Universität Basel

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SQUEEZE

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# Examining Rheumatoid Arthritis Care and eHealth Support in two Swiss Centres: A Contextual Analysis to develop the SQUEEZE Care Model for DMARDs adherence and Implementation Strategies

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## BACKGROUND

- Adherence to disease-modifying antirheumatic drugs (DMARDs) in rheumatoid arthritis (RA) remains suboptimal, with reported **adherence rates range from 10.5-98.9%.**[1-3]
- Evidence-based **adherence interventions in RA are limited** with little translation into real-world practice.[2,3]
- Implementation science offers **structured methods** to support the translation to complex real-world settings.[4]
- The SQUEEZE work package 8 project aims to **improve DMARDs adherence in daily clinical practice** by developing, implementing and pilot-testing an eHealth facilitated integrated care model in two rheumatology centres in Switzerland.
- **Understanding the real-world context is a crucial** first step for a successful and sustainable implementation into daily clinical practice.[4]

## AIMS

1. To understand and disentangle current **practice patterns** related to chronic illness management, particularly focusing on DMARDs adherence.
2. To map **multi-level contextual factors, barriers and facilitators** related to DMARDs adherence.

## METHODS

**Design:** Rapid qualitative research[5] guided by three frameworks:

1. **Basel Approach for coNtextual ANAlysis (BANANA).**[6] (Figure 1)
2. **Context and Implementation of Complex Intervention (CICI)** framework.[7]
3. **eHealth enhanced Chronic Care Model (eCCM).**[8]

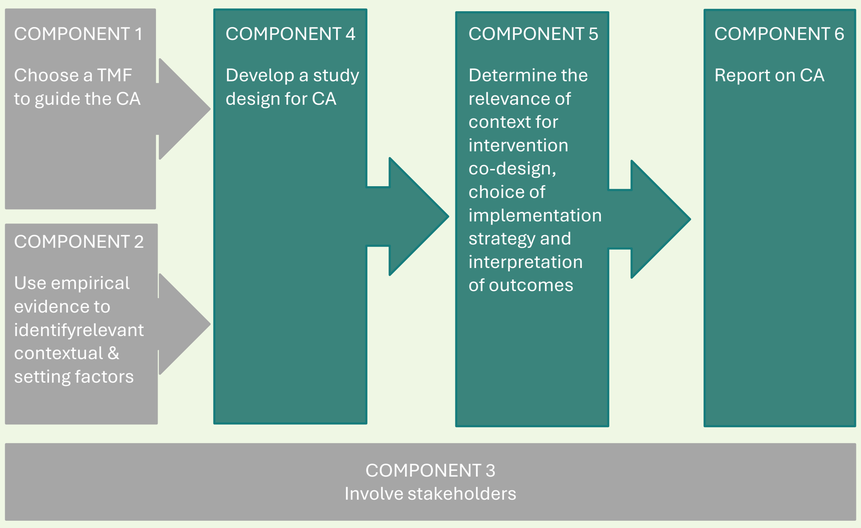


***Figure 1:*** *Basel Approach for coNtextual ANAlysis (BANANA)[6]*

**Data collection:**

1. Observations and informal conversations (12-14 hours per centre)
2. Individual semi-structured interviews (n = 21)
3. Targeted literature review

**Rapid Research Evaluation and Appraisal Lab (RREAL)** sheets, structured according to CICI and eCCM domains, facilitated the recording and analysis of data strands.[5,9]

**Data analysis:**
Iterative **deductive rapid qualitative approach** (framework method).[10]

## RESULTS

### CENTRE CHARACTERISTICS

#### CENTRE 1

- Private rheumatology centre
- 2 rheumatologists & 4 medical assistants
- Stable environment
- Established roles & supportive leadership
- Comprehensive self-management support
- Active patient engagement
- SMS reminders for appointments
- Follow-up by same rheumatologist

#### CENTRE 2

- University hospital clinic
- 20 rheumatologists & 3 nurses
- Rapid organizational changes
- Limited self-management support
- Time constraints & workload challenges
- Limited personnel resources
- Informal appointment scheduling methods
- High turnover among junior physicians

### PRACTICE PATTERNS

#### COMMON STRENGTH

- ☑ High-quality care
- ☑ Strong commitment on patient-centred care
- ☑ Emphasis on shared decision-making
- ☑ Well-educated healthcare professionals

#### SHARED GAPS

- ⛔ Fragmented care due to poor coordination
- ⛔ No tools to assess medication adherence
- ⛔ No tools for clinical decision-making
- ⛔ Variable digital & health literacy among patients

### CONTEXTUAL FACTORS

#### FACILITATORS

- ⊕ Openness to embrace change to improve patients' management
- ⊕ Openness to explore and adopt new technologies to improve care
- ⊕ Use of Swiss Clinical Quality Management (SCQM) registry & its mobile application (mySCQM)
- ⊕ Patients already familiarized with digitalization, are open to use digital tools

#### BARRIERS

- ⊖ Limited reimbursement options for nurse- and medical assistant led interventions & eHealth solutions
- ⊖ Demographic change (e.g. number of comorbidities or psychological disorders)
- ⊖ Significant concerns about digital tools (i.e. transparency, data security & information bias
- ⊖ Use of multiple, non-integrated IT-systems for planning and documentation

## CONCLUSIONS

- **Adress patient needs,** including aging population and varying health and digital literacy, is important.
- **Adapt intervention** to centre characteristics as staffing, leadership and workflow differs.
- **Support innovation readiness** by offering simple, secure and well-integrated solutions.
- **Manage IT-fragmentation** and address data security and usability concerns.
- **Monitor and adapt to context dynamics** in centre 2 to optimise outcomes.

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