APPENDIX 1 Literature search strategy

The search was structured to include terms relating to community, retail, primary care, outpatient and ambulatory pharmacists and independent or supplementary prescribing of minor/common ailments or antimicrobials. There were no limits on study design, intervention type, or outcomes reported.

**MEDLINE**

Ovid MEDLINE(R) ALL <1946 to June 19, 2019>

| #   | Searches                                                                 | Results |
|-----|--------------------------------------------------------------------------|---------|
| 1   | (pharmacist* adj2 prescri*).ab,ti,kw.                                   | 626     |
| 2   | (renew* adj3 prescri* adj3 pharmacist*).ab,ti,kw.                       | 5       |
| 3   | Pharmacists/ or pharmacist*.ab,ti,kw,kf.                                | 34003   |
| 4   | Drug Prescriptions/ and prescribe*.ab,ti,kw,kf.                         | 7092    |
| 5   | ((adapt* or additional or autonomous or authority or collaborative or emergency or independent or initiation or initial-access or authority or non-medical or supplemental or supplementary) adj3 prescri*).ab,ti,kw. | 1445    |
| 6   | ((antibiotic* or anti-biotic* or antiinfective* or anti-infective* or antimicrobial* or anti-microbial* or dispens*) adj3 ("not need** or without) adj3 prescription*).ab,ti,kw. | 272     |
| 7   | ("prescribing by protocol" or "protocol-based prescribing" or "patient group directions" or "prescribing by formulary" or "formulary-based prescribing" or "formulary-guided prescribing").ab,ti,kw. | 49      |
| 8   | (collaborative adj4 prescri*).ab,ti,kw.                                 | 51      |
| 9   | ((prescribing or prescribe or prescriptive) adj2 (authori* or directive* or power* or privilege* or right*)).ab,ti,kw. | 821     |
| 10  | or/4-9                                                                  | 9044    |
| 11  | 3 and 10                                                                | 1058    |
| 12  | Community Pharmacy Services/ or (Drug Prescriptions/ and Professional Role/) | 4447    |
| 13  | Anti-infective Agents/ or exp Anti-infective Agents, Local/ or exp Anti-infective Agents, Urinary/ or (antibiotic* or anti-biotic* or anti-infective* or anti-infective* or anti-microbial* or anti-microbial*).ti,kw,kf. | 450483  |
| 14  | 12 and 13                                                               | 66      |
| 15  | 1 or 2 or 11 or 14                                                     | 1497    |
### EMBASE

**EMBASE <1974 to 2019 June 19>**

| #  | Searches                                                                 | Results |
|----|--------------------------------------------------------------------------|---------|
| 1  | (pharmacist* adj2 prescri*).ab,ti,kw.                                   | 1284    |
| 2  | (renew* adj3 prescri* adj3 pharmacist*).ab,ti,kw.                       | 7       |
| 3  | *pharmacist/ or community pharmacist/ or pharmacist*.ti,kw. or pharmacist*.ab. /freq=2 | 48707   |
| 4  | prescription/ and prescri*.ab,ti,kw. and (drug? or antibiotic* or anti-biotic* or antiinfective* or anti-infective* or antimicrobial* or anti-microbial*).ti,kw. | 17807   |
| 5  | prescription/ and (antiinfective agent/ or antibiotic agent/ or urinary tract antiinfective agent/) | 15556   |
| 6  | ((adapt* or additional or autonomous or authority or collaborative or emergency or independent or initiation or initial-access or authority or non-medical or supplementary) adj3 prescri*).ab,ti,kw. | 2521    |
| 7  | ((antibiotic* or anti-biotic* or antiinfective* or anti-infective* or antimicrobial* or anti-microbial* or antifungal* or anti-fungal* or access* or dispens*) adj3 ("not need"* or without) adj3 prescription*).ab,ti,kw. | 453     |
| 8  | ("prescribing by protocol" or "protocol-based prescribing" or "patient group directions" or "prescribing by formulary" or "formulary-based prescribing" or "formulary-guided prescribing").ab,ti,kw. | 83      |
| 9  | (collaborative adj5 prescri*).ab,ti,kw.                                 | 108     |
| 10 | ((prescribing or prescribe or prescriptive) adj2 (authori* or directive* or power* or privilege* or right*)).ab,ti,kw. | 1061    |
| 11 | or/4-9                                                                  | 30318   |
| 12 | 3 and 11                                                                | 2097    |
| 13 | community pharmacist/                                                    | 459     |
| 14 | antiinfective agent/ or antibiotic agent/ or urinary tract antiinfective agent/ | 439510  |
| 15 | (antibiotic* or anti-biotic* or antiinfective* or anti-infective* or antimicrobial* or anti-microbial*).ti,kw. | 211422  |
| 16 | 14 or 15                                                                | 547588  |
| 17 | 13 and 16                                                               | 31      |
| 18 | 12 or 17                                                                | 2108    |

### IPAB

**International Pharmaceutical Abstracts <1970 to May 2019>**

| #  | Searches                                                                 | Results |
|----|--------------------------------------------------------------------------|---------|
| 1  | ("Prescribing (pharmacists)" or "Pharmacists(prescribing)").sh. or (pharmacist* adj2 prescri*).ti. | 450     |
| 2  | (renew* adj3 prescri* adj3 pharmacist*).ab,ti.                           | 7       |
| 3  | pharmacists.hw. or pharmacist*.ti,ab.                                    | 52790   |
| 4  | (drug* or antibiotic*).hw. and prescribe.ab,ti.                          | 528     |
| 5  | ((adapt* or additional or autonomous or authority or collaborative or emergency or independent or initiation or initial-access or authority or non-medical or supplemental or supplementary) adj3 prescri*).ab,ti. | 325     |
| 6  | ("prescribing by protocol" or "protocol-based prescribing" or "patient group directions" or "prescribing by formulary" or "formulary-based prescribing" or "formulary-guided prescribing").ab,ti. | 9  |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 7  | (collaborative adj4 prescrib*).ab,ti.                                                                                                                                                                                                                             | 23 |
| 8  | ((antibiotic* or anti-biotic* or antiinfective* or anti-infective* or antimicrobial* or anti-microbial* or dispens*) adj3 ("not need*" or without) adj3 prescription*).ab,ti.                                                                                                      | 51 |
| 9  | ((prescribing or prescribe or prescriptive) adj2 (authori* or directive* or power* or privilege* or right*)).ab,ti.                                                                                                                                                  | 304|
| 10 | or/4-9                                                                                                                                                                                                                                                                                                                      | 1078|
| 11 | 3 and 10                                                                                                                                                                                                                                                         | 510 |
| 12 | 1 or 2 or 11                                                                                                                                                                                                                                                    | 776 |
| 13 | antibiotic*.hw.                                                                                                                                                                                                                                                  | 25515|
| 14 | (antibiotic* or anti-biotic* or antiinfective* or anti-infective* or antimicrobial* or anti-microbial*).ti.                                                                                                                                                           | 10829|
| 15 | 13 or 14                                                                                                                                                                                                                                                         | 29660|
| 16 | "Pharmacists (community)".sh. or ((community or independent or retail) and pharmacist*).ti. or ((community or independent or retail) adj5 pharmacist*).ab.                                                                                                                  | 8705|
| 17 | 15 and 16                                                                                                                                                                                                                                                        | 147 |
| 18 | 12 or 17                                                                                                                                                                                                                                                         | 904 |

Wu JHC, Khalid F, Langford BJ, et al. Community pharmacist prescribing of antimicrobials: a systematic review from an antimicrobial stewardship perspective. *Can Pharm J (Ott)* 2021;154. DOI: 10.1177/1715163521999417.