PCNE quality standards in systematic medication review

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1. Economic Outcomes

Involved parties: patients, payers, society

- Patients
  - Individual co-payment for meds:
    - Setting: may vary
    - Method: before/after or intervention vs. control (direct or virtual control group) or claims data
  - Insurance costs – depends on the health-care system, mostly not feasible
1. Economic Outcomes (cont’d)

Payer’s costs (patients receiving/not~ SMR)

- 1) Medicines

- 2) Hospital costs

- 3) GP visits depending on the system (insurance/GP)

- 4) SMR pharmacist costs: time, travel
2. Clinical Outcomes

- Mortality (Y/N)
- Morbidity (e.g. MI; stroke; amputation) – (Y/N)
- Hospitalizations - # admissions
- Referral to long-term care facilities – (Y/N)
- # Rx meds; meds in total (OTC included); # dosages – documented for the review
- ADEs
- Lab parameters
- DRPs
3. Humanistic Outcomes

Activities of Daily Living (ADL)
Process

➢ How to start?

➢ Patient’s inclusion criteria:
  Patients aged > 65
  Taking 5 or more regular medications
  Pharmacist is able to undertake a home visit at least once/year

➢ Interview form
➢ Tools to use
➢ Indicators to measure
Process step by step

- **Step 1**: Quick check of discrepancies between drugs on GP’s list and pharmacy list. Look for duplication of therapy, Drug-drug interactions, …-> if appropriate (MAI) -> Home visit

- **Step 2**: Home Visit: Patient shows medication (1 at a time) and is asked several questions based on the interview guide. Pharmacists are advised not to make judgements and just record the information on what the patient is really doing. Open ended questioning: social habits, lifestyle issues. Solve DRPs detected during the interview process, if possible.

- **Step 3**: Cross-check data from pharmacy, GP and patient. Use Tool to assess Fitness of medication (MFI)
**Tool to use whilst undertaking the review**

MAI before the interview – indication as stated by the GP
Compliance assessed by medication history print out
If a problem is detected, generate a list of possible questions (used as checklist for the pharmacist to plan the interview to conduct with the patient)

**MFI (medication fitness index):** MAI from the patient’s perspective
+ Is the patient compliant with this medicine?
+ Is the patient satisfied with this medicine?
+ Has the patient experienced any side-effect from this medicine?
+ Does the patient store this medicine correctly?
+ Are there any administration problems?

A final index is generated that can indicate if there is a “Big Problem” (real; experienced by the patient)/Small problem (theoretical; described in books but not observed)

When using MFI, if any of the categories is answered “Yes” triggers a report to the GP, where any issues about lifestyle, untreated conditions and ADL should be added.
Data collection sheet

- Australian approach (HMR) used as a starting point: Changes made based on clinical outcomes to be collected; Changes made to adapt to European countries; other changes
- Medication record taken from the NHS form -> all items become questions to transform it into a clearer interview guide for the pharmacist
PCNE data form to guide the interview and collect needed information:

<table>
<thead>
<tr>
<th>Patient assessment</th>
<th>Use of HC resources</th>
<th>Interview guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complains of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insomnia ___*/week/month</td>
<td>Any hospital admissions in last 6 months? Y/N</td>
<td>Standard service/Patient referred</td>
</tr>
<tr>
<td>Depressive symptoms ___*/week/month</td>
<td>Duration stay? Reason?</td>
<td>BMI</td>
</tr>
<tr>
<td>Dizziness ___*/week/month</td>
<td>Any emergency visits? Y/N, reason</td>
<td>Social Habits</td>
</tr>
<tr>
<td>Drowsiness ___*/week/month</td>
<td>Use of long term care? Y/N</td>
<td>Lab results</td>
</tr>
<tr>
<td>Falls ___*/week/month</td>
<td></td>
<td>Allergies (assess safety)</td>
</tr>
<tr>
<td>Vomiting ___*/week/month</td>
<td></td>
<td>Recent changes (assess effectiveness)</td>
</tr>
<tr>
<td>Diarrhoea ___*/week/month</td>
<td></td>
<td>Multiple prescribers and pharmacies</td>
</tr>
<tr>
<td>Confusion ___*/week/month</td>
<td></td>
<td>Attitudes towards generics</td>
</tr>
<tr>
<td>Reflux ___*/week/month</td>
<td></td>
<td>Please check:</td>
</tr>
<tr>
<td>Oedema ___*/week/month</td>
<td>-Records of BP, …</td>
<td>-Records of BP, …</td>
</tr>
<tr>
<td>Rash ___*/week/month</td>
<td>-Equipment</td>
<td>-Equipment</td>
</tr>
<tr>
<td>Pain ___*/week/month</td>
<td>-Technique</td>
<td>-Technique</td>
</tr>
<tr>
<td>Incontinence ___*/week/month</td>
<td></td>
<td>-Technique</td>
</tr>
<tr>
<td>Memory loss ___*/week/month</td>
<td></td>
<td>-Technique</td>
</tr>
<tr>
<td>Other ________________</td>
<td></td>
<td>-Technique</td>
</tr>
</tbody>
</table>

Interview guide

Standard service/Patient referred
BMI
Social Habits
Lab results
Allergies (assess safety)
Recent changes (assess effectiveness)
Multiple prescribers and pharmacies
Attitudes towards generics

Please check:
- Records of BP, …
- Equipment
- Technique
Medication record (part of the data form)

List all medicines
Active/Non-active
Dosage regimen as indicated in the pharmacy/GP record
Dosage regimen as stated by the patient
What do you use this drug for? Write patients words and code after
How often do you take this drug as Rxed? [always; frequently (>50%); seldom (<50%); never]
Do you have any difficulties taking this drug? Y/N
Are you happy with this drug? Y/N/Don’t know
Have you experienced any side-effects from this drug? Y (which?)/N/Don’t know
Are the storage conditions adequate? Y/N
Is the drug expired? Y/N
Is the drug adequately labelled? Y/N (assess reading ability, i.e., understanding and eye sight)
Additional comments
Future work: PCNE MR working group

Foppe will create a space in PCNE’s web page where everyone interested in MR can sign up

This will be a chat room to:

- discuss ideas
- draw on what was achieved during the conference
- people interested to test this can exchange results

Proceedings will include the slides and documents of workshop V