**Supplementary Materials. Rapid literature search strategy to support the evidence-based selection of relevant survey items and additional questions.**

We chose to conduct a linear mixed models analysis at the country level, guided by theoretical considerations and insights from a rapid literature search, rather than relying solely on data-driven model selection criteria such as AIC or BIC. This approach was selected to address multicollinearity, minimize bias due to missing data, and clarify the individual contribution of each group of predictors, while also reducing the risk of overfitting. For this reason, we performed a rapid literature search in PubMed on April 4, 2023, using the following detailed query:

("video consult\*"[tiab] OR "digital consult\*"[tiab] OR "teleconsult\*"[tiab] OR "telemedicine"[tiab] OR "telehealth"[tiab] OR "telemedicine"[MeSH Terms])

AND

("general practice"[tiab] OR "primary care"[tiab] OR "family practice"[tiab] OR "family medicine"[tiab])

AND

("COVID-19"[tiab] OR "SARS-CoV-2"[tiab])

AND

("barrier\*"[tiab] OR "facilitator\*"[tiab] OR ("adopt"[tiab] OR "adoptability"[tiab] OR "adoptable"[tiab] OR "adopted"[tiab] OR "adopter"[tiab] OR "adopters"[tiab] OR "adopting"[tiab] OR "adoption"[MeSH Terms] OR "adoption"[tiab] OR "adoptions"[tiab] OR "adopts"[tiab]) OR "accept\*"[tiab] OR "implement\*"[tiab] OR "driver\*"[tiab] OR "perception\*"[tiab] OR ("effect"[tiab] OR "effecting"[tiab] OR "effective"[tiab] OR "effectively"[tiab] OR "effectiveness"[tiab] OR "effectivenesses"[tiab] OR "effectives"[tiab] OR "effectivities"[tiab] OR "effectivity"[tiab] OR "effects"[tiab]) OR ("uptake"[tiab] OR "uptakes"[tiab] OR "uptaking"[tiab]) OR ("usage"[tiab] OR "usages"[tiab]))

AND

(1000/1/1:2023/4/1[pdat])

Using a convenience sampling approach, we screened the 595 records retrieved through our search and selected a combination of recent systematic reviews and theory-informed observational studies that employed relevant conceptual frameworks, including the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). In total, 11 studies were identified to inform the evidence-based selection of key PRICOV-19 main survey items, as well as additional questions aligned with the study’s objectives, as detailed in **Supplementary Table 1**.

**Supplementary Table 1. Drivers of video consultations according to rapid literature search, with matching data sources (i.e., PRICOV-19 main survey variables, additional PRICOV-19 questions, and COVID-19 data).**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Drivers of use of video consultation** | **References** | | **PRICOV-19 main survey variables1** | **Additional PRICOV-19 questions2** | **COVID-193** |
| *COVID-19, incl. Access and Quality* | | |  |  |  |
| COVID-19 as driver to secure provision of quality of care | | 12,17 |  |  | Intensity data |
| COVID-19 as driver for telehealth reimbursement | | 17,43 | int\_pcp\_paymentsystem | Payment option for video or not |
| Access to those who may otherwise remain untreated | | 43 | pcp\_population\_migrants |  |  |
| Accessibility | | 46 | pcp\_population\_migrants |  |  |
|  | | |  |  |  |
| *Context and Setting, incl. Demand and Payment* | |  |  |  |  |
| Business and financial pressures | | 17 | pcp\_gp\_statute 1-10 |  |  |
| Consumer-led healthcare | | 17 | int\_pcp\_paymentsystem |  |  |
| Consumer-focused healthcare | | 46 | int\_pcp\_paymentsystem |  |  |
| Information sharing | | 46 | Infprev\_documents\_securedserver |  |  |
| Location: urban- versus rural-based practices | | 43 | pcp\_location |  |  |
| *Patients' and Physicians' Experiences, incl. Literacy* | |  |  |  |  |
| Overall satisfaction | | 7,30,46 |  | Offered to all patients or not |  |
| GP experiences shape telehealth use | | 5,17 |  | All kinds of consultation or not |  |
| Practices drove more video use variation than patients | | 44 | pcp\_gp\_statute 1-10 |  |  |
| Computer proficiency | | 7,45 | Commupt\_website\_update |  |  |
| Patients' past treatment experiences | | 30,47 | int\_pcp\_patients |  |  |
| Training and guidelines | | 7,11 |  | Guidelines on video use or not |  |
| *Doctor–Patient Relationship* | |  |  |  |  |
| Patients with regular medication receptive to video | | 30,45 | int\_pcp\_patients |  |  |
| Patients' familiarity with clinicians | | 30,47 | int\_pcp\_patients |  |  |
| *Infrastructure* | |  |  |  |  |
| Low broadband access, low use of video consultations | | 44,46 |  | Limited access to internet |  |
| Proper broadband prerequisite for video consultations | | 47 |  | Internet access affordability |  |

*1The selected PRICOV-19 main survey variables out of the total of 53 items; 2The selected PRICOD-19 additional questions for national leads out of the total of 15 questions;*

*3The effects of COVID-19 on the health of the country's population expressed in cases and mortality rates.*

**Supplementary Table 2. Practice-level characteristics, based on selected PRICOV-19 main survey variables out of the total of 53 items.**

|  |  |  |
| --- | --- | --- |
| **Selected PRICOV-19 main survey variables** | **Original answer options** | **Recoded answer options** |
| What is the main payment system in this practice?  (int\_pcp\_paymentsystem) | Fee-for-service (1)  Capitation (2)  Other (3)  Salary (4)  Pay for performance (5)  Mix of salary and pay-for-performance, P4P (6)  Mix of salary and capitation (7)  Mix of fee-for-service, capitation and P4P (8)  I do not know (9) | Fee-for-service/performance-based: 1,3,5,6,8.  Salary-/capitation-based: 2,4,7.  Missing value: 9 or no answer. |
| GPs in this practice are (pcp\_gp\_statute 1-10): | Salaried employed with centre or authority (1)  Salaried employed with other GP (2)  Self-employed with contract(s) with the health service, insurance or authority (3)  Self-employed without contract (4)  Contract with company providing services (5)  Permanent observer in practice (6)  Occasional observers (7)  Owner of the practice (8)  Independent (9)  I do not know (10) | Self-employed: 3,4,5,7,8,9.  Salaried/employed: 1,2,6.  Missing value: 10 or no answer. |
| How many patients are registered in this practice? (int\_pcp\_patients) | Number of patients | Number of patients listed:  <3,000; 3,000-10,000; >10,000 |
| How would you characterize the place of this practice? (pcp\_location) | Big (inner)city (1)  Suburbs (2)  (Small) town (3)  Mixed urban-rural (4)  Rural (5)  I do not know (6) | Urban: 1,2,3.  Rural: 4,5.  Missing value: 6 or no answer. |
| Compared to the average practice in your country, would you say that this practice on average treats more/less patients with a migration background with difficulty speaking the local language?  (pcp\_population\_migrants) | Below average (1)  Approximately the average (2)  Above average (3)  I do not know (4) | Below average (1).  Approximately the average (2).  Above average (3).  Missing value: 4 or no answer. |

**Supplementary Table 3. Country-level characteristics, based on selected PRICOD-19 additional questions for national leads out of the total of 15 questions.**

|  |  |  |
| --- | --- | --- |
| **Selected additional PRICOV-19 questions** | **Original answer options** | **Recoded answer options** |
| What is the definition of video consultation in your country? (Q1) | Asynchronous patient-clinician video/photo consultations  - Store-and-forward (1)  Synchronous patient-clinician video consultations  - Live interactive video conferencing (2)  Both of them (3)  None of them (4) | Definition:  Yes (1,2,3).  No (4).  Missing value: no answer. |
| For what kind of consultations can you offer video consultations? (Q2) | Only for COVID-19 related consultations (1)  For all kinds of consultations (2) | Limited to COVID-19 use only:  Yes (1)  No (2)  Missing value: no answer. |
| To which patients can you offer video consultations? (Q3) | To all patients (1)  Only to patients you treated before face-to-face (2) | Offered to all patients:  Yes (1)  No (2)  Missing value: no answer. |
| Can you bill video consultations/is it paid? (Q5)  Multiple answers are possible. | No (1)  Yes, by the National Health Service (2)  Yes, by the Social insurance (3)  Yes, by the private insurance (4)  Yes, by the patient (5) | Reimbursement possible:  Yes (2,3,4)  No (1,5)  Missing value: no answer. |
| Are there guidelines on tele/video consultations in your country? (Q10) | Yes (1)  No (2)  I do not know (3) | Guidelines on tele/video consultations:  Yes (1)  No (2)  Missing value: no answer, I do not know. |
| Do any regions in your country have limited access or no access to the internet? (Q11) | Yes (1)  No (2)  I do not know (3) | Limited access or no access to the internet:  Yes (1)  No (2)  Missing value: no answer, I do not know. |
| Is internet access for nearly all persons in your country financially affordable? (Q13) | Yes (1)  No (2)  I do not know (3) | Internet access for nearly all financially affordable:  Yes (1)  No (2)  Missing value: no answer, I do not know. |

**Supplementary Table 4. COVID-19 cases and deaths 1 month prior to PRICOV-19 main survey data collection per country.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country** | **Start data collection** | **Cases 1 month prior** | **Deaths 1 month prior** | **Population** |
| Austria | 05/02/2021 | 395,078 | 6,355 | 8,922,082 |
| Belgium | 08/02/2021 | 688,270 | 19,720 | 11,611,419 |
| Bosnia | 12/12/2020 | 76.757 | 1.234 | 3,270,943 |
| Bulgaria | 15/02/2021 | 213,409 | 7,576 | 6,885,868 |
| Croatia | 05/03/2021 | 239,945 | 5,027 | 4,060,135 |
| Cyprus | 05/03/2021 | 33,153 | 202 | 1,244,188 |
| Czech Republic | 30/11/2020 | 181,962 | 675 | 10,510,751 |
| Denmark | 03/03/2021 | 207,081 | 2,125 | 5,854,240 |
| Estonia | 07/12/2020 | 8,715 | 73 | 1,328,701 |
| Finland | 30/11/2020 | 13,555 | 329 | 5,535,992 |
| France | 25/02/2021 | 2,916,577 | 64,254 | 64,531,444 |
| Germany | 02/02/2021 | 2,088,400 | 33,624 | 83,408,554 |
| Greece | 12/01/2021 | 130,485 | 2,406 | 10,445,365 |
| Hungary | 25/04/2021 | 571,596 | 15,058 | 9,709,786 |
| Iceland | 21/01/2021 | 5,621 | 26 | 370,335 |
| Ireland | 18/01/2021 | 78,776 | 1,976 | 4,986,526 |
| Israel | 08/12/2020 | 325,776 | 2,570 | 9,795,000 |
| Italy | 02/01/2021 | 1,938,083 | 55,576 | 59,240,329 |
| Kosovo | 05/12/2020 | 31,979 | 671 | 1,662,009 |
| Latvia | 14/01/2021 | 30,297 | 210 | 1,873,919 |
| Lithuania | 10/02/2021 | 173,819 | 1,845 | 2,786,651 |
| Luxembourg | 30/09/2021 | 74,262 | 822 | 639,321 |
| Malta | 08/02/2021 | 16,280 | 225 | 526,748 |
| Moldava | 10/02/2021 | 154,118 | 2,985 | 3,061,506 |
| Netherlands | 15/02/2021 | 926,874 | 11,405 | 17,501,696 |
| North Macedonia | 22/04/2021 | 118,736 | 3,137 | 2,103,330 |
| Norway | 05/03/2021 | 68,107 | 563 | 5,403,021 |
| Poland | 05/02/2021 | 1,457,755 | 29,034 | 38,307,726 |
| Portugal | 13/01/2021 | 370,787 | 4,505 | 10,290,103 |
| Romania | 26/11/2020 | 182,854 | 4,862 | 19,328,560 |
| Sebia | 08/01/2021 | 296,528 | 1,604 | 7,296,769 |
| Slovenia | 20/11/2020 | 14,477 | 155 | 2,119,410 |
| Spain | 02/02/2021 | 2,461,832 | 54,187 | 47,486,935 |
| Sweden | 09/03/2021 | 635,190 | 12,223 | 10,467,097 |
| Switzerland | 05/03/2021 | 547,263 | 9,179 | 8,691,406 |
| Turkey | 17/02/2021 | 2,406,216 | 20,881 | 84,775,404 |
| Ukraine | 06/04/2021 | 1,546,363 | 26,050 | 43,531,422 |
| United Kingdom | 27/04/2021 | 4,291,275 | 122,849 | 67,281,039 |
|  |  |  |  |  |

**Supplementary Table 5. Overview of recoded answers, based on selected PRICOD-19 additional questions for national leads.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Definition** | **Which consultations** | **Offered to** | **Reimbursement** | **Guidelines** | **Internet limited** | **Internet affordable** |
| Austria | Synchronous | All kinds | All patients | Social insurance | No | No | Yes |
| Belgium | Synchronous | All kinds | All patients | NHS | No | No | Yes |
| Bosnia and Herzegovina | None | - | - | No | No | Yes | No |
| Bulgaria | Both | All kinds | All patients | No | No | No | Yes |
| Croatia | Both | All kinds | All patients | NHS | - | - | - |
| Cyprus | None | - | - | No | No | No | Yes |
| Czech Republic | None | All kinds | All patients | Social insurance | Yes | No | Yes |
| Denmark | Synchronous | All kinds | All patients | NHS | No | No | Yes |
| Estonia | Synchronous | COVID-19 only | All patients | No | No | No | Yes |
| Finland | Synchronous | All kinds | All patients | NHS | Yes | No | Yes |
| France | Synchronous | All kinds | Only after FTF | NHS, social insurance | Yes | Yes | Yes |
| Germany | Synchronous | All kinds | All patients | Social and private insurance | No | No | Yes |
| Greece | Both | All kinds | All patients | No | No | Yes | No |
| Hungary | Both | All kinds | Only after FTF | No | No | Yes | No |
| Iceland | None | - | - | - | No | No | Yes |
| Ireland | Synchronous | All kinds | All patients | NHS, patient | Yes | Yes | - |
| Israel | Synchronous | All kinds | All patients | No | No | No | Yes |
| Italy | Both | All kinds | All patients | No | No | Yes | Yes |
| Kosovo\* | Both | COVID-19 only | All patients | No | No | Yes | Yes |
| Latvia | Synchronous | COVID-19 only | All patients | NHS | Yes | No | Yes |
| Lithuania | None | All kinds | All patients | Social and private insurance, patient | No | No | Yes |
| Luxembourg | Both | All kinds | All patients | NHS | No | Yes | Yes |
| Malta | Synchronous | All kinds | All patients | No | No | No | Yes |
| Moldavia | Synchronous | COVID-19 only | Only after FTF | No | - | No | Yes |
| Norway | Both | All kinds | All patients | NHS, patient | No | No | Yes |
| Poland | None | - | All patients | No | Yes | - | - |
| Portugal | Synchronous | All kinds | All patients | NHS | - | Yes | No |
| Romania | Synchronous | COVID-19 only | All patients | NHS | No | Yes | Yes |
| Serbia | None | All kinds | Only after FTF | No | No | Yes | No |
| Slovenia | Synchronous | All kinds | All patients | NHS | No | Yes | Yes |
| Spain | Synchronous | All kinds | All patients | No | No | No | Yes |
| Sweden | Synchronous | All kinds | All patients | NHS, private insurance, patient | No | Yes | Yes |
| Switzerland | Both | All kinds | All patients | Social insurance | No | Yes | Yes |
| The Netherlands | Synchronous | All kinds | All patients | Social insurance | No | No | Yes |
| Turkey | Both | All kinds | Only after FTF | No | Yes | Yes | Yes |
| Ukraine | Both | All kinds | All patients | No, patient | Yes | Yes | Yes |
| United Kingdom | Synchronous | All kinds | All patients | NHS | Yes | No | Yes |

*Notes: FTF = face-to-face consultations.*