Polymedication Check - a new reimbursed service for Swiss community pharmacies

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Prescriptions in Swiss community pharmacies

In general:
- 20.9% newly prescribed items
- 74.6% repeat prescriptions
- 4.5% provision in advance


Contact to prescribing physician
- Substitution
- Modification
- Addition of specifications

N = 1'797 prescribed items

Prescribed medications and pharmacy interventions for acute respiratory tract infections in Swiss primary care (ARTIME-study)

“Intention to treat” vs. “as treated” in daily life

Frequent interventions / modifications

Prescribed ≠ dispensed ≠ used
Prescription validation in Switzerland

"Delivery-Check":
Each prescription: sFr. 3.25
- Medication history
- Check accumulation / SM
- Check interactions

"Drug-Check":
Each dispensed item: sFr. 4.30
- Prescription check
- Ev. possibility of repeated dispense
- Dosage / Limitations
- Interactions
- Risk factors / contraindications
- Ev. contact with prescribe
- Check for misuse
- Patient counselling
- Choice of optimised package size
- Need for immediate provision
- Modifications

2 Perspectives
- Pharmaceutical Care
- Technical control with respect to direct charging the assurance

Special Cases:
- Single repetition
- Repetition over time
- Provision in advance
- Provision without prescription
Polymedication Check (45 tax points = ca. €30.-)

Limitations:
• Only for patients on ≥ 4 prescribed drugs over ≥ 3 months
• Only if patient agrees, but independently from prescriber

Elements of new service
• Instruction of the patient on use of ALL drugs he uses
• Together with the patient a written protocol has to be filled which documents for each drug
  • dosing regimen and important recommendations
  • check for motivation, experiences and difficulties of the patient
  • counselling on potential side effects and drug interactions
  • discussion of compliance goals and documentation of agreed objectives
• This protocol has to be signed by the patient who receives a copy
• If patient agrees the pharmacy can dispense the drugs in a Dosette or weekly blister pack for a maximum period of 3 months (continued service needs to be prescribed)
• Repetition of Polymedication check at the earliest after 6 months = max. 2x / year
• This service has to be performed exclusively by a pharmacist
Framework for Swiss community pharmacy services

**Prescription validation**
- Medication history
- Check for cumulation incl. self-medication
- **Need for PM-Check**
- Prescription control
- Ev. possibility of repeated dispense
- Dosage / limitations
- Interactions
- Risk factors / contraindications
- Ev. contact with prescriber
- Check for misuse
- Patient counselling
- Choice of optimised package size
- Need for immediate provision
- Modifications

**Polymedication Check**
- Instruction of the patient on use of ALL drugs he uses
- Together with the patient a written protocol has to be filled which documents for each drug
- dosing regimen and important recommendations
- Check for motivation, experiences and difficulties
- Counselling on potential side effects and drug interactions
- Discussion of compliance goals and documentation of agreed objectives

**Special Case:**
- **Single repetition**
- Repetition over time
- **Provision in advance**
- **Provision without prescription**

**Screening**
- Risk factors

**Lifestyle counselling**
- (TLC)

**Care after discharge**

**Clinical Review**
- (inkl. Monitoring)**
Development of the service – Approach (1)

- Explicit mandate from Swiss association of pharmacists
- Time frame of 3 months

**WS-1 with experts**
- Design of the frame for new service within existing validation of prescriptions
- Screening and discussion of Lit. and pre-existing experiences
- Differentiation to other models of medication review

**WS-2 with experts**
- Pilot over 2 weeks

**WS-3 with pilot pharmacists & experts**
- Consultation by mail on final version
Levels of Pharmaceutical Care

**Level 1**
AD HOC unstructured opportunistic
POS-Intervention Counselling at the point of sale

**Level 2**
TELEPHONE INTERVIEW
Structured counselling with respect to prior POS-intervention; some days later

**Level 3**
MONITORING
Prearranged counselling session with medication review and ev. clinical assessment

**Level 4**
HOME VISIT
Comprehensive assessment of patient self-management

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Pharmaceutical Care Issues
(adapted from S. Hudson, University of Strathclyde, Glasgow, UK)

Systematic evaluation & monitoring of drug therapy:
The pharmacist’s approach includes handling patient data and drug data. 
PC process = „n=1“ clinical trial

**Clinical Cues**
Signs, Symptoms, Laboratory Markers, Patient Interview

**Drug History**

**Checks**  →  **Changes**

**Care Issues**
Potential or Actual Drug Therapy Problems

**Pharmaceutical Care Plan**

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Prof. Dr. K. Hersberger
Three Levels of Medication Review


1. Technical Review
2. Concordance and compliance review (medicines use review, MUR)
3. Clinical Review

Clinical Review:
A structured, critical examination of a patient’s medicines with the objective of reaching an agreement with the patient about treatment, optimising the impact of medicines, minimising the number of medication-related problems and reducing waste.

Key Elements of Clinical Review
- List of ALL medicines being taken
- Appropriateness
- Understanding
- Side effects
- Interactions
- Monitoring/Tests
- Practicalities
- Concordance
Framework for Pharmaceutical Care

In patient contacts the community pharmacy team screens for pharmaceutical care issues arising from 4 situations:

a. requests in self-medication (incl. presentation of symptoms)
b. dispense of prescribed drugs (first or repeat)
c. clinical patient assessment (e.g. BP measurement)
d. transition between institutions

Pharmaceutical care can be delivered in 4 different settings framing 4 levels of care:

1. Ad hoc in the pharmacy
2. By phone
3. Scheduled in the pharmacy
4. At patient’s home

At each level of pharmaceutical care different types of medication review can be performed (according to patient’s needs) and including drugs from self-medication:

I. Technical prescription (drug therapy) review
II. Medication use review focusing on compliance and concordance
III. Clinical medication review (integrating medical history and clinical assessment)
Levels of Pharmaceutical Care

Level 1
- AD HOC
  - Unstructured opportunistic
  - POS-Intervention Counselling at the point of sale

Level 2
- TELEPHONE INTERVIEW
  - Structured counselling with respect to prior POS-intervention; some days later

Level 3
- MONITORING
  - Prearranged counselling session with medication review and ev. clinical assessment

Level 4
- HOME VISIT
  - Comprehensive assessment of patient self-management
 Development of the service – Approach (2)

- **WS-2 with experts**
  - Decision on core elements of documentation form
  - Design documentation form

- **Pilot over 2 weeks**
  - Approach of n=17 pharmacists, selected by experts
  - Tel. instruction on how to perform PM-Check with n=12
    - For free for the patient (=pilot)
  - Evaluation of 16 protocols from 11 pharmacists with their comments on specific questions
Age: 52 years (range: 28 – 86); MD 6
Time: 23 Min (range: 13 – 40); MD 2
Number of drugs 6.7 (range 5 – 9)
How? 97% of drugs „yes“
Why? 87% „yes“
Sometimes forget 21% „yes“ (in 11 of 16 patients)
Handling problem 1.25% „yes“
Recomend. Dosette 5 (30%) / 2 patients accepted
Recomend. Advanced MR 4 (25%) / all accepted

Results
Pilot (n=16)
Development of the service – Approach (3)

- **WS-2 with experts**
  - Decision on core elements of documentation form
  - Design documentation form

- **Pilot over 2 weeks**
  - Approach of n=17 pharmacists, selected by experts
  - Tel. Instruction on how to perform PM-Check with n=12
    - For free for the patient (=pilot)
  - Evaluation of 16 protocols from 11 pharmacists with their comments on specific questions

- **WS-3 with pilot pharmacists & experts**
  - Discussion of results and experiences from pilot
  - Re-design documentation form (→ 3 key questions)

- **Consultation by mail on final version**
W.E. Deming (1900-1993)

PDCA - Principle (Plan, Do, Check, Act)
**Concept Polymedication Check**
All drugs (Focus on RX, but self-medication if considered important)

**Check**
A. Clarification of need for counselling on drug use
   (Unclarity within treatment plan, duplication, problems with drug „handling“)
   1. **Patient knows how** (Wissen, wie)
   2. **Patient knows why** (Wissen, weshalb)

B. „Compliance question“ ?
   3. **Do you ever forget to take this medicine?**

C. Need for Dosette/weekly blister pack?
D. Need for intensified compliance counselling / support?
E. Need for advanced medication review ? (clinical review)

**Act & Plan**
I. Instruction / Motivation to perform treatment plan
K. Follow-up (e.g. next PM-Check)
L. Ev. filling a Dosette
M. Ev. clarification treatment plan with prescriber

Check is based on „open“ questions addressing current drug treatment.
- Check should deliver clear answers to items A-E
- Check should end up in defined actions (I & K), and optionally L & M
Polymedikations-Check

<table>
<thead>
<tr>
<th>Name</th>
<th>Vorname</th>
<th>Pat.-Nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Str.</td>
<td>Ort</td>
<td>Tel.</td>
</tr>
</tbody>
</table>

Der Patient/die Patientin nimmt zurzeit täglich 4 oder mehr Medikamente auf ärztliche Verordnung und über längere Zeit (mind. 3 Monate) ein

Der Patient/die Patientin ist einverstanden, dass der Apotheker/die Apothekerin einen Polymedikations-Check macht

Geburtsdatum ____ / ____ / ________

Geschlecht □ männlich □ weiblich

1. Check Zeit Beginn: ____ . ____ Uhr

<table>
<thead>
<tr>
<th>Aktuelle Medikamente (auf ärztliche Verordnung)</th>
<th>Abklärung Bedarf für Beratung zur Anwendung dieses Medikamentes</th>
<th>Vergessen Sie manchmal dieses Medikament zu nehmen?</th>
<th>Kommentare &amp; weitere Angaben</th>
</tr>
</thead>
<tbody>
<tr>
<td>(dieser Check basiert auf Informationen vom Patienten und/oder aus der Dokumentation der Apotheke)</td>
<td>(beid Beratung Fortsetzung auf Rückseite)</td>
<td>(bei Bedarf Fortsetzung auf Rückseite)</td>
<td>(bei Bedarf Fortsetzung auf Rückseite)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>Name / Stärke / Galenische Form</th>
<th>neu?</th>
<th>Beratung?</th>
<th>Beratung?</th>
<th>Ja</th>
<th>Nein</th>
</tr>
</thead>
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<td>2</td>
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<td>Beratung?</td>
<td>Beratung?</td>
<td>Ja</td>
<td>Nein</td>
</tr>
<tr>
<td>3</td>
<td>Name / Stärke / Galenische Form</td>
<td>neu?</td>
<td>Beratung?</td>
<td>Beratung?</td>
<td>Ja</td>
<td>Nein</td>
</tr>
<tr>
<td>4</td>
<td>Name / Stärke / Galenische Form</td>
<td>neu?</td>
<td>Beratung?</td>
<td>Beratung?</td>
<td>Ja</td>
<td>Nein</td>
</tr>
</tbody>
</table>
### Selbstmedikation

- Ja
- Nein

**Auflistung mit Dosierung**

### 2. Beratung

- Beratung zur Handhabung

### 3. Empfehlungen

<table>
<thead>
<tr>
<th>Empfehlung</th>
<th>Patient/in ist einverstanden</th>
<th>Kommentare:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wochen-Dosiersystem durch den Apotheker</td>
<td>Ja</td>
<td></td>
</tr>
<tr>
<td>Bedarf intensivierte Compliance-Unterstützung</td>
<td>Ja</td>
<td></td>
</tr>
<tr>
<td>Bedarf Wiederholung Check in .......... Monaten</td>
<td>Ja</td>
<td></td>
</tr>
<tr>
<td>Weiterleitung an Arzt/andere Fachperson</td>
<td>Ja</td>
<td></td>
</tr>
</tbody>
</table>

- Bedarf vertiefte Analyse (z.B. Wechselwirkungen, Nebenwirkungen, Duplikationen)

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**Datum:** ____ / ____ / 2009  **Zeit Ende:** ____ . ____ Uhr

**Stempel Apotheke / Unterschrift Apotheker/in:**

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**Prof. Dr. K. Hersberger**
Mainly focused on drug use and compliance problems

Selection of only 1 question on compliance

(Out of the original Morisky questions from 1986):

1. Do you ever forget to take your medicine? (yes/no)
2. Are you careless at times about taking your medicine? (yes/no)
3. When you feel better, do you sometimes stop taking your medicine? (yes/no)
4. Sometimes if you feel worse when you take the medicine do you stop taking it? (yes/no)

1. Technical Review
2. Concordance and compliance review (medicines use review, MUR)
3. Clinical Review
A bright future ahead ???

? Introduction by march 2010

✓ Feasibility

? Implementation into practice /Teaching

? Outcomes