**Supplement 2. Chronic disease-modifying medications and symptom-relieving medications**

Chronic disease-modifying medications included those typically taken on a daily basis to prevent health deterioration (“essential medications”), while symptom-relieving medications included those taken to alleviate symptoms but unlikely to affect the underlying disease process (“nonessential medications”). To identify medications in each category, we used the same groupings as in a previous study,1 which were based on the 2017 WHO Model List of Essential Medications2 as an initial guide and then further modified based on expert clinical advice from a pharmacist and a nurse. Note that this list only contains medications that appear on the formulary for the public drug insurance plan in Quebec.

References:

1Weir DL, Motulsky A, Abrahamowicz M, et al. Challenges at Care Transitions: Failure to Follow Medication Changes Made at Hospital Discharge. Am J Med. May 2019.

2World Health Organization Model List of Essential Medications, 20th List, 2017. Geneva: World Health Organization; 2019. Available at: <https://www.who.int/medicines/news/2017/20th_essential_med-list/en/>. Accessed 10 August 2019.

Appendix Table 1. List of chronic disease-modifying and symptom-relieving medications

|  |  |  |  |
| --- | --- | --- | --- |
| **ATC Class** | **Ingredient** | **Chronic disease-modifying** | **Symptom-relieving** |
| Agents Acting on the Renin-Angiotensin System (C09) | CANDESARTAN | 1 | 0 |
| CILAZAPRIL | 1 | 0 |
| ENALAPRIL | 1 | 0 |
| FOSINOPRIL | 1 | 0 |
| IRBESARTAN | 1 | 0 |
| LISINOPRIL | 1 | 0 |
| LOSARTAN | 1 | 0 |
| OLMESARTAN-MEDOXOMIL | 1 | 0 |
| PERINDOPRIL | 1 | 0 |
| QUINAPRIL | 1 | 0 |
| RAMIPRIL | 1 | 0 |
| TELMISARTAN | 1 | 0 |
| TRANDOLAPRIL | 1 | 0 |
| VALSARTAN | 1 | 0 |
| All Other Therapeutic Products (V03) | LANTHANUM-CARBONATE | 1 | 0 |
| LEUCOVORIN-CALCIUM | 1 | 0 |
| POLYSTYRENE-SULFONATE | 1 | 0 |
| SEVELAMER-CARBONATE | 1 | 0 |
| SEVELAMER-HYDROCHLORIDE | 1 | 0 |
| Analgesics (N02) | ACETAMINOPHEN | 0 | 1 |
| CODEINE | 0 | 1 |
| FENTANYL | 0 | 1 |
| HYDROMORPHONE | 0 | 1 |
| MEPERIDINE | 0 | 1 |
| MORPHINE | 0 | 1 |
| OXYCODONE | 0 | 1 |
| SUMATRIPTAN | 0 | 1 |
| Anti-Acne Preparations (D10) | ERYTHROMYCIN | 1 | 0 |
| ISOTRETINOIN | 1 | 0 |
| Anti-Parkinson Drugs (N04) | BENZTROPINE | 1 | 0 |
| CARBIDOPA | 1 | 0 |
| ENTACAPONE | 1 | 0 |
| ETHOPROPAZINE | 1 | 0 |
| LEVODOPA | 1 | 0 |
| PRAMIPEXOLE | 1 | 0 |
| PROCYCLIDINE | 1 | 0 |
| RASAGILINE | 1 | 0 |
| Antianemic Preparations (B03) | DARBEPOETIN-ALFA | 1 | 0 |
| ERYTHROPOIETIN-HUMAN | 1 | 0 |
| SODIUM-FERRIC-GLUCONATE | 1 | 0 |
| Antibacterials for Systemic Use (J01) | AMIKACIN | 1 | 0 |
| AMOXICILLIN | 1 | 0 |
| AMPICILLIN | 1 | 0 |
| AZITHROMYCIN | 1 | 0 |
| AZTREONAM | 1 | 0 |
| CEFADROXIL | 1 | 0 |
| CEFAZOLIN | 1 | 0 |
| CEFIXIME | 1 | 0 |
| CEFTRIAXONE | 1 | 0 |
| CEFUROXIME | 1 | 0 |
| CEFUROXIME-AXETIL | 1 | 0 |
| CEPHALEXIN | 1 | 0 |
| CIPROFLOXACIN | 1 | 0 |
| CLARITHROMYCIN | 1 | 0 |
| CLAVULANATE | 1 | 0 |
| CLINDAMYCIN | 1 | 0 |
| CLOXACILLIN | 1 | 0 |
| DOXYCYCLINE | 1 | 0 |
| ERTAPENEM | 1 | 0 |
| LEVOFLOXACIN | 1 | 0 |
| LINEZOLID | 1 | 0 |
| MEROPENEM | 1 | 0 |
| METRONIDAZOLE | 1 | 0 |
| MINOCYCLINE | 1 | 0 |
| MOXIFLOXACIN | 1 | 0 |
| NITROFURANTOIN | 1 | 0 |
| NORFLOXACIN | 1 | 0 |
| PENICILLIN-G-SODIUM | 1 | 0 |
| PENICILLIN-V | 1 | 0 |
| PIPERACILLIN | 1 | 0 |
| SULFAMETHOXAZOLE | 1 | 0 |
| TAZOBACTAM | 1 | 0 |
| TOBRAMYCIN | 1 | 0 |
| TRIMETHOPRIM | 1 | 0 |
| Antidiarrheals, Intestinal Anti-Inflammatory/Antiinfective Agents (A07) | ATROPINE-SULFATE | 1 | 0 |
| DIPHENOXYLATE | 1 | 0 |
| MESALAMINE | 1 | 0 |
| NYSTATIN | 1 | 0 |
| RIFAXIMIN | 1 | 0 |
| SULFASALAZINE | 1 | 0 |
| VANCOMYCIN | 1 | 0 |
| Antiemetics and Antinauseants (A04) | APREPITANT | 0 | 1 |
| NABILONE | 0 | 1 |
| ONDANSETRON | 0 | 1 |
| Antiepileptics (N03) | CARBAMAZEPINE | 1 | 0 |
| CLONAZEPAM | 0 | 1 |
| DIVALPROEX | 1 | 0 |
| GABAPENTIN | 1 | 0 |
| LAMOTRIGINE | 1 | 0 |
| LEVETIRACETAM | 1 | 0 |
| PHENYTOIN | 1 | 0 |
| PREGABALIN | 1 | 0 |
| PRIMIDONE | 1 | 0 |
| TOPIRAMATE | 1 | 0 |
| Antifungals for Dermatological Use (D01) | TERBINAFINE | 1 | 0 |
| Antigout preparations (M04) | ALLOPURINOL | 1 | 0 |
| COLCHICINE | 1 | 0 |
| FEBUXOSTAT | 1 | 0 |
| Antihemorrhagics (B02) | TRANEXAMIC-ACID | 1 | 0 |
| Antihistamines for Systemic Use (R06) | DIMENHYDRINATE | 0 | 1 |
| DOXYLAMINE | 0 | 1 |
| VITAMIN-B6 | 0 | 1 |
| Antihypertensives (C02) | CLONIDINE | 1 | 0 |
| DOXAZOSIN | 1 | 0 |
| HYDRALAZINE | 1 | 0 |
| METHYLDOPA | 1 | 0 |
| PRAZOSIN | 1 | 0 |
| Antiinflammatory and Antirheumatic Products (M01) | CELECOXIB | 0 | 1 |
| DICLOFENAC | 0 | 1 |
| INDOMETHACIN | 0 | 1 |
| MELOXICAM | 0 | 1 |
| MISOPROSTOL | 0 | 1 |
| NAPROXEN | 0 | 1 |
| Antimycobacterials (J04) | DAPSONE | 1 | 0 |
| ETHAMBUTOL | 1 | 0 |
| ISONIAZID | 1 | 0 |
| PYRAZINAMIDE | 1 | 0 |
| RIFAMPIN | 1 | 0 |
| Antimycotics for Systemic Use (J02) | CASPOFUNGIN-ACETATE | 1 | 0 |
| FLUCONAZOLE | 1 | 0 |
| ITRACONAZOLE | 1 | 0 |
| KETOCONAZOLE | 1 | 0 |
| POSACONAZOLE | 1 | 0 |
| VORICONAZOLE | 1 | 0 |
| Antineoplastic Agents (L01) | CAPECITABINE | 1 | 0 |
| CHLORAMBUCIL | 1 | 0 |
| CYCLOPHOSPHAMIDE | 1 | 0 |
| ERLOTINIB | 1 | 0 |
| HYDROXYUREA | 1 | 0 |
| IMATINIB-MESYLATE | 1 | 0 |
| METHOTREXATE | 1 | 0 |
| PAZOPANIB | 1 | 0 |
| SUNITINIB | 1 | 0 |
| TEMOZOLOMIDE | 1 | 0 |
| Antiprotozoals (P01) | ATOVAQUONE | 1 | 0 |
| HYDROXYCHLOROQUINE | 1 | 0 |
| QUININE-SULFATE | 1 | 0 |
| Antithrombotic Agents (B01) | APIXABAN | 1 | 0 |
| CLOPIDOGREL | 1 | 0 |
| DABIGATRAN-ETEXILATE | 1 | 0 |
| DALTEPARIN | 1 | 0 |
| ENOXAPARIN | 1 | 0 |
| NICOUMALONE | 1 | 0 |
| PRASUGREL | 1 | 0 |
| RIVAROXABAN | 1 | 0 |
| TICAGRELOR | 1 | 0 |
| TINZAPARIN | 1 | 0 |
| WARFARIN | 1 | 0 |
| Antivirals for Systemic Use (J05) | ABACAVIR | 1 | 0 |
| ACYCLOVIR | 1 | 0 |
| ATAZANAVIR | 1 | 0 |
| DARUNAVIR | 1 | 0 |
| DOLUTEGRAVIR | 1 | 0 |
| EMTRICITABINE | 1 | 0 |
| ETRAVIRINE | 1 | 0 |
| FAMCICLOVIR | 1 | 0 |
| GANCICLOVIR | 1 | 0 |
| LAMIVUDINE | 1 | 0 |
| LEDIPASVIR | 1 | 0 |
| LOPINAVIR | 1 | 0 |
| OSELTAMIVIR | 1 | 0 |
| RALTEGRAVIR | 1 | 0 |
| RIBAVIRIN | 1 | 0 |
| RITONAVIR | 1 | 0 |
| SOFOSBUVIR | 1 | 0 |
| TENOFOVIR-DISOPROXIL | 1 | 0 |
| VALACYCLOVIR | 1 | 0 |
| VALGANCICLOVIR | 1 | 0 |
| Beta Blocking Agents (C07) | ACEBUTOLOL | 1 | 0 |
| ATENOLOL | 1 | 0 |
| BISOPROLOL | 1 | 0 |
| CARVEDILOL | 1 | 0 |
| LABETALOL | 1 | 0 |
| METOPROLOL | 1 | 0 |
| NADOLOL | 1 | 0 |
| PINDOLOL | 1 | 0 |
| PROPRANOLOL | 1 | 0 |
| SOTALOL | 1 | 0 |
| TIMOLOL | 1 | 0 |
| Bile and Liver Therapy (A05) | URSODIOL | 1 | 0 |
| Calcium Channel Blockers (C08) | AMLODIPINE | 1 | 0 |
| DILTIAZEM | 1 | 0 |
| FELODIPINE | 1 | 0 |
| NIFEDIPINE | 1 | 0 |
| VERAPAMIL | 1 | 0 |
| Calcium Homeostasis (H05) | CINACALCET | 1 | 0 |
| Cardiac Therapy (C01) | AMIODARONE | 1 | 0 |
| DIGOXIN | 1 | 0 |
| EPINEPHRINE | 0 | 1 |
| FLECAINIDE | 1 | 0 |
| ISOSORBIDE-MONONITRATE | 1 | 0 |
| MEXILETINE | 1 | 0 |
| MIDODRINE | 1 | 0 |
| NITROGLYCERIN | 0 | 1 |
| NITROGLYCERIN-EMERGENCY | 1 | 0 |
| Corticosteroids for Systemic Use (H02) | CORTISONE-ACETATE | 1 | 0 |
| DEXAMETHASONE | 1 | 0 |
| FLUDROCORTISONE | 1 | 0 |
| HYDROCORTISONE | 1 | 0 |
| METHYLPREDNISOLONE-SODIUM-SUCCINATE | 1 | 0 |
| PREDNISONE | 1 | 0 |
| Cough and Cold Preparations (R05)  | ACETYLCYSTEINE | 0 | 1 |
| CODEINE | 0 | 1 |
| Diuretics (C03) | AMILORIDE | 1 | 0 |
| CHLORTHALIDONE | 1 | 0 |
| EPLERENONE | 1 | 0 |
| FUROSEMIDE | 1 | 0 |
| HYDROCHLOROTHIAZIDE | 1 | 0 |
| INDAPAMIDE | 1 | 0 |
| METOLAZONE | 1 | 0 |
| SPIRONOLACTONE | 1 | 0 |
| TRIAMTERENE | 1 | 0 |
| Drugs for Acid Related Disorders (A02) | DEXLANSOPRAZOLE | 0 | 1 |
| ESOMEPRAZOLE | 0 | 1 |
| LANSOPRAZOLE | 0 | 1 |
| OMEPRAZOLE | 0 | 1 |
| PANTOPRAZOLE | 0 | 1 |
| RABEPRAZOLE | 0 | 1 |
| SUCRALFATE | 0 | 1 |
| Drugs for Functional Gastrointestinal Disorders (A03) | DOMPERIDONE | 1 | 0 |
| METOCLOPRAMIDE | 1 | 0 |
| Drugs for Obstructive Airway Diseases (R03) | BECLOMETHASONE | 1 | 0 |
| BUDESONIDE | 1 | 0 |
| CICLESONIDE | 1 | 0 |
| FLUTICASONE | 1 | 0 |
| FORMOTEROL | 0 | 1 |
| GLYCOPYRRONIUM-BROMIDE | 1 | 0 |
| INDACATEROL | 0 | 1 |
| IPRATROPIUM | 1 | 0 |
| MOMETASONE-FUROATE-INH | 1 | 0 |
| MONTELUKAST | 1 | 0 |
| OLODATEROL | 1 | 0 |
| SALBUTAMOL | 0 | 1 |
| SALMETEROL | 1 | 0 |
| TERBUTALINE | 0 | 1 |
| TIOTROPIUM | 1 | 0 |
| UMECLIDINIUM | 1 | 0 |
| VILANTEROL | 1 | 0 |
| ALENDRONATE | 1 | 0 |
| DENOSUMAB | 1 | 0 |
| PAMIDRONATE-DISODIUM | 1 | 0 |
| RISEDRONATE | 1 | 0 |
| ZOLEDRONATE | 1 | 0 |
| Drugs Used in Diabetes (A10) | ACARBOSE | 1 | 0 |
| ALOGLIPTIN | 1 | 0 |
| CANAGLIFLOZIN | 1 | 0 |
| DAPAGLIFLOZIN | 1 | 0 |
| GLICLAZIDE | 1 | 0 |
| GLIMEPIRIDE | 1 | 0 |
| GLYBURIDE | 1 | 0 |
| INSULIN-ASPART | 1 | 0 |
| INSULIN-ASPART-PROTAMINE | 1 | 0 |
| INSULIN-DETEMIR | 1 | 0 |
| INSULIN-GLARGINE | 1 | 0 |
| INSULIN-GLULISINE | 1 | 0 |
| INSULIN-HUMAN | 1 | 0 |
| INSULIN-HUMAN-NPH | 1 | 0 |
| INSULIN-LISPRO | 1 | 0 |
| LINAGLIPTIN | 1 | 0 |
| LIRAGLUTIDE | 1 | 0 |
| METFORMIN | 1 | 0 |
| PIOGLITAZONE | 1 | 0 |
| REPAGLINIDE | 1 | 0 |
| SAXAGLIPTIN | 1 | 0 |
| SITAGLIPTIN | 1 | 0 |
| Endocrine Therapy (L02) | ABIRATERONE | 1 | 0 |
| ANASTROZOLE | 1 | 0 |
| BICALUTAMIDE | 1 | 0 |
| ENZALUTAMIDE | 1 | 0 |
| EXEMESTANE | 1 | 0 |
| GOSERELIN | 1 | 0 |
| LETROZOLE | 1 | 0 |
| LEUPROLIDE | 1 | 0 |
| Immunostimulants (L03) | FILGRASTIM | 1 | 0 |
| INTERFERON-ALFA-2B | 1 | 0 |
| ADALIMUMAB | 1 | 0 |
| AZATHIOPRINE | 1 | 0 |
| CYCLOSPORINE | 1 | 0 |
| ETANERCEPT | 1 | 0 |
| EVEROLIMUS | 1 | 0 |
| GOLIMUMAB | 1 | 0 |
| INFLIXIMAB | 1 | 0 |
| LENALIDOMIDE | 1 | 0 |
| MYCOPHENOLATE MOFETIL | 1 | 0 |
| MYCOPHENOLATE-NA | 1 | 0 |
| SIROLIMUS | 1 | 0 |
| TACROLIMUS | 1 | 0 |
| TOCILIZUMAB | 1 | 0 |
| Lipid Modifying Agent (C10) | AMLODIPINE | 1 | 0 |
| ATORVASTATIN | 1 | 0 |
| CHOLESTYRAMINE | 1 | 0 |
| COLESEVELAM | 1 | 0 |
| EVOLOCUMAB | 1 | 0 |
| EZETIMIBE | 1 | 0 |
| FENOFIBRATE | 1 | 0 |
| FLUVASTATIN | 1 | 0 |
| LOVASTATIN | 1 | 0 |
| PRAVASTATIN | 1 | 0 |
| ROSUVASTATIN | 1 | 0 |
| SIMVASTATIN | 1 | 0 |
| Muscle Relaxants (M03) | BACLOFEN | 0 | 1 |
| CYCLOBENZAPRINE | 0 | 1 |
| TIZANIDINE | 0 | 1 |
| Nasal Preparations (R01) | BUDESONIDE | 0 | 1 |
| FLUTICASONE | 0 | 1 |
| Ophthalmologicals (S01) | RANIBIZUMAB | 1 | 0 |
| Other Gynecologicals (G02) | CABERGOLINE | 1 | 0 |
| LEVONORGESTREL | 1 | 0 |
| Other Nervous System Drugs (N07) | BETAHISTINE | 0 | 1 |
| DIMETHYL-FUMARATE | 0 | 1 |
| METHADONE | 0 | 1 |
| PILOCARPINE | 0 | 1 |
| PYRIDOSTIGMINE | 0 | 1 |
| RILUZOLE | 0 | 1 |
| VARENICLINE | 0 | 1 |
| Pituitary and Hypothalamic Hormones and Analogues (H01) | DESMOPRESSIN | 1 | 0 |
| OCTREOTIDE | 1 | 0 |
| Psychoanaleptics (N06) | AMITRIPTYLINE | 1 | 0 |
| AMPHETAMINE | 1 | 0 |
| BUPROPION | 1 | 0 |
| CITALOPRAM | 1 | 0 |
| CLOMIPRAMINE | 1 | 0 |
| DEXAMPHETAMINE | 1 | 0 |
| DONEPEZIL | 1 | 0 |
| DOXEPIN | 1 | 0 |
| DULOXETINE | 1 | 0 |
| GALANTAMINE | 1 | 0 |
| IMIPRAMINE | 1 | 0 |
| LISDEXAMFETAMINE | 1 | 0 |
| MEMANTINE | 1 | 0 |
| METHYLPHENIDATE | 1 | 0 |
| MIRTAZAPINE | 1 | 0 |
| MODAFINIL | 1 | 0 |
| NORTRIPTYLINE | 1 | 0 |
| PAROXETINE | 1 | 0 |
| RIVASTIGMINE-TRANSDERMAL | 1 | 0 |
| SERTRALINE | 1 | 0 |
| TRAZODONE | 1 | 0 |
| TRYPTOPHAN | 1 | 0 |
| VENLAFAXINE | 1 | 0 |
| Psycholeptics (N05) | ALPRAZOLAM | 0 | 1 |
| ARIPIPRAZOLE | 1 | 0 |
| BROMAZEPAM | 0 | 1 |
| CHLORPROMAZINE | 1 | 0 |
| CLOBAZAM | 0 | 1 |
| DIAZEPAM | 0 | 1 |
| HALOPERIDOL | 1 | 0 |
| HYDROXYZINE | 0 | 1 |
| LITHIUM | 1 | 0 |
| LORAZEPAM | 0 | 1 |
| METHOTRIMEPRAZINE | 1 | 0 |
| NITRAZEPAM | 0 | 1 |
| OLANZAPINE | 1 | 0 |
| OXAZEPAM | 0 | 1 |
| PALIPERIDONE | 1 | 0 |
| PROCHLORPERAZINE | 1 | 0 |
| QUETIAPINE | 1 | 0 |
| RISPERIDONE | 1 | 0 |
| TEMAZEPAM | 0 | 1 |
| TRIFLUOPERAZINE | 1 | 0 |
| ZIPRASIDONE | 1 | 0 |
| ZUCLOPENTHIXOL | 1 | 0 |
| Sex Hormones and Modulators of the Genital System (G03) | DESOGESTREL | 1 | 0 |
| ESTRADIOL | 1 | 0 |
| ETHINYL-ESTRADIOL | 1 | 0 |
| MEDROXYPROGESTERONE | 1 | 0 |
| NORETHINDRONE | 1 | 0 |
| PROGESTERONE | 1 | 0 |
| TESTOSTERONE | 1 | 0 |
| TESTOSTERONE-ENANTHATE | 1 | 0 |
| Thyroid Therapy (H03) | LEVOTHYROXINE | 1 | 0 |
| METHIMAZOLE | 1 | 0 |
| PROPYLTHIOURACIL | 1 | 0 |
| Urologicals (G04) | ALFUZOSIN | 1 | 0 |
| DUTASTERIDE | 1 | 0 |
| FESOTERODINE | 1 | 0 |
| FINASTERIDE | 1 | 0 |
| MIRABEGRON | 1 | 0 |
| OXYBUTYNIN | 1 | 0 |
| SILDENAFIL | 1 | 0 |
| SILODOSIN | 1 | 0 |
| SOLIFENACIN | 1 | 0 |
| TADALAFIL | 1 | 0 |
| TAMSULOSIN | 1 | 0 |
| TERAZOSIN | 1 | 0 |
| TOLTERODINE | 1 | 0 |
| Vasoprotectives (C05) | HEPARIN | 1 | 0 |
| Vitamins (A11) | ALFACALCIDOL | 1 | 0 |
| CALCITRIOL | 1 | 0 |