



**SERVICE INNOVATIONS
DURING COVID-19**

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Innovations and modifications of services for people who use drugs during the COVID-19 pandemic: what are the interim outcomes?

In response to the COVID-19 global public health emergency (declared a pandemic on 11 March 2020), most countries in the world introduced measures to curb the spread of the virus in the form of movement restrictions and stay-at-home orders.¹ Such restrictions, together with the overburdening of health-care systems due to COVID-19 infections,² compromised access to services aimed at preventing and treating drug use and its consequences.³ Routine surveillance of drug use, drug-related harms, drug treatment and other interventions may also have been affected;⁴ drug-related treatment data that can be used to compare the pre-pandemic situation with the situation during the pandemic have been reported to UNODC by only 46 countries. The majority of these countries⁵ reported a decline in the number of persons in drug treatment between the periods 2018–2019 and 2020–2021, with further declines from 2020 to 2021 in 18 of the 21 countries that provided data for both years.^{6,7} The disruption of services for people who use drugs and who have needed these services during the COVID-19 pandemic has been well documented,^{8,9} as have concerns over the likely negative impact resulting from this disruption.¹⁰

In an attempt to mitigate this negative impact, there is evidence that numerous service providers and policymakers have actively and creatively sought ways to continue to provide services for people with drug use disorders during the emergency situation created by the COVID-19 pandemic. This is especially relevant in the case of opioid use disorders, which often require a daily intake of internationally controlled medicines. A number of different strategies have been implemented across the globe to ensure continuity in service provision, in addition to measures adopted by services

aimed at directly curbing the spread of COVID-19 on-site, such as the use of personal protective equipment, social distancing and COVID-19 testing.¹¹ Such strategies can be broadly categorized as the introduction or scaling up of the use of telehealth approaches, the provision of (uninterrupted) access to medication or sterile injecting equipment and other approaches.

Interim evaluation of implemented adaptations to drug service provision

Adaptations implemented during the COVID-19 pandemic to services for people who use drugs or with drug use disorders have been evaluated in at least 37 countries in all regions of the world,¹² although rigorous studies are mostly available from high-income countries.

Telemedicine

The use of telemedicine approaches has thrived worldwide during the COVID-19 pandemic, although notable gaps in its utilization and challenges still remain.^{13,14,15} In some countries, telehealth has been implemented for the first time during this period,¹⁶ the most commonly used approaches being telephone calls, followed by free video services.¹⁷

Telehealth approaches were recommended by WHO and UNODC¹⁸ for the care of people who use drugs, and have been among the most used approaches during the pandemic.¹⁹ Studies have shown their feasibility and acceptability and increased patient satisfaction,²⁰ as well as a positive perception by clinicians.²¹ However, evaluations of such approaches in the case of people who use drugs have, to date, rarely been published outside of North America. Favourable clinical outcomes, including higher patient compliance, improved or unchanged treatment retention and improved abstinence rates,²² were reported. Telehealth has proved to help not only in overcoming the challenges of the COVID-19 pandemic, but also in addressing traditional barriers to treatment such as childcare or work commitments, transportation challenges and even stigma.²³ A review of studies conducted

TABLE 1 Brief overview of strategies implemented during the COVID-19 pandemic to maintain care for people who use drugs^{24, 25, 26, 27, 28, 29}

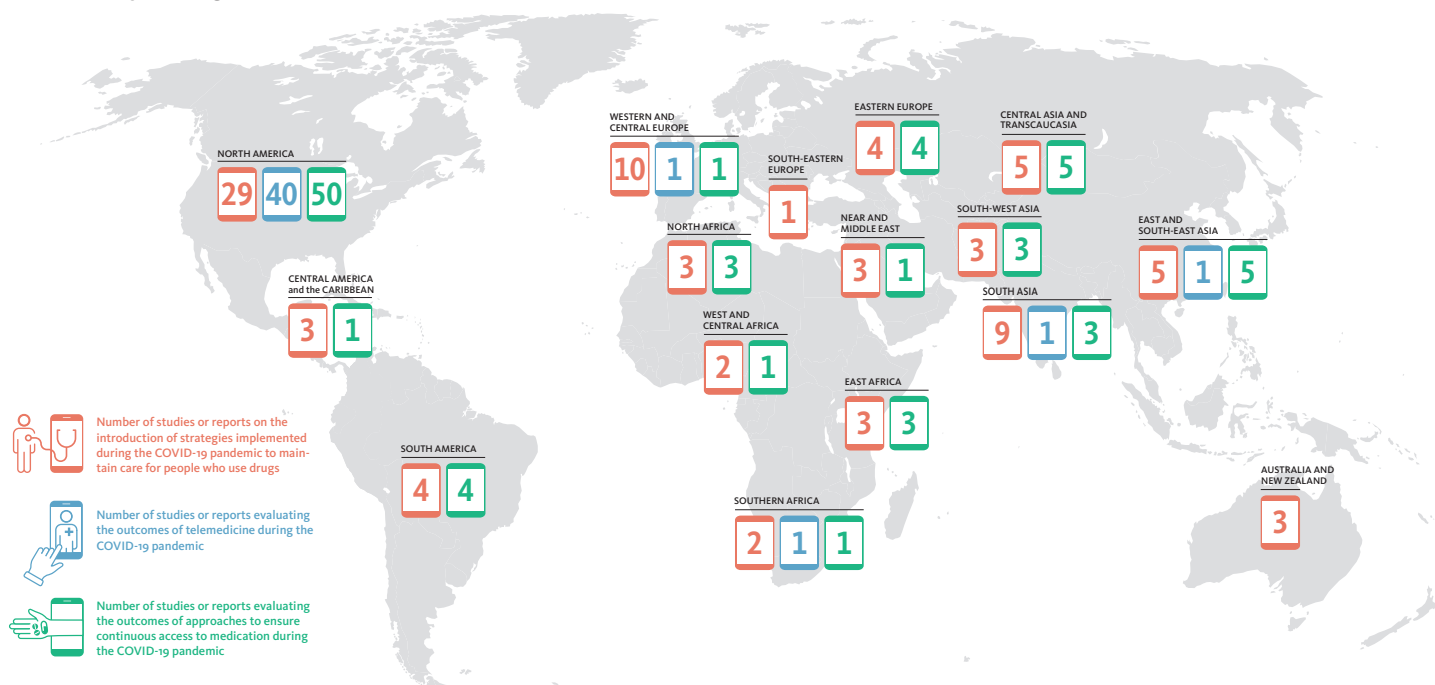
Type of strategy	Examples described in the scientific literature
Telehealth	24-hour telephone lines Smartphone applications for contact Psychosocial services, counselling, individual and group therapy, and sometimes medical consultations online Patient assessment and triage via phone/video calls Distribution of electronic equipment (e.g. donated phones to patients and laptops to clinicians), installation of computers in prison units Distribution of prepaid cards and devices with prepaid services Text messaging with patients Access to sanitized telephone booths placed outside the facility, allowing private video calls Setting up of a sanitized private room with phone communication to providers in another room of the facility Use of virtual platforms for outreach and education (e.g. on naloxone use) Prescription via telemedicine, including teleconference
Ensuring access to medication and sterile injecting equipment	Electronic prescription Introduction or increase in the number of take-home dosages Home delivery of medications (including via a mobile van) Decentralization of medication distribution and support via primary care Dispensing of medications to a trusted contact (e.g. a patient's family member) Increased use of extended-release medicines, including depot buprenorphine Provision of a pharmaceutical quality substitution for various street drugs Drive-through events for naloxone education and distribution Distribution of naloxone kits by mail Drop-off basket regularly refilled with naloxone kits Development of emergency plans to maintain the continuity of needle and syringe exchange programmes and opioid agonist therapy Lifting of restrictions on the number of needles and syringes allowed to be distributed Allowing of secondary distribution of needles and syringes by peers
Other	Adjustment of the legal framework to allow for telehealth and longer take-home dosages Urine drug screening via mobile van near patients' homes Suspension of urine drug screening Provision of electronic pillboxes with a telephone support line

mostly in the United States provided evidence that telehealth innovations during the COVID-19 pandemic have led to higher access to and improved use of medication.³⁰ An overall reduction in health-care costs was an additional benefit.³¹

The implementation of and experimentation with telemedicine has also raised some challenges; besides the impersonal experience and reduced privacy reported by some patients,³² there were limited possibilities of physical examination³³ and limited access to and skills in using appropriate devices or the Internet in some

client groups. Populations facing increased difficulties in accessing telehealth-based care were persons experiencing homelessness³⁴ and people who inject drugs.³⁵ The lack of integration of a telehealth modality with the remainder of the health-care system was another problem reported in multiple studies.³⁶ One exception was in the Province of Alberta, Canada, where the system in place allows many stakeholders (such as various addiction professionals, including from local services, laboratories and pharmacies) to manage the delivery of opioid agonist therapy entirely virtually.³⁷

MAP 1 Number of data collections or studies (including as part of reviews) in countries referred to in the present chapter, by subregion



Sources: UNODC.

In contrast with North American studies, a study in South Africa concluded that telemedicine was feasible only for a minority of the patients treated for substance use disorders: apart from the lack of availability of appropriate technology or connectivity, patients often did not answer phone calls, probably due to privacy concerns, among other barriers to the implementation of these approaches.³⁸ On the other hand, a pan-Malaysian study reported an increase in the utilization of telehealth approaches after “movement control orders” were nationally imposed; such approaches were instrumental in decreasing treatment disruption or discontinuation.³⁹

Overall, the implementation of telemedicine approaches in mental health services in order to overcome service disruption during the pandemic was lower in countries with lower incomes.⁴⁰ Studies beyond the drugs field found that specific subregions and countries may face additional challenges in the implementation of telehealth services, for example, a lack of infrastructure (sometimes including electricity)

and connectivity and the digital or even complete illiteracy of some population groups – the “digital divide” related to inequalities affecting also high-income countries. The cost of some of the approaches was also highlighted, as were the lack of national policies, legislation (including to protect patients’ privacy) and guidelines, and issues related to insurance reimbursement or resistance to change among clinicians and patients.^{41, 42, 43, 44, 45}

Take-home medication

In contrast, approaches that ensured continued access during the pandemic to medication for people who use drugs have been evaluated on a wider geographical scale. Research findings suggest that new or expanded access to take-home dosages was successful in ensuring continuity of treatment for drug use disorders and has led to increased interest in opioid agonist therapy,⁴⁶ and even successful initiation of treatment in new patients in many countries, including in UNODC high-priority countries for drug use and

HIV.⁴⁷ However, data on treatment uptake, which would provide definitive confirmation of these findings, are not always available.

Studies have shown that a decrease in quality of treatment or patient outcomes was not recorded,⁴⁸ while patient satisfaction increased,⁴⁹ alongside improved quality of life and a sense of accomplishment and self-confidence among patients (perceived autonomy with increased self-esteem).⁵⁰ Savings in resources (including clinicians' working hours) were also often reported.⁵¹

The main concerns of clinicians regarding take-home dosages have long been potential diversion and overdose, often with a fatal outcome. Early studies did not show an increase in the number of overdose deaths among opioid agonist therapy patients, while an increase in the number of incidents of diversion to the illicit market was rarely reported; however, few rigorous and individual-level studies have been conducted to date.^{52, 53, 54, 55, 56} Recent studies in two countries showed an increase in methadone-related mortality following the first wave of COVID-19 in persons to whom methadone had not been prescribed (but not in those who had been prescribed the substance)⁵⁷ in the United Kingdom and at the general population level in the United States,^{58, 59} even though methadone-related mortality remained low in both countries and the reasons for the increase are not clear. This raises the question of possible methadone diversion or the non-adherence by patients to prescription instructions, but the available data do not allow definitive conclusions to be drawn yet.^{60, 61, 62}

A few challenges related to the expanded provision of take-home dosages have been highlighted in a number of studies, including more frequent dropouts,⁶³ lower access of disadvantaged groups to support through telehealth interventions,⁶⁴ and the perception of routine and treatment stability disruption in some patients.⁶⁵ The abrupt interruption of the new guidelines for take-home dosages as soon as the state of emergency was lifted is an issue that was also raised.⁶⁶

Implications for future services for people who use drugs or with drug use disorders

The COVID-19 pandemic has created a “natural experiment” situation which has provided, out of the necessity of curbing the spread of the infection, opportunities for testing new approaches. It has also accelerated innovations in drug service provision. Scientific evaluations remain disproportionately concentrated in high-income countries and the long-term evaluations of the innovations have not been completed yet; therefore, definitive conclusions cannot be drawn, even if the interim outcomes of adjustments to services during the pandemic were – in places where their implementation was feasible and followed by an evaluation – to a great extent positive. Some aspects, however, such as the balancing of benefits and risks of different approaches to methadone delivery (i.e. extending take-home dosage policies for long periods of time or to non-stable patients),⁶⁷ need more research. Most of the studies and reports reviewed concluded that innovations should be maintained in the future,^{68, 69} chiefly in order to improve access to evidence-based treatment,⁷⁰ in particular where it was, or still is, lacking. This, however, collides with a number of obstacles, including entrenched routines in clinical practice (resistance to change), as well as inappropriate financing rules (e.g. reimbursement of in-person visits only)⁷¹ and legislative obstacles,⁷² which would require financing and legislation changes in some countries.

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