**Online-only Supplementary Materials**

**Text section:**

**Appendix: Questionnaire on Telepsychiatry Regulations**

**eTables:**

**eTable 1: General regulations and deregulations related to telemedicine (Detailed version).**

**eTable 2: Practical implementation and prescription regulations for telepsychiatry (Detailed version).**

**eTable 3: Insurance reimbursement for telepsychiatry (Detailed version).**

**eTable 4: Impressions regarding telepsychiatry from the authors representing each region.**

**Appendix: Questionnaire on Telepsychiatry Regulations (sent to co-authors on May 7, 2020).**

Questions 6-33 requested two answers as related to the two time points of the study (retrospectively, at the end of 2019, and currently, in May 2020).

1. Is there a common national rule for telemedicine?
2. If there is a common rule, is it a law or a non-law official guideline? (Please describe the contents roughly.)
3. Which agency is in charge of the administration of telemedicine?
4. Have there been any changes in laws and guidelines related to the spread of COVID-19 infections?
5. When did the deregulation associated with COVID-19 take place?
6. Is there a limit to the areas in which telemedicine can be provided under the laws or guidelines?
7. Are there any qualifications required for telemedicine doctors under the laws or guidelines?
8. Do the laws/guidelines provide for a method of patient identification?
9. Are there any performance standards for cameras, phones, etc., to be used under the laws or guidelines?
10. Is there a standard for line speed and security under the laws or guidelines?
11. Are there any restrictions on the applications/software to be used?
12. Is it possible to provide telemedicine in psychiatry under the laws or guidelines?
13. Under the laws or guidelines, is it possible to provide psychiatric care by telemedicine for the first visit? If possible, are there limitations on the diseases and prescriptions that can be used for the first visit?
14. Are there any restrictions on the scope of telepsychiatric care under the laws or guidelines for repeat visits?
15. Are there any conditions for eligible patients (e.g., need to have been in the hospital for more than a few months)?
16. Can it be used for regular medical visits, or are there restrictions, such as only being allowable in emergencies?
17. Is it possible to prescribe medication under the laws or guidelines?
18. Are there restrictions on the types of prescription drugs under the laws or guidelines?
19. Are there any restrictions on the number of days for which drugs can be prescribed compared to face-to-face care under the laws or guidelines?
20. How will patients receive their prescriptions in the case of telemedicine?
21. In the case of telemedicine, where will the patient receive their medication (pharmacy, home, or both, etc.)
22. Can telemedicine be carried out within the scope of public medical insurance?
23. Are there any restrictions on eligible diseases if they are reimbursed for public health care?
24. Are there any restrictions on eligible patients if they are eligible for public health care reimbursement?
25. What is the price difference between telemedicine and face-to-face care when reimbursed by public insurance?
26. If telemedicine is reimbursed by public health care, can it be used for regular medical visits, or are there any restrictions, such as for sudden or emergency visits only?
27. Is there a limit to the number of times telemedicine can be performed in a month when reimbursed by public insurance?
28. Is there a distinction between telephone-only calls and video calls when reimbursed by public insurance? If so, is there a difference in price?
29. If not covered by public insurance, is telemedicine covered by private insurance?
30. What percentage of your patients are using telepsychiatry? (e.g., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.)
31. What percentage of psychiatrists in the country use telepsychiatry, in your opinion?
32. If telepsychiatry is less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well.
33. How easy is it for physicians to practice online compared to face-to-face practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.)

Additional questions (sent May 24, 2020)

1. As you know, we already asked you about differences in insurance reimbursements based on whether telemedicine services are done via video call or telephone. However, we would also like to know if there are any differences in how laws/regulations are applied based on the form of telemedicine. Please respond with any details about this.
2. We felt it would be beneficial to list the "date that your area's lockdown, state of emergency, etc. began", and so we researched that information on our end and added it to the survey results (Table 1, Column E). Please review the dates we researched and confirm that they are correct. In cases where areas experienced multiple instances of lockdown, please input the earliest date that a widespread lockdown began.
3. Please tell us about the easement of restrictions related to Covid-19 in your country. Have the authorities said that any upcoming relaxation of telemedicine rules, restrictions, etc. would be "temporary" and dependent on pandemic conditions? Alternatively, have they indicated that any changes to laws, etc. resulting from the pandemic will be permanent?

**eTable 1. General regulations and deregulations related to telemedicine (Detailed version).**

|  | **Common national rule for telemedicinea** | **Deregulation of rules related to COVID-19** | **Whether the deregulation is temporary or not** | **Timing of deregulation**  | **The day that widespread travel restrictions beganb** | **Limitations on areas where telemedicine can be provided** | **Qualifications required for doctors who practice telemedicine** | **How to confirm patient identity** | **Performance standards for cameras, phones, etc.** | **Standard for Internet connection speed and security** | **Restrictions on the applications/software that can be used** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Australia | Yes | Yes | Undecided | March 2020 | March 23, 2020 | Limited to remote areas and places where medical care is lacking. | No restrictions | Not specified | Medicare card (given to all Australian citizens) | Not specified | Not specified | Not specified |
| Brazil | Yes | Yes | Temporary | March 2020 | After May 2020 | N/A\* | No restrictions | Not specified | Not specified | Not specified | Guidelines for security and personal information protection. No standard line speed requirement. | Not specified |
| Canada (Ontario) | Rules are Prov-ince-depend-ent. | Yes | Undecided | March 2020 | March 17, 2020 | Not specified | Not specified | Not specified | Not specified | Not specified | Only approved telemedicine solution (Ontario Telemedicine Network [OTN]). | Any teleconference or phone provider allowed. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Common national rule for telemedicinea, cont’d** | **Deregulation of rules related to COVID-19, cont’d** | **Whether the deregulation is temporary or not, cont’d** | **Timing of deregulation, cont’d** | **The day that widespread travel restrictions beganb, cont’d** | **Limitations on areas where telemedicine can be provided, cont’d** | **Qualifications required for doctors who practice telemedicine, cont’d** | **How to confirm patient identity, cont’d** | **Performance standards for cameras, phones, etc., cont’d** | **Standard for Internet connection speed and security, cont’d** | **Restrictions on the applications/software that can be used, cont’d** |
|  |  |  |  |  |  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| China | Yes | Yes | Undecided | February 2020 | January 23, 2020 (Wuhan) | Not specified | Licensed doctors working in government-designated medical institutions. | Not specified | Equipment regularly maintained and checked by technician. | Guidelines for security and personal information protection. No standard line speed requirement. | Not specified |
| Denmark | Yes (same as in-person care) | Yes | Temporary | March 2020 | March 11, 2020 | Not specified | Not specified | Full name and unique social security identification number. | Not specified | Regional rules and guidelines for security and personal information protection. No standard line speed requirement. | Rules are region-dependent; popular general-purpose applications are prohibited. | New software solutions have been approved/provided, while others have been prohibited. |
| Egypt | None | None | Not speci-fied | None | March 20, 2020 | Not specified | Doctors registered with Medical Syndicate and Ministry of Health | Not specified | Not specified | Not specified | Not specified |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Common national rule for telemedicinea, cont’d** | **Deregulation of rules related to COVID-19, cont’d** | **Whether the deregulation is temporary or not, cont’d** | **Timing of deregulation, cont’d** | **The day that widespread travel restrictions beganb, cont’d** | **Limitations on areas where telemedicine can be provided, cont’d** | **Qualifications required for doctors who practice telemedicine, cont’d** | **How to confirm patient identity, cont’d** | **Performance standards for cameras, phones, etc., cont’d** | **Standard for Internet connection speed and security, cont’d** | **Restrictions on the applications/software that can be used, cont’d** |
|  |  |  |  |  |  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020** |
| Germany | Rules are state-dependent. | Yes | Temporary | February 2020 | March 17, 2020 | Not specified | Not specified | Not specified | Not specified | Not specified | Accredited providers only; popular general-purpose applications are prohibited. |
| India | Did not exist prior to pandemic. | Yes | Undecided | March 25, 2020 | March 21, 2020 | Not specified | Doctors registered with Medical Council; registration number openly displayed. | Not specified | Not specified | Not specified | Not specified |
| Italy | Yes | Yes | Temporary | March 2020 | March 10, 2020 | Not specified | Not specified | New patients must provide ID or tax code. For return/long-term patients, their voices/faces are confirmed by their health worker. | Not specified | Not specified | Accredited providers only; popular general-purpose applications are prohibited. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Common national rule for telemedicinea, cont’d** | **Deregulation of rules related to COVID-19, cont’d** | **Whether the deregulation is temporary or not, cont’d** | **Timing of deregulation, cont’d** | **The day that widespread travel restrictions beganb, cont’d** | **Limitations on areas where telemedicine can be provided, cont’d** | **Qualifications required for doctors who practice telemedicine, cont’d** | **How to confirm patient identity, cont’d** | **Performance standards for cameras, phones, etc., cont’d** | **Standard for Internet connection speed and security, cont’d** | **Restrictions on the applications/software that can be used, cont’d** |
|  |  |  |  |  |  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Japan | Yes | Yes | Temporary | February 2020 | April 7, 2020 | Limited to patients who live within 30 minutes of the hospital. | No restrictions | New training plan beginning April 2020. | April 2020 training plan abandoned for time being. | Patient's insurance card, personal number card, or driver's license. | Verbal verification of patient's personal information and insurance card information.‡ | Not specified | Guidelines for security and personal information protection. No standard line speed requirement. | Multi-factor authentication recommended. |
| SouthAfrica | Yes | Yes | Temporary | March 2020 | March 26, 2020 | Not specified | Doctors registered with HPSCA. | Not specified | Not specified | Not specified | Not specified |
| SouthKorea | Yes | Yes | Temporary | February 2020 | None | N/A† | No restrictions | N/A†  | No restrictions | N/A† | Verbal verification of patient's National Identification Number.‡ | N/A† | Not specified | N/A† | Not specified | N/A† | Multi-factor authentication recommended. |
|  | **Common national rule for telemedicinea, cont’d** | **Deregulation of rules related to COVID-19, cont’d** | **Whether the deregulation is temporary or not, cont’d** | **Timing of deregulation, cont’d** | **The day that widespread travel restrictions beganb, cont’d** | **Limitations on areas where telemedicine can be provided, cont’d** | **Qualifications required for doctors who practice telemedicine, cont’d** | **How to confirm patient identity, cont’d** | **Performance standards for cameras, phones, etc., cont’d** | **Standard for Internet connection speed and security, cont’d** | **Restrictions on the applications/software that can be used, cont’d** |
|  |  |  |  |  |  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Spain (Madrid) | None | None | Not speci-fied | None | March 14, 2020 | Not specified | Not specified | Not specified | Not specified | Not specified | Not specified |
| Taiwan | Yes | Yes | Temporary | February 2020 | None | Limited to remote areas and places where medical care is lacking. | All patients quarantined in relation to COVID-19 have access to telemedicine. | Only doctors working in government-designated medical institutions. | Number of eligible healthcare institutions has increased. | Patient's insurance card | Verbal verification of patient's personal information.‡ | Not specified | Guidelines for security and personal information protection. No standard line speed requirement. | Not specified |
| Turkey | None | None | Not speci-fied | None | April 11, 2020 | Not specified | Not specified | Not specified | Verbal verification of patient's identification number. | Not specified | Not specified | Not specified |
|  | **Common national rule for telemedicinea, cont’d** | **Deregulation of rules related to COVID-19, cont’d** | **Whether the deregulation is temporary or not, cont’d** | **Timing of deregulation, cont’d** | **The day that widespread travel restrictions beganb, cont’d** | **Limitations on areas where telemedicine can be provided, cont’d** | **Qualifications required for doctors who practice telemedicine, cont’d** | **How to confirm patient identity, cont’d** | **Performance standards for cameras, phones, etc., cont’d** | **Standard for Internet connection speed and security, cont’d** | **Restrictions on the applications/software that can be used, cont’d** |
|  |  |  |  |  |  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| UK(England) | None | None | Not speci-fied | None | March 23, 2020 | Not specified | Not specified | Patient's personal information and/or NHS number | Not specified | Not specified | Not specified |
| USA(New York) | Rules are state-dependent. | Yes | Undecided | March 2020 | March 16, 2020 | Not specified | Doctors licensed in the state where patient is receiving care. | State boundary restrictions have been lifted. | Verification of patient's ID | Registered patients' IDs no longer verified. |  Concrete requirements for equipment exist.c | HIPAA compliance restrictions. No internet speed requirement.d | HIPAA compliance restrictions relaxed. | Concrete restrictions exist.e | Prior restrictions have been partially relaxed. |

Abbreviations: HIPAA, Health Insurance Portability and Accountability Act (USA); HPCSA, Health Practitioners Council of South Africa (South Africa); N/A, not applicable; NHS, National Health Service (UK).

Notes:

\* Telemedicine available only under certain conditions such as a second opinion.

† Telemedicine not established for general patient care.

‡ For phone call consultations.

a E.g., laws and guidelines.

b Includes a lockdown or state of emergency declaration.

c (i) The technology and equipment utilized must be of sufficient quality, size, resolution, and clarity such that the provider of services can safely and effectively provide telemedicine. (ii) The technology and equipment utilized must be compliant with HIPAA.

d State of New York guidelines recommend periodic quality reviews.

e Encrypted secure servers are required. Data needs to be protected. No social media functions built in to prevent data break or streaming. Data encrypted all the time. Only authorized users can get the data. Session logs stored securely.

**eTable 2. Practical implementation and prescription regulations for telepsychiatry (Detailed version).**

|  | **Provide telepsychiatry care for the first visit** | **Conditions for eligible patients**  | **Prescribing via telepsychiatry** | **Types of medications that can be prescribed via telepsychiatry** | **How many days' worth of medication can be prescribed via telepsychiatry** | **How telepsychiatry patients receive their prescriptions** | **Where the telepsychiatry patient will receive their medication**  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Australia | Possible | Referral from GP | Not specified | Possible | Same as for in-person care. | Same as for in-person care. | Mailed to patient or faxed/scanned to pharmacy. | Pharmacy |
| Brazil | N/A\* | Possible | N/A\* | Not specified | N/A\* | Possible | N/A\* | Some restrictions.a | N/A\* | Same as for in-person care. | N/A\* | Electronic data can be sent with a digital signature recognized by the NSDC. | N/A\* | Pharmacy |
| Canada (Ontario) | Possible | Not specified | Possible | Some restrictions.b | Same as for in-person care. | Sent to pharmacy for patient pick up, or recommendations for pharmacotherapy are sent to patient's refer-ring physician. | Pharmacy |
| China | Generally, first visit must be in-person. | Primary treatment advice and/or prescriptions possible for patients already assigned to licensed doctors. | Not specified | Possible | Some restrictions.† | Same as for in-person care. | Mailed to patient. | Mailed to home or collected at pharmacy. |
| Denmark | Generally, first visit must be in-person.c | Possible by video consultation (not phone). | Not specified | Possible | Some restrictions.† New medications prescribed only in-person. | Less strict application of these rules. | Same as for in-person care. | Sent to pharmacy electronically for patient pick up. | Mailed to home, patient pick up at pharmacy, or patient pick up at clinic.  |
| Egypt | Possible | Not specified | Possible | Some restrictions.d | Same as for in-person care. | Scanned and emailed to patient. | Pharmacy |
| Germany | Generally, first visit must be in-person. | Possible | Not specified | Repeat visits only. | Possible | Some restrictions.† | Less strict application of these rules. | Same as for in-person care. | Mailed to patient. | Mailed to patient or faxed/scanned to pharmacy. | Pharmacy |
| India | Possible | Patient can initiate a tele-consultation.e | Possible | Some restrictions without clear definition | Some restrictions.f  | Same as for in-person care. | Not specified | Both electronic and written prescriptions.h | Pharmacy | Mailed to home with patient’s consent. |
| Italy | Generally, first visit must be in-person. | Patients already in treatment and known by the mental health service. | Possibleg | Some restictionsg | Same as for in-person care. | Sent via e-mail, or pick-up prescription in-person without visit. | Prescription e-mailed, patient pick up at pharmacy, or patient pick up at clinic. |
| Japan | Generally, first visit must be in-person. | Possible | Plan of care developed with patient consent prior to remote consultation. | Possible to provide telemedicine from the first visit with no prior treatment plan. | Repeat visits only. | Possible | Can only prescribe new medications in-person. | New prescriptions possible. Some restrictions for the first visit.i | Same as for in-person care. | Only 7-day prescription for new patients. | Mailed to patient. | Sent to pharmacy by fax, etc. for patient pick up. | Pharmacy | Certain pharmacies can mail to home |
| SouthAfrica | Generally, first visit must be in-person. | Possible | Not specified | Repeat visits only. | Possible | Same as for in-person care. | Up to 6 months. | Repeat prescriptions can be refilled an additional 6 months. | Patient picks up at pharmacy. | Pharmacy |
| SouthKorea | N/A‡ | Possible | N/A‡ | Not specified | N/A‡ | Possible | N/A‡ | No restrictions if doctor judges patient is safe. | N/A‡ | Same as for in-person care. | N/A‡ | Sent to pharmacy by fax, etc., for patient pick up. | N/A‡ | Mailed to home or collected at pharmacy. |
| Spain(Madrid) | Possible | Not specified | Possible | Same as for in-person care. | GP must reactive prescriptions once/year. | Same as for in-person care. | Patient picks up at pharmacy with health card. | Pharmacy |
| Taiwan | Possible for certain patients.§ | Possible for broader range of patients than previously allowed. | Only certain patients.§ | All patients quarantined in relation to COVID-19 have access to telemedicine. | Possible, but only by specific public health centers/hospitals. | Additional hospitals in country's COVID-19 program can also provide prescriptions. | Can only prescribe new medications in-person. | Same as for in-person care. | Same as for in-person care. | Up to 1 month.j | Patient picks up at health institutions contracted with Ministry of Health and Welfare. | Family or representative can pick up using patient's health insurance card at health institutions contracted with Ministry of Health and Welfare. | Patient picks up at health institutions contracted with Ministry of Health and Welfare. | Family or representative can pick up using patient's health insurance card at health institutions contracted with Ministry of Health and Welfare. |
| Turkey | Possible | Not specified | Possible | Some restricted medications.k | Same as for in-person care. | Prescription number sent to patient by text message or over phone. Pharmacy uses common prescription software system to look up number. | The patient receives the prescription information and prescription number and picks it up at the pharmacy. |
| UK(England) | Possible | Not specified | Possible | Same as for in-person care.l | Same as for in-person care. | Sent to pharmacy electronically for patient pick up. | Patient picks up at pharmacy, or pharmacy mails medication to patient home. | Some people’s medication must be delivered to their home address.m |
| USA (New York) | Generally, first visit must be in-person. | Possible | Not specified | Repeat visits only. | Possible | Some restricted medications.n | One restricted medication (methadone). | Same as for in-person care. | Sent to pharmacy electronically for patient pick up. | Pharmacy |

Abbreviations: GP, general practitioner; N/A, not applicable; NSDC, National System of Digital Certification (Brazil).

Notes:

\* Telemedicine available only under certain conditions such as a second opinion.

† Benzodiazepines and other potentially addictive drugs.

‡ Telemedicine not established for general patient care.

§ Only for patients in the following categories: 1. specific remote areas; 2. special conditions; 3. life-threatening emergencies.

a Benzodiazepines, psychostimulants.

b Opioids, methadone, stimulants.

c Patients in remote locations exempt.

d Narcotics, hypnotics.

e Unless they are a minor (17 years old or younger). For minors, a guardian is required to participate.

f Narcotics, psychotropics.

g Prescriptions by phone only available for prescription refills, or non-written prescriptions.

h Electronic prescriptions with a doctor's digital signature and registration number are sent to pharmacy. Written prescription and signature are required for restricted medications.

i Narcotics, psychotropics.

j If no information on patient's condition is available at first visit.

k Narcotics, psychotropics, antineoplastics, immunosuppressives.

l With exceptions for some injectable cosmetic medicines.

m For patients who meet the "shielding criteria" and are therefore at high risk of developing complications from COVID-19, it is essential that their medication be delivered to their home address.

n Controlled substances like opioids.

**eTable 3. Insurance reimbursement for telepsychiatry (Detailed version).**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Coverage of telepsychiatry by public medical insurance** | **Limitations on covered diseases/conditions when covered by public health care reimbursement** | **The price difference between telepsychiatry and in-person care when covered by public health care reimbursement** | **Limitations on the number of times telepsychiatry can be performed per month when covered by public health care reimbursement** | **Difference in price between phone only and video phone use when covered by public health care reimbursement** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020** | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Australia | Possible | Limited to remote areas and places where medical care is lacking. | No restrictions | Price for telemedicine is the same as for in-person care. | Approximately 50 times/year. | Phone consultations reimbursed at lower rate than video. |
| Brazil | Possible | Not specified | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| Canada (Ontario) | Possible | Not specified | Price for telemedicine is the same as for in-person care; some small premiums for telemedicine. | Price for telemedicine is the same as for in-person care. | Not specified | Phone consultations not reimbursed. | No difference |
| China | Only some regions. | Not specified | Prices vary by region. | Not specified | Prices vary by region. |
| Denmark | Possible | Not specified | Lower reimbursement than in-person visits, or not reimbursed.\* | Price for telemedicine is the same as for in-person care for some types of consultations. | Not specified | Lower reimbursement for phone consultation than in-person visits, video consultations not reimbursed in private practice.\* | No difference |
| Egypt | Possible | Not specified | Telemedicine may be more expensive than in-person care. | Not specified | No difference |

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| --- | --- | --- | --- | --- | --- |
|  | **Coverage of telepsychiatry by public medical insurance, cont’d** | **Limitations on covered diseases/conditions when covered by public health care reimbursement, cont’d** | **The price difference between telepsychiatry and in-person care when covered by public health care reimbursement, cont’d** | **Limitations on the number of times telepsychiatry can be performed per month when covered by public health care reimbursement, cont’d** | **Difference in price between phone only and video phone use when covered by public health care reimbursement, cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Germany | Possible | First visit had to be face-to-face. | Patients are now eligible from the first visit. | Lower reimbursement than in-person care, or not reimbursed. | Price for telemedicine is the same as for in-person care. | Not specified | Phone consultations reimbursed at lower rate than video. Psychotherapy only available via video. |
| India | Impossible | Possible; telemedicine available only to low socio-economic status patients. | Not specified | Generally, only to low socio-economic status patients. | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| Italy | Possible | Chronic diseases only | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| Japan | Possible | Generally, only dementia, epilepsy, and homebound patients in the psychiatric field are eligible. Additionally, patients receiving in-person care for >6 months are eligible. | No restrictions | Lower reimbursement than in-person care. | Price for telemedicine has been increased, but reimbursement is still lower than in-person. | 1 time/month | Telepsychiatry can be done several times a month, but reimbursement is lower after the second time. | Phone consultations slightly cheaper. | Phone and video calls are roughly the same price. |
| SouthAfrica | Possible | Limited to remote areas and places where medical care is lacking. | Less strict application of this rule. | Price for telemedicine is the same as for in-person care. | Not specified | No difference |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Coverage of telepsychiatry by public medical insurance, cont’d** | **Limitations on covered diseases/conditions when covered by public health care reimbursement, cont’d** | **The price difference between telepsychiatry and in-person care when covered by public health care reimbursement, cont’d** | **Limitations on the number of times telepsychiatry can be performed per month when covered by public health care reimbursement, cont’d** | **Difference in price between phone only and video phone use when covered by public health care reimbursement, cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| SouthKorea | N/A† | Possible | N/A† | Not specified | N/A† | Price for telemedicine is the same as for in-person care. | N/A† | Not specified | N/A† | No difference |
| Spain (Madrid) | Only in exceptional situations.‡ | Possible | Only in exceptional situations.‡ | No restrictions | Phone and video consultations provided only in exceptional situations‡; in such cases, prices the same as in-person. | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| Taiwan | Possible | Not specified | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| Turkey | Possible | Not specified | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| UK(England) | Possible | Not specified | Price for telemedicine is the same as for in-person care. | Not specified | No difference |
| USA(New York) | Possible; only for rural/remote area patients. | Possible | Generally, only for rural/remote area patients. | Not specified | Price for telemedicine is the same as for in-person care. | 1 time/month | No restrictions | Phone consultations not reimbursed. | Inpatient coverage remains the same. Outpatient coverage is reimbursed at 10% of normal rate when done via phone vs. video. |

Abbreviations: N/A, not applicable.

Notes:

\* No reimbursement for video consultations with private practice psychiatrist.

† Telemedicine not established for general patient care.

‡ Such as emergency situations or situations in which it is not possible to provide in-person care.

**eTable 4. Impressions regarding telepsychiatry from the authors representing each region.**

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|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.)** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well.** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.)** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Australia | 0% | 50% | <10% | 50% | It hasn't been necessary and was not reimbursed unless the patient lived in an area of need. | With regulations restricting movement during COVID, people have been encouraged to stay at home; that and the fact that reimbursement is now available for any consult has led to a massive increase in use. | -1 | -1 |
| Brazil | 0% | 80% | 5% | 60% | The conditions for the use of telemedicine are restrictive. | The current percentage for use is due to the new guidelines that came with the bill passed by Brazil's lawmakers, as a means of facing the challenges of the COVID-19 pandemic, focusing on the reduction of social contact. | -3 | -1 |
| Canada (Ontario) | 350 consults per month (out of 15,000 total), mainly for rural and remote areas | 4000 consults per month (80% video, 20% phone) | <5% | 50-60% | Lack of training; lack of coordination; little financial incentive. | The biggest facilitator was the introduction of temporary billing codes. These allowed rapid training and implementation with the hospital's electronic health record, and allowed ongoing access to care while adhering to public health/social distancing policies. The temporary billing codes also enabled the use of more video call platforms, increasing flexibility.  | -1 | 2 |

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| --- | --- | --- | --- | --- |
|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.), cont’d** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?, cont’d** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well., cont’d** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.), cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| China | Very small percentage | Very small percentage | Very small percentage | Very small percentage | - | - | - | - |
| Denmark | 18% of outpatient consults in January 2020 | 64% of outpatient consults in April 2020 | 5-10% | 80-90% | Lack of training and feasible technical solutions. Optimal psychiatric care requires in-person evaluation. The need for telepsychiatry has been very limited. | During the lockdown, in-person visits were minimized to prevent the spread of infections. During the pandemic both patients and physicians have learned the benefits of telemedicine, and sometimes now prefer this option as a good alternative to in-person consultations. The technical solution systems have been optimized during the pandemic. | -3 | -1 |

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| --- | --- | --- | --- | --- |
|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.), cont’d** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?, cont’d** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well., cont’d** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.), cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Egypt | 30% | 60% | <10% | 60-80% | Reasons for the low use of telepsychiatry before the pandemic arise from both psychiatrists and clients. Many psychiatrists resisted the change of shifting to more technical techniques, as they were convinced that telemedicine would not work as effectively as in-person meetings. Moreover, psychiatrists felt that clients would not feel comfortable while using it. From the clients' side, many of them had the same belief, but it is important to consider that Egypt also has a high illiteracy rate (about one third of the population), which is a very high percentage and creates a barrier for using online services. | After the pandemic, both doctors and patients searched for solutions to solve the problem of social distancing and they were forced to use telemedicine. Illiterate clients got help from their relatives and/or friends in order to use this technique. | 0 | 2 |
| Germany | 0% | 60-70% | <5% | 60-80% | In-person evaluation and contact was seen as central/essential; patients live close enough to the hospital center to do in-person assessments. | Done in place of desired/regular in-person visits that cannot take place due to the pandemic; realization that there are less no-show rates via telemedicine. | -3 | -2 |

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| --- | --- | --- | --- | --- |
|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.), cont’d** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?, cont’d** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well., cont’d** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.), cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| India | 30% | 80% | 5% | 30-40% | No guidelines; confusion regarding drugs that can be used; legal dilemmas; deficiency in technical aspects such as apps, internet, payment gateways; patient satisfaction was assumed to be only possible with in-person consultation. | Reasons for increased rates of use since the pandemic include: 1) Patients' need to have/refill prescriptions; 2) Mental health worsening due to lockdown; 3) Availability of general-purpose applications and easy internet facilities with good speed to enable video consultation at no additional expense; 4) Active guideline formulation by the government; 5) Multiple training sessions by various pharma companies on guidelines, methods, legal aspects; 6) Various applications being made easily available for doctors to start consulting in no time; 7) Online payments easily available. | -1 | 2 |
| Italy | 0.1% | 0.8% | 0.1% | 60-80% | Psychiatrists may prefer to see patients in-person, as that is key for the prevention of relapses. Plus, treatment plans should not be changed over the phone. | Because it was necessary. The alternative was not seeing patients at all. | -3 | -1 |

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|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.), cont’d** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?, cont’d** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well., cont’d** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.), cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Japan | 0% | 50% (90% phone, 10% video) | <1% | 50% (95% phone, 5% video) | Public insurance coverage limited to very small population. Reimbursement is approx. half that for in-person visits.  | The current rate of use is due to deregulation during the COVID-19 pandemic, in addition to efforts to have patients refrain from visiting hospitals to prevent the spread of infection. | -3 | -1 |
| SouthAfrica | <10% | 60% (80% phone, 20% video) | <10% | 70% (80% phone, 20% video) | 80% of the population use the public health sector. Most of these patients are indigent. In the private sector, medical insurance companies only reimburse for in-person consultations. | Use has increased because South Africa has been in a hard lockdown for about eight weeks now with very strict restrictions on movement. Outpatient services in the public sector have been de-escalated and replaced by telephone consults. In the private sector, psychiatrists have resorted to telepsychiatry as a risk reduction strategy and because it is reimbursed. | -2 | 2 |
| SouthKorea | Telemedicine was not previously permitted between doctors and patients in South Korea by Article 34 (Remote Medical Treatment) of the Medical Service Act. | <5% | Telemedicine was not permitted between doctors and patients in South Korea by Article 34 (Remote Medical Treatment) of the Medical Service Act. | <5% | Telemedicine was not permitted between doctors and patients in South Korea by Article 34 (Remote Medical Treatment) of the Medical Service Act. | Because telemedicine was banned between doctors and patients before the onset of COVID-19, the current increased rate of use is due to deregulation during the COVID-19 pandemic, in addition to efforts to have patients refrain from visiting hospitals to prevent the spread of infection. | Not applicable  | -2 |
|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.), cont’d** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?, cont’d** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well., cont’d** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.), cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| Spain(Madrid) | 10% | 90% | 25% | 60-95% | (No answer) | Rates of use have risen due to efforts to have patients refrain from visiting hospitals to prevent the spread of infection. | -2 | -1 |
| Taiwan | 0% | 40% (90% video, 10% phone) | <10% | 20-40% | It's hard to use and limited by laws. | In addition to specific public health centers or hospitals, each city's Health Bureau has temporarily included more hospitals to provide telemedicine services to patients who are quarantined in relation to COVID-19. | -3 | -1 |
| Turkey | 25% | 100% (90% psychotherapy) | <10% | 30-40% | Because there are no laws pertaining to telemedicine. Another important reason is the large number of patients in public hospitals. | The current rate of use is due to public facilitation of telepsychiatry during the COVID-19 pandemic despite there being no official deregulation yet, and because the government is making an effort to have patients refrain from visiting hospitals to prevent the spread of infection. | -2 | 0 |
| UK (England) | 0% | 90% (70% phone, 20% video) | 10% | 60-80% | The perception of greater quality of care with in-person assessments compared to telepsychiatry. Also, the relative ease of traveling to outpatient services in cities like London. | Telepsychiatry has been applied both rigorously and broadly wherever deemed safe and appropriate, in order to limit the risk of exposure to SARS-CoV-2 for patients and medical staff. This has been particularly important for patients who are at high risk of developing severe COVID-19 (see "shielding criteria" in Table 2). | -2 | 2 |
|  | **What percentage of your patients are using telepsychiatry? (i.e., what percentage of a day's consultations are telepsychiatry?) (If multiple days or multiple facilities are used, please provide an average.), cont’d** | **What percentage of psychiatrists in the country use telepsychiatry, in your opinion?, cont’d** | **If telepsychiatry is used less than 10% of the time, explain why you think that is. Likewise, if rates of use have risen since the pandemic began, explain why you think that is as well., cont’d** | **How easy is it for physicians to practice online compared to in-person practice? (-3 to 3 Likert Scale 0 is equivalent, -3 is extremely hard to use, +3 is extremely easy to use.), cont’d** |
|  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  | **Up to Dec 2019** | **As of May 2020**  |
| USA (New York) | 0% | 95% (60% phone, 40% video) | 5% | 80% | In the US, before the pandemic it was very complicated to bill telepsychiatry. Hence, its use was discouraged. Other problems included regulations or patient preference. | The current increase in rate of use is due to the fact that regulations were relaxed, payers are covering the services, patients do not have the option of in-person encounters since clinics are closed and company policies during the COVID-19 pandemic encourage healthcare personnel to work remotely. | -1 | 2 |