

# Transfer of care – mind the gap

PSQ3 - 26th March 2021



UNIVERSITÄTS**medizin.**

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MAINZ

# Disclosure

## Relevant Financial Relationship

None

## Off-Label Investigational Uses

None

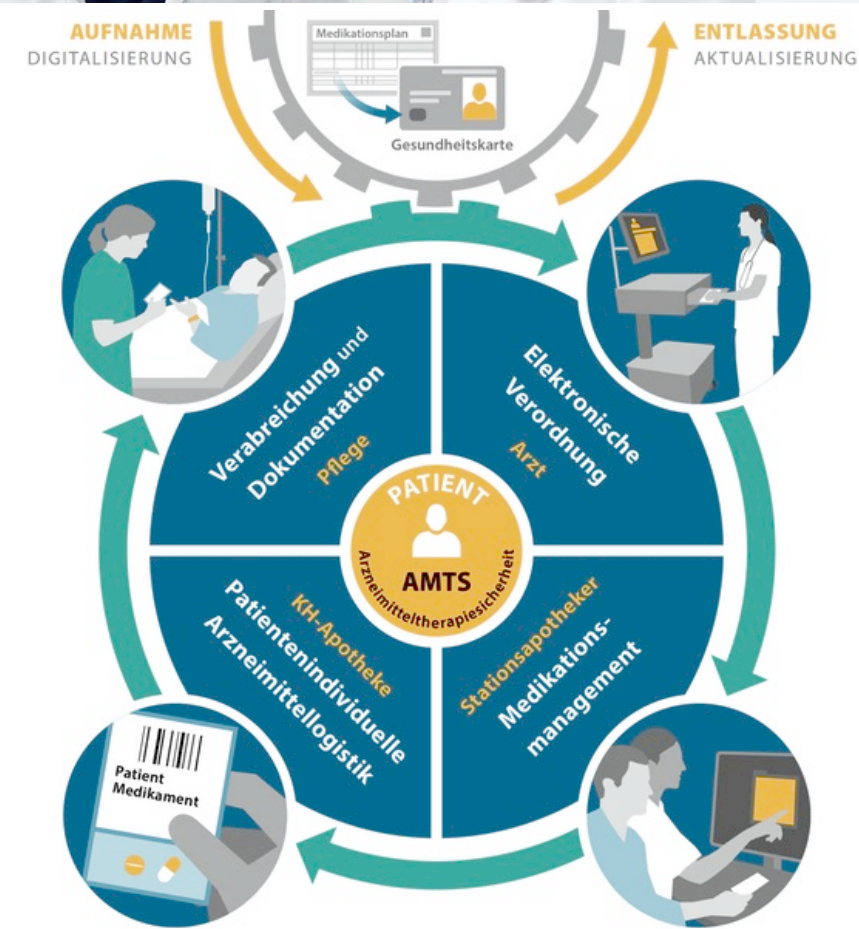
# Self assessment questions

- **Transitions/transfer of care means transfer between different locations and levels of care**  
Yes or No?
- **Multimodal interventions by multidisciplinary teams appear to represent a best practice model for transfer of care interventions**  
Yes or No?
- **In most health care systems there are no gaps between different levels of care**  
Yes or No?



Our Goals

# 2021: Closed Loop Medication Management



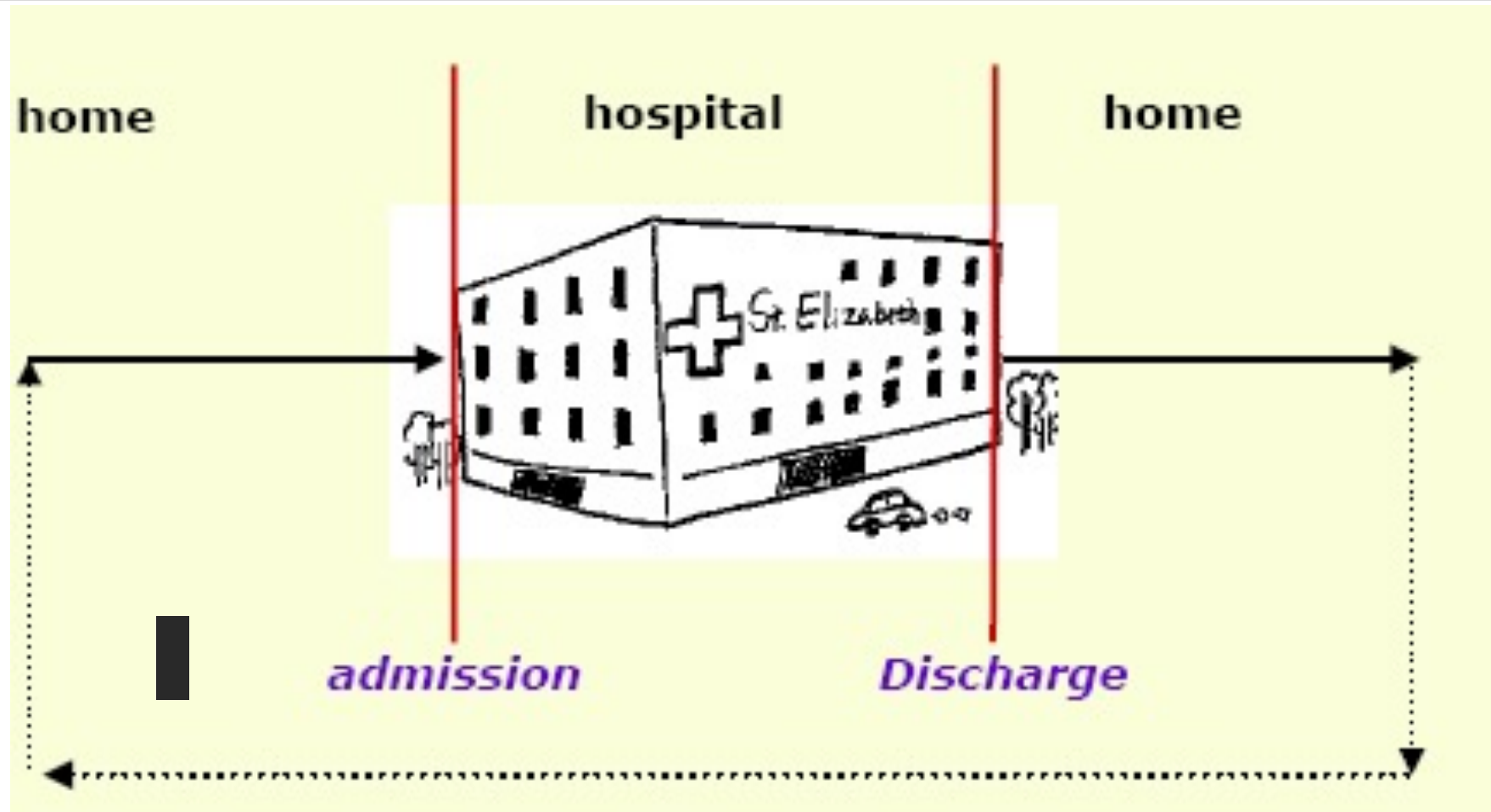
**Electronic medication plan**

**Electronic patient record**

# Medication Management at hospital transition

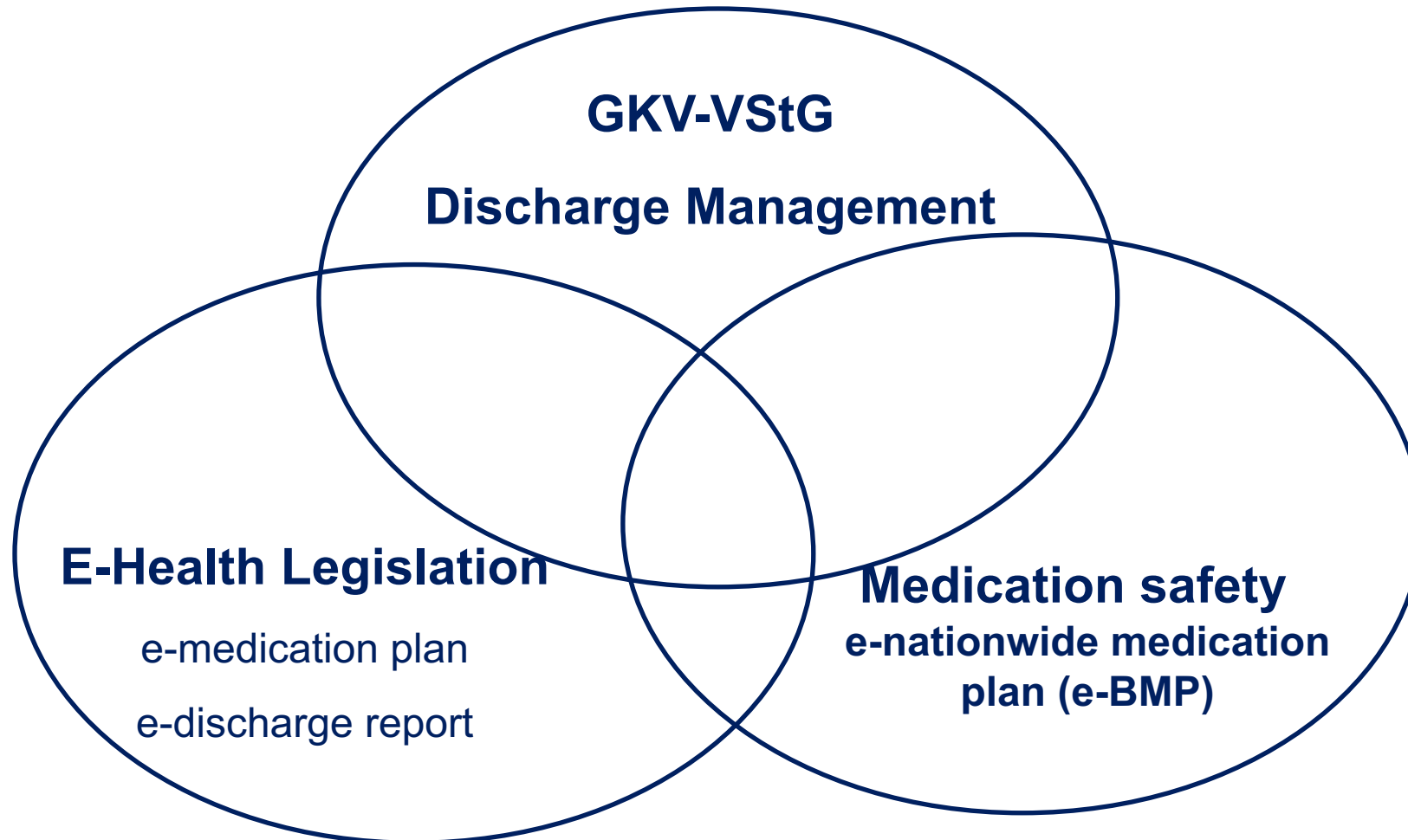
Physician  
offices

Local  
Pharmacies





Chance of Seamless Pharmaceutical Care?

# Medication Management at hospital discharge in Germany



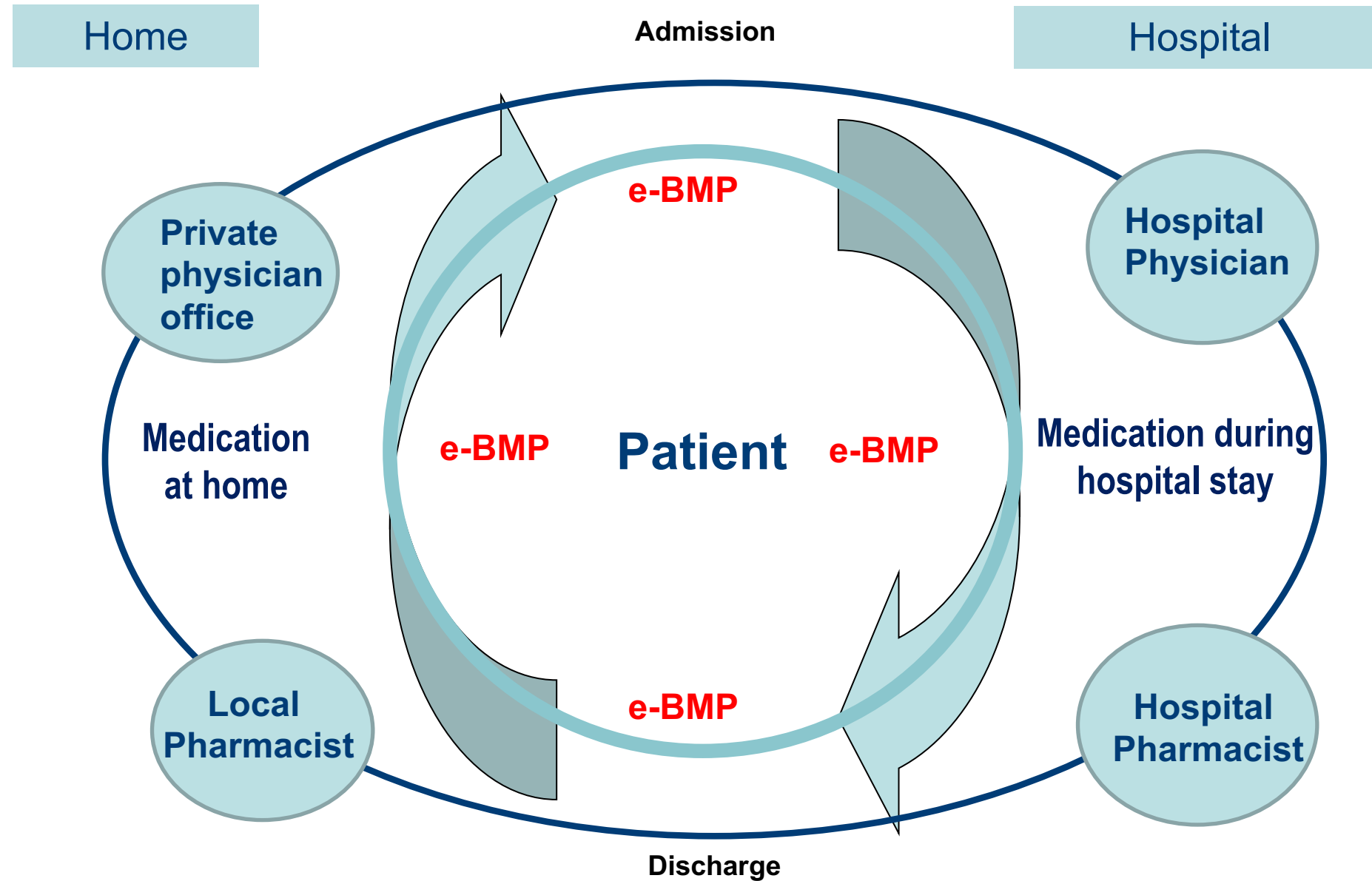
# Electronic nationwide Medication Plan in Germany

|  |   |   |
|--|---|---|
| <p><b>Medikationsplan</b></p> <p>Seite 1 von 1</p>  | <p>für: <b>Daniela Test</b> geb. am: <b>15.08.1976</b></p> <p>ausgedruckt von:<br/>Muster Apotheke<br/>Musterstraße 1, 12345 Musterstadt<br/>Tel: 01234-9876<br/>E-Mail: <a href="mailto:mediplan-apotheke@unimedizin-mainz.de">mediplan-apotheke@unimedizin-mainz.de</a></p> <p>ausgedruckt am: 13.03.2015</p> |  |
|--|---|---|

| Wirkstoff                             | Handelsname                                 | Stärke  | Form   | Mor<br>gens  | Mit<br>tags | Abe<br>nds | zur<br>Nacht | Einheit | Hinweise  | Grund             |
|---------------------------------------|---|---------|--------|--------------|-------------|------------|--------------|---------|---|-------------------|
| <b>Verordnete Medikation</b>          |   |         |        |              |             |            |              |         |   |                   |
| Ramipril                              | RamiLich® 5mg                               | 5mg     | Tabl   | 1            | 0           | 0          | 0            | Stck    | unabhängig von den Mahlzeiten                                 | Bluthochdruck     |
| Hydrochlorothiazid                    | HCT - 1 A Pharma®<br>25mg                   | 25mg    | Tabl   | 1            | 0           | 0          | 0            | Stck    | zu den Mahlzeiten   | Bluthochdruck     |
| Simvastatin                           | Simvastatin dura® 20mg                      | 20mg    | Tabl   | 0            | 0           | 1          | 0            | Stck    | unabhängig von den Mahlzeiten, kein<br>Grapefruitsaft, 1x/Tag | Erhöhte Blutfette |
| <b>Selbstmedikation</b>               |   |         |        |              |             |            |              |         |   |                   |
| Magnesium                             | Magnesium Verla® 300<br>uno Orange Granulat | 300mg   | Gran   | 1            | 0           | 0          | -            | Beutel  | in 1 Glas Wasser einrühren und<br>trinken                     | Wadenkrämpfe      |
| <b>zeitlich befristete Medikation</b> |   |         |        |              |             |            |              |         |   |                   |
| Clotrimazol                           | Antifungol® HEXAL®<br>Lösung                | 10mg/ml | Lösung | 2-3x täglich |             |            |              |         | auf die betroffenen Stellen auftragen,<br>leicht einreiben    | Fußpilz           |

## Wichtige Hinweise

Bitte messen Sie täglich Ihren Blutdruck.





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**Multizentrische Machbarkeitsstudie bei Patienten, Apothekern und Ärzten in Rheinland-Pfalz**

## **Intersektorale Nutzung des bundeseinheitlichen Medikationsplans**

**Participants**

**601 Patients**

**189 General practitioners**

**4 hospital pharmacies**

**327 local pharmacies**

**2199 e-BMP**

**23,000 medication sets**

## **Prospective multicenter study on the internet-based – intersectoral use of the nationwide standardized medication plan in Rheinland-Palatinate?**

Electronic medication plans (eBMP) in the nationwide standardized version should improve information of patients and health care practitioners as well as medication safety. There is little evidence regarding the feasibility, practicality and acceptance of the eBMP. In a non-comparative, area-wide, multicenter intervention study in Rheinland-Palatinate a patient individual eBMP was compiled at hospital discharge by hospital pharmacists in a specifically implemented online portal. eBMPs were updated by general practitioners and local pharmacists. The primary endpoint, i.e. actuality of the eBMP after 6 months, was evaluated by matching the type and number of medications in the most recent electronic version and patients' reports. Secondary endpoints (practicality, acceptance, medication safety) were evaluated by using written questionnaires for patients, physicians and pharmacists.

From March 2015 to March 2016, 601 patients, 189 general practitioners and 327 local pharmacies were enrolled. During the pilot project, 2,199 medication plans containing about 23,000 medication sets (6.2% self-medication) were compiled. After a 6 months period for 13% of the reporting patients an updated eBMP was available in the online portal. Practicality and acceptance were acknowledged by patients, pharmacists and physicians. The eBMP is highly accepted as information and communication tool by patients, physicians and pharmacists. Availability of information technology and interoperability has to be improved.

### **Keywords**

Standardized medication plan, online portal, acceptance, practicality, seamless care, interdisciplinary

ATHINA Arzneimittel-  
Therapiesicherheit in  
Apotheken (Niedersachsen)

Strukturiertes  
Arzneimittelmanagement  
Siegerland (NRW)

Vernetzte Arzneimitteltherapie-  
sicherheit mit dem elektronischen  
Medikationsplan in Rheinland-Pfalz



Primärsystem-Integration  
des Medikationsplans mit  
Akzeptanzuntersuchung  
(Thüringen/Sachsen)

Modelregion Erfurt

MetropolMediplan 2016  
(Nürnberg/Fürth/Erlangen)

## Current/future development

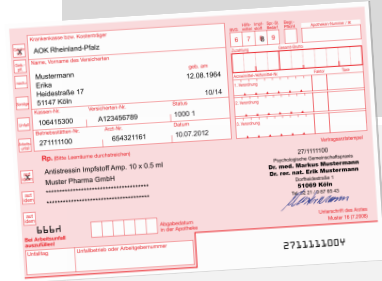
Implementation  
of digital infrastructure

Implementation of  
medication reconciliation  
by pharmacists

Implementation of  
reimbursement for local  
pharmacies

Implementation of ward  
pharmacists

# Gaps in medication management at hospital transitions



## Medication prescribing

- Different prescribing regulations
- Medication switches
- Different cost-benefit-ratio
- Different reimbursement
- Different levels of digitalization  
e-prescribing  
use of e-medication plan
- Data protection regulations
- Different development impetus,  
acceptance

## Medication dispensing

- Different dispensing regulations
- Automatic substitution
- Different price ordinance
- Different reimbursement
- Different levels of digitalization  
dispensing of e-prescriptions  
use of e-medication plan
- Data protection regulations
- Different development impetus,  
acceptance



# It is a long way to go...



## Key messages

Standardized e-medication plans can be used as tool to facilitate transition of care services

Up-to-date e-medication plans represent a reliable information source about medication for patients, physicians, pharmacists

The implementation and use of e-medication plans is a big effort