College G QI drugs protocol DEF

Quality Indicators: Instances of inappropriate prescribing (overuse, misuse, underuse) in Belgian geriatric divisions (PIP)

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Background

- Inappropriate prescribing (PIP) is a frequent problem in older patients.
- IP should be detected and solved in older patients hospitalized in geriatric medicine
- The STOPP & START.v1 lists (2008) provide clinicians with explicit criteria for, respectively, over/misuse & underuse
- The college for geriatric medicine aims at improving quality of care in geriatric units
- INAMI/RIZIV collects data on medications prescribed during hospital stays

Study Aim

- To identify the prevalence of specific potentially IP (PIP) cases in the geriatric divisions of the Belgian hospitals in 2013 (both clinically relevant, and technically detectable using the INAMI/RIZIV data

Time-line

1. Selection of inappropriate drug lists (college : 2/2015)
2. Selection of indicators (college : 2/2015)
3. Identification of the codes (team : 2/2015)
4. Protocole (team : 2/2015)
5. Methodological decisions (college 3/2015 & 4/2015)
    a. Unit of analysis : hospital stay in geriatric unit only
    b. Exclusion criteria:
        i. patients with multiples units during one hospital stay
        ii. patients with < 75 years of age
        iii. patients with stays ≤ 9 days ; and « non-G » stays)
        iv. patients with strong opioïds during last 6 days (to exclude dying patients)

Methods

- Design : cross-sectional study in all geriatric hospital units in Belgium
- Patients : all patients discharged from a geriatric unit in 2013.
- Exclusion criteria
  - patients with multiples units during one hospital stay
  - patients with < 75 years of age
  - patients with stays ≤ 9 days ; and « non-G » stays)
  - patients with strong opioïds during last 6 days (to exclude dying patients)
- Starting form the STOPP-START vs 1, 13 PIP were selected. After practical considerations like clinically relevant and technically detectable, the use of 11 drugs at discharge of the patients are described. From those 9 are linked to frequently over- or misused drugs and 2 are linked to frequently underused drugs.
  - 9 frequently over/misused drugs (any prescription during the last 6 days of the G stay)
    - NSAID
    - PPI
    - TCA
    - SSRI
    - Benzodiazepine
    - Antipsychotics
    - Anticholinergic
    - Statin (not in STOPP.v1)
    - Antibiotic during the stay (out of STOPP scope)
    - + **Global indicator** for neuropsy drugs as TCA , BZD , antipsychotics , SSRI
  - 2 frequently underused drugs (any prescription during the G stay)
    - Oral anticoagulant [should be as high as AFib prevelance]
    - Vitamin D [should be as high as osteoporosis,
- Denominators : ALL discharged patients
- Numerators: number of patients with the drug class (ATC code)

<u>Analyses :</u>

Overall (n=45.086 G stays)
by Province,
by Hospital,
by Patient's characteristics (age, gender)

College criteria adapted from STOPP-START vs1	Indicator in G units	NUMERATOR	DENOMINATOR
1. Global indicator neuropsy drugs TCA, BZD, antipsychotics, SSRI	PIP Over/misuse at end of stay (last 6 days): % with any of the following at discharge (TCA, BZD, antipsychotics and SSRI) at discharge	TCA, BZD, antipsychotics, SSRI	**All** patients at discharge
2.NSAID	PIP Over/misuse at end of stay (last 6 days): % with NSAIDS at discharge	**M01A** (ANTIINFLAMMATORY AND ANTIRHEUMATIC PRODUCTS, NON-STEROIDS)	**All** patients at discharge
3. PPI at treatment dose for peptic ulcer disease at full therapeutic dosage for > 8 weeks	PIP Over/misuse at end of stay (last 6 days): % with PPI at discharge	A02BC	**All** patients at discharge
4. TCA with dementia [risk of worsening cognition]	PIP Over/misuse at end of stay (last 6 days): % of patients on TCAs at discharge	**N06AA** (tricyclic antidepressant: TCAs)	**All** patients at discharge
5. BZD (benzodiazepines) if long-term (i.e. > 1 month) and long-acting e.g. chlordiazepoxide, flurazepam, nitrazepam and benzodiazepines with long-acting metabolites e.g. diazepam [risk of prolonged sedation, confusion, impaired balance, falls].	PIP Over/misuse at end of stay (last 6 days): % of patients on benzo at discharge	N05CD (benzo) or N05BA (benzo)	**All** patients at discharge
6. Antipsychotics	PIP Over/misuse at end of stay (last 6 days): % of patients on antipsychotics at discharge	N05A (antipsychotics)	**All** patients at discharge
7. SSRI's	Use at end of stay (last 6 days): % of patients on SSRI's at discharge	N06AB (SSRI)	**All** patients at discharge
8 Anticholinergic drugs	PIP Over/misuse at end of stay (last 6 days): % with score 3 at discharge **(**see burden scale: score >3) Amitryptiline - TCA Doxepin and others related to TCA	N06AA (Non-sel monoamine reupt. inh) N06AB05 (paroxetine-SSRI) R06AB04 (chlorphenamine) R06A (antihistamines, systemic use) N05CM (other hypnotics, inclusive scopolamine: N05CM05)	**All** patients at discharge

	Paroxetine Chlorphenamine and sedating antihistamins Hyoscine Olanzapine and other atypicals Oxybutinine	N05AH (diazepine) within N05AH03 (olanzapine) G04BD04 (oxybutynin)	
9.OAC (oral anticoagulant)	PIP Usual UNDERUSE during the stay: % with oral anticoagulant. (VKA or NOAC) during the stay (because UNDERUSE)	B01AA (vitamin K antagonists) Or NOAC, especially B01AE07 (dabigatran) B01AX06 (rivaxoxaban)	**All** patients during stay
10. vitamin D	PIP Usual UNDERUSE during the stay % patients with vit D during the stay (because UNDERUSE)	A11CB (vit A and D in combination), A11CC (vit D and analogues)) or A12AX (vit D+calcium)	**All** patients during stay

Feedback to the G units

Feedback to the Geriatric Departments

Through the secretary of the Belgian Society with support of FOD/INAMI

Full file on the website

Invoice to the heads of G wards of the anonymised results with contact point to obtain their own identification number

The college will provide in 2016 a voluntary, non anonymised questionnaire to ask for feedback on the proposed QI and to ask which actions are planned for improvement

LOK/GLEM coordinators are asked to be present at a meeting with the college on november the 17. Information will be given regarding the development and interpretation of the Quality Indicator.

Some examples of discussion points could be offered:

- Role of equipment /infrastructure /organization/ contextual :
    - staff : FTE geriatricians
    - presence (and task) of clinical pharmacists
    - E prescription
    - Active Role /influence of CMP/MFC (conseil médicopharmaceutique ; medisch farmaceutisch comité)
    - Care pathway for drug prescription and revision policy…
- Rational use of drugs :
    - Existing guidelines
    - Specific strategy on stop and start
    - Drug prescription revision policy
    - ….
- What do you plan to do with those results?
    - Information session
    - Adapt general / specific policy
    - Prescription review
    - ….