

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.

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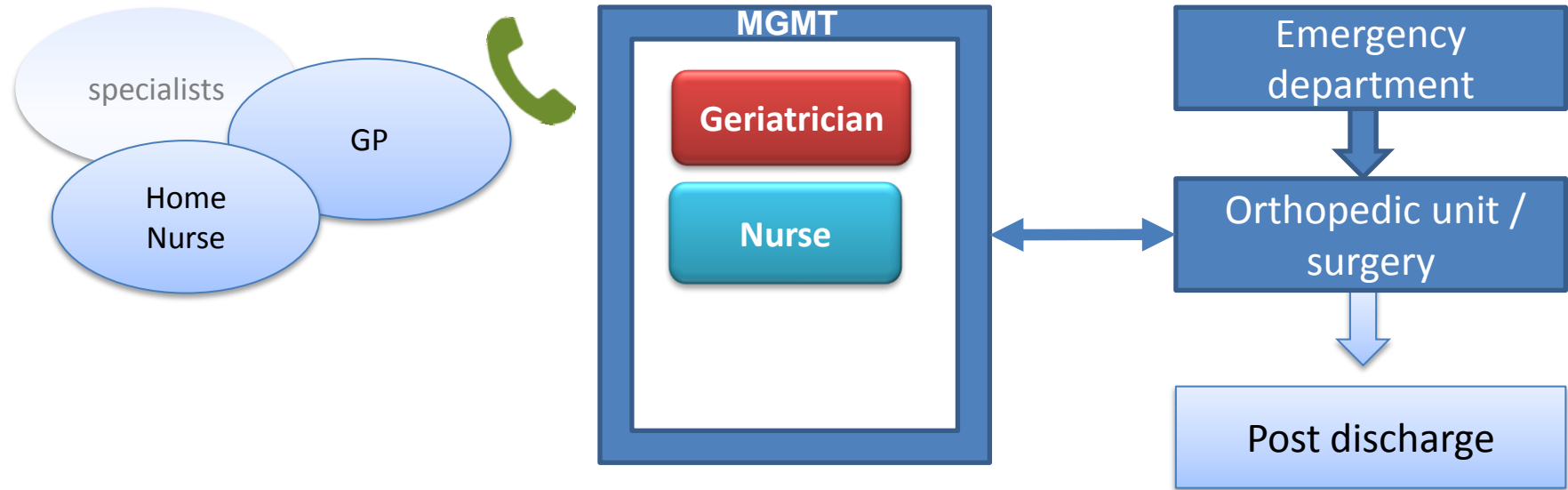
2017, september 22nd

O-065

Conflict of interest

Nothing to disclose

Context



Multidisciplinary Geriatric Mobile Team (MGMT)

- Missions:

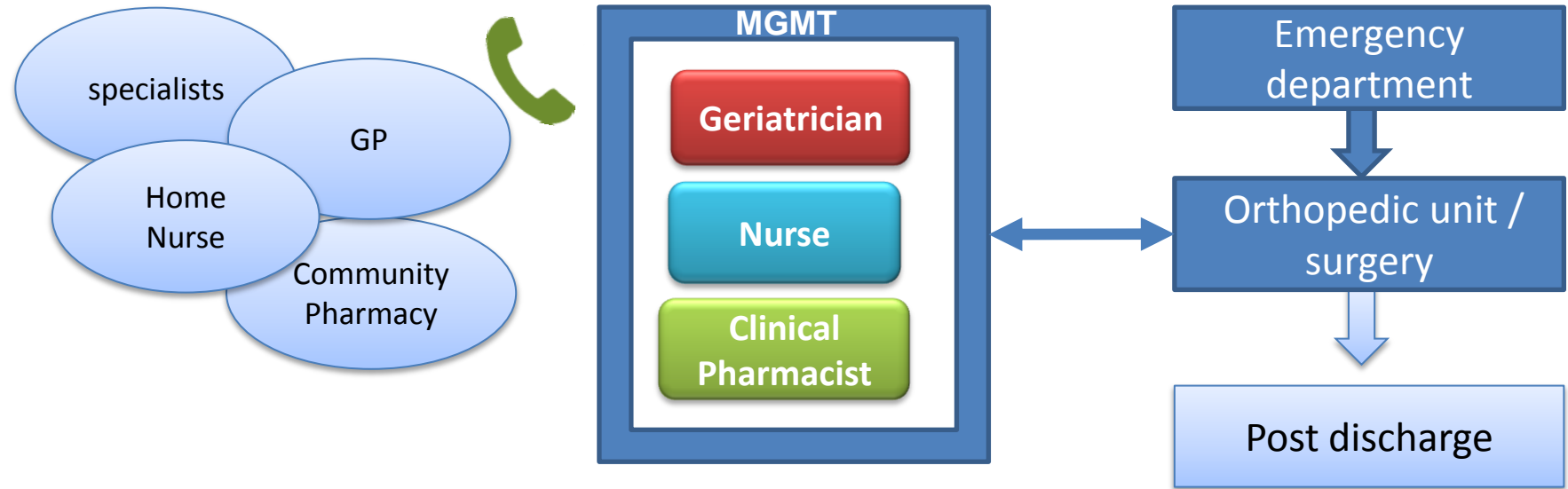
- medical issues related to elderly patients
- preventing geriatric syndrome post discharge

- Comprehensive geriatric assessment

2017

Implementing **medication reconciliation** during the geriatric assessment of elderly patients hospitalized in orthopedy

Process



- Medication history
- Potentially inappropriate prescription identification (START/STOPP)
- Medication review
- Therapeutic recommendation short / medium term

Objective: to evaluate the impact of this process on in-hospital prescriptions and exposure to sedative and anticholinergic drugs

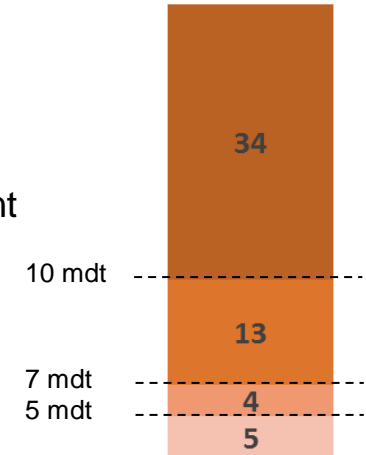
Medication reconciliation

Admission

Demographics	
n	58
Sex ratio	70F/30M
Mean age	88 ± 5 y.o.
Delay MGMT after admission	3,3 ± 2,5
Length of stay	10,1 ± 5,7
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%

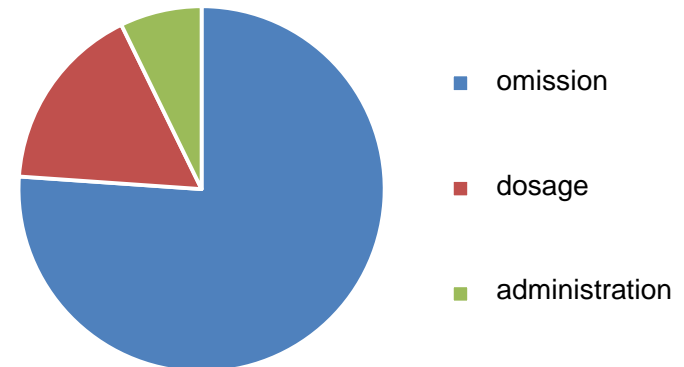
Medication history

Polypharmacy:
10 ± 4 medications per patient



Medication reconciliation

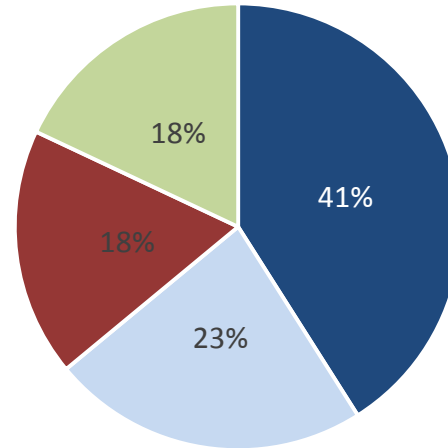
218 Unintentional discrepancies (UD)
 → 3,9 ± 2,8 UD per patient
 → 94% of patients at least one UD



Medication review

Potentially inappropriate prescriptions

- overuse
- underuse
- misuse
- UD



188 Therapeutic recommendations

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

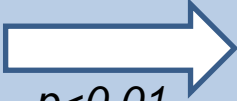
Acceptance rate during hospitalization:

71 ± 29 % vs 53 ± 38% (p<0,05)

Medium term impact

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

Hilmer et al.2007

Admission DBI: **1.09 +/- 0.72**  Discharge DBI: **0.81 +/- 0.58**
p < 0,01

- 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%

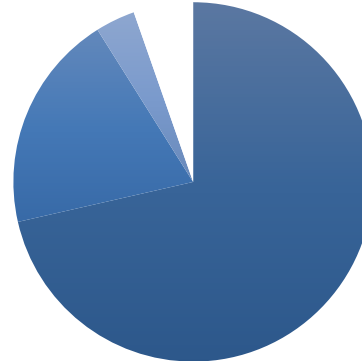
Re-hospitalization rate: 12,5%

Perspectives

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 !

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