

Supplementary material:

Appendix 1: Scoping review methodology

Arksey & O'Malley	Levac et al.
Stage 1: Identifying the Research Question	Linking the purpose and research question
Stage 2: Identifying Relevant Studies	Balancing feasibility with breadth and comprehensiveness of the scoping process
Stage 3: Study Selection	Iterative approach (more than 1 reviewer) in selecting studies and extracting data
Stage 4: Charting the Data	Data charting form (numerical summary and qualitative thematic analysis)
Stage 5: Collating, Summarizing and Reporting the Results	Three parts: analysis, reporting and implications for future research and practice
Stage 6: Consultation Exercise as an option	Consultation as a necessary part of scoping review

Framework for scoping reviews first described by Arksey & O'Malley and later developed by Levac et al.^{30,31}

Appendix 2: Search strategy

Preliminary search strategy of one database (Ovid MEDLINE)

Databases: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations,
Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Strategy:

- 1 Electronic Health Records/ (15112)
- 2 "Referral and Consultation"/mt,og [Methods, Organization & Administration] (3052)
- 3 Remote Consultation/ (4862)
- 4 (asynchronous adj2 consult*).tw,kf. (27)
- 5 Champlain BASE.tw,kf. (18)
- 6 ((consult* or refer*) and (tele medicine* or telemedicine*)).tw,kf. (2442)
- 7 (e-consult* or econsult*).tw,kf. (165)
- 8 (e-diagnos* or electronic diagnos*).tw,kf. (154)
- 9 (e-health* or ehealth*).tw,kf. (4476)
- 10 (e-refer* or erefer*).tw,kf. (134)
- 11 electronic consult*.tw,kf. (130)
- 12 electronic refer*.tw,kf. (265)
- 13 remote consult*.tw,kf. (329)
- 14 (tele consult* or teleconsult*).tw,kf. (1223)
- 15 (tele refer* or telerefer*).tw,kf. (8)
- 16 virtual consult*.tw,kf. (67)
- 17 or/1-16 [Combined MeSH & text words for electronic consultation] (29546)
- 18 General Practitioners/ (6432)
- 19 exp Nurse Practitioners/ (17046)
- 20 Primary Health Care/ (71215)
- 21 Physicians, Family/ (16550)
- 22 Physicians, Primary Care/ (2690)
- 23 ((doctor* or physician* or practitioner*) adj2 family).tw,kf. (22033)
- 24 (general practi* or GP*).tw,kf. (230060)
- 25 (general adj2 physician*).tw,kf. (3507)
- 26 generalist*.tw,kf. (8479)
- 27 nurse practitioner*.tw,kf. (10529)
- 28 PCPs.tw,kf. (3259)
- 29 (primary adj (health* or care*)).tw,kf. (132492)
- 30 referring physician*.tw,kf. (2728)
- 31 or/18-30 [Combined MeSH & text words for primary care] (413625)
- 32 Allergists/ (25)
- 33 exp "Allergy and Immunology"/ (17236)
- 34 Anesthesiologists/ (275)
- 35 Anesthesiology/ (30957)
- 36 Bariatric Medicine/ (66)
- 37 Cardiologists/ (159)
- 38 Dermatologists/ (154)
- 39 Dermatology/ (17255)
- 40 Endocrinologists/ (42)
- 41 Gastroenterologists/ (131)
- 42 Geriatricians/ (21)
- 43 Geriatrics/ (30204)
- 44 exp Internal Medicine/ (95533)
- 45 Nephrologists/ (64)
- 46 Neurologists/ (135)
- 47 exp Neurology/ (18343)
- 48 exp Oncologists/ (245)
- 49 Ophthalmologists/ (135)
- 50 Osteopathic Physicians/ (277)
- 51 Osteopathic Medicine/ (2977)

52 Otolaryngologists/ (37)
53 Palliative Medicine/ (243)
54 exp Pediatricians/ (350)
55 exp Pediatrics/ (56655)
56 Physiatrists/ (18)
57 exp "Physical and Rehabilitation Medicine"/ (35342)
58 Pulmonologists/ (38)
59 Radiologists/ (373)
60 exp Radiology/ (35789)
61 exp Reproductive Medicine/ (22520)
62 Rheumatologists/ (80)
63 Secondary Care/ (423)
64 Specialization/ (24246)
65 exp Specialties, Surgical/ (199324)
66 exp Surgeons/ (5006)
67 Urologists/ (73)
68 allergist*.tw,kf. (1758)
69 an?esthesiolog*.tw,kf. (32416)
70 cardiolog*.tw,kf. (49986)
71 cardiac care*.tw,kf. (2070)
72 ((care* or physician*) adj1 specialty).tw,kf. (3527)
73 (clinic* adj2 (heart* or kidney*)).tw,kf. (5213)
74 dermatolog*.tw,kf. (54202)
75 endocrinolog*.tw,kf. (24129)
76 (gastro-enterolog* or gastroenterolog*).tw,kf. (22851)
77 (geriatric medicine or geriatrician* or geriatrics).tw,kf. (25700)
78 gyn?ecolog*.tw,kf. (95437)
79 h?ematolog*.tw,kf. (127585)
80 immunolog*.tw,kf. (228912)
81 kidney care*.tw,kf. (112)
82 nephrolog*.tw,kf. (16869)
83 neurolog*.tw,kf. (311448)
84 (neuro-surg* or neurosurg*).tw,kf. (48268)
85 obstetric*.tw,kf. (94957)
86 oncolog*.tw,kf. (134803)
87 ophthalmolog*.tw,kf. (51922)
88 ORL.tw,kf. (1917)
89 osteopath*.tw,kf. (5291)
90 otolaryngolog*.tw,kf. (15778)
91 otorhinolaryngolog*.tw,kf. (10274)
92 p?ediatric*.tw,kf. (327807)
93 physiat*.tw,kf. (1512)
94 pulmonolog*.tw,kf. (3727)
95 radiolog*.tw,kf. (243770)
96 rheumatolog*.tw,kf. (29060)
97 surgeon*.tw,kf. (183752)
98 specialist*.tw,kf. (87749)
99 (sub-special* or subspecial*).tw,kf. (11246)
100 urolog*.tw,kf. (54141)
101 vascular care*.tw,kf. (115)
102 or/32-101 [Combined MeSH & text words for specialists] (2288300)
103 and/17,31,102 [Combined concepts for econsults, primary care & specialists] (1478)
104 limit 103 to yr="1995-Current" (1453)
105 limit 104 to english (1371)
106 remove duplicates from 105 (1197)

Appendix 3: Data extraction form

Ref ID	Study Characteristics					Study Design		Use of Statistical analysis or qualitative analysis	Description of eConsult	Purpose/objective	Comments
	First Author	Year	Country	Journal name	Funding Source	Theoretical Vs. Qualitative Vs. Observational Vs. RCT Vs. Quasi-experimental					

Quadruple Aim Framework									
Patient Care Experience		Care Team Experience				Population Health		Lower Costs	
Patient level		Primary care level		Secondary care level		Patient outcomes / Health care system		Cost related	
barriers	facilitators	barriers	facilitators	barriers	facilitators	barriers	facilitators	barriers	facilitators

Appendix 4: Flow chart for study search and decision process

