

Supplemental materials for:

Mangin D, Lawson J, Cuppage J, Shaw E, Ivanyi K, Davis A, Risdon C. Legacy drug-prescribing patterns in primary care. *Ann Fam Med*. 2018;16(6):515-520.

Supplemental Table 1 - Anatomical Therapeutic Chemical (ATC) Codes for Legacy Drug Groups

| Antidepressants | | |
|------------------------|---------------|-------------|
| TC_ATC_NUMBER | TC_ATC | Code |
| N06AB08 | FLUVOXAMINE | SSRIs |
| N06AB06 | SERTRALINE | SSRIs |
| N06AB03 | FLUOXETINE | SSRIs |
| N06AB05 | PAROXETINE | SSRIs |
| N06AB04 | CITALOPRAM | SSRIs |
| N06AB10 | ESCITALOPRAM | SSRIs |
| N06AX16 | VENLAFAXINE | SSNRIs |
| N06AX21 | DULOXETINE | SSNRIs |

| | | |
|------------------------|-----------------|----------------------------|
| N06AX23 | DESVENLAFAXINE | SSNRIs |
| N06AX12 | BUPROPION | Other AntiDepress |
| N06AX11 | MIRTAZAPINE | Other AntiDepress |
| N06AA09 | AMITRIPTYLINE | Tris and NRIs |
| N06AA10 | NORTRIPTYLINE | Tris and NRIs |
| Bisphosphonates | | |
| TC_ATC_NUMBER | TC_ATC | TC_AHFS |
| M05BA02 | CLODRONIC ACID | BONE RESORPTION INHIBITORS |
| M05BA07 | RISEDRONIC ACID | BONE RESORPTION INHIBITORS |
| M05BA03 | PAMIDRONIC ACID | BONE RESORPTION INHIBITORS |
| M05BA04 | ALENDRONIC ACID | BONE RESORPTION INHIBITORS |

| | | |
|-------------------------------|--|----------------------------|
| M05BA01 | ETIDRONIC ACID | BONE RESORPTION INHIBITORS |
| M05BB01 | ETIDRONIC ACID AND CALCIUM, SEQUENTIAL | BONE RESORPTION INHIBITORS |
| M05BA08 | ZOLEDRONIC ACID | BONE RESORPTION INHIBITORS |
| M05BB03 | ALENDRONIC ACID AND CHOLECALCIFEROL | BONE RESORPTION INHIBITORS |
| M05BX04 | DENOSUMAB | BONE RESORPTION INHIBITORS |
| Proton Pump Inhibitors | | |
| TC_ATC_NUMBER | TC_ATC | TC_AHFS |
| A02BC03 | LANSOPRAZOLE | PROTON-PUMP INHIBITORS |
| A02BC01 | OMEPRAZOLE | PROTON-PUMP INHIBITORS |
| A02BC02 | PANTOPRAZOLE | PROTON-PUMP INHIBITORS |
| A02BC04 | RABEPRAZOLE | PROTON-PUMP INHIBITORS |

| | | |
|---------|---------------------------|------------------------|
| A02BC05 | ESOMEPRAZOLE | PROTON-PUMP INHIBITORS |
| A02BC06 | DEXLANSOPRAZOLE | PROTON-PUMP INHIBITORS |
| M01AE52 | Naproxen and esomeprazole | PROTON-PUMP INHIBITORS |

Supplemental Table 2 - Validation of 4 Categories of Legacy Assignment

| Antidepressants | | | | | | | | |
|-------------------------------------|----------------------|---------------------------------|-----------------------------------|-------------------------------------|-------------------------------|---------------------|---------------------|-------------------|
| Item | Patient Count | Validation Sample, n (%) | Checked as Accurate, n (%) | Checked as Inaccurate, n (%) | Proportion/ Prevalence | Lower 95% CL | Upper 95% CL | Difference |
| Legacy via Start-Stop Duration Only | 919 | 126 (13.7) | 62 (49.2) | 64 (50.8) | 0.49 | 0.41 | 0.58 | 0.17 |
| Legacy via Sum Duration Only | 223 | 39 (17.5) | 0 (0) | 39 (100.0) | 0 | 0.00 | 0.09 | 0.09 |
| Legacy via both Methods | 3802 | 219 (5.8) | 201 (91.8) | 18 (8.2) | 0.92 | 0.87 | 0.95 | 0.08 |
| Non-Legacy | 3327 | 96 (2.9) | 95 (99.0) | 1 (1.0) | 0.99 | 0.94 | 1.00 | 0.06 |
| Total Patients | 8271 | 480 | 358 | 122 | | | | |
| Bisphosphonates | | | | | | | | |

| Item | Patient Count | Validation Sample, n (%) | Checked as Accurate, n (%) | Checked as Inaccurate, n (%) | Proportion/ Prevalence | Lower 95% CL | Upper 95% CL | Difference |
|-------------------------------------|---------------|--------------------------|----------------------------|------------------------------|------------------------|--------------|--------------|------------|
| Legacy via Start-Stop Duration Only | 123 | 123 (100) | 41 (33.3) | 82 (66.7) | NA | NA | NA | NA |
| Legacy via Sum Duration Only | 82 | 52 (63.4) | 0 (0) | 52 (100) | 0.00 | 0.00 | 0.07 | 0.07 |
| Legacy via both Methods | 230 | 119 (51.7) | 100 (84.0) | 19 (16.0) | 0.84 | 0.76 | 0.90 | 0.14 |
| Non-Legacy | 1166 | 65 (5.6) | 65 (100) | 0 (0) | 1.00 | 0.94 | 1.00 | 0.06 |
| Total Patients | 1601 | 359 | 206 | 153 | | | | |
| PPIs | | | | | | | | |
| Item | Patient Count | Validation Sample, n (%) | Checked as Accurate, n (%) | Checked as Inaccurate, n (%) | Proportion/ Prevalence | Lower 95% CL | Upper 95% CL | Difference |
| Legacy via Start-Stop Duration Only | 633 | 124 (19.6) | 44 (35.5) | 80 (64.5) | 0.35 | 0.28 | 0.44 | 0.16 |
| Legacy via Sum Duration Only | 129 | 35 (27.1) | 0 (0) | 35 (100) | 0 | 0 | 0.03 | 0.03 |
| Legacy via both Methods | 2897 | 222 (7.7) | 197 (88.7) | 25 (11.3) | 0.89 | 0.84 | 0.92 | 0.08 |
| Non-Legacy either Method | 2861 | 95 (3.3) | 95 (100) | 0 (0) | 1 | 0.96 | 1 | 0.04 |

| | | | | | | | | |
|-----------------------|------|-----|-----|-----|--|--|--|--|
| Total Patients | 6520 | 476 | 336 | 140 | | | | |
|-----------------------|------|-----|-----|-----|--|--|--|--|

Supplemental Table 3 - Demographic Characteristics of Patients with Legacy and Non-Legacy Prescribing

| | Antidepressants | | | Bisphosphonates | | | Proton Pump Inhibitors | | |
|------------------------------|-----------------------|-----------------------------|--------------------------|---------------------|------------------------------|-----------------------------|------------------------|-------------------------|-------------------------------|
| | Legacy n=1,978 (%) | Non- Legacy n=508 (%) | Odds Ratio (95% CI) | Legacy n=163 (%) | Non- Legacy n= 234 (%) | Odds Ratio (95% CI) | Legacy n=1,531 (%) | Non-Legacy n=354 (%) | Odds Ratio (95% CI) |
| Male | 573 (29) | 179 (35) | 1.3 (1.1,1.6) p=0.006 | 19 (12) | 51 (22) | 2.1 (1.2,3.9) p=0.009 | 564 (37) | 126 (36) | 0.95 (0.74,1.2) p=0.649 |
| Female | 1,401 (71) | 327 (64) | | 144 (88) | 183 (78) | | 965 (63) | 228 (64) | |
| Non-Binary | 4 (0.2) | 2 (0.1) | | 0 (0) | 0 (0) | | 2 (0.1) | 0 (0) | |
| Mean Age [years] (SD) | 53 (15.9) | 47 (18.8) | | 76 (10.3) | 73 (12.5) | | 63.8 (15.2) | 55.7 (17.2) | |