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# Management of COVID-19 for Persons with Mental Illness in Secure Units: A Rapid International Review to Inform Practice in Québec

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## ABSTRACT

Most countries have implemented guidelines and policies in response to COVID-19 that have had a direct impact on institutionalized or incarcerated persons with mental health problems. Although these strategies are essential to protect these vulnerable persons from the pandemic, they can also have significant consequences on recovery, well-being, as well as rights and freedoms. Accordingly, we conducted a rapid review to identify strategies, challenges and recommendations for dealing with the COVID-19 outbreak in secure settings for persons with mental illness. While most available publications are not empirical in nature, this knowledge synthesis can nevertheless guide managers of psychiatric and forensic psychiatric institutions, and correctional facilities in dealing with the COVID-19 pandemic.

## KEYWORDS

Mental illness; secure unit; prison; psychiatric institution; forensic; COVID-19; Pandemic; Alternatives to incarceration; Early release mechanisms; Prison reform

## Introduction

As COVID-19 spreads around the world, more and more countries are implementing guidelines and policies in order to flatten the infection curve and avoid overtaxing health-care systems. For example, social distancing and confinement measures have been applied in the general population, and several countries have had to reassign medical and psychosocial staff to COVID-19 screening, management, and treatment services in order to avoid the worst-case transmission scenarios.

These government measures and guidelines have a direct impact on institutionalized or incarcerated persons with mental health problems. Specialized mental health resources have been reassigned to short-term hospital services and long-term care facilities, and social distancing measures have limited visitors' access to mental health institutions. In addition, institutionalized or incarcerated persons with mental health problems have seen decreases in their access to practitioners and non-essential services, which has led to reduced care (Hewson et al., 2020; Moreno et al., 2020). Although these strategies are essential to protect these vulnerable persons from the pandemic, they can also have significant consequences on

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their recovery and well-being. Indeed, persons with mental illness in closed settings are particularly susceptible to such consequences, as they were experiencing some form of confinement *prior* to the pandemic.

### **Local context in Canada and Québec**

The first official cases of COVID-19 in Canada appeared on January 23, 2020; by the end of August 2020, Canada will have had a total of 125 969 cases and 9 090 deaths (Government of Canada, 2020). Long-term care facilities were hard hit: this is where the majority of outbreaks and deaths occurred (Flood et al., 2020). However, there have been outbreaks reported in correctional settings, as well as psychiatric institutions across the country. Correctional services in Canada have reported 360 cases and two deaths as of August 25, 2020, one of which occurred in a correctional facility in the province of Québec (Correctional Service Canada, 2020). The perceived mismanagement of the COVID-19 pandemic in federal correctional facilities sparked a class action lawsuit on behalf of all federal inmates in the province, alleging that appropriate dispositions were not taken to contain contagion and that inmates who presented symptoms were discredited and diminished (Iftene, 2020).

Within Canada, the province with the highest COVID-19 death rate is Québec, with a total of 61 945 cases and 5 747 deaths for a population of 8.485 million (Gouvernement du Québec 2020); this represents a death rate of 677.31 per one million population, making it the third-deadliest place in the world (Statista, 2020). Montréal with a population of 2 million, bore the brunt of the pandemic in the province of Québec and reported 29 714 cases and 3 465 deaths as of August 26, 2020.

Montréal is home to the *Institut national de psychiatrie légale Philippe-Pinel* (INPLPP), Québec's only high secure forensic psychiatric institution and Canada's largest, with its 15 20-bed units. Because of its particular expertise in forensic mental health, the INPLPP has a provincial mandate to exercise an advisory role with government agencies dealing with issues at the intersection of mental health and justice involvement, including offenders with mental illness within the criminal justice system. Montreal is also home to the Montreal Mental Health University Institute (IUSMM),<sup>1</sup> a 389-bed institution, which includes a low-medium secure forensic psychiatry unit of 18 patients.

As of August 26, 2020, the INPLPP reported two positive COVID-19 cases among patients upon admission over the course of the pandemic, while the IUSMM forensic psychiatry unit recorded none. The successful management of this health crisis by these institutions is in part due to the rapid mobilization of management and staff in implementing changes based on the best available information.

### **Supporting clinical leadership through health technology assessment**

On March 13, 2020, the Government of Québec declared a public health emergency for the entire province of Quebec, due to the COVID-19 pandemic. This triggered an immediate mobilization by the INPLPP, through the creation of a COVID-19 crisis management unit and of a special inter-council COVID-19 committee. The crisis unit is composed of INPLPP managers, and meets daily to plan rapid and effective responses to pandemic-related issues. The inter-council committee is composed of the heads of the various clinical councils and provides recommendations for the INPLPP's executive committee and COVID crisis unit.

The INPLPP's safety, justice, and mental health technology assessment unit<sup>2</sup> was invited to participate in the inter-council committee to orient recommendations and decision-making based on available evidence. The IUSMM put a similar crisis response structure in place. In response to questions raised by the crisis units and the inter-council committee, the INPLPP's health technology assessment unit collaborated with the IUSMM's mental health technology assessment unit<sup>3</sup> to support their clinical leadership in the management of the pandemic by conducting a rapid review.

## **Aim**

It is essential to examine the potential impact of changes in practice of various kinds (legislative, organizational, clinical, ethical) on institutionalized or incarcerated persons with mental health problems. Doing so will allow managers and clinicians to respond to the health issues raised by the COVID-19 pandemic and take appropriate action. Accordingly, a rapid review was conducted to answer the following question: *What strategies have been implemented in response to the COVID-19 outbreak in clinical and legal environments (general-psychiatry services, forensic-psychiatry services, correctional services) in which persons with mental health problems are confined?* This review also addresses a logical corollary of this question, namely: *Given the potential impact of these strategies in these environments, should they be maintained after the pandemic?*

## **Methods**

### **Search strategy**

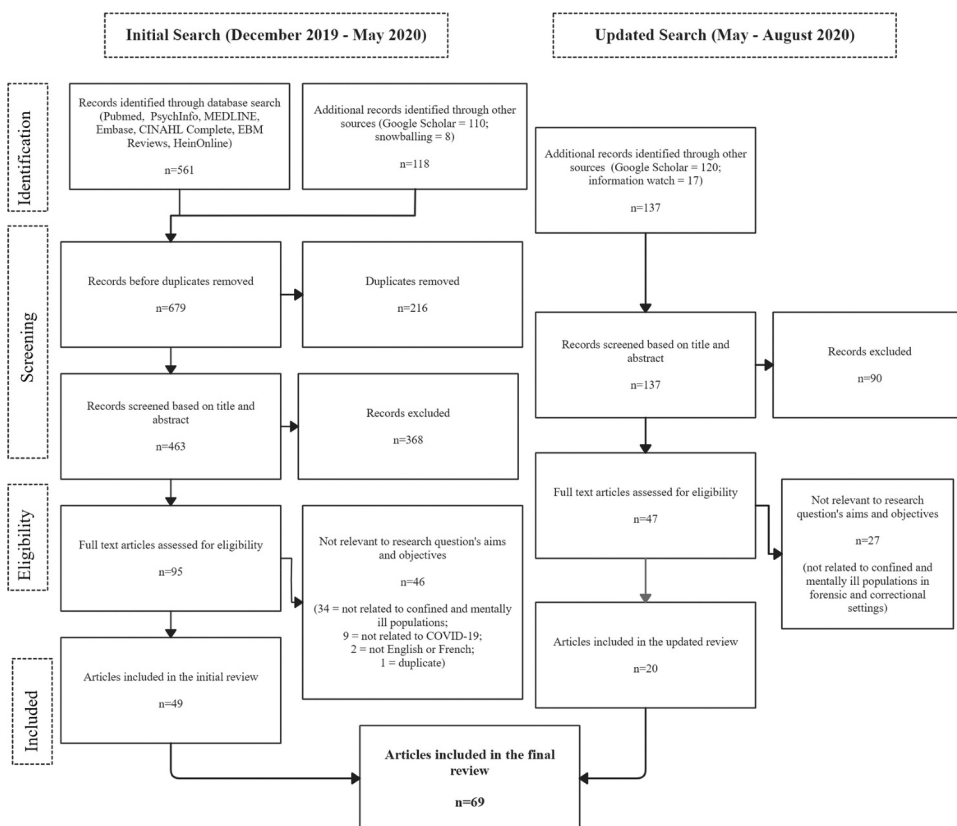
A rapid review of the gray and scientific literature on clinical and legal environments (general and forensic psychiatric services, correctional services housing persons with mental health problems) was carried out between May 10 and May 16, 2020. From this date on, a literature watch was set up to identify any relevant papers, up until August 18, 2020. Moreover, an additional search was conducted in Google Scholar on August 18, 2020. To be included in the review, the publications had to be in French or English, and published from December 2019 (when Chinese health authorities identified the first cases of COVID-19 in Wuhan, China) onwards. Two librarians searched the Medline, Pubmed, PsycInfo, CINAHL, EMBASE, EBM Reviews, and HeinOnline bibliographic databases, as well as Internet sites of some international organizations active in health technology assessment (HTA), some national and international health organizations, and Google Scholar. The primary keywords used included terms related to psychiatry (e.g., psychiatric, mental disorder, mental illness), correctional activities (correctional, offender), and forensic psychiatry (e.g., forensic); these were then combined with keywords related to COVID-19 (e.g., coronavirus, SARSCoV-2).

### **Selection of documents**

The initial reference search yielded 679 publications. Of these, 561 were in the seven reference databases, 110 were found using Google Scholar, and 8 were found through manual searches of the references of previously identified publications and scientific journal

newsletters. Elimination of duplicates ( $n = 216$ ) resulted in 463 publications, of which 368 were not retained; this reduced the number of eligible publications to 95. These 95 publications were read, and after applying inclusion and exclusion criteria, 49 were included into the review. An additional 137 papers were identified through information watch (17) and Google Scholar (120) after the original search was conducted; of these, 20 were identified as relevant. This review is therefore based on 69 publications. The flow chart for the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) model can be found in [Figure 1](#). For the complete list of references, please contact the authors.

For the first 49 publications, the documents were independently selected by two professionals trained in HTA (AJ, JD, and JM). Inter-rater reliability was assessed using a 25% sample of the publications retained after the first selection stage and 20% of the publications retained after the second. In the case of divergent evaluations, a third professional cast the deciding vote. Because of the explosion in the number of publications since May 26, 2020, the following 20 papers were selected based on inclusion criteria as well as relevance. Specifically, because a majority of publications in the first iteration pertained to psychiatric institutions, the second iteration favored publications focusing on correctional and forensic institutions.



**Figure 1.** PRISMA flow chart (Moher et al., 2015).

## **Data extraction, coding, analysis, and synthesis**

The three HTA professionals developed an extraction form, and extracted data from the publications after an analysis of inter-rater reliability using a 20% sample of the documents retained for analysis. For the first 49 publications, information extracted pertained to: 1) description of the measures implemented (and, if described or measured, their impact); 2) primary clinical, practical, or ethical issues; and 3) recommendations for changes in practice (the data extraction form is available upon request). The data was then coded by the three HTA professionals and grouped into thematic categories. For the subsequent 20 publications, only new information was extracted (AJ and AD) into the relevant themes and one additional theme was identified. The quality of the studies was not evaluated. The results are presented below in narrative form.

## **Summary of results**

The 69 publications reviewed were all published in 2020 in, most commonly, the United States (14 publications), China (13), Italy (8), the United Kingdom (6), France (5), Germany (3), and Ireland (3). Singapore, Brazil, Canada, Spain, and Australia contributed two publications each, and India, Israel, Poland, New Zealand, South Korea, Scandinavia, and Switzerland contributed one each.

These publications were primarily ( $n = 50$ ) opinion pieces by experts (editorials, letters to the editor, position papers and other correspondences). There were also four rapid literature reviews, seven narrative (i.e. non-systematic) literature reviews, and eight empirical studies (three surveys and five descriptive/case studies). Reference documents (laws, standards, guidelines, etc.) were also consulted for context (for a list of complementary resources, please consult the original rapid response guide linked in the Acknowledgments or contact the authors).

The rest of this section presents a synthesis of information collected from the literature reviewed. The authors of the publications primarily discuss issues related to the management of the pandemic in psychiatric environments, and present recommendations based on their own experience with COVID-19 or on previous studies. Nine main themes are discussed: 1) increased vulnerability of confined persons with mental health problems; 2) composition and management of mental health teams; 3) release from prison, and return to the community; 4) management of transmission and physical spaces on secure units; 5) sanitary issues; 6) continuity, suspension, or reduction of services; 7) remote technologies; 8) patient rights; and 9) longer-term effects of the pandemic.

## **Increased vulnerability of patients**

Persons with mental health problems are more vulnerable to COVID-19: both morbidity and mortality are greater in this population, in large part because of multiple physical comorbidities as well as lifestyle factors, such as sedentary lifestyle and smoking (C. Brown et al., 2020; Kozloff et al., 2020). Special attention should be paid to the interaction between COVID-19 and psychiatric medication (Chevance et al., 2020; Cranshaw & Harikumar, 2020). This is especially important to consider when using sedation to ensure compliance with measures of isolation in their rooms, as it may aggravate respiratory symptoms

(Chevance et al., 2020). Another issue identified in correctional settings is the increased risk of withdrawal symptoms in response to reduced access to illicit psychoactive substances as a result of restricted access to the community (Fovet et al., 2020).

### ***Living environment***

Transmission of COVID-19 is greater in secure units, such as forensic and psychiatric hospitals, remand centers, and prisons (De Girolamo et al., 2020; Liebrez et al., 2020) as social distancing is challenging due to population density (Kothari et al., 2020; Kozloff et al., 2020). Moreover, in order to prevent suicide or unauthorized leaves, windows are often locked, which leads to poor ventilation, itself a risk factor for transmission (Kozloff et al., 2020). Correctional environments, already underfunded and overcrowded prior to the pandemic, struggle as austerity measures amplify preexisting challenges (Kothari et al., 2020).

### ***Clinical issues***

Some patients need constant reminders of social distancing rules due to illness-related cognitive problems or disorganized behavior (Chevance et al., 2020; Kozloff et al., 2020). Concomitant substance use affects some persons' judgment, and ability to comply with these rules (Kozloff et al., 2020). Some patients suffering from psychosis are less motivated to comply with rules regarding social distancing and infection control (E. Brown et al., 2020; Rajkumar, 2020). Agitated patients may spit on staff or other patients, which increases the risk of transmission (C. Brown et al., 2020). The circumstances of the pandemic may also lead to atypical psychiatric presentations that may complexify treatment and compliance (Türközer & Öngür, 2020). Moreover, rising tension, distress and anger in the face of an ever-increasing number of restrictions coupled with fear of falling ill, have led to acts of rebellion such as hunger strikes, protests and riots in prisons, along with escapes, deaths and injuries (Caputo et al., 2020; De Carvalho et al., 2020).

### ***Relapse***

The impact of COVID-management measures on psychiatric relapses must be emphasized. Relapses may be triggered by increased stress secondary to confinement or pandemic-related discharge and early return to the community (Garriga et al., 2020), as well as by exposure to constant negative media coverage and worries about friends and family in the community with whom the patient or inmate has lost contact (Fovet et al., 2020). In additions, individuals with mental illness and those who are already confined in prisons or in psychiatric facilities are at increased risk of developing a pandemic acute stress disorder (Heitzman, 2020). Because suicide and self-harm rates are generally high in correctional settings, globally, especially for those who are on remand, some authors are concerned that increased isolation may increase this risk (Hewson et al., 2020).

### ***Staff composition and personnel management in mental health***

The management of the COVID-19 pandemic has led to significant changes to the organization of care, and especially to staff composition and personnel management in clinical settings. In the current context, it may prove useful to create an inter-profession task force, which includes representatives of all clinical and non-clinical departments, that meet on

a daily basis to oversee the operational aspects of interventions and procedures (L. Li, 2020). Transparent communications within the institution as well as with the public can be facilitated through intranet, podcasts, and institutional websites (Kreuzer et al., 2020). Increased collaboration between professionals and community agencies has had some positive impacts, as stated by Hewson et al. (2020), in the United Kingdom: clinicians have been advocating for whole prisons and communities, which has generated a sense of belonging for inmates within their communities and a greater camaraderie between staff and inmates.

Healthcare professionals must not only take on new roles and responsibilities but also rapidly adapt to work environments characterized by tense relationships and uncertainty about COVID-19 transmission (Muirhead, 2020). Several authors recommend that the management of front-line staff (psychiatrists, psychologists, social workers, etc.) be based on six principles: 1) implementation of a staff-management plan (canceling and rescheduling holidays, financial compensation); 2) equitable treatment of staff, and attention to their well-being; 3) training and appropriate supervision of staff; 4) psychological support for teams facing challenging situations daily; 5) good communication and strong collaboration between professionals and teams; and 6) validation of the work and skills of those most at risk (Kothari et al., 2020; Ornell et al., 2020; Poremski et al., 2020). To reinforce affiliation and allow debriefing after each work shift, an employee-manager buddy system can be established (Kothari et al., 2020). Discussing practical changes in team briefings through examples across disciplines may help support staff behavioral changes (Boland & Dratcu, 2020).

Teams of healthcare professionals should be reduced in size, in order to create standby replacement teams that can incorporate providers in non-clinical administrative roles. This would permit the staff most at risk of infection (workers who are older, pregnant, or in fragile health) to avoid undue exposure and allow work teams to have rest periods (L. Li, 2020). A survey can be used to identify staff with specific needs, such as those with health risks or those with children to care for during lock down (Kreuzer et al., 2020).

It is clear from the literature that there is a need for training programs on COVID-19 risk and prevention strategies, in order to equip professionals to deliver appropriate care that minimizes the risk of infection, and rapidly identify the signs and symptoms of the infection (C. Brown et al., 2020; Druss, 2020). Guidelines on the evaluation of symptoms, patient transfers to intensive care units, and the functional links between services should be produced and disseminated (Thome et al., 2020). It is recommended that posters and e-mail be used to regularly communicate up-to-date information, as there seems to exist a knowledge gap about the pandemic among staff (Kothari et al., 2020; Zhu et al., 2020).

### ***Conditional discharge and community release***

The increased criminalization of some social groups (ethnic minorities, homeless persons, persons with substance-use problems, persons with mental health problems) is reported to increase transmission of COVID-19 in correctional settings (Akiyama et al., 2020). Moreover, repeated transitions to and from their living environment and prison (i.e. “the revolving doors of justice”) increase the transmission of COVID-19 in both the community and correctional settings.



In response to this problem, Akiyama et al. (2020) have formulated recommendations for this population, most notably: 1) release from prison of persons with the lowest risk of recidivism, of older inmates, and of persons with health problems; 2) provisional suspension of arrests and court proceedings for minor offenses; 3) isolation of persons who are, or are suspected of being, COVID-positive; 4) preparation of protocols for the transfer and hospitalization of inmates with severe cases of COVID-19; and 5) identification of infected and recovered staff who may have acquired greater immunity and could therefore be assigned to duties related to the hygiene and care of COVID-positive inmates.

To prevent transmission of the virus in prisons, the Bazelon Center for Mental Health (Washington DC, United States) recommends the immediate release of inmates with mental health problems, and the exclusion from prisons of any arrested person with a mental health problem (Canady, 2020a). In the United Kingdom, new legislation had been proposed to modify the admission and diversion conditions for legally detained persons with mental health problems, and strongly incites Mental Health Trusts to transfer these persons to, and treat them in, the community (C. Brown et al., 2020). On the other hand, although public health authorities in England have also recommended early release of correctional detainees, this has only been carried out partially, and has been ineffective in reducing prison deaths due to COVID-19 (Kothari et al., 2020). In Italy, a government decree was introduced on March 17 which gave approximately 4 000 prisoners the possibility of home detention, with electronic bracelets for those with less than 18 months left to serve (Caputo et al., 2020). However, releasing individuals from prison into precarious living situations or into the streets, in a context where many emergency resources have reduced their services, may in fact increase the “revolving doors of justice” phenomenon (Fovet et al., 2020).

The diversion of COVID-negative patients from psychiatric hospitals to psychiatric services in the community must be planned (Choi et al., 2020), though sometimes, relocation of hospitalized patients to community-based services occurred very rapidly, without any transition period (Muirhead, 2020). Rapid discharge poses ethical and clinical challenges with regards to the evaluation of risk of transmission as well as the suitability and availability of community services (Moreno et al., 2020).

In the United Kingdom, patients who tested positive for COVID-19 were prioritized for discharge if they were medically well and responded positively to psychiatric treatment (Boland & Dratcu, 2020). In France, patients who could be quarantined (14 days), had a stable psychiatric state, and were able to comply with confinement requirements were released early from psychiatric hospitals in order to free up psychiatric beds for pandemic patients (Chevance et al., 2020). In Italy however, psychiatric hospitalizations lasted longer in March 2020 than in March 2019 in some regions, because of difficulties ensuring that patients could return to a safe home environment (Clerici et al., 2020).

## ***Management of transmission and physical spaces in secure units***

### ***Admissions***

Many hospitals have suspended admissions (D’Agostino et al., 2020) or tightened admission criteria (Muirhead, 2020; Xiang et al., 2020). Prior to admission, all patients and detainees should be screened for COVID-19 symptoms, including a history of travel to high-risk regions, and a history of contacts with persons confirmed to be COVID-positive or

exhibiting COVID-like symptoms (D'Agostino et al., 2020; Starace & Ferrara, 2020). Isolation of new admissions was standard practice in mental health (Starace & Ferrara, 2020) and correctional settings (Burton et al., *in press*).

### ***Detection of positive cases and “cohorting”***

Vigilance for COVID-19 symptoms should be constant and dynamic, in order to prevent outbreaks on units (D'Agostino et al., 2020). Individuals with severe mental illness often presented with atypical symptoms and were unable to correctly and rapidly identify their own symptoms (Ji et al., 2020). It has also been reported that inmates in correctional facilities were reluctant to report symptoms, out of fear that they would be subjected to additional isolation precisely when they were feeling particularly vulnerable and alone (Kothari et al., 2020). When a COVID-positive case is identified, all individuals on the unit should be tested for COVID-19, and a protocol should be in place for their transfer to a designated COVID care unit should their health deteriorate.

Several authors have reported the creation of distinct units (“patient cohorting”): 1) Hot zones, in which COVID-positive patients or inmates receive appropriate treatment; 2) Warm zones, which house suspected/symptomatic COVID cases for 14 days while they await the results of screening tests; and 3) Cold zones, which house COVID-negative individuals (Arango, 2020; L. Li, 2020). In addition, distinct corridors may be created within these units for staff and patients, in order to limit the risk of transmission (Chevance et al., 2020). If necessary, patients or inmates suspected of being or known to be COVID-positive may be separated from the general population and isolated in designated individual rooms for 14 days (Akiyama et al., 2020; L. Li, 2020). Dedicated isolation units should include seclusion rooms for behavioral disturbances with dedicated personnel and full use of personal protective equipment (A. I. F. Simpson et al., 2020).

Symptomatic patients in isolation should also be monitored closely should they exhibit suicidal or violent behaviors (L. Li, 2020). The decision to transfer a patient to a designated hospital should be based on the patient's level of risk and needs, determined through a procedure established by the local government (Zhu et al., 2020). In their narrative review of the impact of the pandemic on psychiatric care, Bojdani et al. (2020) underline several challenges faced by institutions when dealing with contagion. One of the difficulties in dealing with COVID-positive patients is the inability to predict the course of a patient's infection. Psychiatric and correctional facilities seldom have access to emergency material, supplies and expertise for physical interventions, such as intubation, if a patient were to rapidly develop complications. Strategies to effectively and rapidly transfer patients and inmates to appropriately resourced medical units are essential.

## ***Hygiene, sanitation, and protection***

### ***Personal protective equipment***

The implementation of enhanced hygiene measures and of personal protective equipment (PPE, e.g., masks, face coverings, protective suits) faces many obstacles, especially with regards to supply, safety, training, and use. First, both psychiatric and correctional institutions have difficulty obtaining adequate supplies due in part to the fact that they lie outside traditional supply chains and maintain little PPE on the premises (Enos, 2020; Kothari et al., 2020). It is also important to consider the inherent hazard of some

situations in secure units: masks may be used as ligatures (Enos, 2020), and alcohol-based hand sanitizers may be prohibited in units, due to the risk of patients or inmates consuming them. Their use may therefore require additional monitoring by staff (Burton et al., *in press*).

All staff should wear masks and be trained in the use of PPE, in order to reduce the risks of infection (Enos, 2020; Percudani et al., 2020). When the supply of PPE is limited, the equipment should be reserved for interactions with patients with fever and respiratory symptoms (L. Li, 2020). Changing rooms should be set up to allow staff to don surgical masks and disposable suits before entering units with COVID-positive patients (Chevance et al., 2020; Percudani et al., 2020). However, staff must be mindful that masks might inadvertently appear threatening to patients experiencing emotional distress and paranoid thoughts (The Lancet Psychiatry, 2020). Moreover, to foster empowerment, patients should be offered the choice of wearing or not wearing a mask, so that they can feel that they have some control over their situation (Canady, 2020b). If a patient is incapable of wearing a mask due to their psychiatric symptoms or safety considerations, those near them should wear a mask or face covering, in order to reduce the risk of transmission (Enos, 2020).

### ***Enhanced hygiene measure***

In the current context, it is essential to increase the availability of alcohol-based hand sanitizer and to educate not only patients, but also staff, about hand hygiene, how to cough safely and how to dispose of tissues (A. I. F. Simpson et al., 2020). Some authors recommend using highly visible posters that provide information on COVID-19, the virus' means of transmission, and the different safety protocols applicable to staff and patients (Canady, 2020a). Surfaces (e.g., doors, shared computers, identity cards, metal or plastic surfaces that facilitate virus transmission) and frequently used locations (e.g., dining rooms) should be disinfected (L. Li, 2020). Additional measures should be put in place in hot zones, such as regular disinfection of all equipment (e.g., keys, telephones), assigning specific equipment to each patient or, when this is not possible, disinfecting it between each patient interaction (Chevance et al., 2020). Food and equipment of any kind should be inspected and disinfected by staff before their distribution (C. Li et al., 2020). Increased ventilation can be achieved by keeping windows open whenever safe to do so, in all clinical and non-clinical rooms in the ward (Boland & Dratcu, 2020).

### ***Continuity, reduction, or suspension of services***

#### ***Restriction of admissions***

Several authors reported difficulties in maintaining services to persons with mental health problems due in part to restricted admissions policies (Arango, 2020; Choi et al., 2020) and closure of community-based clinical and psychosocial services (L. Li, 2020). In addition, the admission of new patients takes longer, which contributes to overtaxing psychiatric emergency services. Zuffranieri and Zanalda (2020), in Italy, report that court orders were temporarily put on hold for admission to rehabilitative psychiatric health facilities for offenders who are mentally incapacitated and considered to be highly dangerous to society; admission were limited to individuals who were already in prison as well as those who were difficult to control in the community during lockdown.

### ***Suspension of group activities***

Several authors have recommended the reduction, if not complete suspension, of group activities and activities held in common rooms, as well as the restriction of the number of participants in groups, especially those involving older patients with multiple comorbidities (L. Li, 2020; Tomlin, 2020). However, limiting group activities could lead to greater loneliness in already isolated patients, and exacerbate psychiatric symptoms (Xiang et al., 2020). Group activities where social distancing can be applied, such as gardening, should be expanded and maintained (Boland & Dratcu, 2020). In forensic psychiatric residential facilities in Italy, group activities were reorganized with the help of patients, by limiting the number of participants, by enforcing physical distancing and the use of surgical masks, and by choosing to do the activities in large well-ventilated spaces, or outdoors (Zuffranieri & Zanalda, 2020). Boland and Dratcu (2020) report offering occupational therapy activities and educational sessions on COVID-19 on a one-on-one basis as opposed to group settings. While transforming group activities into individual session may be resource-intensive, the reduction of the number of inpatients through community release and restricted admissions will allow institutions to increase resources for those remaining (Kreuzer et al., 2020).

### ***Individual activities and interventions***

Poremski et al. (2020) state that the decision to reduce individual activities should take into account the risk posed by the activity, patient needs, and existing alternative services. Cullen et al. (2020) fear that reducing services will lead to a deterioration of patients' mental and physical states, and recommend increasing care during this period of crisis. Tomlin (2020) recommends that forensic mental health environments plan how often patients go outdoors and enjoy exercise periods, to ensure that they receive the minimum time outdoors recommended by the United Nations' Nelson Mandela Rules (at least one hour of outdoor physical activity per day, weather permitting). Kothari et al. (2020) recommend that prisoners in cells receive entertaining material such as jigsaw puzzles and playing cards, as well as personal-development material such as guides to yoga or physical fitness. A variety of levels should be available, with activities for beginners and experts. They also report that detainees greatly appreciate these basic interventions.

### ***Reduction of mental health services in prisons***

Many therapeutic and recreational activities have been suspended in prisons while time in cells has increased, with reports stating some prisoners are isolated up to 23 hours a day (Hewson et al., 2020). Liebreuz et al. (2020) emphasize that mental health problems are disproportionately frequent among incarcerated persons. Even under normal conditions, psychiatric care in prison environments is inadequate – during a crisis, the psychiatric and psychological needs are that much greater, due to increased feelings of fear and uncertainty, and the undesirable effects of isolation measures. Ensuring the continuity of psychiatric and psychological services during the COVID-19 pandemic is paramount. To this end, Kothari et al. (2020) recommend regional coordination of psychiatric and correctional services, as well as liaison with courts and probation officers to screen for mental health problems and ensure adequate follow-up. They also emphasize the need to triage persons with serious mental health problems, by identifying risk factors – such as preexisting mental health problems, the risk of harm to self or others, violent or aggressive behavior, and refusal to eat – and to consider the recommendations of professionals with prior knowledge of the

detainee. These individuals should be prioritized for care (Kothari et al., 2020). Furthermore, professionals who provide psychosocial care should be regularly informed of the evolution of symptoms (Liebrenz et al., 2020). In order to ensure that follow-up is congruent with the constantly evolving situation, new practices should be regularly reevaluated and redeveloped, and all changes should be clearly explained to staff and detainees (Kothari et al., 2020). Spaces may even need to be reorganized in order to allow for the respect of social distancing measures (Fovet et al., 2020).

### ***Suspension of legal proceedings***

Treatment orders and involuntary admissions take longer to process when court proceedings are suspended or limited, and this may exacerbate existing psychiatric problems (L. Li, 2020). Suspension of court hearings and jury trials have increased time spent in remand centers. In their commentary, Hewson et al. (2020) highlight that time spent in remand is often difficult for prisoners, as it is characterized by uncertainty and anxiety about possible legal outcomes. This is compounded by the distress and insecurity brought on by the ongoing pandemic. They suggest that additional assistance be offered by court-liaison services in order to reduce delays in court processing and offer much-needed support.

### ***Remote technologies***

#### ***Technology as the interface for patient-family meetings***

Several countries have promoted the use of remote technologies to ensure hospitalized patients remain in contact with their families. In the absence of in-person visits, videoconferencing (when available) and telephones have become the principal means of contact between these groups (Garriga et al., 2020). In Madrid, one psychiatric unit prohibited in-person visits, but families could turn to a psychiatric-liaison department, which provided videoconferencing technology for virtual visits to patients (Arango, 2020). In addition to videoconferencing with patients' close relatives and friends, some hospitals used remote technology to provide psychological support to grieving families (De Girolamo et al., 2020). In the United States, the National Association of State Mental Health Program Directors (2020) recommends patients stay in touch with their loved ones, which can be done via videoconferencing (Muirhead, 2020), FaceTime, or Skype (Canady, 2020a). In addition, the National Alliance on Mental Illness (2020) published a guide that explains, among other things, how to contact an incarcerated close relative or friend with a mental health problem.

### ***Remote interventions***

In response to the COVID-19 pandemic, some public authorities rapidly turned to remote delivery of patient services, with the justice environment being no exception. In Ireland, the experience has been positive (Kennedy et al., 2020): the use of video court appearances has resulted in meetings adhering more closely to the agenda, triage being more rigorous and effective, and detainees being more likely to appear. Regarding telemedicine, some care units, such as those of the Irish National Forensic Mental Health Service and the Irish Prison Service, offer videoconferencing interventions. Kennedy et al. (2020) believe that video court appearances and telemedicine accelerate some elements of the judicial process and propose that they be continued after the COVID-19 crisis. Although virtual contacts may be used in secure rooms or cells for interventions or mental state checks, they may

present some challenges in shared spaces, such as prison cells and double-occupancy rooms, where they compromise confidentiality and may increase stigmatization and feelings of shame (Kothari et al., 2020). Hewson et al. (2020) recommend that other communication methods should be encouraged: writing letters, increased access to telephone landlines, and use of the prison voicemail service.

Prior to the COVID-19 pandemic, communication technologies dedicated to intervention were not always available or used for this purpose in psychiatric settings (Shalev & Shapiro, 2020). A survey conducted by S. A. Simpson et al. (2020) in March 2020 – in which 101 psychiatrists in 29 US states were asked to assess the quality of, and access to, mental health services – reveals that even today, these technologies are not always used when available. Psychiatrists reported being more likely to use telemedicine technologies for outpatients than for inpatients, whose health status increases their susceptibility to COVID-19 infection (S. A. Simpson et al., 2020). The current situation may reflect the apprehension some health professionals have in the use of these technologies as alternatives to in-person meetings with clients. Nevertheless, this apprehension is continually diminishing as the value of these communication technologies in hospital environments is recognized; as a result, uptake of the technologies is growing.

The recourse to remote technologies, be they videoconferencing or telephone consultations between professionals and patients (Arango, 2020), or FaceTime or Skype discussions between staff, requires staff training in the technology in question (Canady, 2020a). Moreover, remote technologies should be used not only for consultations but also for the management of medication and communications with patients' close relatives and friends (De Girolamo et al., 2020). In fact, the value of these technologies is increasingly recognized, and remote consultations with patients are becoming widespread in the face of social distancing measures applicable to patients and healthcare personnel (S. Li & Zhang, 2020; Muirhead, 2020). Furthermore, the use of computers, cellular telephones, and tablets for virtual team meetings is increasingly common, and is consistent with recommendations by institutional authorities to find alternatives to in-person meetings (Shalev & Shapiro, 2020; Shao & Fei, 2020). However, if telepsychiatry becomes the new norm (Türközer & Öngür, 2020), it is unclear whether telehealth services will be reimbursed differently from face-to-face services, which will probably increase inequalities in fractured health-care systems (Moreno et al., 2020).

## ***Patient rights: from loss to empowerment***

### ***Loss of rights and confinement***

Preventive isolation measures have forced many psychiatric-care and residential-treatment care settings to confine patients who were normally free to come and go. This has been reported in Italy (De Girolamo et al., 2020; Starace & Ferrara, 2020), Scotland (C. Brown et al., 2020), New Zealand (Muirhead, 2020), and China (Zhu et al., 2020), and is also true generally in forensic psychiatry environments (Tomlin, 2020). However, the loss of rights and freedoms is a fundamental concern when implementing isolation measures with populations that are already confined. One of the issues raised for some patients is their difficulty observing guidelines for in-room isolation without resorting to sedation which could aggravate respiratory symptoms (Chevance et al., 2020). Zuffranieri and Zanalda (2020) pointed out the psychological impact of isolation for all people, but more attention

should be given to patients who are already limited in their freedom. In fact, isolation measures within the prison context results in a superposition of confinements, which De Carvalho et al. (2020) call “overisolation”.

### ***Video court appearances and tele-assessment: not as good an idea as it seems?***

Kelly (2020) reports that COVID-motivated temporary legislative changes in the Republic of Ireland affect the assessment, treatment, and judicial process of persons with mental health problems. The most noteworthy changes concern assessment procedure (both remote and in-person evaluations are now allowed), composition of the members of the tribunal assessing mental health problems (the tribunal can now be composed of only one person rather than three), and procedures of the tribunal (both video and in-person appearances are now allowed). C. Brown et al. (2020) reported similar temporary legislative changes in the United Kingdom.

Although these provisional changes to the law were proposed in response to the heightened need for psychiatrists dispatched to other sectors, Kelly (2020) notes that they may have significant impact on patient rights. Specifically, video appearances may raise additional barriers to access for patients with literacy or cognitive difficulties, placing a further burden on the patient’s legal representative, who must ensure that their client comprehends and participates in the proceedings. Also, the mental health tribunal’s reduced size and wider powers may compromise the fairness and equity of hearings. As such, the authors recommend that such changes be avoided in future mental health legislation. Moreover, Farrell and Hann (2020) mentioned that the measures to contain the spread of COVID-19 should always be carried out in strict accordance with human rights standards.

### ***Loss of rights and isolation***

The proposed provisional changes in the United Kingdom were also meant to facilitate the isolation and detention of persons with mental health problems, in the interest of preventing transmission (C. Brown et al., 2020). Isolation and deprivation of liberties is a crucial issue in secure units, in light of increased vulnerability factors and possible inability to provide informed consent (due to cognitive impairment and psychiatric symptoms). These measures must therefore be applied with caution, as they constitute a significant infringement on individual rights (C. Brown et al., 2020). Moreover, involuntary hospitalization in response to an inability to follow sanitary guidelines may exacerbate the mental health state which led to this inability to begin with (Gold et al., 2020). Conversely, one may be tempted to use involuntary confinement as a means to reduce the risk of transmission to the patients or others, even when the behavior is not directly related to psychiatric symptomatology (for example, individuals who refuse to quarantine in order to purchase illicit substances). This would represent an abuse of the commitment law (Gold et al., 2020).

In order to avoid COVID-19 transmission in the community or in institutions, protocols that ensure the observation of isolation guidelines, as well as the respect of patient rights, must be put in place. Isolation should only be implemented after measures more respectful of individual liberties (e.g., discharge, parole and patient cohorting) have failed. In C. Brown et al.’s (2020) view, existing laws regarding the confinement of psychiatric patients who are, or are suspected of being, COVID-positive are deficient. Moreover, the use of isolation to prevent COVID-19 transmission is a security and contamination risk-management issue,

not a mental health treatment issue. The legal apparatus surrounding isolation must reflect this, and public-health acts must be adapted to reflect the situation of persons with mental health problems. The authors recommend that, in light of this legal gray zone, governments issue clear and concrete guidelines regarding COVID-19 isolation measures for individuals with severe mental illness, and that the power to implement isolation measures under public-health acts be delegated to care providers. In the absence of formal recommendations, each health institution should develop clear COVID-19 isolation policies which are the least restrictive of individual liberties.

### ***Favoring empowerment and trauma-informed approaches***

In Mental Health Weekly paper, Canady (2020a) pointed out that measures in place in hospitals and prisons may trigger painful memories of trauma. In response, the National Association of State Mental Health Program Directors (2020) shared peer-led recommendations emphasizing safety, empowerment, transparency, collaboration, peer support, and cultural sensitivity. Empowerment may also be reinforced by the continuous communication of decisions, based on reliable sources, which affect patients and inmates – if the stream of communications does not overload them or staff. In the same vein, regularly and adequately informing inmates or patients of the current situation and of the reasons for the measures taken to protect their health is essential (L. Li, 2020; Zhu et al., 2020). To ensure decision-making transparency, patients and inmates should therefore be informed of changes in procedures and of measures underway in their environment (Canady, 2020a). To this end, they must be able to have discussions with staff and obtain accurate and relevant information about the pandemic that they can easily understand (De Carvalho et al., 2020; Hewson et al., 2020). Tomlin (2020) reviewed the literature on the effects of restrictive measures on the perceived freedom of patients in forensic-psychiatry environments, and concluded that these measures are perceived as punitive, provoke fear, and deny the dignity of patients. Patients subjected to these measures feel diminished, bored, frustrated, and dehumanized. Echoing Canady (2020a), Tomlin (2020) states that measures that patients perceive to be fair, less restrictive, and contextually appropriate are also perceived as more legitimate, and are thus more likely to be respected.

### ***The post COVID world: dealing with lasting effects and changes***

A new theme that emerged with the updated literature review was a preoccupation with the lasting effects of the pandemic, in terms of mental health impacts as well as service delivery.

#### ***On mental health***

In their paper on pandemic acute stress disorder, which is defined as a “prolonged anxiety reaction and inability to break away from permanent trauma”, Heitzman (2020) describes the diagnostic criteria, which includes obsessive symptoms, mood disorder symptoms, dissociative symptoms, avoidance symptoms, and as well as symptoms of hyperactivity. The author states that individuals with preexisting mental illness, as well as those who are deprived of liberty, such as those who are incarcerated, are more vulnerable to developing this disorder. As such, the author proposes strategies, which include providing organizational security (procedures, standards and guidelines to direct decision-making, management, and responsibility); informative security (limit information to proven and reliable



sources); and medical security (discussions on how to manage and control symptoms of mental illness and strategies to reduce their impact). They also suggest undertaking educational and informational work with families and supporting health professionals (Heitzman, 2020). Strategies to mitigate the lasting effects on mental health could include community monitoring and mental health screening of vulnerable groups using digital technologies to identify the specific needs of each geographic area (Moreno et al., 2020).

### ***On the economy***

It is no surprise that after months of restrictive measures, most nations are now faced with an economic crisis in addition to a global pandemic. Individuals in secure settings are not immune to the long-term effects of this pandemic on the economy. Economic recessions have been found to increase rates of mental health disorders, homelessness, suicide, substance use, all of which are already highly prevalent in populations with mental illness in secure settings (Türközer & Öngür, 2020). Mental health services are already struggling to meet higher demands, and the long-term effects of the pandemic and economic crises are likely to add additional strain. As such, mental health, addiction, housings, and social services must prepare to meet these new challenges.

### ***On practice***

Many measures have been rapidly put into place in the past several months to quickly respond to a pandemic that took everyone by surprise. Now that these structures are in place, it is critical to thoroughly consider their impact by defining indicators and outcomes (Moreno et al., 2020). These indicators should include outcomes related to COVID-19 monitoring and treatment (testing, cases, intensive-care cases, mortality, vaccination, etc.), and service use (use of face-to-face, video or phone contact with different mental health providers, availability and uptake of COVID-19 information, rates of prescription medication, rates of psychiatric hospitalization, discharge, loss to follow-up, etc.).

In line with decreased populations in secure settings to minimize infection, efforts will have to be made to increase access and maintain community supports for people with severe mental illness through home-based treatment and monitoring (Moreno et al., 2020). This will imply, on one hand, increased resources to ensure that community services have the capacity to guarantee sufficient services and, on the other, changes in practice for all stakeholders to move away from institutionalizing offending patients and toward increased residential support (Zuffranieri & Zanalda, 2020).

Moreno et al. (2020)'s review of mental health practice changes in the face of COVID-19 underlines the new roles that can be taken by service users. Faced with limited resources, services can increase peer worker involvement in service delivery. Moreover, changes in practice should be spearheaded by service users, as they have been pivotal in the development of recovery-oriented approaches across the globe. It is essential that the current need for rapid decision-making is not used as a pretext to evacuate service users and should instead be used as an opportunity for the co-creation of new protocols and practice.

### ***On research***

This pandemic has had a considerable impact on research in forensic mental health: most activities with participants have been suspended to minimize infection risk and researchers and their teams have been affected like most professionals by stay at-home orders. Research

funding has been massively turned toward COVID-related initiatives. Clinical research resources have been dedicated to patient care, while basic research has been reoriented to support laboratory testing (Kreuzer et al., 2020). While confinement measures have been slowly easing in the general population, this likely will not be the case immediately in secure settings, given their additional vulnerability factors. This may demand that researchers adapt their protocols to this new reality, for example, through the use of digital technologies (Türközer & Öngür, 2020). This may, however, pose an additional challenge to recruitment, especially in secure settings where the use of digital technologies is often monitored and restricted. Moreover, existing tools may need to be adapted and validated for use in digital settings. Finally, the pandemic, and its effect on physical health, mental health and disruptive behaviors will represent a significant confounder for research in forensic mental health which will have to be accounted for in non-pandemic research (Türközer & Öngür, 2020). While this may not have an immediate impact on the individuals who are confined in correctional or mental health settings, we can expect that long-term changes might influence how we conduct research in these environments for practitioners, researchers, and service users.

## Discussion

The objective of this rapid response guide was to identify strategies that have been developed in response to the COVID-19 pandemic and applied in clinical, forensic, and correctional environments housing legally detained persons with mental health problems. More specifically, the intent was to characterize the impact of these measures, in order to identify the best practices to promote, now and going forward. The literature reports transformations around the world, primarily in psychiatric environments, but also in correctional and forensic-psychiatry environments. The publications reviewed describe real-world situations, identify issues relevant to patient and detainee management, and issue recommendations.

Seven major conclusions can be drawn from this literature review. First, persons confined in psychiatric or correctional environments are more vulnerable to COVID-19, due to their multiple physical and psychiatric comorbidities, and to the characteristics of the environments themselves. It is therefore necessary to take these factors into account when planning patient management strategies during this health emergency, when vulnerability factors are accentuated. Although certain group activities should be suspended to minimize the risk of transmission, patients/detainees will probably require additional individual interventions.

Second, frequent, and transparent communication between management, treatment teams, and patients/detainees is essential to ensure effective and acceptable changes in the organization of services in response to the pandemic. Involving patients/detainees in communication activities and changes gives them a feeling of control that helps reduce the negative impacts of disruptions and may enhance compliance.

Third, changes in care trajectories due to early release or to restricted admission policies must be compensated for by intensive community services and ongoing follow-up. While services move from institutions to communities, it will be essential to broaden the scope of interventions to include those with higher needs in terms of mental health and therapeutic security. This may include favoring options such as mental health probation or forensic assertive community teams (ACT), and should comprise sufficient community services so as to not encourage the revolving door phenomenon (Cuddeback et al., 2020).

Fourth, contagion-control measures that are least restrictive of individual liberties should be favored. When in-room or in-cell isolation is necessary, it should be compensated for by more extensive psychosocial services.

Fifth, managers of these institutions must ensure supplies are adequate, staff is trained, PPE is used, and equipment to support enhanced hygiene measures is available. Clear protocols that are proportionate to the risk of transmission must be implemented, and staff and patients/detainees should be informed of them.

Sixth, the use of remote technologies (videoconferencing, computers, tablets, telephones, etc.) appears to be a valuable strategy for maintaining contacts between patients and their families, between patients and their treatment teams (telemedicine), and between professionals (for professional discussions and team meetings). It also appears to be useful for maintaining the continuity of essential judicial activities (video court appearances, tele-assessment). Although these technologies appear promising in facilitating access and continuity of care, effective and efficient, it is necessary to consider their impacts on confidentiality, their suitability for persons with literacy or cognitive deficits, and the subjective experience of patients/detainees, who may feel that they are not understood as well as during in-person interactions.

Finally, this reorganization of services should be seized as an opportunity to further involve service users in the planning, development, and delivery of care, as well as an occasion to evolve toward more trauma-informed and recovery-oriented approaches.

It is important to bear in mind that although there are specific issues to be considered when planning service delivery to forensic psychiatric patients – such as the risk of violence and the higher prevalence of functional deficits (Beach et al., 2013; Nijdam-Jones et al., 2017) – the scientific literature reviewed only identified a small number of publications which related specifically to the forensic mental health context. The gray literature reviewed somewhat fills this gap by noting the importance of the factors mentioned in this review, but also by pointing out the need to take into account the following factors upon admission, detention, or hospitalization: 1) transfer and follow-up procedures; 2) the patient/detainee's legal status; 3) the patient/detainee's individual risk factors (e.g., family violence, sexual violence, pedophilia); and 4) the use of isolation and restraint measures when behavioral problems arise (Association des jeunes psychiatres et des jeunes addictologues, 2020; Royal College of Psychiatrists, 2020).

Another noteworthy point is the scarcity of literature specifically focusing on persons who have mental health problems and are in correctional settings. This literature review has demonstrated that mental health problems are an additional challenge to be taken into account in the management of persons in detention, but did not undertake an in-depth analysis of the specific situation in correctional environments, which pose specific challenges, such as inadequate psychosocial care and relatively heterogeneous populations (Mulvey & Schubert, 2017).

### ***Health technology assessment in support of rapid changes***

Locally, this review produced a rapid response guide that was essential in guiding decision makers in the implementation of practices in uncertain times. It was the product of the collaboration of two leading mental health institutions in the province. During the course of the process, communication was maintained between researchers and managers of the

crises teams so as to ensure that daily decisions were made with the best available knowledge. This likely contributed to low infection rate throughout.

The rapid turn around resulted in response guides being produced in both official languages (French and English), a brief, five-minute capsule on social media which conveyed complex information in an accessible manner to practitioners, service users, and family members alike, as well as an online webinar which was widely viewed by practitioners and managers in the fields of psychiatry, forensic mental health, corrections and social services across the province. The rapid response guide is also being used in the development of an implementation plan for a potential second COVID-19 wave. This project is a successful example of how health technology assessment can be rapidly put into practice to inform decision-making in times of crises.

### ***Limitations of the rapid review***

This rapid review has some limitations that should be taken into consideration when interpreting the results presented. The first limitation pertains to the type of literature reviewed: given the novelty of the COVID-19 pandemic, it was decided not to limit the review to reports of empirical studies. In fact, the publications reviewed are mostly opinion pieces by experts (editorials, letters to the editor, other correspondence).

The review period corresponds to the period that saw a rapid outbreak of COVID-19 around the world. The content of the publications analyzed reflects the urgency of the situation in psychiatric and correctional environments in many countries. Most of the publications report recommendations, issued by practitioners and local authorities, which modify professional practice and the organization of services offered to persons with serious mental health problems and who are confined in one of these environments. Although these recommendations are based on clinical knowledge or previous research, it should be noted that they are not systematically based on empirical knowledge of the impact of COVID-19 or of the measures implemented.

The second limitation pertains to the timeframe of the review relative to the sheer quantity of information that has been produced in response to the pandemic. The period covered by our initial search strategy spanned approximately six months (December 2019 to May 2020). When we sought to re-run the same strategy to update our review in August, we were faced with more than three times the amount of literature for half the period. We therefore chose to restrict our search strategy to one database. Though we had reached a certain level of thematic saturation, it is likely that we missed pertinent papers published between May and August 2020. Moreover, by the time this is published, many more papers will have been published. In the short time we conducted this review, the nature of publications has also evolved: more papers of an empirical or descriptive nature are being published as time progresses. The next step in responding to our framework question would therefore be to revisit our research when enough time has elapsed to allow empirical research to have been conducted in this area. This second review could contrast the COVID-related recommendations reported here with the results of empirical studies and develop guidelines for future health emergencies of this kind. Finally, given the need for a rapid response, methodological quality was not evaluated in this review. Readers should therefore be cautious in their interpretation of the results and recommendations reported.

## Conclusion

This rapid review was intended to identify best practices for persons who have serious mental health problems and are confined in secure units during the COVID-19 pandemic. Although the literature review and the conclusions thereafter are based primarily on opinion pieces rather than empirical studies, this review will nevertheless help managers of psychiatric services in forensic-psychiatry and correctional environments make decisions related to the management of the COVID-19 pandemic. It should also stimulate reflection on the best way to ensure the safe management of patients and detainees that minimizes undesirable effects on recovery from mental illness.

## Notes

1. Institut universitaire en santé mentale de Montréal.
2. Unité d'évaluation des technologies et modes d'intervention en santé mentale, justice et sécurité.
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## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## References

- Akiyama, M. J., Spaulding, A. C., & Rich, J. D. (2020). Flattening the curve for incarcerated populations—Covid-19 in jails and prisons. *New England Journal of Medicine*, 382(22), 2075–2077. <https://www.nejm.org/doi/full/10.1056/NEJMp2005687>
- Arango, C. (2020). Lessons learned from the coronavirus health crisis in Madrid, Spain: How COVID-19 has changed our lives in the last 2 weeks. *Biological Psychiatry*, 88(7), e33–e34. [files/16839/abstract.html](https://doi.org/10.1016/j.biopsych.2020.05.011)
- Association des jeunes psychiatres et des jeunes addictologues. (2020). *Recommandations en psychiatrie légale - épidémie Covid-19* [Recommendations in Forensic Psychiatry – Covid-19 Epidemic].

- Retrieved March 2020, from [https://www.ajpja.fr/uploads/file/5e853089ec30b\\_EUhPsvPWAAE6aul.jpeg](https://www.ajpja.fr/uploads/file/5e853089ec30b_EUhPsvPWAAE6aul.jpeg)
- Beach, C., Dykema, L.-R., Appelbaum, P. S., Deng, L., Leckman-Westin, E., Manuel, J. I., McReynolds, L., & Finnerty, M. T. (2013). Forensic and nonforensic clients in assertive community treatment: A longitudinal study. *Psychiatric Services*, 64(5), 437–444. <https://doi.org/10.1176/appi.ps.201200170>
- Bojdani, E., Rajagopalan, A., Chen, A., Gearin, P., Olcott, W., Shankar, V., Solomon, H., Naqvi, N. Z., Batty, N., Festin, F. E. D., Tahera, D., Chang, G., DeLisi, L. E., & Cloutier, A. (2020). COVID-19 pandemic: Impact on psychiatric care in the United States, a review. *Psychiatry Research*, 289, 113069. <https://doi.org/10.1016/j.psychres.2020.113069>
- Boland, X., & Dratcu, L. (2020). COVID-19 and acute inpatient psychiatry: The shape of things to come. *International Journal of Psychiatry in Clinical Practice*, 1–3. <https://doi.org/10.1080/13651501.2020.1801755>
- Brown, C., Keene, A. R., Hooper, C. R., & O'Brien, A. (2020). Isolation of patients in psychiatric hospitals in the context of the COVID-19 pandemic: An ethical, legal, and practical challenge. *International Journal of Law and Psychiatry*, 71, 101572. <https://doi.org/10.1016/j.ijlp.2020.101572>
- Brown, E., Gray, R., Lo Monaco, S., O'Donoghue, B., Nelson, B., Thompson, A., ... McGorry, P. (2020). The potential impact of COVID-19 on psychosis: A rapid review of contemporary epidemic and pandemic research. *Schizophrenia Research*. <https://doi.org/10.1016/j.schres.2020.05.005>
- Burton, P. R. S., Morris, N. P., & Hirschtritt, M. E. (in press). Mental health services in a U.S. prison during the COVID-19 pandemic. *Psychiatric Services*. Prepublication. <https://doi.org/10.1176/appi.ps.202000476>
- Canady, V. A. (2020a). Bazelon center urges reduction of jail population with MI. *Mental Health Weekly*, 30(15), 7. <https://doi.org/10.1002/mhw.32318>
- Canady, V. A. (2020b). NASMHPD issues guidance to maintain hospital patients' health in crisis. *Mental Health Weekly*, 30(18), 1–3. <https://doi.org/10.1002/mhw.32343>
- Caputo, F., Gratteri, S., Sacco, M. A., Scalise, C., Cacciatore, G., Bonetta, F., ... Cordasco, F. (2020). Covid-19 emergency in prison: Current management and forensic perspectives. *Medico-Legal Journal*, 0025817220923693. <https://doi.org/10.1177/0025817220923693>
- Chevance, A., Gourion, D., Hoertel, N., Llorca, P. M., Thomas, P., Bocher, R., ... Gaillard, R. (2020). Ensuring mental health care during the SARS-CoV-2 epidemic in France: A narrative review. *Encephale*, 46(3), 193–201. <https://doi.org/10.1016/j.encep.2020.03.001>
- Choi, K. R., Heilemann, M. V., Fauer, A., & Mead, M. (2020). A second pandemic: Mental health spillover from the novel coronavirus (COVID-19). *Journal of the American Psychiatric Nurses Association*, 1078390320919803. <https://doi.org/10.1177/1078390320919803>
- Clerici, M., Durbano, F., Spinogatti, F., Vita, A., de Girolamo, G., & Micciolo, R. (2020). Psychiatric hospitalization rates in Italy before and during COVID-19: Did they change? An analysis of register data. *Irish Journal of Psychological Medicine*, 26(4), 1–8. <https://doi.org/10.1017/ipm.2020.29>
- Correctional Service Canada. (2020). *Inmate COVID-19 testing in federal correctional institutions August 26 2020*. Retrieved August 29, 2020, from <https://www.csc-scc.gc.ca/001/006/001006-1014-en.shtml>
- Cranshaw, T., & Harikumar, T. (2020). COVID-19 infection may cause clozapine intoxication: Case report and discussion. *Schizophrenia Bulletin*, 46(4), 751. <https://doi.org/10.1093/schbul/sbaa070>
- Cuddeback, G. S. S., Jennie, M., & Wu, J. C. (2020). A comprehensive literature review of forensic assertive community treatment (fact): Directions for practice, policy and research. *International Journal of Mental Health*, 49(2), 106–127. No-Specified. <https://doi.org/10.1080/00207411.2020.1717054>
- Cullen, W., Gulati, G., & Kelly, B. D. (2020). Mental health in the Covid-19 pandemic. *QJM: An International Journal of Medicine*, 113(5), 311–312. [files/16949/PMC7184387.htmlfiles/16951/5813733.html](https://doi.org/10.1093/qjz/hnab011)

- D'Agostino, A., Demartini, B., Cavallotti, S., & Gambini, O. (2020). Mental health services in Italy during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(5), 385–387. [https://doi.org/10.1016/S2215-0366\(20\)30133-4](https://doi.org/10.1016/S2215-0366(20)30133-4)
- de Carvalho, S. G., Santos, I. M., & Dos Santos, A. B. S. (2020). *The pandemic in prison: Interventions and overisolation*. <https://doi.org/10.1590/SciELOPreprints.570>
- de Girolamo, G., Cerveri, G., Clerici, M., Monzani, E., Spinogatti, F., Starace, F., . . . Vita, A. (2020). Mental health in the coronavirus disease 2019 emergency—the Italian response. *JAMA Psychiatry*, 77(9), 974. <https://doi.org/10.1001/jamapsychiatry.2020.1276>
- Druss, B. G. (2020). Addressing the COVID-19 pandemic in populations with serious mental illness. *JAMA Psychiatry*, 77(9), 891. <https://doi.org/10.1001/jamapsychiatry.2020.0894>
- Enos, G. (2020). Few organizations immune to perils of securing PPE for staff, patients. *Mental Health Weekly*, 30(19), 1–8. <https://doi.org/10.1002/mhw.32355>
- Farrell, A.-M., & Hann, P. (2020). Mental health and capacity laws in Northern Ireland and the COVID-19 pandemic: Examining powers, procedures and protections under emergency legislation. *International Journal of Law and Psychiatry*, 71(July–August), 101602. <https://doi.org/10.1016/j.ijlp.2020.101602>
- Flood, C. M., MacDonnell, V., Philpott, J., Thériault, S., & Venkatapuram, S. (2020). Overview of COVID-19: Old and new vulnerabilities. In C. M. Flood, V. MacDonnell, J. Philpott, S. Thériault, & S. Venkatapuram (Eds.), *Vulnerable: The law, policy and ethics of COVID-19* (pp. 1–30). University of Ottawa Press.
- Fovet, T., Lancelevée, C., Eck, M., Scoufflaire, T., Bécache, E., Dandelot, D., . . . Lacambre, M. (2020). Mental health care in French correctional facilities during the Covid-19 pandemic. *L'Encéphale*, 46(3). <https://doi.org/10.1016/j.encep.2020.05.002>
- Garriga, M., Agasi, I., Fedida, E., Pinzón-Espinosa, J., Vazquez, M., Pacchiarotti, I., & Vieta, E. (2020). The role of mental health home hospitalization care during the COVID-19 pandemic. *Acta Psychiatrica Scandinavica*, 141(5), 479–480. <https://doi.org/10.1111/acps.13173>
- Gold, A., Strous, R. D., & Appelbaum, P. S. (2020). COVID-19 and involuntary hospitalisation: Navigating the challenge. *The Lancet Psychiatry*, 7(7), 572–573. [https://doi.org/10.1016/S2215-0366\(20\)30246-7](https://doi.org/10.1016/S2215-0366(20)30246-7)
- Government of Canada. (2020). *Coronavirus disease (COVID-19)*. Retrieved August 29, 2020, from <https://www.canada.ca/fr/sante-publique/services/maladies/maladie-coronavirus-covid-19.html>
- Heitzman, J. (2020). Impact of COVID-19 pandemic on mental health. *Psychiatria Polska*, 52(2), 187–198. <https://doi.org/10.12740/PP/120373>
- Hewson, T., Shepherd, A., Hard, J., & Shaw, J. (2020). Effects of the COVID-19 pandemic on the mental health of prisoners. *The Lancet Psychiatry*, 7(7), 568–570. [https://doi.org/10.1016/S2215-0366\(20\)30241-8](https://doi.org/10.1016/S2215-0366(20)30241-8)
- Iftene, A. (2020). COVID-19 in Canadian prisons: Policies, practices and concerns. In C. M. Flood, V. MacDonnell, J. Philpott, S. Thériault, & S. Venkatapuram (Eds.), *Vulnerable: The law, policy and ethics of COVID-19* (pp. 367–380). University of Ottawa Press.
- Ji, H., Li, L., Huang, T., & Zhu, Y. (2020). Nosocomial infections in psychiatric hospitals during the new coronavirus pneumonia outbreak. *The European Journal of Psychiatry*, 34(3), 177–179. <https://doi.org/10.1016/j.ejpsy.2020.04.001>
- Kelly, B. D. (2020). Emergency mental health legislation in response to the Covid-19 (Coronavirus) pandemic in Ireland: Urgency, necessity and proportionality. *International Journal of Law and Psychiatry*, 70(May–June), 101564. <https://doi.org/10.1016/j.ijlp.2020.101564>
- Kennedy, H. G., Mohan, D., & Davoren, M. (2020). Forensic psychiatry and Covid-19: Accelerating transformation in forensic psychiatry. *Irish Journal of Psychological Medicine*, 1–26. <https://doi.org/10.1017/ipm.2020.58>
- Kothari, R., Forrester, A., Greenberg, N., Sarkissian, N., & Tracy, D. K. (2020). *COVID-19 and prisons: Providing mental health care for people in prison, minimising moral injury and psychological distress in mental health staff*. SAGE Publications Sage UK.
- Kozloff, N., Mulsant, B. H., Stergiopoulos, V., & Voineskos, A. N. (2020). The COVID-19 global pandemic: Implications for people with Schizophrenia and related disorders. *Schizophrenia Bulletin*, 46(4), 752–757. <https://doi.org/10.1093/schbul/sbaa051>

- Kreuzer, P. M., Baghai, T. C., Rupprecht, R., Wittmann, M., Steffling, D., Ziereis, M., . . . Langguth, B. (2020). SARS-CoV-2 risk management in clinical psychiatry: A few considerations on how to deal with an unrivaled threat. *Frontiers in Psychiatry, 11*(550), 1–8. <https://doi.org/10.3389/fpsy.2020.00550>
- Li, C., Zhao, W., He, C., Wu, D., Yue, Y., & Chen, Y. (2020). COVID-19 prevention and control strategies for psychiatric hospitals. *Psychiatry Research, 289*(July), 112935. <https://doi.org/10.1016/j.psychres.2020.112935>
- Li, L. (2020). Challenges and priorities in responding to COVID-19 in inpatient psychiatry. *Psychiatric Services, 33*(2), appips202000166. <https://doi.org/10.1176/appi.ps.202000166>
- Li, S., & Zhang, Y. (2020). Mental healthcare for psychiatric inpatients during the COVID-19 epidemic. *General Psychiatry, 33*(2), e100216. <https://doi.org/10.1136/gpsych-2020-100216>
- Liebrez, M., Bhugra, D., Buadze, A., & Schleifer, R. (2020). Caring for persons in detention suffering with mental illness during the Covid-19 outbreak. *Forensic Science International: Mind and Law, 1* (November), 100013. <https://doi.org/10.1016/j.fsimpl.2020.100013>
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., & Stewart, L. A.; PRISMA-P Group. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews, 4*(1), 1–9. <https://doi.org/10.1186/2046-4053-4-1>
- Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., . . . Arango, C. (2020). How mental health care should change as a consequence of the COVID-19 pandemic. *The Lancet Psychiatry, 7*(9), 813–824. [https://doi.org/10.1016/S2215-0366\(20\)30307-2](https://doi.org/10.1016/S2215-0366(20)30307-2)
- Muirhead, C. (2020). A pandemic within our borders, but what about the impact for our people in acute inpatients? *Journal of Psychiatric and Mental Health Nursing. https://doi.org/10.1111/jpm.12650*
- Mulvey, E. P., & Schubert, C. A. (2017). Mentally ill individuals in jails and prisons. *Crime and Justice, 71*(1), 231–277. <https://doi.org/10.1086/688461>
- National Alliance on Mental Illness. (2020). COVID-19. Resource and Information Guide. <https://www.nami.org/Support-Education/NAMI-HelpLine/COVID-19-Information-and-Resources>
- National Association of State Mental Health Program Directors. (2020). *Peer-led recommendations for supporting individuals receiving care in state psychiatric facilities during the COVID-19 crisis*. Retrieved in March 2020, from <https://www.nasmhpd.org/content/peer-led-recommendations-supporting-individuals-receiving-care-state-psychiatric-facilities>
- Nijdam-Jones, A., Nicholls, T. L., Crocker, A. G., Roy, L., & Somers, J. M. (2017). History of forensic mental health service use among homeless adults with mental illness. *International Journal of Forensic Mental Health, 16*(1), 69–82. <https://doi.org/10.1080/14999013.2016.1255281>
- Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). “Pandemic fear” and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry(AHEAD), 42*(3), 232–235. <files/16878/scielo.html>
- Percudani, M., Corradin, M., Moreno, M., Indelicato, A., & Vita, A. (2020). Mental health services in Lombardy during COVID-19 outbreak. *Psychiatry Research, 288*(June), 1–3. <https://doi.org/10.1016/j.psychres.2020.112980>
- Poremski, D., Subner, S., Lam, G., Kin, F., Dev, R., Mok, Y. M., . . . Fung, D. S. S. (2020). Effective infection prevention and control strategies in a large accredited psychiatric facility in Singapore. *Infection Control and Hospital Epidemiology, 41*(10), 1238–1240. <https://doi.org/http://dx.doi.10.1017/ice.2020.163>
- Gouvernement du Québec. (2020). *Situation du coronavirus (COVID-19) au Québec*. Retrieved August 29, 2020 from <https://www.quebec.ca/sante/problemes-de-sante/a-z/coronavirus-2019/situation-coronavirus-quebec/>
- Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry, 52*(August), 102066. <https://doi.org/10.1016/j.ajp.2020.102066>
- Royal College of Psychiatrists. (2020). *COVID-19: Secure hospital and criminal justice settings*. Retrieved in June 2020, from <https://www.rcpsych.ac.uk/about-us/responding-to-covid-19/responding-to-covid-19-guidance-for-clinicians/community-and-inpatient-services/secure-hospital-and-criminal-justice-settings>



- Shalev, D., & Shapiro, P. A. (2020). Epidemic psychiatry: The opportunities and challenges of COVID-19. *General Hospital Psychiatry*, 64(May–June), 68–71. <https://doi.org/10.1016/j.genhosppsych.2020.03.009>
- Shao, Y., & Fei, J. M. (2020). Psychiatry hospital management facing COVID-19: From medical staff to patients. *Brain, Behavior, and Immunity*, 88(August), 947. <https://doi.org/10.1016/j.bbi.2020.04.018>
- Simpson, A. I. F., Chatterjee, S., Darby, P., Jones, R. M., Maheandiran, M., Penney, S. R., . . . Wilkie, T. (2020). Management of COVID-19 response in a secure forensic mental health setting. *The Canadian Journal of Psychiatry*, 65(10), 695–700. <https://doi.org/10.1177/0706743720935648>
- Simpson, S. A., Dumas, A., McDowell, A. K., & Westmoreland, P. (2020). Novel coronavirus and related public health interventions are negatively impacting mental health services. *Psychosomatics*, 61(5), 568–571. <https://doi.org/10.1016/j.psym.2020.04.004>
- Starace, F., & Ferrara, M. (2020). COVID-19 disease emergency operational instructions for mental health departments issued by the Italian society of epidemiological psychiatry. *Epidemiology and Psychiatric Sciences*, 29(e116), 1–4. <https://doi.org/10.1017/s2045796020000372>
- Statista. (2020). *COVID-19 deaths worldwide per on million population as of August 27, 2020 by country*. Retrieved on August 27, 2020, from <https://www.statista.com/statistics/1104709/coronavirus-deaths-worldwide-per-million-inhabitants/>
- The Lancet Psychiatry. (2020). Mental health and COVID-19: Change the conversation. *The Lancet Psychiatry*, 7(6), 463. [https://doi.org/10.1016/S2215-0366\(20\)30194-2](https://doi.org/10.1016/S2215-0366(20)30194-2)
- Thome, J., Coogan, A., Fischer, M., Tucha, O., & Faltraco, F. (2020). Challenges for mental health services during the 2020 Covid-19 outbreak in Germany. *Psychiatry and Clinical Neurosciences*, 74(7), 407. <https://doi.org/10.1111/pcn.13019>
- Tomlin, J. (2020). What does social distancing mean for patients in forensic mental health settings? *Forensic Science International: Mind and Law*, 1, 1–2. <https://doi.org/10.1016/j.fsimpl.2020.100018>
- Türközer, H. B., & Öngür, D. (2020). A projection for psychiatry in the post-COVID-19 era: Potential trends, challenges, and directions. *Molecular Psychiatry*, 25(October), 2214–2219. <https://doi.org/10.1038/s41380-020-0841-2>
- Xiang, Y. T., Zhao, Y. J., Liu, Z. H., Li, X. H., Zhao, N., Cheung, T., & Ng, C. H. (2020). The COVID-19 outbreak and psychiatric hospitals in China: Managing challenges through mental health service reform. *International Journal of Biological Sciences*, 16(10), 1741–1744. <https://doi.org/10.7150/ijbs.45072>
- Zhu, Y., Chen, L., Ji, H., Xi, M., Fang, Y., & Li, Y. (2020). The risk and prevention of novel coronavirus pneumonia infections among inpatients in psychiatric hospitals. *Neuroscience Bulletin*, 36(3), 299–302. <https://doi.org/10.1007/s12264-020-00476-9>
- Zuffranieri, M., & Zanalda, E. (2020). The forensic psychiatry in the time of coronavirus: The Italian security residences put to the test in a public health emergency. *Psychiatry and Clinical Neurosciences*, 74(9), 507–508. <https://doi.org/10.1111/pcn.13100>