Implementing medication reconciliation for elderly hospitalized in an orthopedic unit raised surgeons’ awareness to therapeutic recommendations and led to decrease the cumulative exposure to sedative and anticholinergic drugs.

Héloïse Capelle, Guillaume Hache, Pierre Caunes, David Kerebel-Bucovaz, Pierre Bertault-Peres, Patrick Villani, Aurélie Daumas, Stéphane Honoré.
Nothing to disclose
Multidisciplinary Geriatric Mobile Team (MGMT)

- Missions:
  - medical issues related to elderly patients
  - preventing geriatric syndrome post discharge

- Comprehensive geriatric assessment

Implementing **medication reconciliation** during the geriatric assessment of elderly patients hospitalized in orthopedy
Objective: to evaluate the impact of this process on in-hospital prescriptions and exposure to sedative and anticholinergic drugs
### Medication reconciliation

#### Admission

<table>
<thead>
<tr>
<th>Demographics</th>
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<tbody>
<tr>
<td>n</td>
<td>58</td>
</tr>
<tr>
<td>Sex ratio</td>
<td>70F/30M</td>
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<tr>
<td>Mean age</td>
<td>88 ± 5 y.o.</td>
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<tr>
<td>Delay MGMT after admission</td>
<td>3.3 ± 2.5</td>
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<tr>
<td>Length of stay</td>
<td>10.1 ± 5.7</td>
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</tbody>
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#### Comprehensive geriatric assessment

- Living status (home/nursing home): 91/09
- Cognitive impairment: 49%
- Delirium: 51%
- Mobility impairment: 72%
- History of falls: 40%
- Poor nutrition status: 19%
- Polypathology (>3): 61%
- ADL (activity daily living) (≤4): 28%
- IADL ≤2/4: 48%
- Mood disorders: 39%

#### Medication history

**Polypharmacy:**

- 10 ± 4 medications per patient

- 3,9 ± 2,8 UD per patient
- 94% of patients at least one UD

#### Medication reconciliation

218 Unintentional discrepancies (UD)

- → 3,9 ± 2,8 UD per patient
- → 94% of patients at least one UD

- Omission: 34
- Dosage: 13
- Administration: 4
- Delay: 5

**Medication reconciliation**
Potentially inappropriate prescriptions

- overuse: 41%
- underuse: 18%
- misuse: 18%
- UD: 23%

188 Therapeutic recommendations

3,4 ± 2,2 per patient vs 2,0 ± 1,7 (p<0,01)

Acceptance rate during hospitalization:

71 ± 29 % vs 53 ± 38% (p<0,05)
Medium term impact

Exposure to sedative and anticholinergic drugs, Drug Burden Index (DBI):

Admission DBI: 1.09 +/- 0.72  \[ p < 0.01 \]  Discharge DBI: 0.81 +/- 0.58

- Associated with a long term decline of cognitive functions in elderly Hilmer et al., 2009
- Associated with increase in falls, GP visits and death Nishtala et al., 2014, Ruxton et al., 2015; Salahudeen et al., 2015

90 days outcomes:

Mortality: 12.5%
Re-hospitalization rate: 12.5%
To optimize the transmission of medium/long term recommendations

**Discharge:**

- Rehabilitation
- Nursing home
- Home
- Death

Preliminary study: 26 patients – phone call to rehab 4-7 days post discharge

- MGMT recommendations integrated within the transmissions: **19**
- Physicians in rehab facilities who had received the information: **15**

**93,9 ± 0,1% were taken into account**

(vs 57,3 +/- 0,3%)

Physicians in post-discharge facilities are keen to apply therapeutic recommendations suggested by in-hospital MGMT

... If they are aware of
Thank you!

**Internal medicine / geriatry**
- Pr P. Villani
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- P. Niédée

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- Pr JN. Argenson
- Pr S. Paratte
- Dr D. Lami
- Dr J. Sbihi
- Dr S. Cohen
- Dr M. Fabre
- Dr M. Ollivier

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- Dr P. Bertault-Peres
- Pr S. Honoré
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- Dr MA Estève
- Dr F. Correard
- Dr C. Tabelé
- N. Poletto

**Hôpital de la Timone**

**Ministère des Solidarités et de la Santé**