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**Appendix Table 1 Instances of STOPP potentially inappropriate prescribing (PIP)**

| <b>Criteria</b>  | <b>All</b> | <b>Exc. prns</b> |
|--|------------|------------------|
| <b><u>Cardiovascular System</u></b>  |            |                  |
| Loop diuretic for dependent ankle oedema only i.e. no clinical signs of heart failure      | 8          | 8                |
| Loop diuretic first line for hypertension  | 34         | 34               |
| Use of diltiazem or verapamil with NYHA Class III or IV heart failure                      | 2          | 2                |
| Calcium channel blockers and constipation  | 24         | 24               |
| Aspirin and history of peptic ulcer disease without H2 antagonist/PPI                      | 1          | 1                |
| Aspirin without an indication  | 20         | 20               |
| Warfarin for first, uncomplicated deep venous thrombosis for longer than 6 months duration | 1          | 1                |
| <b><u>Central nervous system</u></b>   |            |                  |
| TCA and dementia   | 8          | 8                |
| TCA and glaucoma   | 3          | 3                |
| TCAs and cardiac conductive abnormalities  | 2          | 2                |
| TCAs and constipation  | 12         | 12               |

| <b>Criteria</b>   | <b>All</b> | <b>Exc. prns</b> |
|---|------------|------------------|
| TCAs and opiate or calcium blockers   | 20         | 13               |
| TCA and urinary retention   | 1          | 1                |
| Long term long acting benzodiazepine or benzodiazepines with long acting metabolites  | 61         | 61               |
| Long-term (i.e. > 1 month) neuroleptics as long-term hypnotics  | 22         | 22               |
| Long-term neuroleptics ( > 1 month) in those with Parkinsons' disease   | 25         | 25               |
| Phenothiazines in patients with epilepsy  | 5          | 0                |
| Anticholinergics to treat extra-pyramidal side-effects of neuroleptic medications   | 14         | 14               |
| Selective serotonin re-uptake inhibitors (SSRI's) with a history of clinically significant hyponatraemia (non-iatrogenic hyponatraemia<130mmol/l within the previous 2 months). | 4          | 4                |
| >1 week first-generation antihistamines   | 25         | 25               |
| <b><u>Gastrointestinal system</u></b>   |            |                  |
| Diphenoxylate, loperamide or codeine phosphate for treatment of diarrhoea of unknown cause  | 1          | 1                |
| Prochlorperazine or metoclopramide with Parkinsons disease  | 4          | 2                |
| PPI for peptic ulcer disease at full therapeutic dosage for >8 weeks  | 166        | 166              |

| <b>Criteria</b>   | <b>All</b> | <b>Exc. prns</b> |
|---|------------|------------------|
| Anticholinergic antispasmodic drugs with chronic constipation                                   | 5          | 0                |
| <b><u>Respiratory system</u></b>  |            |                  |
| Theophylline as monotherapy for COPD  | 2          | 2                |
| Nebulised ipratropium with glaucoma   | 4          | 3                |
| <b><u>Musculoskeletal system</u></b>  |            |                  |
| NSAIDs and hypertension   | 60         | 26               |
| NSAIDs and heart failure  | 12         | 2                |
| Long-term continuous NSAIDs for osteoarthritis  | 6          | 6                |
| Warfarin and NSAIDs together  | 9          | 4                |
| NSAID with chronic renal failure  | 4          | 1                |
| Long-term corticosteroids (>3 months) as monotherapy for rheumatoid arthritis or osterarthritis | 8          | 8                |
| <b><u>Urogenital System</u></b>   |            |                  |
| Bladder antimuscarinic drugs with dementia  | 12         | 12               |
| Antimuscarinic drugs with chronic glaucoma  | 2          | 2                |
| Antimuscarinic drugs with chronic constipation  | 17         | 17               |
| Antimuscarinic drugs with chronic prostatism  | 3          | 3                |

| <b>Criteria</b>   | <b>All</b>  | <b>Exc. prns</b> |
|---|-------------|------------------|
| Alpha-blockers in males with frequent incontinence  | 12          | 12               |
| Alpha-blockers with long-term urinary catheter in situ  | 3           | 3                |
| <b><u>Drugs that adversely affect fallers</u></b>   |             |                  |
| Benzodiazepines in individuals with a history of recurrent falls  | 197         | 115              |
| Neuroleptic drugs in individuals with a history of recurrent falls  | 138         | 115              |
| First generation antihistamines in individuals with a history of recurrent falls  | 24          | 16               |
| Long-term opiates in individuals with a history of recurrent falls  | 71          | 71               |
| <b><u>Analgesic Drugs</u></b>   |             |                  |
| Use of long-term powerful opiates e.g. morphine or fentanyl as first line therapy for mild-moderate pain                            | 4           | 4                |
| Long-term opiates in those with dementia unless indicted for palliative care or management of moderate/severe chronic pain syndrome | 22          | 22               |
| <b><u>Duplicate class</u></b>   | 202         | 62               |
| <b>Total STOPP PIP instances</b>  | <b>1280</b> | <b>955</b>       |

**Key:** **Exc:** Excluding; **prn:** Pro Re Nata (as needed/ as required); **NYHA:** New York Heart Association; **H2 receptor antagonist:** Histamine 2 receptor antagonist; **PPI:** Proton Pump Inhibitor; **SSRIs:** Selective Serotonin Reuptake Inhibitors; **COPD:** Chronic Obstructive Pulmonary Disease; **NSAIDs:** Non-Steroidal Anti-Inflammatory Drugs; **STOPP:** Screening Tool of Older People's potentially inappropriate Prescriptions; **PIP:** Potentially Inappropriate Prescribing.

**Appendix Table 2 Instances of Beers' ID potentially inappropriate prescribing (PIP)**

| Criteria   | All | Exc. prns |
|--|-----|-----------|
| Muscle relaxants and antispasmodics:oxybutynin (do not consider extended release oxybutynin)   | 10  | 10        |
| Flurazepam   | 15  | 15        |
| Amitriptyline, chlordiazepoxide- amitriptyline and perphenazine- amitriptyline   | 20  | 20        |
| Doxepin  | 1   | 1         |
| Doses of short acting benzodiazepines: doses greater than lorazepam 3mg; oxazepam 60mg; alprazolam 2mg; temazepam 15mg; triazolam0.25mg.                   | 10  | 10        |
| Chlordiazepoxide, chlordiazepoxide- amitriptyline, clidinium- chlordiazepoxide, diazepam, quazepam, halazepam and chlorazepate                             | 70  | 41        |
| Long-acting benzodiazepines  | 7   | 6         |
| Gastrointestinal antispasmodic drugs:dicyclomide, hyoscyamine, propantheline, belladonna alkaloids and clidinium-chlordiazepoxide                          | 27  | 8         |
| Anticholinergics and antihistamines: Chlorpheniramine, diphenhydramine, hydroxyzine, cyproheptadine, promethazine, tripeleminamine and dexchlorpheniramine | 25  | 12        |

| <b>Criteria</b>                     | <b>All</b> | <b>Exc. prns</b> |
|-------------------------------------|------------|------------------|
| Daily fluoxetine                    | 17         | 17               |
| Amiodarone                          | 15         | 15               |
| Nitrofurantoin                      | 13         | 13               |
| Doxazosin                           | 9          | 9                |
| Oestrogen                           | 1          | 1                |
| <b>Total Beers ID PIP Instances</b> | <b>240</b> | <b>178</b>       |

**Key:** **Exc:** Excluding; **prn:** Pro Re Nata (as needed/ as required); **ID:** Independent of Diagnosis; **PIP:** Potentially Inappropriate Prescribing.

**Appendix Table 3 Instances of Beers' CD potentially inappropriate prescribing (PIP)**

| Criteria   | All | Exc. prns |
|--|-----|-----------|
| Gastric or duodenal ulcers AND NSAIDs and aspirin  | 9   | 4         |
| Seizures or epilepsy AND Clozapine, chlorpromazine, thioridazine and thiothixene   | 1   | 0         |
| Blood clotting disorders or receiving anticoagulant therapy AND aspirin, NSAIDs, dipyridamole, ticlodipine and clopidogrel   | 10  | 7         |
| Bladder outflow obstruction AND anticholinergics and antihistamines, GI antispasmodic drugs, muscle relaxants, oxybutynin, flavoxate, anticholinergics, antidepressants, decongestants and tolteridine.    | 34  | 29        |
| Stress incontinence AND $\alpha$ -blockers, anticholinergics, tricyclic antidepressants (imipramine hydrochloride, doxepin hydrochloride and amitriptyline hydrochloride) and long-acting benzodiazepines. | 77  | 58        |
| Arrhythmias AND Tricyclic antidepressants (imipramine hydrochloride, doxepin hydrochloride and amitriptyline hydrochloride)  | 1   | 1         |
| Parkinson disease AND Metoclopramide, conventional antipsychotics and tacrine  | 5   | 3         |
| Cognitive impairment AND barbiturates, anticholinergics, antispasmodics, muscle relaxants and CNS stimulants:  | 68  | 49        |



| Criteria   | All        | Exc. prns  |
|--|------------|------------|
| dextroamphetamine, methylphenidate, methamphetamine and pemolin.   |            |            |
| Depression AND long-term benzodiazepine use. sympatholytic agents: methyldopa, reserpine and guanethidine  | 87         | 87         |
| Syncope or falls AND short to intermediate acting benzodiazepine and tricyclic antidepressants (imipramine hydrochloride, doxepin hydrochloride and amitriptyline hydrochloride)                     | 208        | 124        |
| SIADH/hyponatraemia AND SSRIs (fluoxetine, citalopram, fluvoxamine, paroxetine and Sertraline)   | 2          | 2          |
| Obesity AND Olanzapine   | 1          | 1          |
| COPD AND Long-acting benzodiazepines: chlordiazepoxide, chlordiazepoxide- amitriptyline, clidinium-chlordiazepoxide, diazepam, quazepam, halazepam and chlorazepate. $\beta$ -blockers: propranolol. | 7          | 4          |
| Constipation AND calcium channel blockers, anticholinergics, tricyclic antidepressants (imipramine hydrochloride, doxepin hydrochloride and amitriptyline hydrochloride)                             | 81         | 70         |
| <b>Total Beers CD PIP Instances</b>  | <b>591</b> | <b>439</b> |

**Key:** **Exc:** Excluding; **prn:** Pro Re Nata (as needed/ as required); **GI:** Gastro-Intestinal; **SIADH:**

Syndrome of Inappropriate Anti-Diuretic Hormone; **SSRIs:** Selective Serotonin Reuptake Inhibitors;

**COPD:** Chronic Obstructive Pulmonary Disease; **NSAIDs:** Non-Steroidal Anti-Inflammatory Drugs; **CD:**

Considering Diagnosis; **PIP:** Potentially Inappropriate Prescribing.