**Table S1. Summary of included studies** 

| Study ID       | Aim  | Methods   | Setting                                 | Sample   | How was continuity defined, measured and explored?                                 | Funding  |
|----------------|--|---|---|--|--|--|
| Ball 2018      | Explore views of patients and carers utilising a 'telephone first' approach  | Qualitative<br>interview study<br>(unclear when<br>data was<br>collected)                         | England (12<br>General Practices)       | 43 patients (30 women, 9 aged > 75 years,  | asked about the ease of accessing their preferred GP (i.e. relational continuity). | NIHR, with some paying for data to be extracted from practice records by a company providing management support for 'GP Access'. GP Access had no input into the data analysis or interpretation. Sponsored by Cambridgeshire and Peterborough Clinical Commissioning Group (CCG). |
| De Guzman 2022 | Explore GPs'<br>perceptions of<br>telehealth in<br>primary care  | Qualitative interview study (data collected during the pandemic but exact timeline not specified) | Australia (GPs nationwide)              | Purposively-selected<br>sample of 14 GPs<br>with different levels<br>of telehealth<br>experience | Participants discussed the ways  | Australian Government<br>Research Training<br>Program (RTP)<br>Scholarship   |
| Glock 2021     | Explore GPs' general experiences of telemedicine, and opinions on the use of digital contact methods, chronic disease monitoring with digital tools, and | Web-based<br>survey (data<br>collected May-<br>August 2019)                                       | Sweden (160<br>primary care<br>centres) | 100 primary care physicians.   |  | ALF funding from<br>Region Skåne awarded<br>to Susanna Calling.  |

|             | artificial<br>intelligence.   |   |  |   |   |   |
|-------------|---|---|--|---|---|---|
| Hansen 2021 | Explore views of oncologists and specialist nurses taking part in 'The Partnership Study' - an RCT of 79 tripartite video consultations between a GP, oncologist, and patient | Qualitative interview study (conducted in Feb 2020)   | Denmark (recruited from Lillebaelt University Hospital, general practices in the region of Southern Denmark) | Five oncologists and four nurse specialists   |   | The Partnership Project was financially supported by the Danish Cancer Society; The Region of Southern Denmark Research Foundation; the Region of Southern Denmark PhD Foundation; Lillebaelt Hospital, University Hospital of Southern Denmark; University of Southern Denmark; The Foundation for General Practice and the ML Jørgensen and Gunnar Hansen Foundation. |
| Imlach 2020 | Explore views of patients about contact with general practice during the first Covid-19 lockdown (March-May 2020)   | Mixed-method<br>approach: online<br>survey and in-<br>depth interviews<br>(data collected<br>April-May<br>2020) | New Zealand<br>(Aotearoa)  | Survey data (n = 1010) and interview data (n = 38) from primary care adult patients (>18) recruited through social media and email lists. | Continuity was not explicitly defined. The impact of having a pre-existing doctor-patient relationship (ie. relational continuity) on telemedicine consultations was explored using quotes from participants. | Health Research<br>Council of New<br>Zealand  |

| Javanparast 2021 | Explore views of high-risk patients using telehealth services in general practice during COVID-19 (May-June 2020)   | Qualitative<br>interview study<br>(data collected<br>May-June 2020)   | Australia<br>(Adelaide)                     | 30 patients from nine general practices in identified by their regular doctor as being at high risk of poor health outcomes.  | defined or asked about. The   | Discipline of General<br>Practice at Flinders<br>University |
|------------------|---|---|---|---|---|---|
| Johnsen 2021     | Explore GPs views on the suitability of video consultations conducted within primary care during a Covid-19 lockdown (April - May 2020) and the relationship this has with continuity | Nationwide,<br>prospective<br>cross-sectional<br>survey of<br>Norwegian GPs<br>where they were<br>asked to<br>evaluate upto 10<br>video<br>consultations<br>(data collected<br>April-May<br>2020) | Norway (national<br>Primary Care<br>sector) | of whom 1000<br>supplied video<br>consultations for<br>analysis (total of   | This study focused on episodic continuity (defined as following up from a previous problem) and relational continuity (defined as the GP having previous knowledge of the patient). The association between relational and episodic continuity with the GP's perceived suitability of the video consultation, in comparison with an envisaged face-to-face consultation, was explored quantitatively. | Information not provided                                    |
| San Juan 2021    | Explore the views of patients receiving telemental health care from any service or professional, including General Practitioners.   | A collaborative<br>framework<br>analysis of data<br>from semi-<br>structured<br>interviews (data<br>collected<br>September-<br>October 2020)  | United Kingdom                              | 44 patients with prepandemic mental health issues receiving ongoing telemental health support throughout the pandemic, recruited via community and voluntary sector organisations and networks, and via social media, with support from the Mental Elf blogger. | l   | NIHR Policy Research<br>Programme                           |

| Leung 2021   | QIP to explore the reasons high-frequency users of an online consultation platform (Dr iQ) were presenting in order to assess whether their needs were being appropriately addressed and ways in which usage could be contained. | Two PDSA cycles including semi-structured telephone interviews, discussion among the multidisciplinary team, and regular scheduled telephone or face-to-face appointments with users (data collected July-November 2020) | UK (one busy inner-city General Practice)   | practice identified as high users of an online consultation platform (10 or more                     | defined. The way in which telemedicine may result in a lack of continuity for those with unmet health needs was explored using quotes from the participants. | No specific funding   |
|--------------|--|--|---|--|--|---|
| Norman 2021  | Explore the views of staff working in deprived areas of General Practice during the Covid-19 pandemic about the use of remote consulting approaches, and the impact upon socioeconomically disadvantaged community.              |  | UK (34 Deep End practices from the North East and North Cumbria, which rank amongst the 10% most deprived General Practices in England) | prescribing link   | defined or asked about. The  | NIHR Applied<br>Research Collaboration<br>for the North East and<br>North Cumbria   |
| Quigley 2019 | Evaluation of the independent evaluation of Babylon GP at Hand, a private, digital-first model of General Practice   | Summary of the evaluation findings based on a web-based Patient experience survey, qualitative interviews and  | United Kingdom  | 1452 Babylon GP at<br>Hand (BGPaH)<br>patients (6.29% of<br>total users) compared<br>with a similar, | having access to the same GP at different appointments. Participants discussed how telemedicine may result in a  | NHS Hammersmith<br>and Fulham Clinical<br>Commissioning<br>Group and NHS<br>England |

|               |  | analysis of<br>secondary data<br>(data collected<br>in 2019)   |  | Service (NHS) GP<br>Patient Survey  In-depth interviews<br>with 12 general<br>practitioners, a nurse<br>and a member of<br>operational staff from<br>BGPaH, 32 current<br>patients and 4 ex-<br>patients from BGPaH.  Routine NHSE<br>activity data sets | telemedicine were also discussed by the authors.   |   |
|---------------|--|--|--|--|--|---|
| Tonnies 2021  | Explore the views of health policy experts about the introduction of integrated specialty models whereby collaborative joint consultations are conducted by video between GPs, specialists, and patients | Interviews with health policy experts with knowledge of mental health patients and changes to their care (unclear when data was collected) | Germany  | 15 health policy<br>experts with<br>knowledge of mental<br>health patients and<br>changes to their care  | defined. Barriers to continuity  | German Federal<br>Ministry of Education<br>and Research grant                                 |
| Trabjerg 2021 | Explore the views of patients about an integrated remote consultation model: 'The Partnership Study' - an RCT of 79 tripartite video consultations between a GP,   | Likert-response<br>survey data from<br>cancer patients,<br>their oncologists<br>and GPs (data<br>collected 2016-<br>2019)                  | Denmark (recruited<br>from Lillebaelt<br>University<br>Hospital, general<br>practices in the<br>region of Southern<br>Denmark) | 87 patients allocated to the intervention group between June 2016 and April 2019 and based on 55 joint consultations.  | defined. Continuity was quantitatively evaluated by asking participants if video consultations created a better and more coherent course for | Danish Cancer Society, the Region of Southern Denmark and the University of Southern Denmark. |

|                | oncologist, and patient  |   |                                    |  | quantified but was not directly referred to,  |   |
|----------------|--|---|------------------------------------|--|---|---|
| Verhoevan 2020 | Explore the experiences of GPs working during the Covid-19 pandemic                      | Interview study using a topic list based on the WONCA definition of core competencies in general practice (data collected March 2020) | Belgium (GP practices in Flanders) | 132 GPs who were either the internship supervisors for 3 <sup>rd</sup> year medical students during their family medicine rotation during March 2020 or recruited through social media (38 GPs and 8 GP trainees). |   | No specific funding<br>declared   |
| Wherton 2021   | Evaluate the introduction, spread, and scale-up of Scotland's video consultation service | Multiple sources<br>of qualitative<br>information<br>(data collection<br>mid 2019-<br>throughout<br>2020)                             | Scotland                           |  | defined or asked about. The benefits and barriers telemedicine may have on continuity was qualitatively explored, although continuity was not directly referred to. | UK NIHR Oxford Biomedical Research Centre, Economic and Social Research Council COVID-19 Emergency Fund, and Health Foundation and Wellcome Trust |

## Table S2. GRADE-CERQual Summary of Findings

The GRADE-CERQual consists of four separate assessments, which are combined into an overall score:

- Methodological limitations of included studies
- Coherence of data
- Adequacy of data
- Relevance of data

Here we present the overall summary of this assessment. The methodological limitations of the studies has been systematically assessed using the CASP score, and these findings are presented in table S3, whilst adequacy and relevance are presented in table S4.

| Summary of review finding  | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)              | Coherence  | Adequacy<br>(see<br>supplementary<br>table 4) | Relevance<br>(see<br>supplementary<br>table 4) | CERQual<br>assessment of<br>confidence in<br>the evidence | Explanation of CERQual assessment   |  |  |  |
|--|--|---|--|---|--|---|---|--|--|--|
| Theme 1: Sparsity of studies specifically reporting and measuring continuity   |  |   |  |   |  |   |   |  |  |  |
| Some studies included tacit rather than overt and specific references to continuity (and others by exclusion during screening) | (1-3)                                      | Some concern<br>about analytical<br>rigour(1) and<br>reflexivity(4) | Minor concerns  — clear reference to the inherent concept of continuity in the sense of coherence, even if it was not explicitly stated. | No concerns(1-3)                              | Moderate concerns(1, 2)  No concerns(3)        | Moderate<br>confidence                                    | Only 3 studies<br>directly providing<br>data but few other<br>significant<br>concerns |  |  |  |
| No paper attempted to measure continuity.  | All studies                                | See supplementary table 3   | No concerns – search was not designed to exclusively select qualitative studies  | See supplementary table 4                     | See supplementary table 4                      | High<br>confidence  | All papers<br>contributing data<br>by default with<br>inclusive search<br>strategy    |  |  |  |
| Several studies<br>attempted to<br>distinguish between<br>the concepts behind  | (1, 2, 4, 5)                               | Some concern<br>about analytical<br>rigour(1) and<br>reflexivity(4) | Minor concerns –studies varied in how explicit they were in distinguishing   | No concerns(1, 5)  Minor concerns(2)          | Serious concerns(1, 4)  No concerns(2, 5)      | High confidence   | No significant concerns; 4 studies contributing data with reasonable coherence.       |  |  |  |

| Summary of review finding   | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)                                     | Coherence  | Adequacy<br>(see<br>supplementary<br>table 4) | Relevance<br>(see<br>supplementary<br>table 4) | CERQual assessment of confidence in the evidence | Explanation of CERQual assessment   |
|---|--|--|--|---|--|--|---|
| the different types of continuity   |  | Unsuitable for qualitative CASP(5)   | underlying<br>aspects/concepts<br>of continuity  | Moderate concerns(4)                          |  |  |   |
| Theme 2: Patient f  | actors impacting o                         | on continuity of care  | 2  |   |  |  |   |
| Some patients<br>highly value<br>relational continuity<br>with their GP<br>(sometimes above<br>the medium of the<br>consultation) | (6-8)                                      | Some uncertainty about reflexivity(6-8), ethical issues(6-8), and analytical rigour(7, 8). | No concerns – strongly evidenced with qualitative data.  | Minor concerns(6, 8)  No concerns(7)          | Minor concerns(6)  No concerns(7, 8)           | High<br>confidence                               | 3 studies contributing data with good coherence and few other concerns.                       |
| Theme 3: Health p   | professional factor                        | rs influencing conti   | nuity of care  |   |  |  |   |
| Some GPs view continuity as highly significant or even essential for effective consultations.                                     | (3, 9, 10)                                 | Some concerns about recruitment(3), reflexivity(3, 9, 10), and ethical considerations(10)  | Minor concerns  — GPs in some studies reported continuity as essential whereas others just expressed the sentiment that it was important for effective consultations | Minor concerns(3)  Moderate concerns(9, 10)   | Minor concerns(3)  Moderate concerns(9, 10)    | High<br>confidence                               | 3 studies contributing data with reasonable coherence and few other concerns.                 |
| Flexibility of remote approaches could increase users' potential to enable continuity.  | (1, 2, 4, 9)                               | Some concern<br>about analytical<br>rigour(1) and<br>reflexivity(4, 9)                     | Moderate<br>concerns –<br>studies within<br>RCT of strategic<br>integrated<br>remote   | Minor concerns(1)  Moderate concerns(2, 4)    | Serious concerns(1, 4)  Minor concerns(2)      | Moderate<br>confidence                           | Questionable relevance of 2 studies to overall finding within a routine primary care context. |

| Summary of review finding  | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)                                   | Coherence   | Adequacy<br>(see<br>supplementary<br>table 4) | Relevance<br>(see<br>supplementary<br>table 4) | CERQual assessment of confidence in the evidence | Explanation of CERQual assessment   |
|--|--|--|---|---|--|--|---|
|  |  |  | consultations with GP, oncologist and patient thus questionable relevance to 'routine' primary care(1, 4).    | No concerns(9)                                | No concerns(9)                                 |  |   |
| GPs rate remote consultations more suitable when there are higher levels of relational continuity.                                     | (5)  | Unsuitable for qualitative CASP(5)   | No concerns   | No concerns(5)                                | Moderate concerns(5)                           | Moderate confidence                              | Only one study contributing data; with moderate concerns about relevance. |
| GPs rate video consultations as more suitable for follow-up consultations, particularly in the context of strong relational continuity | (5)  | Unsuitable for qualitative CASP(5)   | No concerns   | No concerns(5)                                | Moderate concerns(11)                          | Moderate<br>confidence                           | Only one study contributing data; with moderate concerns about relevance. |
| Theme 4: System for  | actors impacting c                         | ontinuity of care  |   |   |  |  |   |
| Remote care approaches can enable improved access to patient's usual or preferred GP.  | (6, 7)                                     | Some uncertainty about reflexivity(6) (7), ethical issues(6, 7) and analytical rigour(7) | Minor concerns – strongly evidenced with qualitative data but included in papers with highly variable patient | Minor concerns(6, 7)                          | No concerns(6) Minor concerns(7)               | Moderate<br>confidence                           | Only two studies contributing data and some concerns about coherence.     |

| Summary of review finding   | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)   | Coherence  | Adequacy (see supplementary table 4)    | Relevance<br>(see<br>supplementary<br>table 4) | CERQual assessment of confidence in the evidence | Explanation of CERQual assessment  |
|---|--|--|--|---|--|--|--|
|   |  |  | experiences and views  |   |  |  |  |
| There may be a trade-off between continuity and ease and/or speed of access.  | (6, 10, 12)                                | Some concerns about recruitment(12) and uncertainties about reflexivity(6, 10, 12) and ethical issues(6, 10) | No concerns  | Minor concerns(6, 10, 12)               | No concerns(6)  Minor concerns(10, 12)         | High<br>confidence                               | Few concerns   |
| Some patients requiring/requesting continuity are concerned about its absence in systems that more obviously promote ease and/or speed of access. | (12)                                       | Some concerns about recruitment and uncertainty about reflexivity(12)  | Minor concerns  — limited sample size and not explored in detail in study.                   | Minor concerns(12)                      | Minor concerns(12)                             | Moderate<br>confidence                           | Only one study providing data, which had some significant methodological concerns regarding recruitment. |
| Remote care approaches can be strategically integrated into systems to improve aspects of continuity eg: managerial or informational              | (1, 2, 4)                                  | Some concern<br>about analytical<br>rigour(1) and<br>reflexivity(4)  | No concerns  | No concerns(1, 4)  Moderate concerns(2) | Minor concern(1, 4)  Moderate concerns(2)      | High<br>confidence                               | Few concerns   |
| Trust developed through longitudinal continuity with a GP can help promote engagement or trust  | (1, 2, 4)                                  | Some concern<br>about analytical<br>rigour(1) and<br>reflexivity(4)  | Minor concerns  – variable  relationships  reported  between GPs  and patients and  variable | No concerns(1, 4)  Moderate concerns(2) | Minor concern(1, 4)  Moderate concerns(2)      | Moderate<br>confidence                           | Some concerns<br>about adequacy<br>and relevance of<br>finding in one<br>paper.                          |

| Summary of review finding   | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)  | Coherence   | Adequacy<br>(see<br>supplementary<br>table 4)  | Relevance<br>(see<br>supplementary<br>table 4) | CERQual<br>assessment of<br>confidence in<br>the evidence | Explanation of CERQual assessment   |
|---|--|---|---|--|--|---|---|
| in specialist services.   |  |   | experiences reported.   |  |  |   |   |
| The way in which remote care approaches are implemented within systems can make it difficult for them to see their usual GP, resulting in frustration, distress, harm and inefficiencies. | (6, 8, 13)                                 | Some uncertainty about reflexivity(6, 8) ethical issues(6, 8), and analytical rigour(8)  (QIP, not primary research, but uncertainty about reflexivity, ethical issues, and analytical rigour (13)) | No concerns – strongly evidenced with qualitative data.   | Minor concerns(6, 8) Serious concerns(13)      | Minor concerns(6, 8)  Moderate concerns(13)    | Moderate<br>confidence                                    | Serious concerns<br>about the adequacy<br>of findings in one<br>study despite<br>strongly coherent<br>qualitative data. |
| Increased accessibility may increase the workload resulting in an overwhelmed system and impaired continuity for those who really need it.  | (3)  | Some concerns about recruitment(3) and reflexivity(3)   | No concerns   | No concerns(3)                                 | No concerns(3)                                 | Moderate<br>confidence                                    | Few concerns despite but only one study contributing data   |
| Flexibility and consideration of patient choice in access routes are important. This may be more difficult with centralised policy decisions.   | (6, 7, 9, 14)                              | Some uncertainty about reflexivity(6, 7, 9, 14), ethical issues(6, 7), and analytical rigour(7)   | No concerns – although some studies also report the barriers to facilitating this i.e. more nuanced to achieve. | Moderate concerns(6)  Minor concerns(7, 9, 14) | Moderate concerns(6, 7)  Minor concerns(9, 14) | Moderate<br>confidence                                    | Multiple studies contributing data with moderate concerns about the relevance and adequacy of data for a couple.        |

| Summary of review finding   | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)  | Coherence   | Adequacy<br>(see<br>supplementary<br>table 4)     | Relevance<br>(see<br>supplementary<br>table 4)           | CERQual<br>assessment of<br>confidence in<br>the evidence | Explanation of CERQual assessment   |
|---|--|---|---|---|--|---|---|
| Theme 5: The patie  | ent-doctor relation                        | eship   |   |   |  |   |   |
| Patients and healthcare professionals often believe that remote consultations are easier, safer, and of higher quality in the context of preexisting relationships. | (1, 4, 6-8, 10, 15, 16)                    | Some uncertainty about reflexivity(4, 6-8, 10, 15), ethical issues(6-8, 10), and analytical rigour(4, 7, 8) | No concerns – strongly evidenced with qualitative data                                  | Minor concerns(4, 10)  Moderate concerns(6-8, 16) | Minor concerns(1, 4, 15)  Moderate concerns(6-8, 10, 16) | Moderate<br>confidence                                    | 8 papers<br>contributing data<br>but moderate<br>concerns for a<br>number about<br>adequacy and<br>relevance of data. |
| Patients report that pre-existing relationships are not essential for successful consultations if they are conducted with empathy, nor sufficient if they are not.  | (8)  | Some uncertainty<br>about reflexivity,<br>ethical issues, and<br>analytical rigour(8)                       | No concerns – strongly evidenced with qualitative data                                  | No concerns(8)                                    | No concerns(8)   | Moderate<br>quality                                       | No concerns but only one paper contributing data to finding   |
| Healthcare professionals consider relational and episodic continuity important for fully eliciting subtleties around patients' presentations.                       | (10)                                       | Some uncertainties about reflexivity and ethical issues(10)   | Minor concerns  – although evidenced in paper, unclear how many opinions supported this | No concerns(10)                                   | Moderate concerns(10)                                    | Low confidence  | Only one paper contributing data and moderate concerns about relevance to finding.                                    |
| Some individuals or those with particular   | (2, 14, 16)                                | Some uncertainty about reflexivity(14)  | Minor conditions – patient  | Serious concerns(2, 14)                           | Minor concerns(2, 14)                                    | Low confidence  | 3 papers contributing data with few   |

| Summary of review finding  | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)   | Coherence   | Adequacy<br>(see<br>supplementary<br>table 4)                        | Relevance<br>(see<br>supplementary<br>table 4)                 | CERQual<br>assessment of<br>confidence in<br>the evidence | Explanation of CERQual assessment   |
|--|--|--|---|--|--|---|---|
| conditions struggle with the medium of remote consultations even when continuity is maintained.  |  |  | experiences are<br>highly variable<br>between and<br>within<br>conditions   | Moderate concerns(16)  | Moderate concerns(16)  |   | methodological limitations but serious and moderate concerns for adequacy and relevance in some cases.              |
| Remote approaches can cause a perception of reduced continuity of care for some individuals and the perception of unmet health needs.                              | (13)                                       | QIP, not primary research, but uncertainty about reflexivity, ethical issues, and analytical rigour (13)   | No concerns – clearly evidenced with qualitative data   | No concerns(13)  | Moderate concerns(13)  | Low confidence  | Only one paper supporting finding with moderate concerns about relevance  |
| Some remote care approaches are associated with high levels of patient satisfaction.   | (12)                                       | Some concerns<br>about recruitment<br>and uncertainty<br>about<br>reflexivity(12)  | Minor concerns<br>given<br>methodological<br>limitations  | Minor concerns(12)   | No concerns(12)  | Moderate<br>concerns                                      | Only one paper supporting finding. Few other concerns but some methodological limitations.                          |
| Theme 6: Risks of  | the impact of remo                         | ote care on continui   | ity   |  |  |   |   |
| Remote care approaches can introduce or exacerbate inequities of care by reducing relational or episodic continuity (especially in patients who value it and where | (3, 6, 8, 12, 14)                          | Some concerns(12) about recruitment strategy(3, 12) and uncertainties about reflexivity(3, 6, 8, 12, 14) ethical issues(6, 8), and analytical rigour(6, 8) | No concerns – strongly evidenced with qualitative data across range of patient and healthcare professionals in different contexts | Minor concerns(6)  Serious concerns(3, 8, 14)  Moderate concerns(12) | No concerns(6)  Serious concerns(3, 8)  Minor concerns(12, 14) | Low confidence  | 5 papers<br>supporting finding<br>but serious<br>concerns about<br>adequacy and<br>relevance of data<br>for several |

| Summary of review finding   | Studies contributing to the review finding | Methodological limitations (see supplementary table 3)   | Coherence  | Adequacy (see supplementary table 4)                        | Relevance<br>(see<br>supplementary<br>table 4)  | CERQual assessment of confidence in the evidence | Explanation of CERQual assessment   |
|---|--|--|--|---|---|--|---|
| continuity is likely to impact outcomes)  |  |  |  |   |   |  |   |
| Remote approaches for long-term conditions could compromise safety if the processes do not identify a suitable clinician to deal with them (ideally with relational and/or episodic continuity) | (3)  | Some concerns about recruitment(3) and reflexivity(3)  | No concerns  | Minor concerns(3)   | Minor concerns(3)                               | Moderate<br>confidence                           | Only one paper supporting finding but few other concerns  |
| Some GPs and patients have concerns about clinical safety with remote approaches (sometimes despite continuity)   | (4, 6, 8, 10)                              | Some uncertainty about reflexivity(4, 6, 8, 10), ethical issues(6, 8, 10), and analytical rigour(7, 8) | No concerns – clearly reported in qualitative data in different contexts | No concerns(4)  Moderate concerns(6, 8)  Minor concerns(10) | Moderate concerns(4) (10)  Minor concerns(6, 8) | Moderate<br>confidence                           | 4 papers supporting finding with good coherence but moderate concerns about the adequacy and relevance of the data for several. |
| Continuity cannot fully mitigate infrastructure or contextual concerns that limit practical aspects of remote care.   | (14, 16)                                   | Some uncertainty about reflexivity(14)   | Minor concerns  – not explored in detail in studies                      | Moderate concerns(14) Serious concerns(16)                  | Minor concerns(14)  Moderate concerns(16)       | Low confidence                                   | Only 2 papers supporting finding and serious and moderate concerns for adequacy and relevance of data in one.                   |



| Paper               | Was<br>there a<br>clear<br>stateme<br>nt of the<br>aims of<br>the<br>research | Is a qualitativ e methodol ogy appropriat e | Was the research design appropriate to address the aims of the research | Was the recruitment strategy appropriate to the aims of the research                    | Was the data<br>collected in a<br>way that<br>addressed the<br>research<br>issue | Has the relationship between researcher and participants been adequately considered   | Have ethical issues been taken into consideration                    | Was the data analysis sufficiently rigorous   | Is there a clear statement of findings | How<br>valuable<br>is the<br>research |
|---------------------|---|---|---|---|--|---|--|---|--|---------------------------------------|
| Ball 2018           | Y   | Y   | Y   | Y   | Y  | CT  | CT   | Y   | Y                                      | Useful                                |
| De Guzman<br>2022   | Y   | Y   | Y   | Y   | Y  | CT  | Y  | Y   | Y                                      | Useful                                |
| Glock 2021          | Y   | Y   | Y   | CT (very limited response rate – only 12% of those sampled supplied free text comments) | Y  | CT (no<br>reflexivity about<br>the fact that<br>researchers are<br>primary care<br>physicians in<br>same area where<br>study was<br>undertaken) | Y  | Y   | Y                                      | Useful                                |
| Hansen 2021         | Y   | Y   | Y   | Y   | Y  | Y   | Y  | N (only one researcher)   | Y                                      | Useful                                |
| Imlach 2020         | Y   | Y   | Y   | Y   | Y  | N   | CT (mentions ethics committee but no other details)                  | N (can't<br>tell how<br>many<br>researchers<br>did what)  | Y                                      | Useful                                |
| Javanparast<br>2021 | Y   | Y   | Y   | Y   | Y  | N (no reflexivity about this)   | CT (presumably as used previous RCT infrastructure but not explicit) | CT (not<br>very<br>detailed<br>about how<br>deductive<br>coding<br>frame<br>developed<br>or roles of<br>researchers | Y                                      | Useful                                |

| Johnsen 2021(30)  (quantitative survey using Likert scales to assess GP opinion – not suitable for qualitative CASP) |                            |                            |   |                                  |   |             |    |    |   |  |
|--|----------------------------|----------------------------|---|----------------------------------|---|-------------|----|----|---|--|
| San Juan<br>2021(45)   | Y                          | Y                          | Y | Y                                | Y | Y           | Y  | Y  | Y | Useful   |
| Leung 2021(46)   | Y (for<br>PDSA<br>cycle 1) | Y (for<br>PDSA<br>cycle 1) | Y | Y                                | Y | N           | N  | CT | Y | Moderat<br>ley<br>useful.<br>Limited<br>context. |
| Norman<br>2021(47)   | Y                          | Y                          | Y | Y                                | Y | CT          | Y  | Y  | Y | Useful   |
| Quigley<br>2019  | Y                          | Y                          | Y | N (very low<br>response<br>rate) | Y | CT (prob Y) | Y  | Y  | Y | Moderat ely useful (signific ant limitatio ns)   |
| Tonnies 2021(33)   | Y                          | Y                          | Y | Y                                | Y | Y           | Y  | Y  | Y | Useful   |
| Trabjerg 2021(42)  | Y                          | Y                          | Y | Y                                | Y | CT          | Y  | Y  | Y | Useful   |
| Verhoevan<br>2020(41)  | Y                          | Y                          | Y | Y                                | Y | CT          | СТ | Y  | Y | Useful   |
| Wherton 2021(43)   | Y                          | Y                          | Y | Y                                | Y | CT          | Y  | Y  | Y | Useful   |

Y = Yes; N = No; CT = Can't Tell

Table S4. Adequacy and Relevance of findings

| Summary of review finding  | Studies contributing to the review finding | Adequacy   | Relevance   |
|--|--|--|---|
| Theme 1: Sparsity  | of studies specific                        | ally reporting and measuring continuity  |   |
| Some studies included tacit rather than overt and specific references to continuity (and others by exclusion during screening) | (1-3)                                      | No concerns. Rich sample of five oncologists and four specialist nurses taking part in RCT. Narrative style interview with open questions, opportunity to discuss thoughts freely in a comfortable environment(1).  No concerns. Tried to consider micro and macro factors impacting continuity of care for patients with mental health problems. Although explicitly referenced as 'challenges to continuity of care' there is then no mention of continuity but concepts such as 'collaboration', 'absence of networks', 'communication between mental health specialists and GPs'with no link as to how these factors might improve 'informational' or 'managerial' continuity(2).  No concerns - large sample of GPs from 2 regions in Sweden with clear expression of importance of 'prior knowledge' of GP for patient in remote consultations(3). | Moderate concerns – studies within RCT of strategic integrated remote consultations with GP, oncologist and patient. Patient could choose to be either with GP or oncologist rather than independently 'remote' - thus questionable relevance to 'routine' primary care and likely way in which remote consultations would be applied in practice(1).  Moderate concerns – data based on 15 interviews with health policy experts in Germany and their views on how remote approaches might improve care of mental health patients there. Difficult to know how transferable such a finding would be to other primary care/healthcare systems(2).  No concerns – clear use of aspect behind 'continuity' without direct reference to it(3). |
| No paper attempted to measure continuity.  | All studies                                |  | Relatively broad inclusion criteria and search strategy that did not specify quantitative or qualitative studies  |
| Several studies<br>attempted to<br>distinguish between<br>the concepts behind<br>the different types<br>of continuity          | (1, 2, 4, 5)                               | No concerns. Rich sample of five oncologists and four specialist nurses taking part in RCT. Narrative style interview with open questions, opportunity to discuss thoughts freely in a comfortable environment. Rich qualitative quotes to describe concepts(1).   | Serious concerns – studies within RCT of strategic integrated remote consultations with GP, oncologist and patient. Patient could choose to be either with GP or oncologist rather than independently 'remote' - thus questionable relevance to 'routine' primary care and likely way in which remote consultations would be applied in practice. Likely more focus on information and knowledge  |

| Summary of review finding   | Studies contributing to the review finding | Adequacy   | Relevance   |
|---|--|--|---|
|   |  | Minor concerns - although explicitly referenced as 'challenges to continuity of care' there is then no mention of continuity but concepts such as 'collaboration', 'absence of networks', 'communication between mental health specialists and GPs' with no link as to how these factors might improve 'informational' or 'managerial' continuity(2).  Moderate concerns - response rate of patient survey = 80%; 100% of oncologists and 71% of GPs. However survey didn't allow for freetext answers and instead provided respondents with options about different aspects of continuity that they might deem important (derived from the literature)(4).  No concerns – clear distinction of episodic and relational continuity(5). | sharing (i.e. informational/managerial continuity) given integrated consultations between primary and secondary care(1, 4).  No concerns - data based on 15 interviews with health policy experts in Germany and their views on how remote approaches might improve care of mental health patients there. Difficult to know how transferable such a finding would be to other primary care/healthcare systems but the concepts behind these different aspects of continuity are likely to be similar(2).  No concerns – clear distinction between episodic and relational continuity in video consultations evaluated via nationwide survey of 26% of Norwegian GP population(5). |
| Theme 2: Patient for  | actors impacting a                         | on continuity of care  |   |
| Some patients<br>highly value<br>relational continuity<br>with their GP<br>(sometimes above<br>the medium of the<br>consultation) | (6-8)                                      | Minor concerns - good sized, representative range of patients interviewed across a number of different GP practices however range of patient views reported(6).  No concerns - good sized, representative range of patients interviewed across a number of different GP practices. Clear qualitative support for relational continuity enabling telehealth approaches(7).  Minor concerns – good-sized, representative range of patients contacting general practice during a lockdown period. Clear expression of this finding for some patients but variable views reported(8).  | Minor concerns – clear qualitative quotes to illustrate this finding. However, extent to which this is shared between participants is unclear(6).  No concerns – clear qualitative data supporting this finding(7).  No concerns – clear qualitative data supporting this finding(8).   |

| Summary of review finding  | Studies contributing to the review finding | Adequacy   | Relevance  |
|--|--|--|--|
| Some GPs view continuity as highly significant for effective consultations.            | (3, 9, 10)                                 | Minor concerns - large sample of GPs from 2 regions in Sweden with clear expression of this finding (expressed as 'prior knowledge'). However, no information about how widely this sentiment is shared amongst participants(3).  Moderate concerns – purposive sample of GPs with different experience of telehealth. Most expressed the view that telehealth was more appropriate in 'pre-existing' relationships(9).  Moderate concerns – GPs express the additional ease of consultations with 'known' patients, reduced clinical risk, patient-centred care – which is very highly rated – however unclear exactly how widely these views are shared(10).   | Minor concerns – 'continuity' not explicitly mentioned, rather 'prior knowledge' used instead(3).  Moderate concerns – continuity (pre-existing relationships) viewed as more appropriate but no specific data about the efficacy of the consultation(9).  Moderate concerns - study is situated in the acute pandemic so difficult to know how relevant the findings will be to more 'routine' general practice(10).  |
| Flexibility of remote approaches could increase users' potential to enable continuity. | (1, 2, 4, 9)                               | Minor concerns. Rich sample of five oncologists and four specialist nurses but all taking part within an RCT of a specifically-designed integrated remote consultation intervention therefore could only discuss one model of remote approaches. Narrative style interview with open questions, opportunity to discuss thoughts freely in a comfortable environment. Rich qualitative quotes to describe concepts(1).  Minor concerns – adequate sample of 15 health policy experts with experience of caring for individuals with mental health problems. However, only addressing one particular kind of remote care model(2).  Moderate concerns - response rate of patient survey = 80%; 100% of oncologists and 71% of GPs. However, all conducted in context of specific integrated consultation RCT(4). | Serious concerns – studies within RCT of strategic integrated remote consultations with GP, oncologist and patient. Patient could choose to be either with GP or oncologist rather than independently 'remote' - thus questionable relevance to 'routine' primary care and likely way in which remote consultations would be applied in practice(1, 4).  Minor concerns - data based on 15 interviews with health policy experts in Germany and their views on how remote approaches might improve care of mental health patients there. Difficult to know how transferable such a finding would be to other primary care/healthcare systems but the concepts in this finding are likely to be similar(2).  No concerns – qualitative data clearly supporting this finding(9). |

| Summary of review finding  | Studies contributing to the review finding | Adequacy  | Relevance  |
|--|--|---|--|
|  |  | No concerns – clear data describing how flexibility of telehealth can specifically increase 'connections with patients', 'follow-ups', and 'continuity'(9).   |  |
| GPs rate remote consultations more suitable when there are higher levels of relational continuity.                                     | (5)  | No concerns – 26% of total GP population in Norway participated in online survey with 855 individuals evaluating at least one telephone consultation (so a wide representation of different views). However, the majority of the patients were previously known to the GP conducting the consultation. Clear significantly statistical difference in 'suitability for remote consultation' rating where there was good relational/episodic continuity(5). | Moderate concerns – 82% of patients within the consultations were already known to the GPs. Therefore this finding may not be the same in consultations conducted with lower levels of relational or episodic continuity. Also all remote consultations reviewed were video. It is therefore impossible to know whether these findings would be generalisable to other remote approaches such as telephone or online consultations(5). |
| GPs rate video consultations as more suitable for follow-up consultations, particularly in the context of strong relational continuity | (5)  | No concerns – 26% of total GP population in Norway participated in online survey with 855 individuals evaluating at least one telephone consultation (so a wide representation of different views). However, the majority of the patients were previously known to the GP conducting the consultation. Clear significantly statistical difference in 'suitability for remote consultation' rating where there was good episodic continuity(5).            | Moderate concerns – 82% of patients within the consultations were already known to the GPs. Therefore this finding may not be the same in consultations conducted with lower levels of relational or episodic continuity(5).   |
| Theme 4: System for  | actors impacting c                         | continuity of care  |  |
| Remote care approaches can enable improved access to patient's usual or preferred GP.  | (6, 7)                                     | Minor concerns - good sized, representative range of patients interviewed across a number of different GP practices however range of patient views and experiences in terms of access reported(6).  Minor concerns – clear qualitative data supporting this finding. Unclear to what extent this experience is shared amongst respondents(7).   | No concerns – clear qualitative quotes to illustrate this finding(6).  Minor concerns – clear qualitative data supporting this finding although this seems to reflect more the number of presentations/GP contacts rather than contact with preferred GP above a different GP/practitioner(7)  |

| Summary of review finding   | Studies contributing to the review finding | Adequacy   | Relevance  |
|---|--|--|--|
| There may be a trade-off between continuity and ease and/or speed of access.  | (6, 12, 15)                                | Minor concerns - good sized, representative range of patients interviewed across a number of different GP practices however range of patient views and experiences in terms of access reported(6).  Minor concerns – clear qualitative data supporting finding. However methodological limitations raise concerns about representative nature of participants(12).  Minor concerns – very rich collection of mixed-methods data. Clear statement that patient's decision for preference of consultation mode includes multiple trade-offs. Unclear to what extent access to practice is a contributor to this(15). | No concerns – clear qualitative quotes to illustrate this finding(6).  Minor concerns – study was undertaken as part of an evaluation of a very particular and specific remote care approach. Difficult to know to what extent findings would be relevant in more 'traditional' general practice model(12).  No concerns – findings based on data collected prepandemic(15).   |
| Some patients requiring/requesting continuity are concerned about its absence in systems that more obviously promote ease and/or speed of access. | (12)                                       | Minor concerns – clearly supported in qualitative data however unclear how widely sentiments are shared amongst relevant patients and methodological limitations to study also make it difficult to assess the adequacy of this finding(12).   | Minor concerns – study was undertaken as part of an evaluation of a very particular and specific remote care approach. Difficult to know to what extent findings would be relevant in more 'traditional' general practice model(12).   |
| Remote care approaches can be strategically integrated into systems to improve aspects of continuity eg: managerial or informational              | (1, 2, 4)                                  | No concerns. Rich sample of five oncologists and four specialist nurses taking part in RCT. Narrative style interview with open questions, opportunity to discuss thoughts freely in a comfortable environment. Rich qualitative quotes to describe concepts(1).  Moderate concerns – adequate sample of 15 health policy experts with experience of caring for individuals with mental health problems. However,  | Minor concerns – studies within RCT of strategic integrated remote consultations with GP, oncologist and patient i.e. design was specifically about strategic integration of remote approaches. However, patient could choose to be either with GP or oncologist rather than independently 'remote' - thus questionable relevance to 'routine' primary care and likely way in which remote consultations would be applied in practice(1, 4). |

| Summary of review finding  | Studies contributing to the review finding | Adequacy  | Relevance   |
|--|--|---|---|
|  |  | only speculating hypothetically about how remote approaches may be strategically integrated to improve care for these patients with enhanced informational and managerial continuity (although not referenced explicitly as such). No direct evidence of this(2).  No concerns - response rate of patient survey = 80%; 100% of oncologists and 71% of GPs with clear perceived benefit of strategic integrated remote consultation intervention noted(4).  | Moderate concerns - data based on 15 interviews with health policy experts in Germany and their views on how remote approaches might improve care of mental health patients there. Difficult to know how transferable such a finding would be to other primary care/healthcare systems (2).   |
| Trust developed through longitudinal continuity with a GP can help promote engagement or trust in specialist services.       | (1, 2, 4)                                  | No concerns. Rich sample of five oncologists and four specialist nurses taking part in RCT. Narrative style interview with open questions, opportunity to discuss thoughts freely in a comfortable environment. Rich qualitative quotes to describe concepts(1, 4).  Moderate concerns – adequate sample of 15 health policy experts with experience of caring for individuals with mental health problems. However, only speculating hypothetically about how remote approaches may be strategically integrated to improve care for these patients. Clear qualitative data from experts about trust in GPs promoting motivation for patient engagement but unclear what evidence they are basing this upon(2). | Minor concerns – studies within RCT of strategic integrated remote consultations with GP, oncologist and patient i.e. design was specifically about strategic integration of remote approaches to improve primary-secondary care interface. However, patient could choose to be either with GP or oncologist rather than independently 'remote' - thus questionable relevance to 'routine' primary care and likely way in which remote consultations would be applied in practice(1, 4).  Moderate concerns - data based on 15 interviews with health policy experts in Germany and their views on how remote approaches might improve care of mental health patients there. Difficult to know how transferable such a finding would be to other primary care/healthcare systems (2). |
| The way in which remote care approaches are implemented within systems can make it difficult for them to see their usual GP, | (6, 8, 13)                                 | Minor concerns - good sized, representative range of patients interviewed across a number of different GP practices however range of patient views and experiences in terms of access to their preferred GP and the impact this exerted(6).   | Minor concerns – clear qualitative quotes to illustrate this finding but variable views reported(6) (8)  Moderate concerns – study undertaken as part of QIP in single GP practice using a very specific online platform.  Difficult to know to what extent findings may be relevant in   |

| Summary of review finding   | Studies contributing to the review finding | Adequacy  | Relevance   |
|---|--|---|---|
| resulting in frustration, distress, harm and inefficiencies.  |  | Minor concerns – good-sized, representative range of patients contacting general practice during a lockdown period. Clear expression of this finding for some patients but variable views reported(8).  | other settings although qualitative data in study does clearly support this finding(13).  |
|   |  | Serious concerns – study undertaken as part of a quality improvement practice in a single GP practice. Although clear qualitative data supporting finding it is difficult to ascertain how widely views' were shared amongst participants(13).  |   |
| Increased accessibility may increase the workload resulting in an overwhelmed system and impaired continuity for those who really need it.    | (3)  | No concerns – clear qualitative data expressed in multiple ways and regarding different aspects of workload (consultations, admin, results etc) that supported this finding(3).   | No concerns – multiple, direct qualitative quotes clearly supporting this finding(3).   |
| Flexibility and consideration of patient choice in access routes are important. This may be more difficult with centralised policy decisions. | (6, 7, 9, 14)                              | Moderate concerns - good sized, representative range of patients interviewed across a number of different GP practices however range of patient views about preferences for future access routes. Majority preferred remote approach despite disadvantages. No data about views on decision processes determining access routes(6).  Minor concerns – qualitative statements reflecting how patients would have preferred a choice of mediums to consult practice team. Statement in paper about how centralised policy decision was for videoconferencing to be offered in all GP practices however some patients reported not being able to access this(7). | Moderate concerns – clear qualitative quotes to illustrate some participants' preference for ongoing telephone first approach, whereas others prefer face-to-face. No data/discussion about factors influencing this(6).  Moderate concerns – clear statements about how patients valued being able to choose consultation medium; unclear if policy directives at the time were supporting this or actively promoting videoconferencing for all(7).  Minor concerns – clear qualitative supportive data but no direct link to policy decisions as influencing factor(9).  Minor concerns – study is sited in practices with very high levels of deprivation. Although likely to be relevant to other settings, this is not entirely clear(14). |

| Summary of review finding | Studies contributing to the review finding | Adequacy  | Relevance |
|---------------------------|--|---|-----------|
|                           |  | Minor concerns – although clear qualitative data supporting the importance of patient choice, counterbalanced by views about the need to ensure clinical need is the main driver determining mode of consultation and no direct link to policy decisions(17). |           |
|                           |  | Minor concerns – clear statement about need for local flexibility in consultation approaches and inappropriateness when these are determined by centralised policy decisions. Unclear how widely this view is shared amongst respondents(14).                 |           |

No concerns. Rich sample of five oncologists and

four specialist nurses taking part in RCT. Narrative

## Theme 5: The patient-doctor relationship

16)

(1, 4, 6-8, 10, 15,

Patients and

healthcare

|   | professionals often   | style interview with open questions, opportunity to   |
|---|-----------------------|---|
|   | believe that remote   | discuss thoughts freely in a comfortable  |
|   | consultations are     | environment. Rich qualitative quotes to describe  |
|   | easier, safer, and of | concepts(1).  |
|   | higher quality in the |   |
|   | context of pre-       | Minor concerns - response rate of patient survey =  |
|   | existing              | 80%; 100% of oncologists and 71% of GPs.  |
|   | relationships.        | However survey didn't allow for freetext answers and instead provided respondents with options about remote consultations that they might deem important(4).  |
|   |                       | Moderate concerns - good sized, representative range of patients interviewed across a number of different GP practices in UK, New Zealand, and Australia; variable views reported but clear qualitative data supporting this finding. However studies did not explore views of healthcare professionals(6-8). |
| ı |                       |   |

Minor concerns – studies within RCT of strategic integrated remote consultations with GP, oncologist and patient However, patient could choose to be either with GP or oncologist rather than independently 'remote' - thus questionable relevance to 'routine' primary care and likely way in which remote consultations would be applied in practice(1, 4).

Moderate concerns – clear qualitative quotes to illustrate some participants' views about the risks of remote consultations. Healthcare professionals views' not reported(6-8).

Moderate concerns - study is situated in the acute pandemic so difficult to know how relevant the findings will be to more 'routine' general practice(10).

Minor concerns – study partly took place during acute pandemic (although some data collected prior to this) thus difficult to know how relevant the findings will be in more 'routine' general practice(15).

| Summary of review finding  | Studies contributing to the review finding | Adequacy  | Relevance  |
|--|--|---|--|
|  |  | Minor concerns – clear expression in multiple qualitative quotes that many participants' views support this finding. However patients' views were not explored(10).   | Moderate concerns – specific population group (with mental health professional), thus unclear how relevant findings will be to other patient groups(16).   |
|  |  | Minor concerns – clear qualitative data supporting finding amongst GPs. Unclear if patients also expressed similar views(15).   |  |
|  |  | Moderate concerns – oblique reference to how familiarity with healthcare providers can facilitate remote contact, which made them more effective. However unclear how widely this view is shared amongst participants(16) |  |
| Patients report that pre-existing relationships are not essential for successful consultations if they are conducted with empathy, nor sufficient if they are not. | (8)  | No concerns – clear qualitative data supporting this, although unclear how broadly this sentiment is reported across the whole sample(8).   | No concerns – very supportive qualitative quotes(8).   |
| Healthcare professionals consider relational and episodic continuity important for fully eliciting subtleties around patients' presentations.                      | (10)                                       | No concerns – multiple qualitative data supporting different aspects of this finding eg: affecting management of chronic conditions, eliciting psychological concerns etc(10).  | Moderate concerns - study is situated in the acute pandemic so difficult to know how relevant the findings will be to more 'routine' general practice(10). |

| Summary of review finding   | Studies contributing to the review finding | Adequacy  | Relevance   |
|---|--|---|---|
| Some individuals or those with particular conditions struggle with the medium of remote consultations even when continuity is maintained. | (2, 14, 16)                                | Serious concerns – adequate sample of 15 health policy experts with experience of caring for individuals with mental health problems. However, only one speculative quote hypothesizing about about how remote approaches may be unsuitable for some individuals with mental health problems. Unclear how widely this view is shared amongst other participants(2).  Serious concerns – qualitative data supporting finding but most relates to the technological/infrastructure challenges individuals face and do not specifically relate this to continuity(14).  Moderate concerns – clear reference to difficulties with not being able to see body language, social cues etc. and impact on patients' ability to form connection with healthcare professional. However, there is no specific reference to continuity(16). | Minor concern – relevant expert opinion of participant however unclear how applicable it is in reality as largely speculative(2).  Minor concerns – study is sited in practices with very high levels of deprivation. Although likely to be relevant to other settings, this is not entirely clear(14).  Moderate concerns – specific population group (with mental health professional), thus unclear how relevant findings will be to other patient groups(16). |
| Remote approaches can cause a perception of reduced continuity of care for some individuals and the perception of unmet health needs.     | (13)                                       | No concerns – clear statement in paper that the 'majority' of participants reported views in support of this finding(13).   | Moderate concerns – study undertaken as part of QIP in single GP practice using a very specific online platform. Difficult to know to what extent findings may be relevant in other settings although qualitative data in study does clearly support this finding(13).  |
| Some remote care approaches are associated with high levels of patient satisfaction.  | (12)                                       | Minor concerns – due to methodological limitations of paper questioning to what extent participants represent wider users(12).  | No concerns – very clear qualitative and quantitative data supporting finding(12).  |

| Summary of review finding   | Studies contributing to the review finding | Adequacy  | Relevance   |
|---|--|---|---|
| Theme 6: Risks of   | the impact of rem                          | ote care on continuity  |   |
| Remote care approaches can introduce or exacerbate inequities of care by reducing relational or episodic continuity (especially in patients who value it and where continuity is likely to impact outcomes) | (3, 6, 8, 12, 14)                          | Minor concerns - good sized, representative range of patients interviewed across a number of different GP practices. Clear expression of concerns about potential to worsen inequities for patients less able to push for appropriate face-to-face consultations however unclear how broadly this was representative of participants' views(6).  Serious concerns – definite expression of the potential to worsen inequities amongst respondents, but linked more to technological/infrastructure issues rather than impact on continuity(8).  Serious concerns – multiple qualitative quotes about how remote approaches may increase workload/overwhelm capacity, resulting in inequities for those who really need it. Expression about the importance of 'the' primary care physician having time/capacity to deal with this work but no clear link to impaired continuity as a causal factor(3).  Moderate concerns – methodological limitations of paper raise questions about representative nature of participants. However clear statement that some individuals who might value continuity and 'need' face-to-face consultations eg: with chronic illness or complex needs may not have their health needs adequately met (or patients perceive them to not be adequately met (or patients perceive them to not be adequately met)(12)  Serious concerns – clear statement of concerns about worsening inequities but largely due to concerns about worsening inequities but largely due to concerns about digital poverty and no direct link to continuity(14). | No concerns – clear expression of this finding(6).  Serious concerns – data supports inequities relating to broader issues around telehealth rather than continuity per se(3, 8).  Minor concerns – study was undertaken as part of an evaluation of a very particular and specific remote care approach. Difficult to know to what extent findings would be relevant in more 'traditional' general practice model(12).  Minor concerns – study is sited in practices with very high levels of deprivation. Although likely to be relevant to other settings, this is not entirely clear(14). |

| Summary of review finding   | Studies contributing to the review finding | Adequacy   | Relevance  |
|---|--|--|--|
| Remote approaches for long-term conditions could compromise safety if the processes do not identify a suitable clinician to deal with them (ideally with relational and/or episodic continuity) | (3)  | Minor concerns – multiple qualitative quotes about how remote approaches may increase workload/overwhelm capacity resulting in safety concerns. Expression about the importance of 'the' primary care physician having time/capacity to deal with this work but no clear link to continuity(3).  | Minor concerns - multiple qualitative quotes supporting finding but not directly linked to continuity(3).  |
| Some GPs and patients have concerns about clinical safety with remote approaches (sometimes despite continuity)   | (5, 6, 8, 10)                              | No concerns – clear statistical finding that GPs were concerned about the risk of missing signs of serious disease in 15% of evaluated video consultations(5).  Moderate concerns – clear expression that some patients were worried about not being examined; delayed diagnoses; and inappropriate treatment (eg: overuse of antibiotics) despite continuity. However, paper did not explore GPs' views(6, 8).  Minor concerns – clear expression that some GPs are concerned and stressed about the fear of missing important diagnoses but unclear how widely this is shared amongst participants and patients' views were not explored in this study(10) | Moderate concerns - impossible to know whether GPs feelings about safety in video consultations would also be applicable to telephone and/or online consultations. Likely but no data in this study(5).  Minor concerns – very clear qualitative statements from some patients supporting this finding but paper did not explore GPs' views(6, 8).  Moderate concerns - study is situated in the acute pandemic so difficult to know how relevant the findings will be to more 'routine' general practice(10). |
| Continuity cannot fully mitigate infrastructure or contextual concerns that limit practical aspects of remote care.   | (14, 16)                                   | Moderate concerns – reference to the central role that GPs and GP practices play in the community, with reference to patients seeing 'their GP' and data to support how telehealth approaches may be imposing barriers to this. However no direct link to continuity as a specific concept(14).  Serious concerns – although separate quotes refer to the benefits of continuity in facilitating successful  | Minor concerns – study is sited in practices with very high levels of deprivation. Although likely to be relevant to other settings, this is not entirely clear(14).  Moderate concerns – specific population group (with mental health professional), thus unclear how relevant findings will be to other patient groups(16).   |

| Summary of review finding | Studies contributing to the review finding | Adequacy  | Relevance |
|---------------------------|--|---|-----------|
|                           |  | remote consultations, and other quotes clearly indicate that infrastructural limitations are the ultimate factors determining this, the two are not clearly linked(16). |           |

## Medline and Embase (OvidSP)

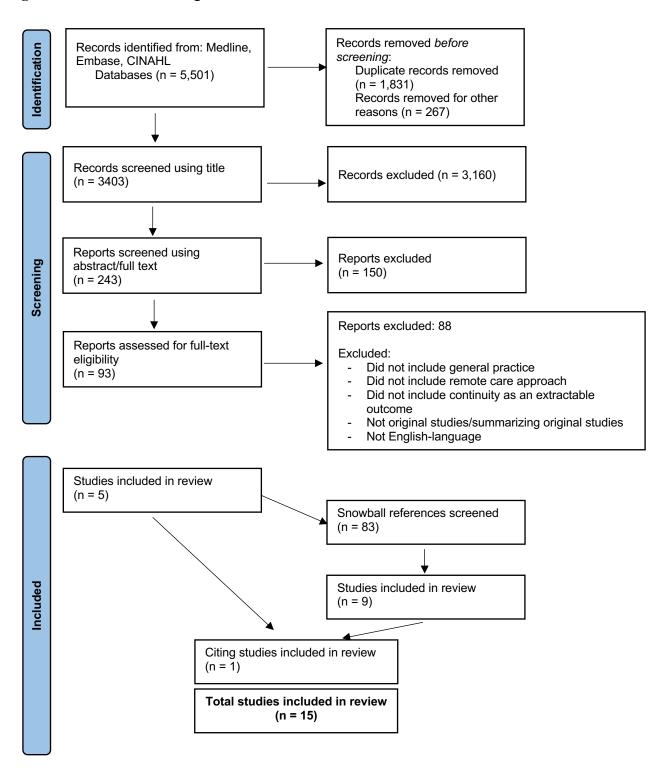
- 1. exp remote/ or exp remote consultation/ or exp digital/ or exp digital consultation/ or exp asynchronous/ or exp asynchronous consultation/ or exp econsult/ or exp online/ or exp online consultation/ or exp virtual/ or exp virtual consultation/ or exp telemedicine/ or exp tele-consultation/ or exp video consultation/ or exp remote consultation/
- 2. exp Primary health care/ or exp Ambulatory care/ or exp Community health services/ or exp Family practice/ or exp Family physician/s or exp general practice/ or exp general practitioner/s or exp primary care physician
- 3. exp continuity/ or exp relational continuity/ or exp longitudinal continuity/ or exp informational continuity/ or exp managerial continuity
- 4. 1 and 2 and 3
- 5. limit 5 to (abstracts and English language and humans and yr="2000 -Current")

## **CINAHL (EBSCO Host)**

- 1. (MH "remote+") or (MH "digital+") or (MH "asynchronous+") or (MH "econsult+") or (MH "online+") or (MH "virtual+") or (MH "teleconsultation+") or (MH "telemedicine+") or (MH "video+") or (MH "remote+")
- 2. (MH "Family Practice") or (MH "Ambulatory Care") or (MH "Primary Health Care") or (MH "Physicians, Family") or (MH "Community Health Services+") or
- 3. (MH "continuity+")
- 4. S1 and S2 and S3

Limiters: publication year from: 2000; English Language

Figure S1 PRISMA flow diagram



- 1. Hansen DG, Trabjerg TB, Sisler JJ, Søndergaard J, Jensen LH. Cross-sectoral communication by bringing together patient with cancer, general practitioner and oncologist in a video-based consultation: a qualitative study of oncologists' and nurse specialists' perspectives. BMJ Open. 2021;11(5):e043038.
- 2. Tönnies J, Oeljeklaus L, Wensing M, Hartmann M, Friederich HC, Haun MW. Health policy experts' perspectives on implementing mental health specialist video consultations in routine primary care a qualitative interview study. BMC health services research. 2021;21(1):1-713.
- 3. Glock H, Nymberg VM, Bolmsjö BB, Holm J, Calling S, Wolff M, et al. Attitudes, barriers, and concerns regarding telemedicine among swedish primary care physicians: A qualitative study. International journal of general medicine. 2021;14:9237-46.
- 4. Trabjerg TB, Jensen LH, Søndergaard J, Sisler JJ, Hansen DG. Cross-sectoral video consultations in cancer care: perspectives of cancer patients, oncologists and general practitioners. Support Care Cancer. 2021;29(1):107-16.
- 5. Johnsen TM, Lønnebakke Norberg B, Kristiansen E, Zanaboni P, Austad B, Helgetun Krogh F, et al. Suitability of video consultations during the COVID-19 pandemic lockdown: Cross-sectional survey among Norwegian general practitioners. J Med Internet Res. 2021;23(2):e26433-e.
- 6. Ball SL, Newbould J, Corbett J, Exley J, Pitchforth E, Roland M. Qualitative study of patient views on a 'telephone-first' approach in general practice in England: speaking to the GP by telephone before making face-to-face appointments. BMJ Open. 2018;8(12):e026197-e.
- 7. Javanparast S, Roeger L, Kwok Y, Reed RL. The experience of Australian general practice patients at high risk of poor health outcomes with telehealth during the COVID-19 pandemic: a qualitative study. BMC Fam Pract. 2021;22(1):69-.
- 8. Imlach F, McKinlay E, Middleton L, Kennedy J, Pledger M, Russell L, et al. Telehealth consultations in general practice during a pandemic lockdown: survey and interviews on patient experiences and preferences. BMC Fam Pract. 2020;21(1):269-.
- 9. De Guzman KR, Snoswell CL, Giles CM, Smith AC, Haydon HH. GP perceptions of telehealth services in Australia: a qualitative study. BJGP Open. 2022;6(1).
- 10. Verhoeven V, Tsakitzidis G, Philips H, Van Royen P. Impact of the COVID-19 pandemic on the core functions of primary care: will the cure be worse than the disease? A qualitative interview study in Flemish GPs. BMJ Open. 2020;10(6):e039674.
- 11. Johnsen TM, Norberg BL, Kristiansen E, Zanaboni P, Austad B, Krogh FH, et al. Suitability of Video Consultations During the COVID-19 Pandemic Lockdown: Cross-sectional Survey Among Norwegian General Practitioners. J Med Internet Res. 2021;23(2):e26433.
- 12. Quigley A HN, Aznar C, Salisbury C. . Evaluation of Babylon GP at Hand: Final Evaluation Report. URL: <a href="https://www.hammersmithfulhamccg.nhs.uk/media/156123/Evaluation-of-Babylon-GP-at-Hand-Final-Report.pdf">https://www.hammersmithfulhamccg.nhs.uk/media/156123/Evaluation-of-Babylon-GP-at-Hand-Final-Report.pdf</a> [accessed May 2022]; 2019 May.
- 13. Leung K, Qureshi S. Managing high frequency users of an electronic consultation system in primary care: a quality improvement project. BMJ open quality. 2021;10(2):e001310.
- 14. Norman C, Wildman JM, Sowden S. COVID-19 at the deep end: A qualitative interview study of primary care staff working in the most deprived areas of england during the COVID-19 pandemic. International journal of environmental research and public health. 2021;18(16):8689.
- 15. Wherton J, Greenhalgh T, Shaw SE. Expanding video consultation services at pace and scale in scotland during the covid-19 pandemic: national mixed methods case study. Journal of medical Internet research. 2021;23(10):e31374-e.
- 16. Juan NVS, Shah P, Schlief M, Appleton R, Nyikavaranda P, Birken M, et al. Service user experiences and views regarding telemental health during the COVID-19 pandemic: A co-produced framework analysis. PloS one. 2021;16(9):e0257270-e.
- 17. Ng M, Fleming T, Robinson M, Thomson B, Graetz N, Margono C, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet. 2014;384(9945):766-81.