Appendix 1: Supplementary material

Supplementary Table S1. EMR systems and provinces included the national CPCSSN database
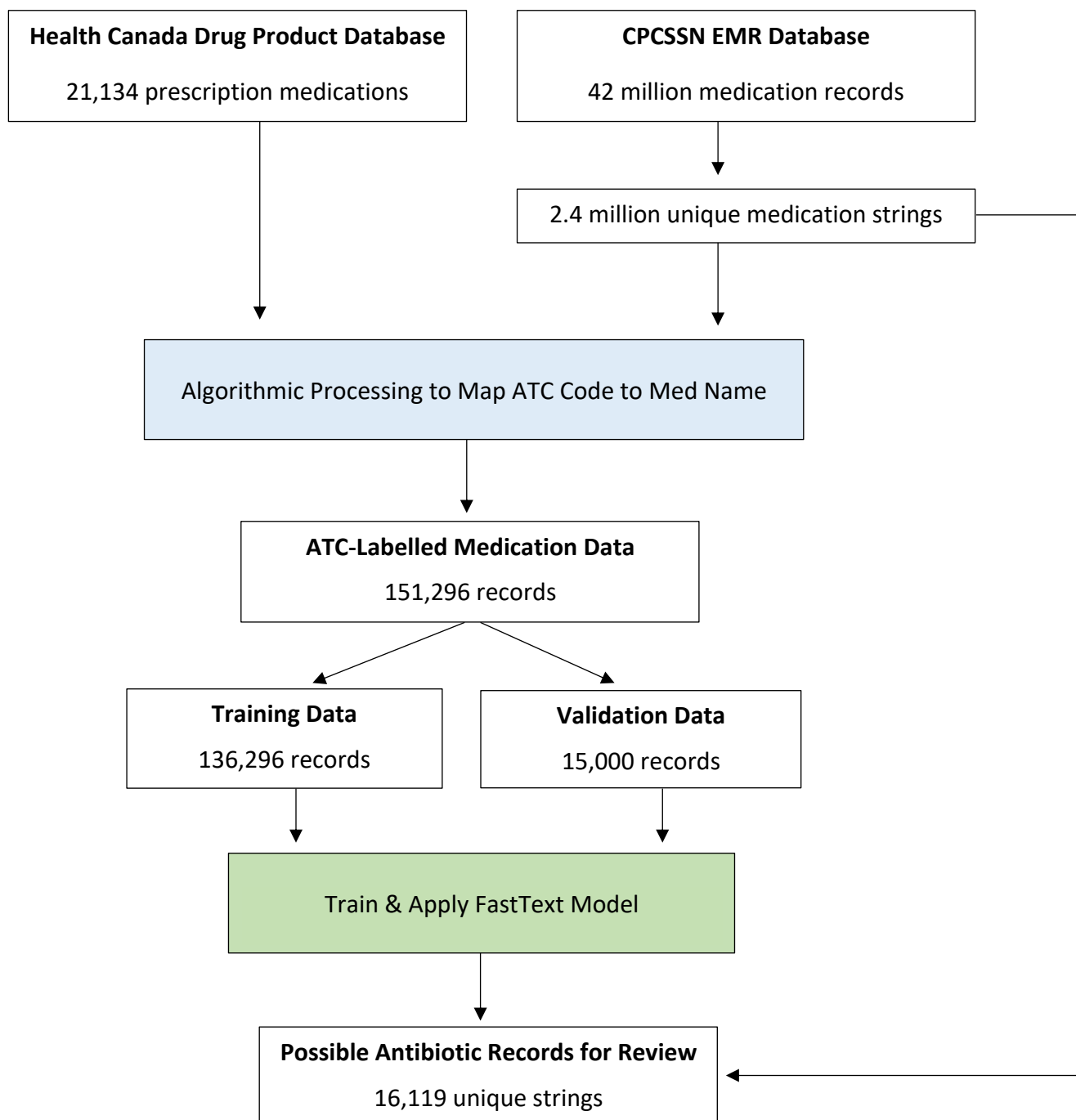
De-identified data are extracted from the following EMR systems across Canada:
- Accuro
- Healthquest
- InputHealth
- Intrahealth
- Med Access
- Medesync
- MYLE
- OSCAR
- P&P
- Practice Solutions
- Purkinje
- Wolf

Number of practice sites by region/province:
- British Columbia: 20
- Alberta: 54
- Manitoba: 48
- Ontario: 114
- Quebec: 11
- Atlantic provinces: 7

Supplementary Figure S1. Data Flow Diagram

Supplementary Table S2. List of antibiotic-specific ATC codes.

ATC Code	Medication Name
A01AB22	Doxycycline
A01AB23	Minocycline
A07AA02	Nystatin
A07AA06	Paromomycin
A07AA09	Vancomycin
A07AA11	Rifaximin
A07AA12	Fidaxomicin
D06AA02	Chlortetracycline
D06AA04	Tetracycline
D06AX01	Fusidic Acid
D06AX04	Neomycin
D06AX05	Bacitracin
D06AX07	Gentamicin
D06AX09	Mupirocin
D06AX13	Retapamulin
D06AX14	Ozenoxacin
D06AX30	Combinations of Antibiotics
D06AX55	"Bacitracin, Combinations"
D06BA01	Silver Sulfadiazine
D06BA03	Mafenide
D06BA51	"Silver Sulfadiazine, Combinations
D06BX01	Metronidazole
D07CA01	Hydrocortisone and Antibiotics
D07CA02	Methylprednisolone and Antibiotics
D07CB01	Triamcinolone and Antibiotics
D07CB05	Flumetasone and Antibiotics
D07CC01	Betamethasone and Antibiotics
D07CC05	Fluocinonide and Antibiotics
D10AF01	Clindamycin
D10AF51	"Clindamycin, Combinations"
D10AF52	"Erythromycin, Combinations"
D10AF53	"Chloramphenicol, Combinations"
G01AA01	Nystatin
G01AA10	Clindamycin
G01AA51	"Nystatin, Combinations"
G01AF01	Metronidazole
J01AA01	Demeclocycline
J01AA02	Doxycycline
J01AA07	Tetracycline
J01AA08	Minocycline
J01AA09	Rolitetracycline
J01AA12	Tigecycline
J01BA01	Chloramphenicol
J01CA01	Ampicillin
J01CA02	Pivampicillin
J01CA04	Amoxicillin
J01CA06	Bacampicillin
J01CA08	Pivmecillinam
J01CA12	Piperacillin
J01CA13	Ticarcillin
J01CA51	"Ampicillin, Combinations"
J01CE01	Benzylpenicillin
J01CE02	Phenoxymethylpenicillin

J01CE08	Benzathine Benzylpenicillin
J01CE09	Procaine Penicillin
J01CE10	Benzathine Phenoxymethylpenicillin
J01CE30	Combinations
J01CF	Beta-Lactamase Resistant Penicillins
J01CF02	Cloxacillin
J01CF05	Flucloxacillin
J01CR02	Amoxicillin and Beta-Lactamase Inhibitor
J01CR03	Ticarcillin and Beta-Lactamase Inhibitor
J01CR05	Piperacillin and Beta-Lactamase Inhibitor
J01DB01	Cefalexin
J01DB03	Cefalotin
J01DB04	Cefazolin
J01DB05	Cefadroxil
J01DC01	Cefoxitin
J01DC02	Cefuroxime
J01DC03	Cefamandole
J01DC04	Cefaclor
J01DC05	Cefotetan
J01DC10	Cefprozil
J01DD01	Cefotaxime
J01DD02	Ceftazidime
J01DD04	Ceftriaxone
J01DD07	Ceftizoxime
J01DD08	Cefixime
J01DD13	Cefpodoxime
J01DE01	Cefepime
J01DF01	Aztreonam
J01DH02	Meropenem
J01DH03	Ertapenem
J01DH04	Doripenem
J01DH51	Imipenem and Cilastatin
J01DI01	Ceftobiprole Medocaril
J01DI54	Ceftolozane and Beta-Lactamase Inhibitor
J01EA01	Trimethoprim
J01EB02	Sulfamethizole
J01EB04	Sulfapyridine
J01EB05	Sulfafurazole
J01EC01	Sulfamethoxazole
J01EC02	Sulfadiazine
J01EE01	Sulfamethoxazole and Trimethoprim
J01EE02	Sulfadiazine and Trimethoprim
J01FA01	Erythromycin
J01FA02	Spiramycin
J01FA09	Clarithromycin
J01FA10	Azithromycin
J01FA15	Telithromycin
J01FF01	Clindamycin
J01FF02	Lincomycin
J01FG02	Quinopristin and Dalfopristin
J01GA01	Streptomycin
J01GB01	Tobramycin
J01GB03	Gentamicin
J01GB05	Neomycin
J01GB06	Amikacin
J01GB07	Netilmicin

J01MA01	Ofloxacin
J01MA02	Ciprofloxacin
J01MA06	Norfloxacin
J01MA11	Grepafloxacin
J01MA12	Levofloxacin
J01MA13	Trovafloxacin
J01MA14	Moxifloxacin
J01MA15	Gemifloxacin
J01MA16	Gatifloxacin
J01MB02	Nalidixic Acid
J01RA02	"Sulfonamides, Combinations With Other Antibacterials (Excl. Trimethoprim)"
J01XA01	Vancomycin
J01XA03	Telavancin
J01XA04	Dalbavancin
J01XB01	Colistin
J01XB02	Polymyxin B
J01XC01	Fusidic Acid
J01XD01	Metronidazole
J01XE01	Nitrofurantoin
J01XX01	Fosfomycin
J01XX04	Spectinomycin
J01XX05	Methenamine
J01XX08	Linezolid
J01XX09	Daptomycin
J01XX10	Bacitracin
J01XX11	Tedizolid
J01XX55	"Methenamine, Combinations"
J02AA01	Amphotericin B
J04	Antimycobacterials
J04AA02	Sodium Aminosalicylate
J04AB01	Cycloserine
J04AB02	Rifampicin
J04AB04	Rifabutin
J04AB30	Capreomycin
J04AC01	Isoniazid
J04AC51	"Isoniazid, Combinations"
J04AK01	Pyrazinamide
J04AK02	Ethambutol
J04AM05	"Rifampicin, Pyrazinamide and Isoniazid"
J04BA01	Clofazimine
J04BA02	Dapsone
P01AB01	Metronidazole
S01AA	Antibiotics
S01AA01	Chloramphenicol
S01AA02	Chlortetracycline
S01AA07	Framycetin
S01AA09	Tetracycline
S01AA11	Gentamicin
S01AA12	Tobramycin
S01AA13	Fusidic Acid
S01AA17	Erythromycin
S01AA26	Azithromycin
S01AA30	Combinations of Different Antibiotics
S01AB04	Sulfacetamide
S01AB54	"Sulfacetamide, Combinations"
S01AE01	Ofloxacin

S01AE03	Ciprofloxacin
S01AE06	Gatifloxacin
S01AE07	Moxifloxacin
S01AE08	Besifloxacin
S01CA01	Dexamethasone and Antiinfectives
S01CA02	Prednisolone and Antiinfectives
S01CA03	Hydrocortisone and Antiinfectives
S01CA05	Betamethasone and Antiinfectives
S01CA07	Fluorometholone and Antiinfectives
S02AA01	Chloramphenicol
S02AA14	Gentamicin
S02AA30	"Antiinfectives, Combinations"
S02CA02	Flumetasone and Antiinfectives
S02CA03	Hydrocortisone and Antiinfectives
S02CA05	Fluocinolone Acetonide and Antiinfectives
S02CA06	Dexamethasone and Antiinfectives
S03AA07	Ciprofloxacin
S03AA30	"Antiinfectives, Combinations"

ATC=Anatomical Therapeutic Chemical (classification system)