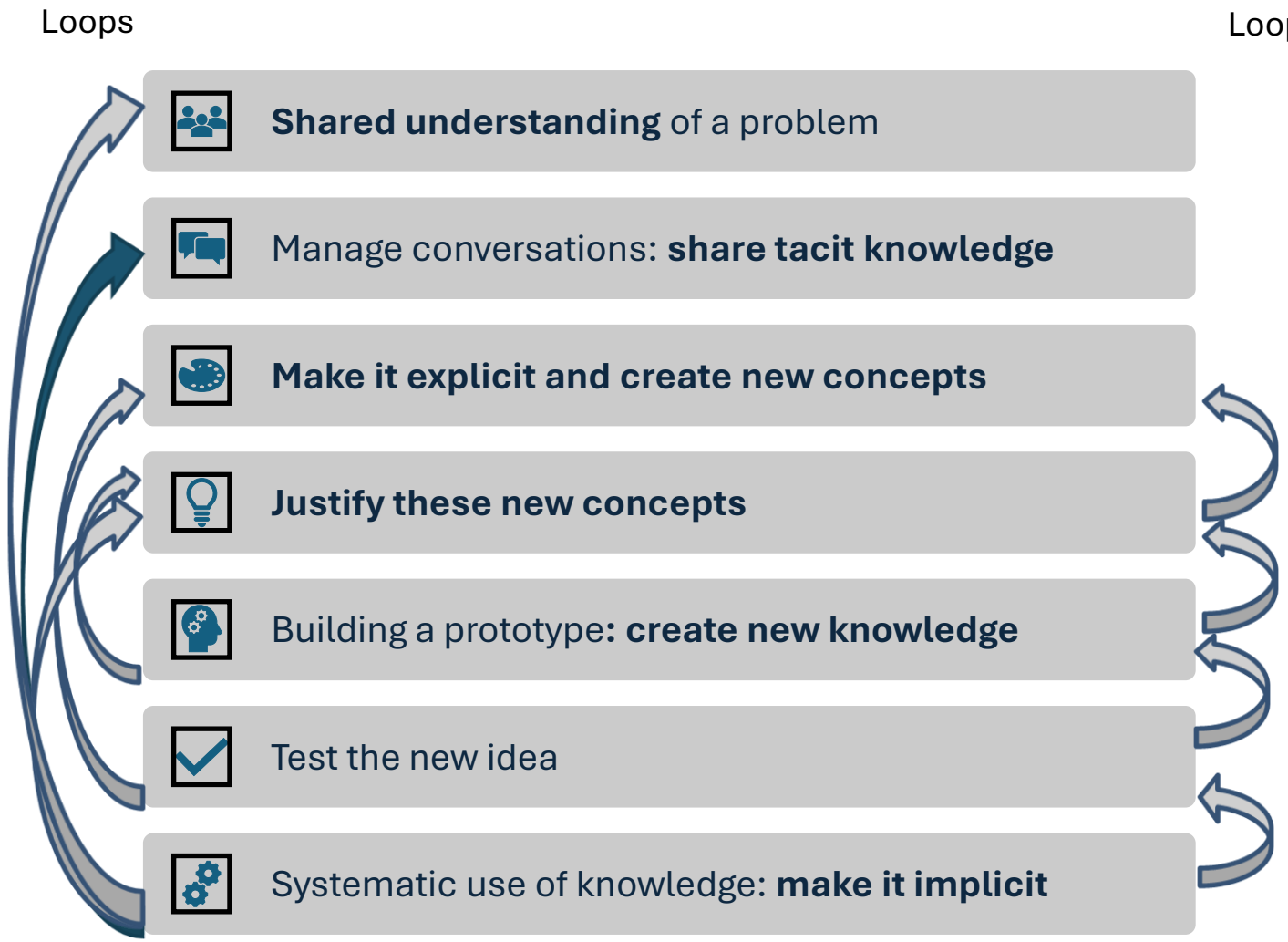
Introduction of quality circles to GPs is important for its acceptance



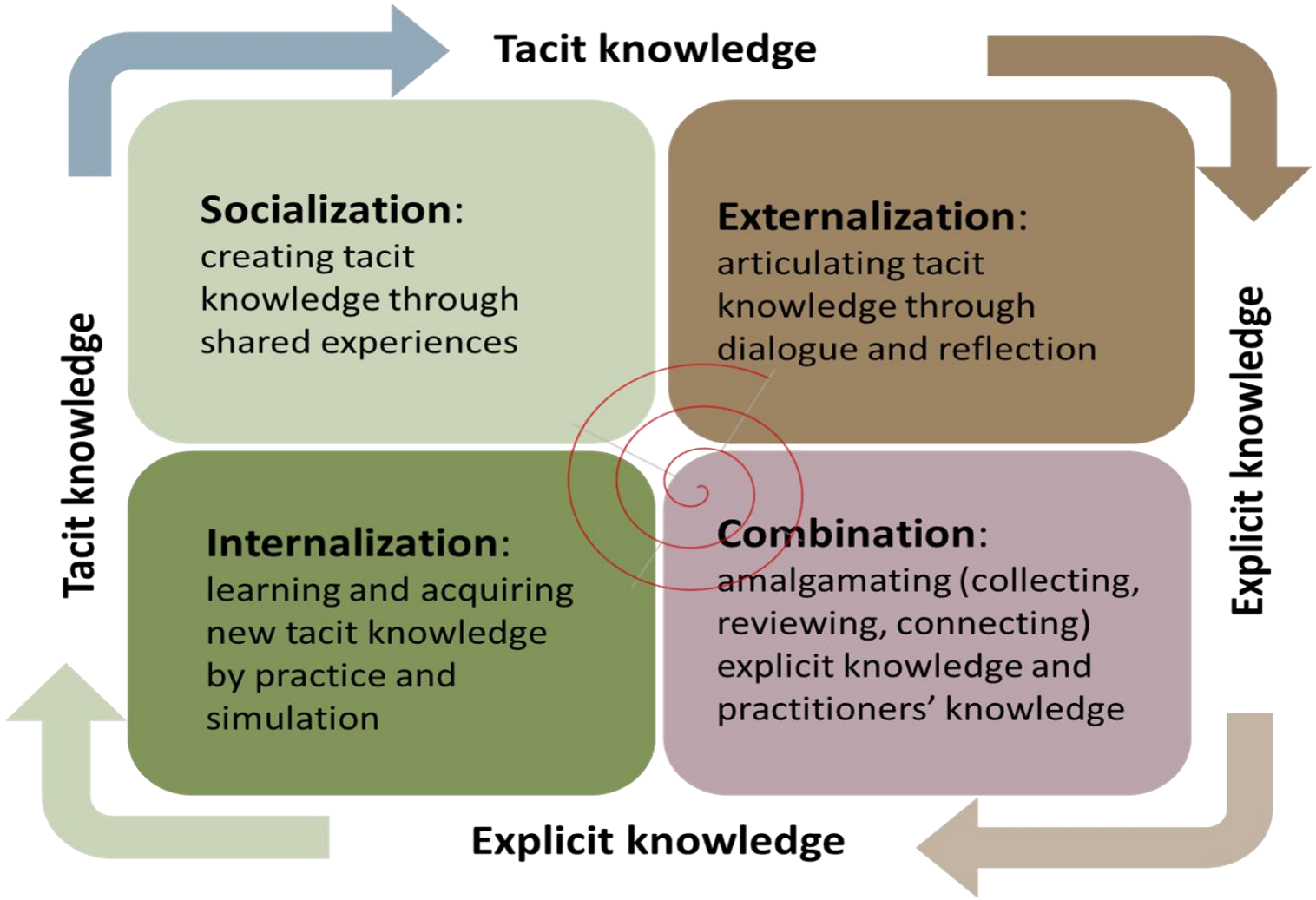
Organisational Context:
local administations

- Provision of appropriate venues and meeting times
- Decentralised organisation
  - integrate new knowledge
  - accept local speed of work
  - accept local solutions

Group process



Knowledge creation: SECI-Model



(Nonaka)

- **‘Sharing similar needs’**
- **‘Need for relatedness’**
- **‘Need for autonomy and competence’**
- **‘Size of the group affects communication’**
- **‘Variety of characters stimulates reflection – cognitive dissonance’**
- ‘strong cognitive dissonance threatens self-image’

Rohrbasser A, *et al*. *BMJ Open* 2022;12:e058453. doi:10.1136/bmjopen-2021-058453

Self-determination theory Ryan and Deci 2000)

Why do GPs meet in this context? *-Motivation-*

Group: Essential Concepts and Theories

5-12 people - **Diversity** - **No hierarchy**

Need for **relatedness** - Need for interaction

Knowing each other - Developing **norms** - Knowing the rules

Autonomy (making own decisions - including the moderator)

Benevolence – "active empathy"

showing sympathy and understanding while actively listening

Reciprocity (respond to a gesture or action by making a corresponding one) fosters cooperation, builds trust and strengthens relationships

Safe environment: building trust

(Cross et al., 2001, Dirks and Ferrin, 2001, Pereles et al., 2002, Kozlowski and Ilgen, 2006, Baumeister et al., 2016)

- **‘Feeling safe and not vulnerable’**
- **‘Need for competence and self-actualisation’**
- **‘Previous knowledge is activated’**
- **‘Immediate relevance for the practice’**
- **‘Cognitive dissonance’**
- ‘Social learning’

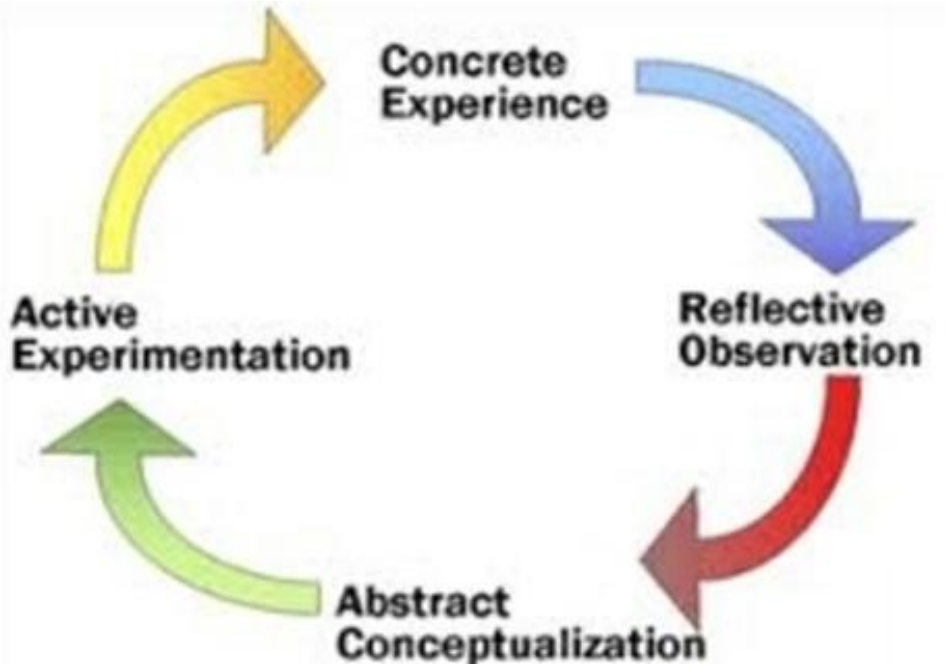
Rohrbasser A, *et al*. *BMJ Open* 2022;12:e058453. doi:10.1136/bmjopen-2021-058453

- Self-directed
- Task oriented
- Experience based
- Builds on prior knowledge
- Immediate use
- High level of motivation

Adult learning theory

- Starting point: own experience
- Agree on
  - which topic to focus
  - on how to address the topic
- Discuss your experiences – experience- based learning

(Kolb 1984 /Mukhalalati and Taylor 2019)



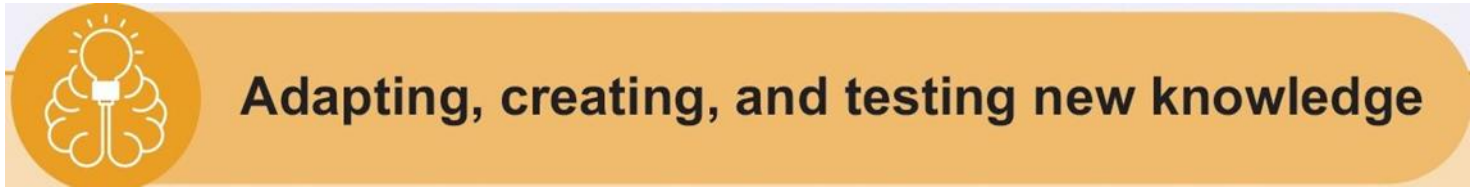
Cognitive dissonance - reflection

Own attitudes and behaviors may contrast with their peers' knowledge, causing cognitive dissonance that makes them reconsider their way of working.

- Clinical case ('have you considered....?')
- Evidence-based information
- Data on diagnostic or prescription patterns

Transformative Learning Theory

(Mezirow, 1997, Sandars, 2006)



- ‘**Positive interdependence** between the administration at national level and GPs’
- ‘Threat to professional autonomy’
- ‘**Positive interdependence** among group members’
- ‘**Identifying and removing barriers to change**’
- ‘Need for competence, autonomy and relatedness’
- ‘**Intention to change**’
- ‘Testing new knowledge’

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Positive Interdependence

(Johnson and Johnson, 2005, Johnson and Johnson, 2009)

Each person in the group can only succeed if the others succeed as well.

Encourages the group to act and negotiate together to achieve a common goal.

Mutual appreciation and support increase.

Enhances self-esteem and psychological well-being.

Creates a sense of ownership.

Improves mental well-being.

Leads to long-term success.

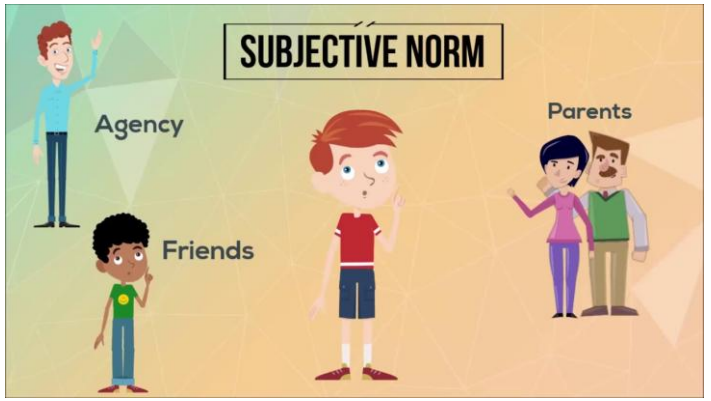
Implementing knowledge

- Discuss new ideas
- Address barriers to change
- Debate and test the proposals for change
- Agree on action plans

Self determination theory
Sense of ownership- satisfaction

Theory of Planned Behaviour

- Plan your intentions:
  - if the new behaviour makes sense,
  - others approve and
  - if it feels easy enough to change.



- ‘Gaining confidence in an innovation’
- ‘Repetition priming and automaticity’ - ‘practice makes perfect’

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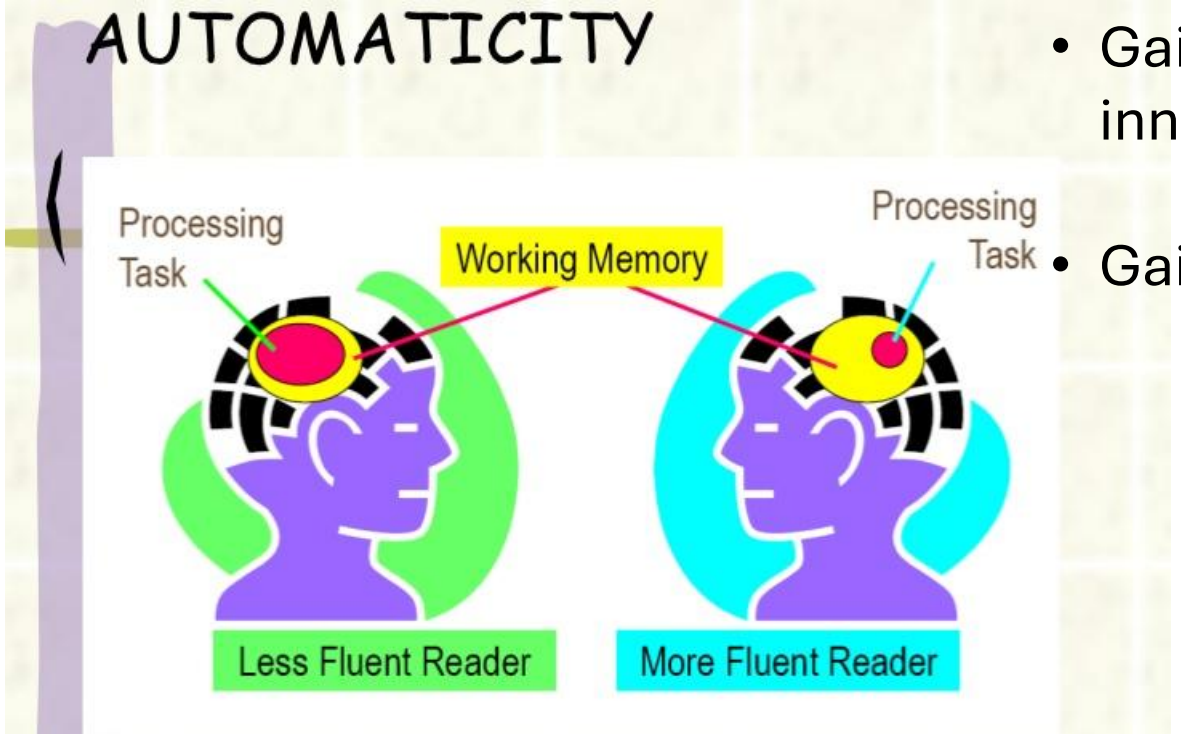
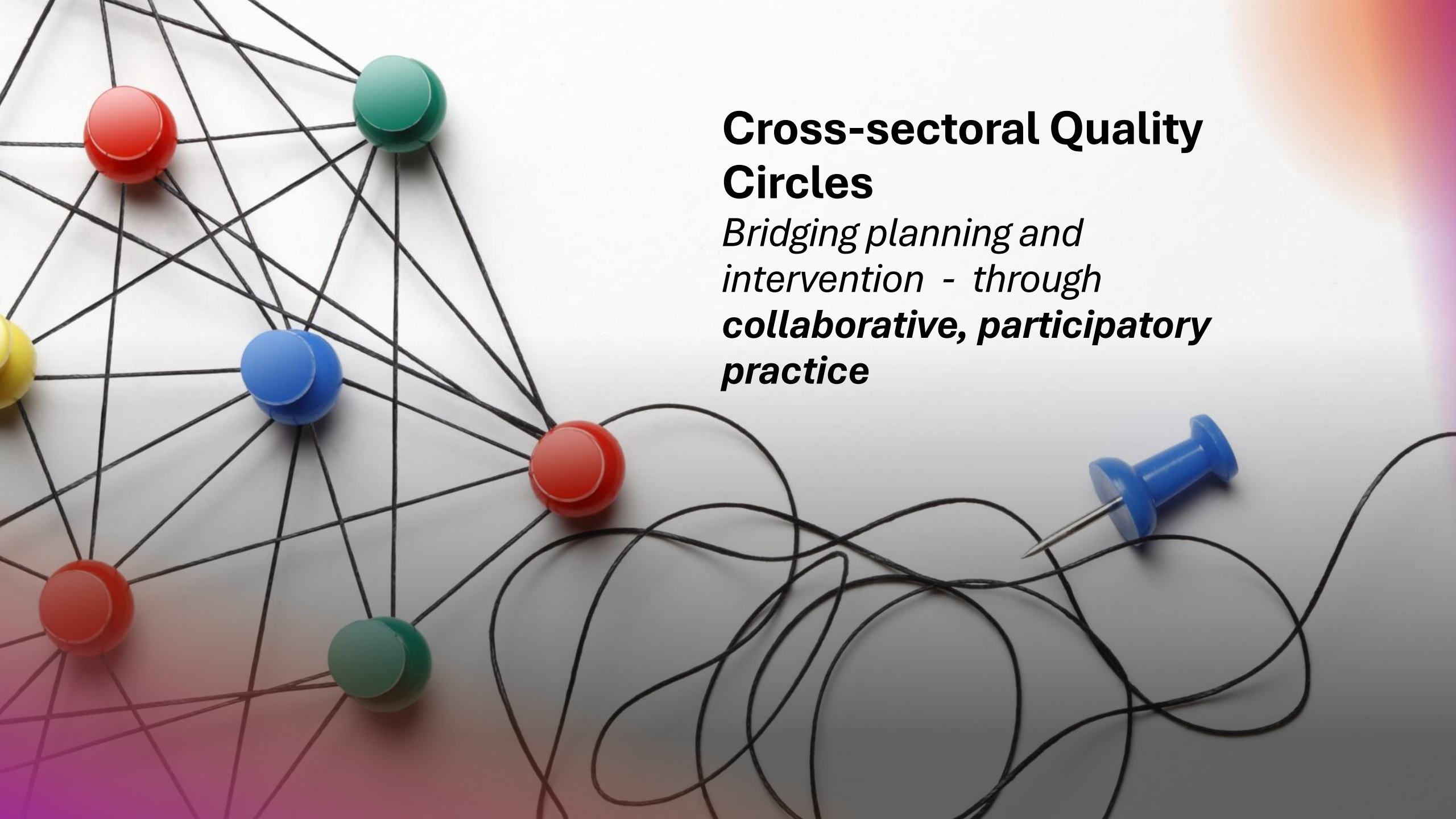
“once is not enough”



- Gain confidence in the innovation
- Gain QC skills

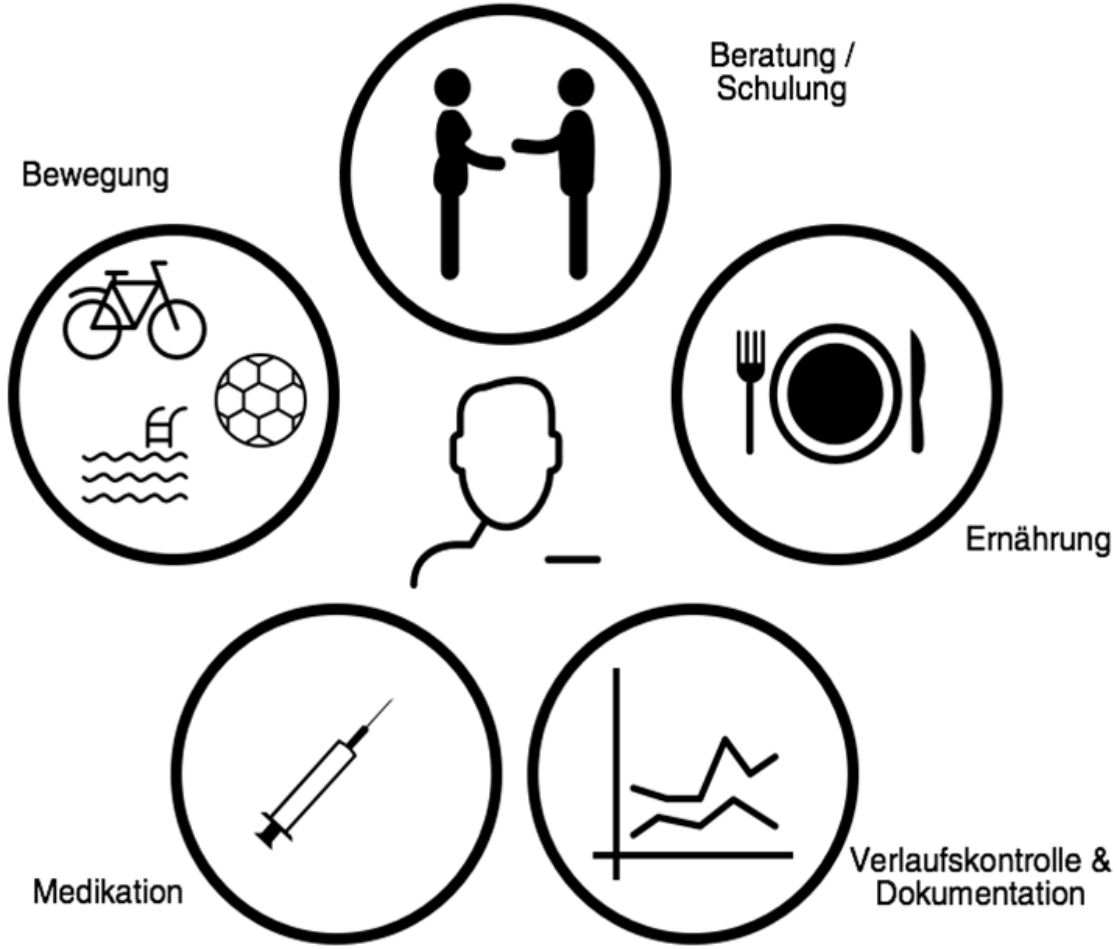


Cross-sectoral Quality Circles

Bridging planning and intervention - through ***collaborative, participatory practice***

Stakeholder involvement is key!

- «Diabetic patients»
- General Practitioner
- Medical Practice Assistant / Practice Coordinator with clinical training
- Nurse Practitioner
- Physiotherapist
- Other relevant health care professional



Care:

- patient centered and evidence-based
- according to current patient needs
- may differ depending of the state or patient needs

Intervention Medbase

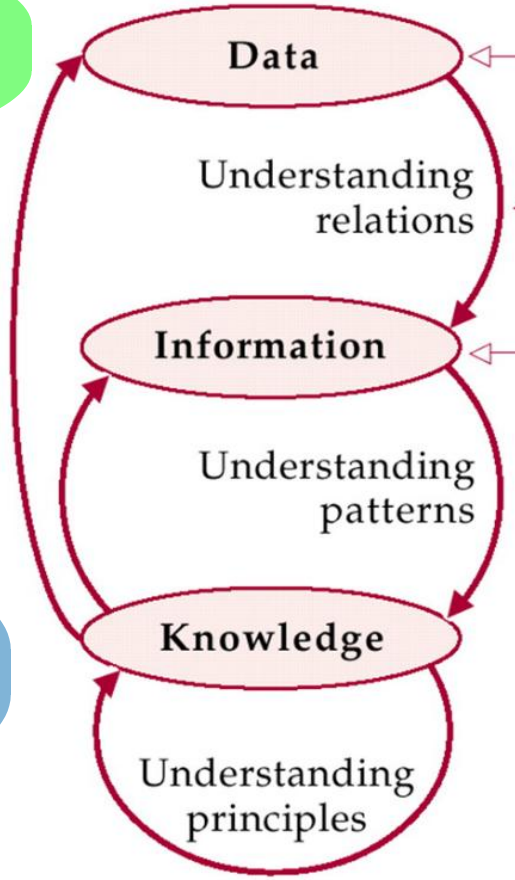
Introducing interprofessional and intersectoral care

SGED Criteria: performance indicators
Number of **consultations**
Lifestyle counselling: **physical exercise**, **nutrition**, **smoking** habits, driving,….
Blood Pressure, BMI
HbA1c
LDL
Nephropathy: **S-creatinine, ACR** (Urine albumin to creatinine ratio)
Looking for **Retinopathy** (Ophtalmologist)
Checking feet for neuropathy (**monofilament test**) and vascular problems (**puls**)

Data – Information - Knowledge

Health Care Professionals

- Data recording during consultations
- Understanding the information
- Developing knowledge in workshops and quality circles



Medbase IT

Supporting technologies

Data processing

Data management
Data analysis

Information management

Adjustment of electronic medical records according to HCPs needs

SENSKY, T. 2002. Knowledge management. *Advances in Psychiatric Treatment,* 8**,** 387-395.

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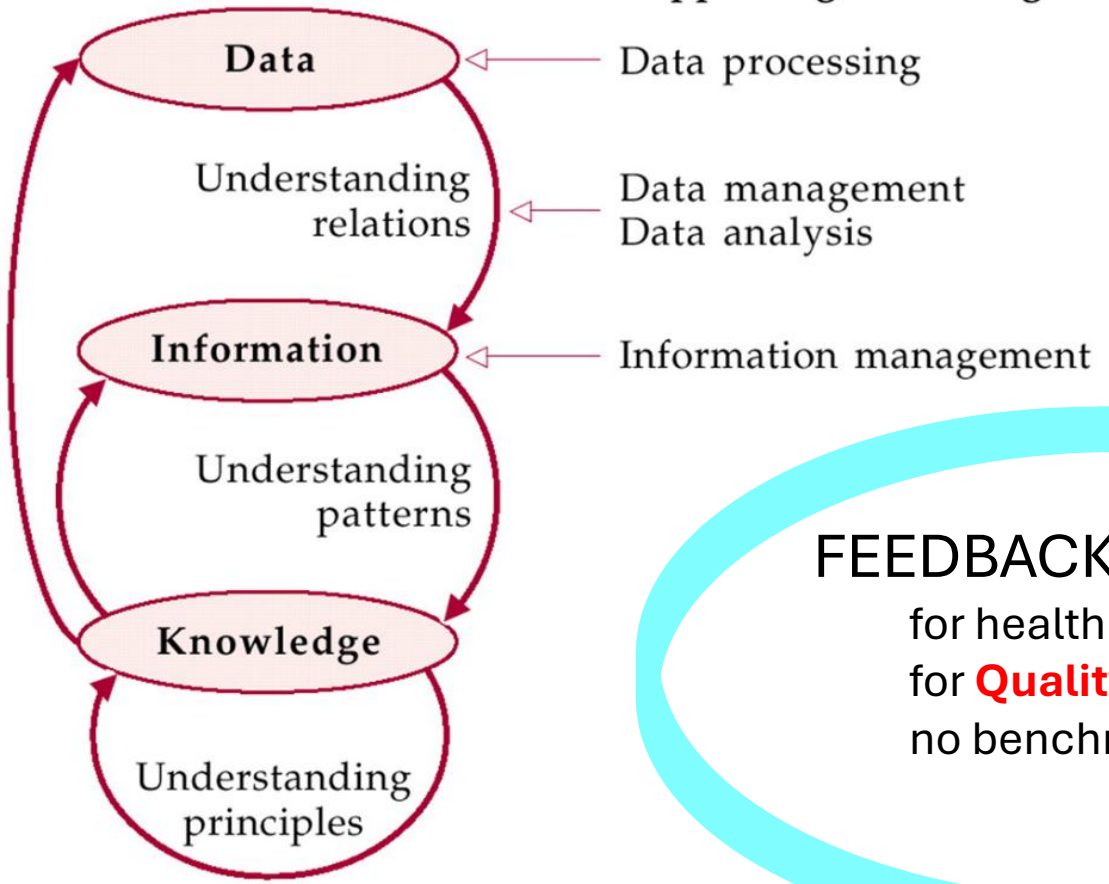


Medbase IT

Supporting technologies

Data processing

Data management
Data analysis

Information management

FEEDBACK
for health care professionals
for **Quality Circles**
no benchmarking

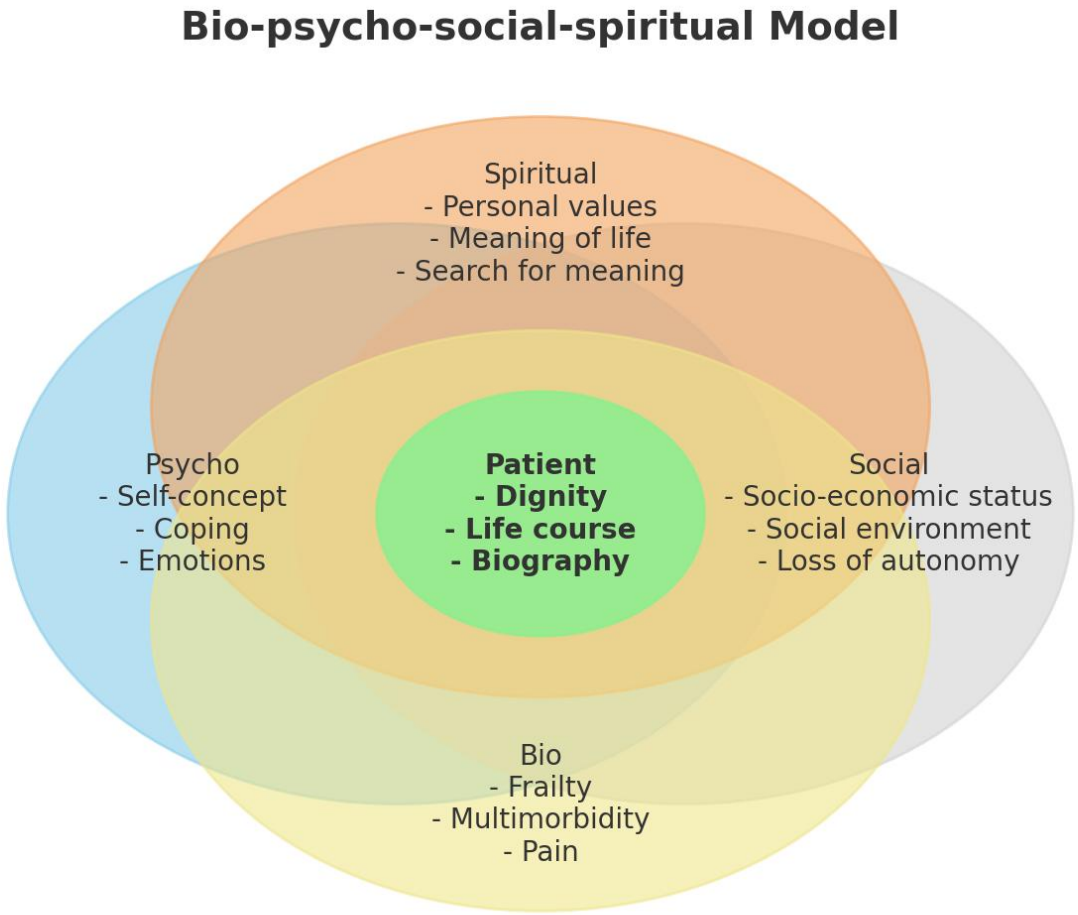
SENSKY, T. 2002. Knowledge management. *Advances in Psychiatric Treatment,* 8, 387-395.

Interprofessional care concept:

„co-management“ APN and MPA

- Lower care costs, fewer complications and hospital admissions
- Integration of patients in treatment processes and decision-making based on the bio-psycho-social-spiritual model
- Lower stress levels in teams (improved psychological well-being)
- Prerequisites:
  - mutual respect
  - trust
  - common care / care philosophy
  - clarified roles

(Norful et al., 2022, Norful et al., 2019)



Study Design & Data

- **Data Source:** Claims data of diabetes patients from a major Swiss health insurer (SWICA, covering approx. 10% of Swiss population)

- **Primary Outcomes:**
- Guideline adherence (4SPM) (Huber et al. 2016a)
  - ≥2 HbA1c tests
  - Lipid profile
  - Nephropathy status
  - Ophthalmology (24m)
- Hospitalization rate (within one year)
- Healthcare costs
  - Total
  - Outpatient
  - Inpatient

Design: Observational study with a staggered difference-in-difference (DiD) approach

- comparison of matched groups

Population: Diabetes patients (type 1 & 2) treated with antidiabetic drugs

- Intervention group (DMP): N=5,813
- Control group (usual care): N=17,906

Observation period: 2017 to 2023

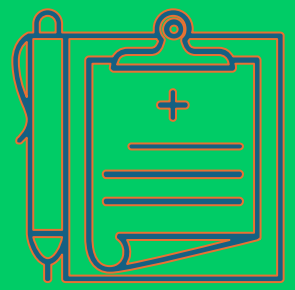
Settings: 17 group practices providing primary care with staggered DMP implementation (DMP cohorts 2018, 2020, 2021, 2022, 2023)

Effects: Relative Δ to baseline in year 5

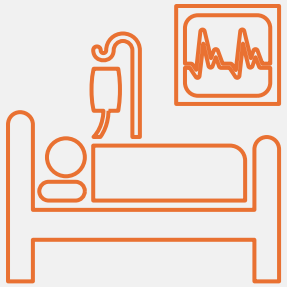
(“different development of the treatment relative to the control group”)

Positive effect on patient share with guideline adherent treatment (4SPM)

+11%-points

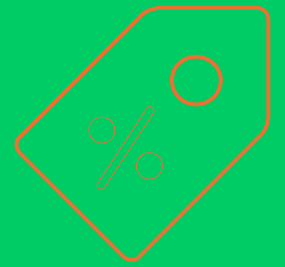


No effect on hospitalisation rate



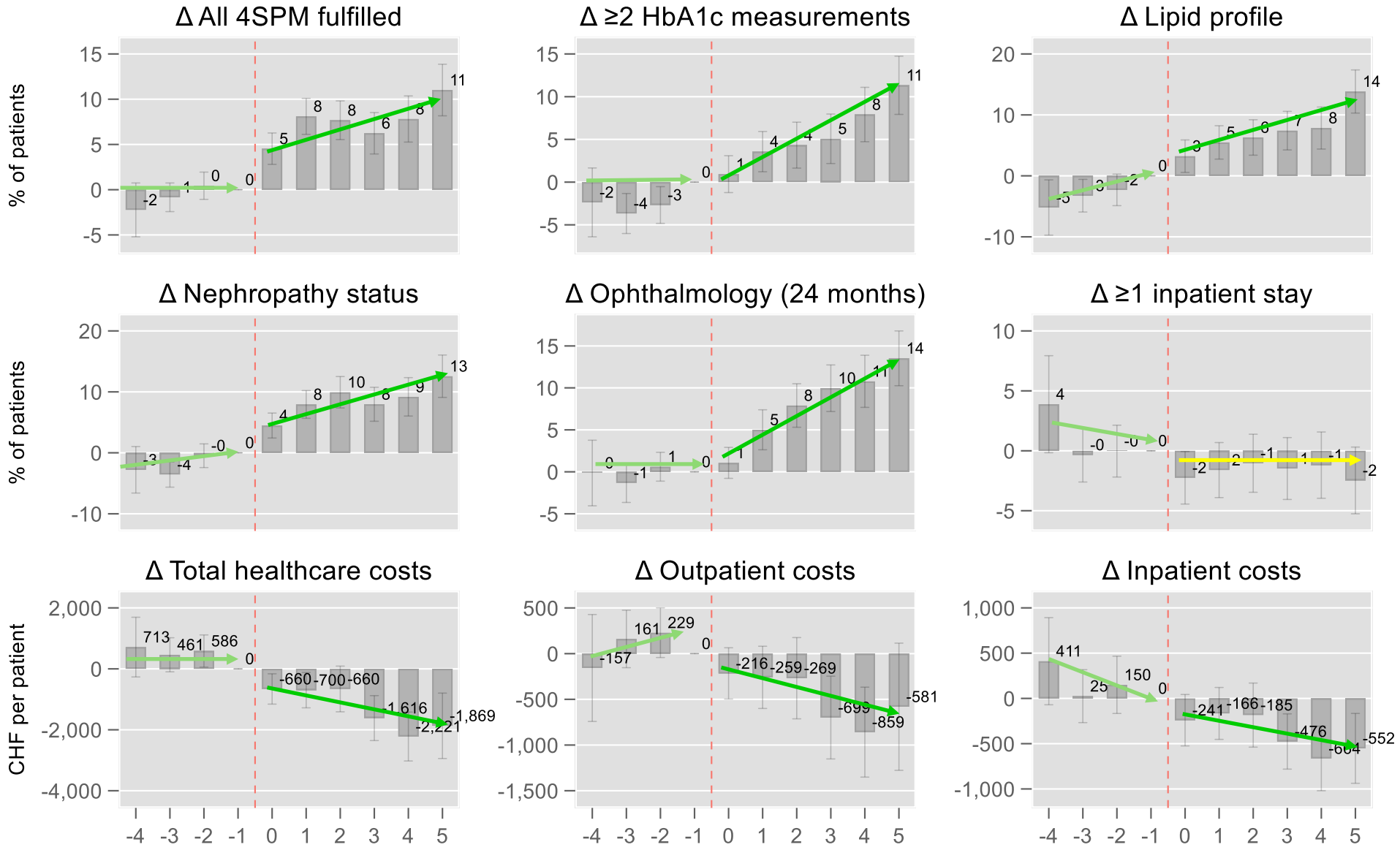
Reduced healthcare cost growth

-1,869 CHF (corresponding to 12% of controll group costs)



Relative improvement with DMP ➔ sustainable & increasing

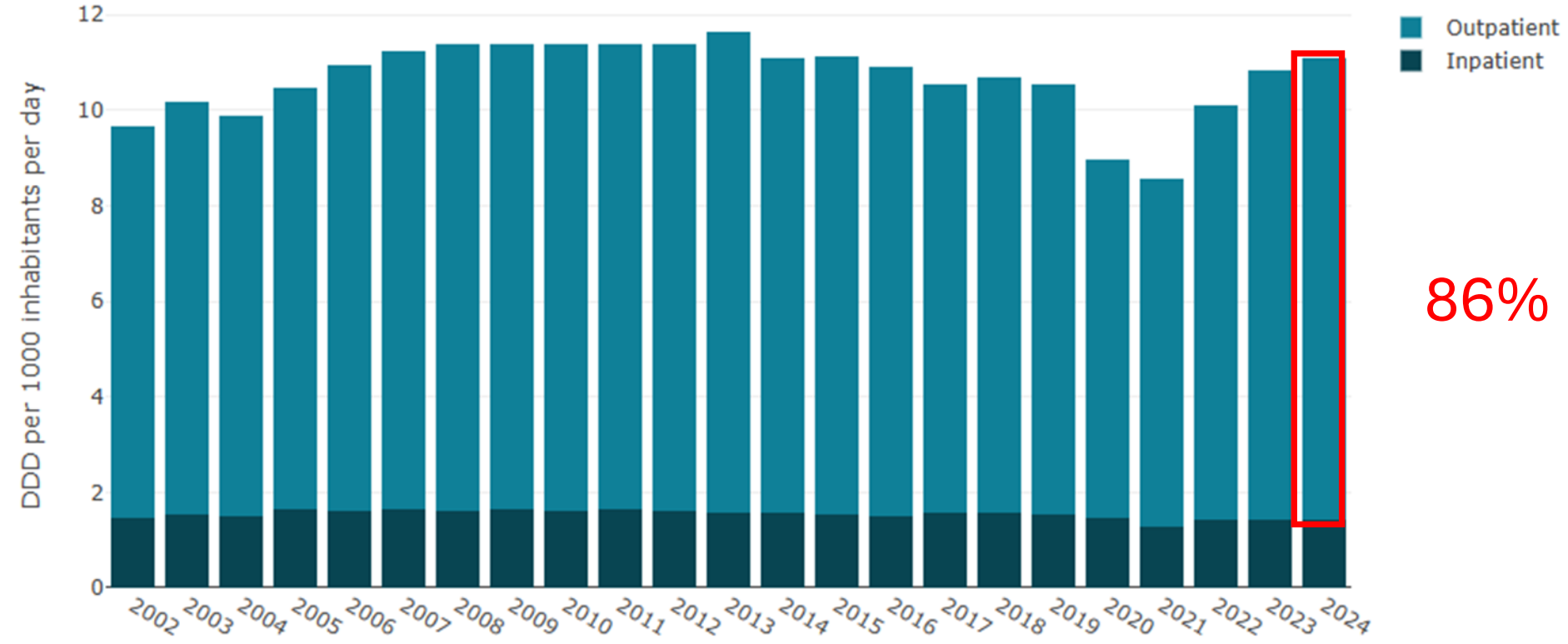
Effect of DMP on outcomes. DiD-estimates by year since DMP introduction (change to baseline relative to the control group). Point estimates with 95%-CI, 141,604 observations from 20,520 patients (2015-2023)



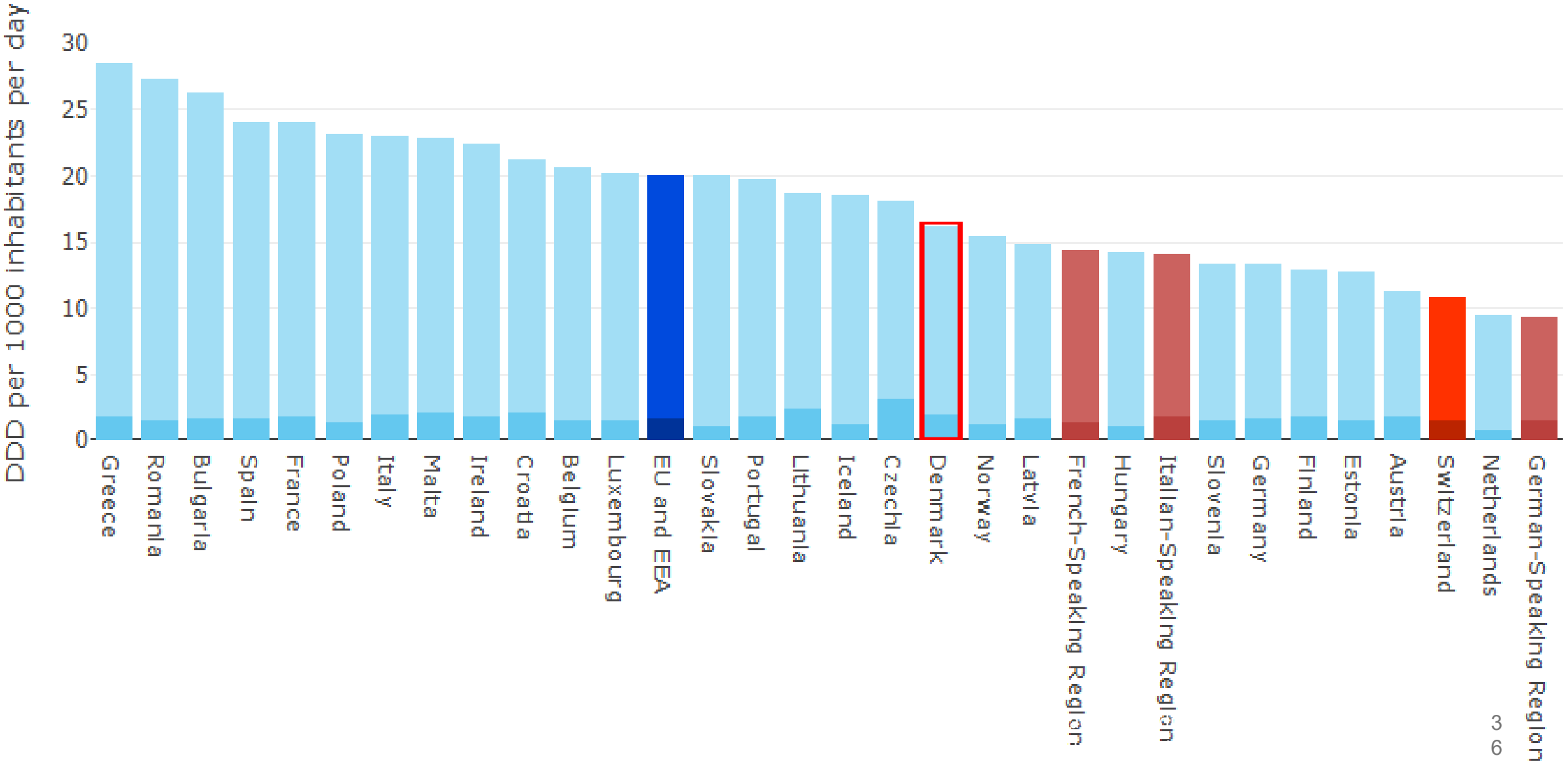
Strategie Antibiotikaresistenzen StAR

Shared decision-making in guideline-based treatment of self-limiting infectious diseases in Swiss general practices: 2024

an approach to reducing excessive antibiotic prescribing



Switzerland uses few antibiotics in primary care 2023



Target: overuse of antibiotics

- If primary care physicians (PCPs) prescribe fewer antibiotics, this should **lower the rate of antibiotic resistance**
- Five self-limiting infections *account for 80%* of antibiotic prescription in ambulatory care:
  - **acute otitis media**
  - **tonsillopharyngitis**
  - **uncomplicated urinary tract infection**
  - **infectious cough (bronchitis)**
  - **sinusitis**

Hamm, R.M., R.J. Hicks and D.A. Bemben, 1996; Coxeter, P., et al., 2015**;** Glinz, D., et al., 2017, Glinz, D., 2018; Glinz, D., et al.,, 2021. Anresis 2023/ BAG Sentinella Meldesystem

BIHAM

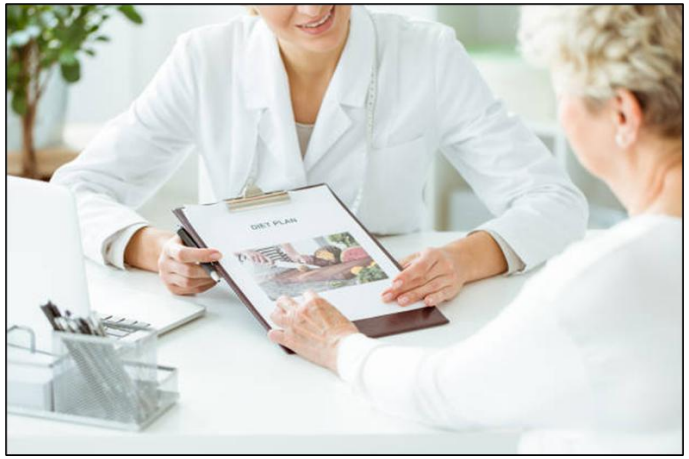
Intervention

Shared Decision Making

Online learning tool

Quality circle sessions

(on the topic of self-limiting infectious diseases and shared decision making).



Use of tools in consultations

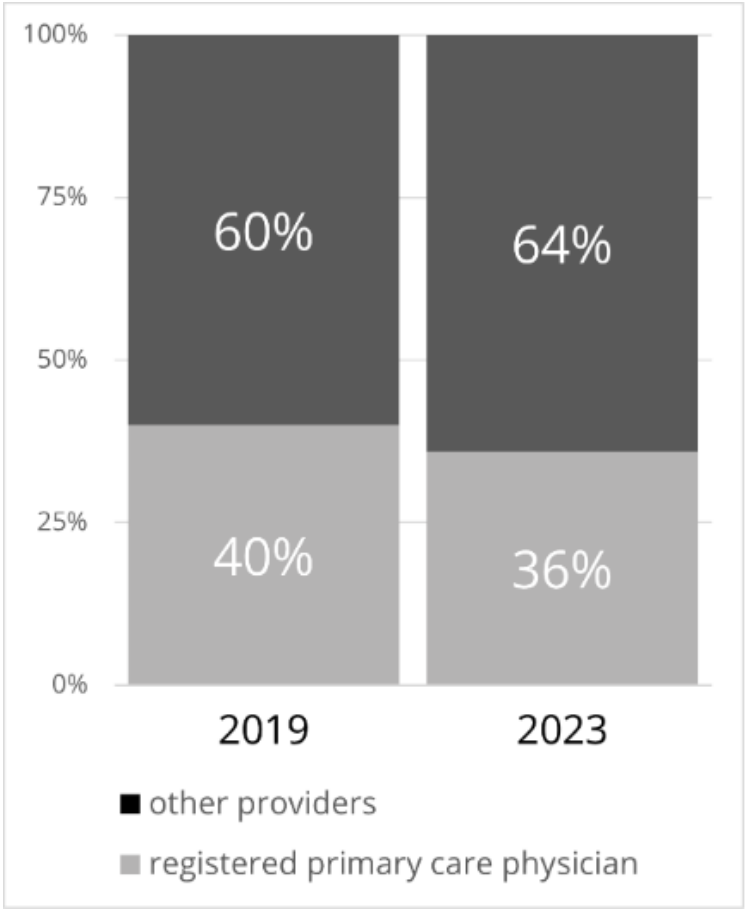
(information for HCP and consultation aid for patients)

BIHAM

Intervention: 18 medical centers 132 000 patients

- *prescriptions of antibiotics in outpatient setting*

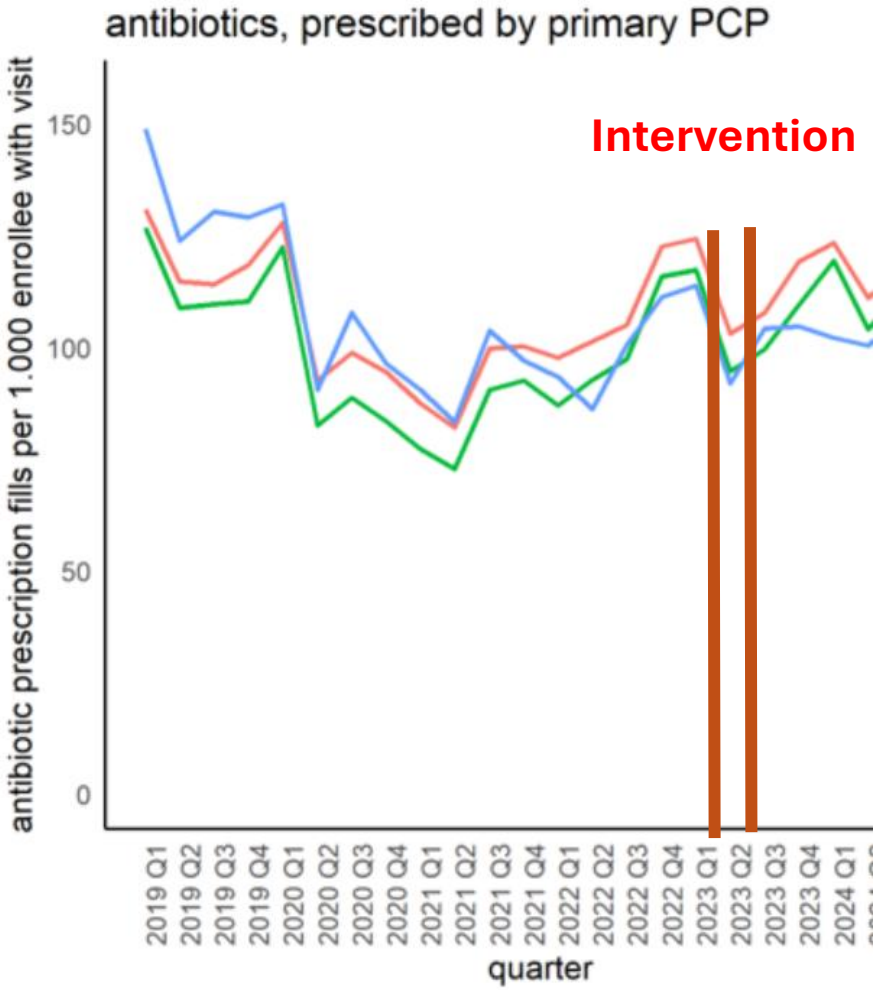
Baseline Analysis



Intervention in 18 medical centers 132 000 patients – DiD analyis

Probability of a patient receiving at least one antibiotic prescription in a quarter:

- Without intervention 1.54%
- With intervention 1.35%
- **This corresponds to an absolute decrease of 3.8 prescriptions per 1,000 insured individuals annually.**
- Reduced Likelihood of Antibiotic Prescribing Among Participating GPs (OR = 0.86)



Thank you

Cross-sectoral Quality Circles

bridging planning and intervention - through ***collaborative, participatory practice***