ENABLE ADHERENCE

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Universität Basel
Medizinische Fakultät
Departement Public Health

Policy brief

Swiss Priority Setting on Implementing Medication Adherence Interventions –the European ENABLE COST Action

While medication adherence is a major public health concern that warrants high priority by all stakeholders in the healthcare system, it remains absent from Swiss policymakers' agendas.

This policy brief summarizes key recommendations to implement interventions to support patients' medication adherence in Switzerland.
Public health media campaigns would raise public awareness about medication non-adherence. Funding agencies are encouraged to invest in medication adherence research and innovations. Health insurance companies are advised to develop innovative models of financial contributions to promote the development and implementation of medication adherence interventions in daily clinical practice (i.e., screening, monitoring and facilitating patients' medication adherence). A new model of remuneration for healthcare providers facilitating patients' medication adherence would foster an integrated model of care through inter-professional collaborations. Concurrent development of teaching resources to be integrated in pre-, post-graduate and in-service training would ensure that the latest findings about medication adherence are rapidly scaled up into practice with cost-effective public health benefits.

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Context

Definition of medication adherence

Medication adherence is “the process by which patients take their medications as prescribed” [2]. This process follows the prescribing process, where, ideally, shared decision-making supports the choice of the best treatment in partnership with the patient, family and carers.

Medication adherence consists of three phases: *initiation, implementation* and *discontinuation.*

Initiation occurs when the patient takes the first dose of a prescribed medication.

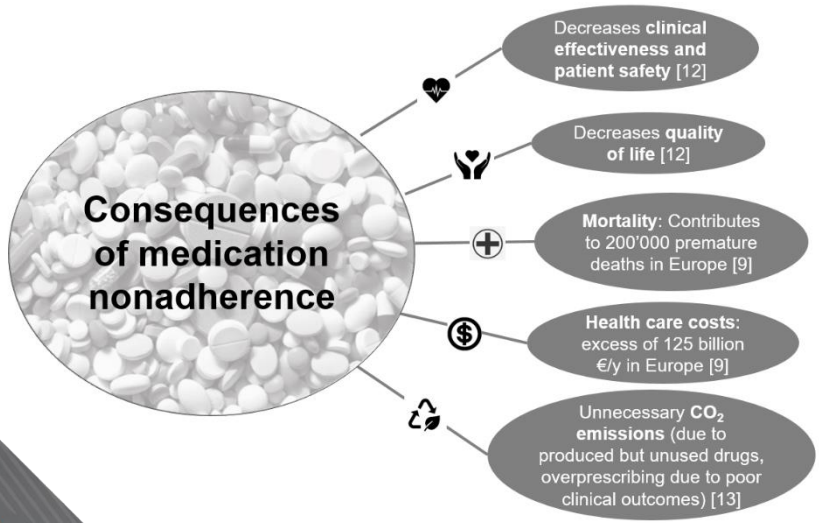
Implementation is the extent to which a patient's actual dosing corresponds to the prescribed regimen, from initiation until the last dose.

Discontinuation occurs when the patient stops taking the prescribed medication earlier than planned, for whatever reason(s) [2].

In Switzerland, 50% of the population ≥15 yrs. takes at least one medication each week [4]. About 17% of the adult Swiss population is polymedicated (i.e., using ≥5 medications chronically) [5]. Among the population aged 65-80 yrs, 45% is polymedicated, which rises to 65% in people aged 81-92 yrs [8].

Volume of tablet blisters prescribed over a year for a single kidney transplant patient [1]

Medication non-adherence (i.e., not taking the medication as prescribed) is endemic. Although three quarters of the patients initiate their prescribed long-term treatments, 30-50% do not implement them correctly. Additionally, more than 50% of patients discontinue their prescribed medication within two years after treatment initiation [9]. Insurance companies estimate that enhancing medication adherence would decrease health care costs by a factor four [10, 11].



Evidence on addressing medication non-adherence exists [3] (e.g., effective multi-level interventions), but is often not translated into real-world settings, preventing patients and public health from benefitting from scientific knowledge [6, 7]. To date, there are no adherence-focused national programs, nor have guidelines been developed, implemented or evaluated in Switzerland [6].

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The ENABLE COST Action

The European Network to Advance Best practices & technoLogy on medication adherencE (ENABLE), a Cooperation in Science and Technology (COST, https://www.cost.eu/actions/CA19132/) action, links relevant stakeholders across 40 European countries, including Switzerland, to work collaboratively towards implementation of medication adherence enhancing technologies into daily clinical practice.

The Swiss ENABLE COST network

In March 2022, the Swiss ENABLE COST country group initiated an online conference 1) to network national and international stakeholders, and, 2) to initiate priority setting for medication adherence, particularly with regard to the implementation of adherence interventions and technologies in real-world settings. This was funded by ENABLE Cost Action (19132) and the Swiss National Science Foundation (IZSEZ0_208877).

Moving toward a more enabling ecosystem for improving the translation of adherence interventions into practice in Switzerland: a framework for change

Seventy-five participants (i.e., researchers, clinicians, healthcare industry delegates, and one policy maker) from 34 countries met to discuss the main actions needed to create an enabling ecosystem to implement adherence interventions in Switzerland. The ideas discussed were organized into a framework for change (Fig. 1) to describe stakeholders, arenas and main objectives - on the one hand, for a systematic elaboration of strategies to address medication adherence at the national level, and, on the other hand, to move towards an **integrated, patient-as-partner healthcare** system.

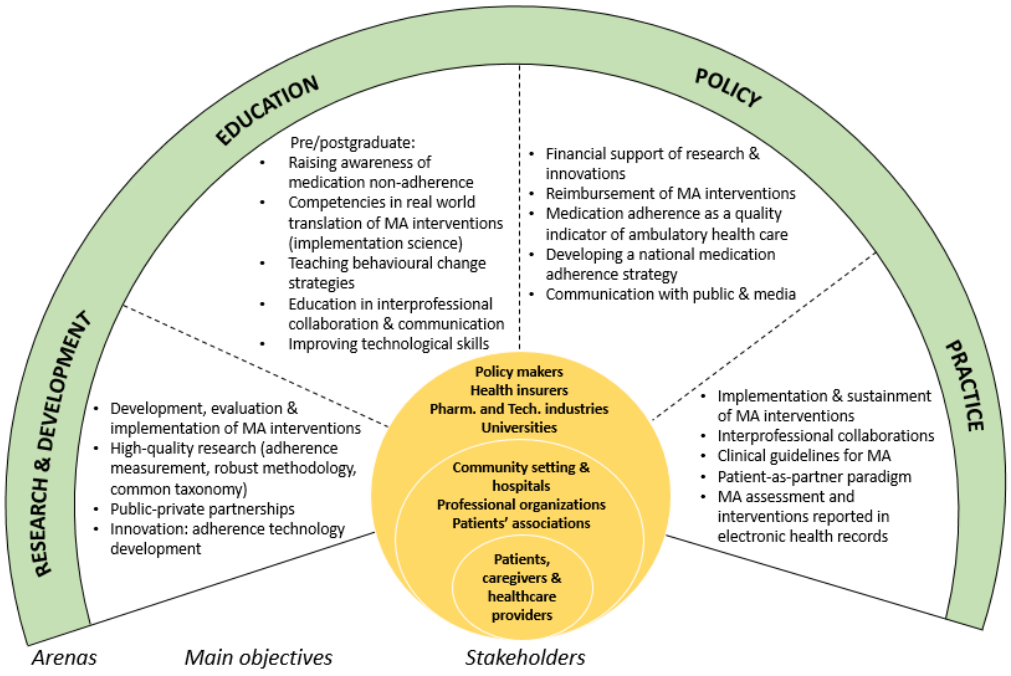

Figure 1: Framework for addressing medication adherence in a multilevel ecosystem: stakeholders (in yellow circle), arenas (in green ribbon) and main objectives (in white wedges).

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Priorities for creating a more enabling ecosystem for the development, implementation and sustainment of adherence interventions

Changing the mindset and attitudes of patients and the population overall, health care professionals (HCPs), health care organizations and other stakeholders:

- **Raising awareness** on the health and social benefits of sharing objectives on medication adherence
- Promoting medication adherence **research and funding**

Preparing a multilevel ecosystem, involving patients, relatives, HCPs and other stakeholders

- **Synergies:** Enabling stakeholders to work inter-professionally and coordinate their actions to jointly support, monitor and maximize medication adherence
- **Innovative ecosystems:** Connecting funding agencies, start-up incubators, and public-private-partners to foster development of medication adherence enhancing technology innovations
- **Financial support:** Negotiation with health insurers to develop reimbursement models to facilitate the implementation of evidence-based interventions in clinical practice

Strengthening the patient-as-partner paradigm as the basis for shared decision-making and therapeutic awareness-raising

- **Tailoring interventions:** Supporting medication adherence based on the patients' individual needs, preferences and possibilities
- **Developing trust, partnerships and communication channels across all HCPs and patient groups:** Reducing conflicting information and ensuring continuity of care
- **Training of HCPs:** Capacity-building behavior change and inter-professional competencies
- **Integrated care models powered by digitalization:** Providing fertile ground for development of innovations (e.g., improved computerization in healthcare settings)

Monitoring medication adherence and its determinants in routine practice as an informed basis for clinical decision-making

- **Routine practice:** Medication adherence to be considered as a patient's 5th vital sign
- **System-level:** Medication adherence as an indicator of quality of care
- **Technology:** Designed to match patients' and HCPs' needs and preferences

Investing in **translation from research to real-world settings**

- **Effective multi-level and multi-sectoral medication interventions.**
- **Implementation science:** Assisting the uptake of research evidence into clinical practice [14]

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Recommendations to expand medication adherence efforts to all health care system professions, consistent with the Swiss *Health2030* strategy [15]

1

Key inter-professional **stakeholders** need to be **identified and connected** to address medication adherence in the multi-level ecosystem and to determine contextually appropriate medication adherence interventions as well as long-term quality indicators.

2

Efforts to develop and implement **coordinated care models** must be strengthened and tailored to facilitate medication adherence management.

Technology-based innovations (e.g., electronic health records, teleconsultation), new technologies (e.g., digital pill boxes) and methodologies (e.g., artificial intelligence) should be adapted to facilitate interventions.

Technology literacy needs to be enhanced at all levels, including the patient and HCPs.

3

To support the translation of medication adherence evidence into Swiss clinical practice, contextually appropriate **implementation strategies** (e.g., patient involvement) need to be integrated using a multi-level approach.

4

Research funding programs that support medication adherence research are needed. Funding options should be devised to enable and encourage researchers to broaden their foci from efficacy / effectiveness research to **evaluate implementation and implementation strategies** for medication adherence interventions in real-world settings.

5

Synergies between **bottom-up and top-down** approaches, public and private initiatives as well as inter-professional collaborations are needed to maximize impact and drive change.

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Conclusions

This policy brief builds on evidence, expert knowledge and inter-professional experience to define priorities for addressing medication adherence as a major public health problem. Multi-level approaches are necessary to allow translation of evidence to implement medication adherence interventions into real-world practice.

Three first steps are needed to raise medication adherence awareness:

- **Laying the foundations for health ecosystems to support medication adherence;**
- **Translating effective medication adherence interventions into daily clinical practice;**
- **Promoting research into technologies to improve medication adherence.**

These strategic first steps are needed to inform research activities, policies and implementation of medication adherence interventions in Switzerland.

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Further information: contact the authors

Pr. Sabina De Geest: sabina.degeest@unibas.ch

Pr. Marie P. Schneider: marie.schneider@unige.ch

AUTHORS AND AFFILIATIONS

Janette Ribaut[1,2*] & Carole Bandiera[3,4*], Kate Molesworth[5], Alexandra L. Dima[6], Samuel S. Allemann[7], Kabeza Kalumiya[8], Fabian Käser[9], Melvin Skip Olson[10], Michel Burnier[11], Job F.M. van Boven[12,13], Thomas Szucs[14], Ira Wilson[15], Marie Paule Schneider[3,4°] & Sabina De Geest[1,16°] (* shared first authorship / ° shared last authorship)

[1]Nursing Science, Department Public Health, Faculty of Medicine, University of Basel, Basel, Switzerland
[2]Department of Hematology, University Hospital of Basel, Switzerland
[3]School of Pharmaceutical Sciences, University of Geneva, Geneva, Switzerland
[4]Institute of Pharmaceutical Sciences of Western Switzerland, University of Geneva, University of Lausanne, Geneva, Switzerland
[5]Swiss Centre for International Health, Swiss Tropical and Public Health Institute, University of Basel, Basel, Switzerland
[6]Research and Development Unit, Institut de Recerca Sant Joan de Déu, Sant Boi de Llobregat, Barcelona, Spain
[7]Pharmaceutical Care, Department of Pharmaceutical Sciences, University of Basel, Basel, Switzerland
[8]Patient-as-partner project, Geneva University Hospitals
[9]Innosuisse, Switzerland
[10]Real World Data Strategy & Innovation, Novartis Pharma AG, Basel, Switzerland
[11]Faculty of Biology and Medicine, University of Lausanne, Lausanne, Switzerland
[12]Department of Clinical Pharmacy & Pharmacology, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands
[13]Medication Adherence Expertise Center of the northern Netherlands (MAECON), Groningen, The Netherlands
[14]European Centre of Pharmaceutical Medicine, University of Basel, Basel, Switzerland
[15]Department of Health Services, Policy & Practice, Brown University School of Public Health, Providence, RI, USA.
[16]Academic Center for Nursing and Midwifery, Department of Public Health and Primary Care, KU Leuven, Leuven, Belgium

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