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Research Paper

Consensus recommendations for opioid agonist treatment following the introduction of emergency clinical guidelines in Ireland during the COVID-19 pandemic: A national Delphi study

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ABSTRACT

Background: Emergency contingency guidelines for opioid agonist treatment (OAT) were introduced in Ireland in March 2020, to ensure rapid and uninterrupted access to treatment while mitigating COVID-19 risk. The contingency guidelines deviated, across multiple clinical domains, from pre-pandemic clinical guidelines published in 2016. The objectives of this study are to (1) identify changes introduced to OAT clinical guidelines in Ireland during the pandemic; and (2) develop consensus on whether the new recommendations should be retained beyond the pandemic, using a national Delphi consensus methodology.

Methods: Clinical guidance recommendations ('statements') were generated by comparing the newly established contingency guidelines with the national 2016 Clinical Guidelines for OAT. Over two rounds of on-line Delphi testing, a panel of experts (people currently accessing OAT, psychiatrists, general practitioners, community pharmacists, a nurse, a psychologist and support/key workers) independently rated their agreement with each statement and provided comments. Statements with a median score of 4 or 5 and a lower quartile of ≥4 were classified as having reached consensus.

Results: Forty-eight panel members were recruited, with a high participation level at Round 2 (90%, n=43). Consensus was achieved for 12 of the 19 statements at Round 1. The 7 remaining statements were revised, with 2 new statements, resulting in 9 statements at Round 2. Four statements reached consensus at Round 2. The final list includes 16 clinical guidance statements; 9 relating to assessment, 3 to OAT drug choice and dosing, 1 to take-away doses, 2 to overdose prevention and 1 to the continuation of e-prescriptions.

Conclusions: A wide range of stakeholders involved in the delivery and receipt of OAT agreed on 16 clinical guidance statements for inclusion in OAT clinical guidelines as we move beyond the pandemic, rather than reverting to pre-pandemic guidelines. The agreed statements relate to facilitating safe access to OAT with minimal waiting time, supporting patient-centred care to promote health and well-being, and preventing drug overdose. Notably, consensus was not achieved for OAT drug dosage and frequency of urine testing during the stabilisation and maintenance phase of care.

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Introduction

The declaration of the COVID-19 pandemic in March 2020 was followed by the implementation of various containment and mitigation strategies, with the aim of suppressing the virus and protecting those most vulnerable from infection (Parodi & Liu, 2020). Measures such as lockdowns (local and national), social distancing, self-isolation, closure of non-essential services, redeployment of healthcare workers, and restrictions on public gatherings were implemented as primary preventive strategies (Talic et al., 2021). While these coordinated suppression efforts were necessary to mitigate the risk of COVID-19, they exacerbated social and structural inequalities, disproportionately affecting marginalised populations, including people with opioid dependency (Alexander et al., 2020; Bennett et al., 2021; Krawczyk et al., 2021; Volkow, 2020).

Opioid agonist treatment (OAT), is first line treatment for opioid dependence, as it is safe and effective in suppressing illicit opioid use (Mattick et al., 2009, 2014), improving mental and physical wellbeing (Lawrinson et al., 2008), and reducing risk of all-cause, overdose, suicide, cancer, alcohol-related, and cardiovascular-related mortality (Santo et al., 2021). However, the public health measures introduced to suppress COVID-19 disrupted patients' ability to access OAT, which by its nature is heavily dependent on regular face-to-face health care delivery (Krawczyk et al., 2021; Nguyen & Buxton, 2021). It was feared that interruptions to treatment, combined with changes in the availability, price and potency of illicit drugs, would lead to changes in drug consumption habits resulting in increased overdose risk and other drug-related harms globally (Alexander et al., 2020; Becker & Fiellin, 2020; Dunlop et al., 2020; Imtiaz et al., 2021; Krawczyk et al., 2021; Volkow, 2020).

In response to these challenges, Ireland, like many other countries, developed a rapid and coordinated response to accelerate new ways of meeting the treatment needs of people with opioid dependency, documented in a suite of national contingency guidelines by the Health Service Executive (HSE) (Hennigan et al., 2021; Krawczyk et al., 2021; Mongan et al., 2020). The priority was to facilitate rapid access or low threshold pathways to OAT for those not already in treatment, while ensuring that existing patients' care was uninterrupted (Corace et al., 2022; Hennigan et al., 2021; Khatri & Perrone, 2020; Krawczyk et al., 2021; O'Carroll et al., 2021). The contingency guidelines supported accelerated access to OAT, particularly for the homeless, and included increased access to buprenorphine. Prior to the pandemic, methadone was the most common form of OAT in Ireland, with buprenorphine-naloxone available on a limited basis (Delargy et al., 2019). The continuity of care when a patient had to undergo a period of self-isolation, was supported through the provision of take-away doses for the duration, or part-duration, of their self-isolation with medications dispensed to a family member or a key worker following patient consent. Where clinically appropriate, access to take-away doses of methadone increased. When patients had to store a large quantity of medication at home or in a congregated setting such as a hostel, advice was given regarding the safe storage of all take-home medicines, particularly methadone. Other innovative strategies adopted during the pandemic included an increase in e-consultations, and increased availability of naloxone. Temporary regulatory changes to the Medicinal Products (Prescription and Control of Supply) Regulations 2003 and the Misuse of Drugs Regulations 2017 were introduced allowing for the electronic transfer of prescriptions, including those for OAT medications, from doctors to pharmacists and removing the need for a paper equivalent. These temporary amendments also allowed for the emergency supply of five days for controlled drugs, including OAT medications. Finally, the cap on the number of patients a Level 2 GP (specialist GPs qualified to initiate OAT and stabilise OAT drug doses) could initiate on OAT was temporarily increased from 35 to 50 during the pandemic (Hennigan et al., 2021; Mongan et al., 2020).

Krawczyk and colleagues' recent scoping review of articles published in 2020 concluded that, although the COVID-19 pandemic presented many challenges for the delivery of OAT, it simultaneously accelerated innovations in policies, and care models to lower thresholds for OAT services (Krawczyk et al., 2021). It is being increasingly suggested that many of the recent innovations could, and should, be implemented beyond COVID-19 (Bennett & Elliott, 2021; Bennett et al., 2021; Brothers et al., 2021; Krawczyk et al., 2021; O'Carroll et al., 2021). The Irish Programme for Government: Our Shared Future states that they will seek to retain measures introduced during COVID-19 to reduce waiting times in accessing treatment services. However, most studies to date have only provided commentaries describing the adaptation of OAT services (Krawczyk et al., 2021). The objectives of this study are to (1) identify changes introduced to OAT clinical guidelines in Ireland during the pandemic; and (2) develop consensus on which of the new recommendations should be retained beyond the pandemic, using a national Delphi consensus methodology. These recommendations are intended to guide policy-makers and inform future clinical guidelines as we begin to move beyond the emergency measures introduced during the pandemic.

Methods

Study design

A consensus-based study, using a modified Delphi technique. The Delphi consensus method was chosen as it is commonly used to provide consensus based recommendations on important clinical questions, informing the development of guidelines and policies in situations of limited evidence (Boulkedid et al., 2011; Stewart et al., 2017). The Delphi technique allows a consensus opinion to be reached among a panel of experts, through an iterative process of multiple anonymised questionnaires (Clayton, 1997). A project steering group (PSG) was established to identify the initial set of recommendations as documented in the contingency guidelines and to later oversee the Delphi consensus study. The PSG included epidemiologists, a qualitative methodologist, psychiatrists, general practitioners and pharmacists involved in the delivery of OAT in Ireland, representatives from an advocacy group for people who use drugs (UISCE) and from a national voluntary organisation that provides frontline services to people who use drugs (Merchants Quay Ireland (MQI)). People currently accessing OAT, and representatives from the Health Service Executive (HSE) National Social Inclusion office and the National Addiction Advisory Governance Group were also included in the PSG. All study procedures received full ethical approval from the Research Ethics Committee in the Royal College of Surgeons in Ireland (REC 202102010).

Statement development

Clinical guidance recommendations ('statements') for the first round Delphi questionnaire were developed by comparing the national contingency guidelines of 2020 with the 2016 national Clinical Guidelines for OAT (Health Service Executive, 2016). Results from service-user experience and national service provider reports from the HSE National Social Inclusion Office following the introduction on the contingency guidelines were also reviewed to inform the drafting of the statements. The PSG held a meeting to determine the completeness of the list of statements, and agreed on the inclusion of 19 statements, which related to changes introduced to clinical guidance for the delivery of OAT during the pandemic. The agreed set of 19 statements related to six clinical domains: assessment, OAT drug choice and optimal dosing, drug testing, take-away doses, overdose prevention and e-prescriptions. The Round 1 Delphi questionnaire was developed in the Welphi (DecisionEyes) online platform, and was piloted using a convenience sample (n=5) of service users, health care professionals working in OAT, and an academic to check face validity, understanding and acceptability. Members of PSG reviewed suggested modifications and revised the questionnaire accordingly.

Selection of Delphi panel

As different stakeholders often have very different points of views about quality of care, which enrich the results of the Delphi procedure, we sought to create a diverse expert panel (N=48). We recruited service users and healthcare providers, including psychiatrists, general practitioners, community pharmacists, a nurse, a psychologist and support/key workers involved in the delivery of OAT in specialist addiction clinics, primary care, homelessness services and prison services in Ireland. Service users (n=14) and key workers (n=2) were recruited via UISCE and MQI. Psychiatrists (n=2), general practitioners (n=19) and pharmacists (n=9) involved in the delivery of OAT were recruited following an invitation email via the College of Psychiatrists of Ireland, the Irish College of General Practitioners and the Pharmaceutical Society of Ireland, respectively. The nurse and psychologist were recruited from HSE specialist addiction services.

Online Delphi consensus methodology

The consensus process involved two rounds of web-based questionnaires. Each panel member, who had agreed to take part following the invitation email was sent a follow-up email with a link to the online questionnaire (October 2021). The invitation emails, information leaflets and surveys were reviewed by the National Adult Literacy Agency (NALA) to ensure that any potential service users with literacy issues would not be excluded. Service users were also offered the support of a peer worker to address any literacy, technology or access issues when completing the questionnaires and to provide follow-up support after completing the surveys. Before commencing the first-round questionnaire, panel members indicated their consent to take part on-line. Panel members were presented with statements and accompanying rationales, organised across the six themes (Supplementary Table 1). They rated their level of agreement with each statement using a 5-point Likert scale, ranging from 1 “strongly disagree” to 5 “strongly agree”. Following feedback from service users and advocacy organisations in the PSG, we also included the option of ‘unable to respond’. However, we outlined in the survey instructions, that panel members should only select ‘unable to respond’ if they felt they do not have enough experience or expertise to respond to a particular statement. A comment box was also included for each statement, allowing for further comment and the opportunity to propose additional statements. A four-week deadline was set for task completion, with a reminder email after two weeks (Boulkedid et al., 2011).

After each round, the median response and interquartile range (IQR) were calculated for each statement. Consistent with previous Delphi consensus studies, the required level for consensus was defined a priori as a median of 4 or 5 and a lower quartile ≥4. An upper quartile value of ≤2 was considered indicative of general disagreement and the statement was rejected. A lack of agreement between panel members was identified with an interquartile range including 3. This resulted in a review of that statement by the PSG (via discussion) leading to revision and inclusion in the second round questionnaire, or a rejection of the statement based on the comments received by panel members (Cooper et al., 2014; Holton et al., 2017; Smith et al., 2018). In Round 2, panel members were provided with feedback on the aggregate results for each statement at Round 1 alongside their individual responses. They were required to rate only those statements that did not meet consensus in round one, and any additional statements arising from comments at round one. As before, the median and interquartile range were calculated and evaluated by the PSG using the same thresholds to determine consensus as described above. If consensus was not reached for a statement, following the second round, the statement was rejected. Statistical analysis was performed using SAS Enterprise Guide version 7.1 (SAS Institute, Inc., Cary, NC, USA).

Results

Forty-eight panel members, who agreed to take part, completed the first round questionnaire, 56% were men (n=27). The majority of service users (93%) were aged less than 50 years, with 41% of healthcare professionals aged less than 50 years. Of the 14 service users currently accessing OAT, four were women and half (n=7) reported first accessing OAT more than ten years ago, with four accessing treatment within the last year for the first time. The remaining service users reported first accessing treatment between one to three years (n=2) and four to ten years ago (n=1). Over 70% of healthcare professionals (n=24) reported being involved in the delivery of OAT for more than ten years. Ninety per cent of panel members (n=43) completed the round 2 survey.

Round one

The project steering group agreed on the inclusion of 19 statements at round one, which related to changes introduced to clinical guidance for the delivery of OAT during the pandemic. Group consensus was achieved for 12 of the 19 statements, with no statements rejected (Table 1). Consensus was not reached for the remaining seven statements. Following a review of panel members’ comments, members of the steering group revised all seven statements and created an additional two statements for consideration in the second round (supplementary Table 2). For example in the assessment domain, while participants agreed that people seeking OAT for opioid dependence should be offered a short health assessment (and what that should include) with little to no waiting time, consensus was not reached regarding patients choosing between a remote and a face-to-face short health assessment. A number of participants commented that, although patient choice is positive and remote assessment may be appropriate in certain circumstances, face-to-face assessment is preferable. Based on panel member comments, examples of which are provided below, we revised the initial statement (no. 2) and created an additional statement (supplementary Table 2).

> *“This (remote assessment) should only occur in exceptional circumstances where face-to-face is not possible…it is much more preferable to see the individual in person” [*Pharmacist],
>
> *“Remote contact is a workable solution in some instances, but there should be occasional face-to-face meetings”* [Pharmacist],
>
> *“I think face-to-face is much more preferable” [Service User],*
>
> *“I agree, I think you should get a choice about it. A video call would make it easier” [Service User],*
>
> *“There does need to be a (face-to-face) assessment, just in case someone is coming in for someone else” [Service User],*
>
> *“I think this depends on the situation. I work in an inner-city GP practice…many patients do not speak English so remote consultations are difficult in those situations…I found that patients preferred face-to-face review where possible. I could see where this could be useful in a rural setting though” [GP].*

There was also a lack of consensus regarding optimal drug dosing at round one. For example, the contingency guideline recommendation of starting a person on 20 mg/daily methadone and increasing by 10mg every four days following a medical review was generally viewed as being too slow by both general practitioners and people currently in treatment:

> *“I would use 20-30 mg as a starting range depending on the patient’s history and reported use” [GP].*
>
> *“This amount may be too little for some and too much for others – the critical element is careful medical review” [GP],*

Table 1
Results of the round 1 and round 2 Delphi process.

	Round One				Steering group consensus	Round Two			Final recommendations
Clinical Domain	Total	Accepted	Revision*	Rejected	New statements included†	Total	Accepted	Rejected‡	Total accepted
Assessment	8	6	2	0	1	3	3	0	9
OAT drug choice and optimal dosing	5	2	3	0	1	4	1	3	3
Drug testing	2	0	2	0	0	2	0	2	0
Take-away doses	1	1	0	0	0	0	0	0	1
Overdose prevention	2	2	0	0	0	0	0	0	2
E-Prescriptions	1	1	0	0	0	0	0	0	1
Total	**19**	**12**	**7**	**0**	**2**	**9**	**4**	**5**	**16**

* Required revision, rewording or refinement.
† The project steering group developed new statements to be included in round two based on comments/suggestions made by panel members during the first round.
‡ Where consensus was not reached at round two, statements were rejected.

"They should start them on a little bit higher than 20mls…maybe 40 and then work on that.." [Service User].

Based on these comments we revised the statement according to the original 2016 guidelines which recommended a starting dose of methadone between 10-40 mg daily (supplementary Table 2) at round two. We also revised the statements regarding the recommended maintenance dose for both methadone and buprenorphine, as neither reached consensus at round one. For methadone, service users generally felt the recommended dosage was too high, and service providers expressed concern that the statement failed to account for individual differences across patients:

"Strongly disagree, there should be no upper or lower limit…it varies from patient to patient…60mg may be too much for some patients and 120 mg too little for others. The expert is the patient, not the prescribing community" [GP],

"While 60-120 mg sounds sensible, and maintenance doses of 40-60 mg may be associated with higher relapse, the decision should be made on a case-by-case basis. Harm reduction doses have a role to play" [Psychiatrist]

"120 mg is pretty high, they should be stabilised around 100 mg" [Service User],

"I think 60 is too much.…I think people should be brought down more. 80mls should be the max" [Service User].

Only 33 participants responded to the statement regarding the optimal dosing for buprenorphine. This was primarily due to service users indicating that they could not respond as they have no experience or knowledge of buprenorphine with several commenting "*my doctor hasn't told me about suboxone*" or "*I don't know about suboxone*". The GPs, psychiatrists and pharmacists expressed similar concerns to those expressed in relation the optimal dose of methadone, specifically that the statement did not allow for flexibility or account for differences across patients.

Round two

Of the nine statements included in the second questionnaire, consensus was reached for four statements (Table 1). The remaining five statements, which addressed OAT drug dosage (n=3) and frequency of urine drug testing (n=2), were rejected due to a lack of consensus for each of the five statements and based on additional comments from the panel members (supplementary Table 2). There were mixed opinions around the need to start methadone in the range of 10-40 mg daily depending on tolerance, with dose increases at a maximum of 5-10 mg daily and a weekly maximum of 20 mg (as per the 2016 national guidelines). Some agreed with this recommendation,

"*I agree with this. It is a reasonable compromise. Currently, it can be a bit of a battle to get an OST patient up to a dose which is reasonable for that individual…..It is in many international guidelines" [GP],*

"I think it's a good idea, as long as they aren't left waiting weeks" [Service User].

Others, however, were more critical,

"*Everyone is different, can't put everyone in the same box*" *[Service User],*

"*They put you up fast…they put certain people up too fast, they should be allowed to stabilise on lower amounts*" *[Service User].*

There were also diverse comments in relation to the revisions to statement 12 (Supplementary Table 2) regarding the recommended maintenance dose of 60-120 mg daily of methadone,

"This seems well worded to me and it makes allowance for outliers. In my experience, there are quite a number of patients who are on less than 60 mls and who seem to do quite well" [GP],

"I think 120 mls is too high" [Service User],

"While the statement as written is broadly true there are far more exceptions to this statistic, with people needing doses higher than 120mg much more often than implied by this phrase "and in some exceptional instances" [GP].

Similarly, consensus was not achieved regarding the frequency of urine testing during the stabilisation and maintenance phase of OAT, with diverse comments within and across groups. The perspectives of clinicians varied, ranging from the view that frequent testing was required during the stabilisation period to the suggestion that urine testing was "meaningless",

"More frequent urine testing should take place in this initial phase, up to weekly" [GP],

"Some patients prefer and benefit from more frequent urine test sampling" [GP],

"I consider urines generally meaningless as an aide to progress and harmful to the therapeutic relationship" [GP],

"Random urine drug tests seem less and less clinically useful [Psychiatrist].

Service user perspectives were similarly mixed,

"Once every two months" [Service User],

"Once a month is grand" [Service User],

"Some people might like more often drug testing, because they are on takeaways, you don't mind giving a urine once a month. Anyone on takeaways shouldn't mind" [Service User],

Table 2
Consensus recommendations for opioid agonist treatment following the introduction of emergency clinical guidelines in Ireland during the COVID-19 pandemic.

Statement number	Statements
	Assessment
1	All people seeking opioid agonist treatment (OAT) for opioid dependence should be offered an initial short health assessment with little to no waiting time
2	To make sure the initial short health assessment is done quickly, particularly if an in-person assessment would result in delayed access to OAT, people should be offered the choice between a remote assessment (for example by phone or video-consultation), and a face-to-face assessment
3	If a person selects a remote initial health assessment, a follow-up face-to-face consultation should be scheduled within 2 to 4 weeks of the initial remote assessment
4	The initial short health assessment should include the following: • Current and past medical history • Current drug use (establish opioid dependence according to ICD10/11 or DSMV criteria) • History of accidental and deliberate overdose • Current prescribed and non-prescribed medications • Any drug-related complications such as abscesses, venous thrombosis, septicaemia, endocarditis, and constipation • Pregnancy • Presence of past infection with blood-borne viruses (Hepatitis, HIV), including assessment of risk such as previous injecting or sharing or having tattoos) • Psychiatric history and current symptoms • At least one urine drug test to confirm recent opioid use
5	The treating doctor should start a person on OAT once the initial short health assessment is completed, and the person meets the diagnostic criteria for opioid dependence with a positive urine test to confirm recent opioid use, in the knowledge that the full health assessment will be completed within one month
6	The full health assessment as described in the 2016 Clinical Guidelines for OAT, including vaccinations for Hepatitis A and B, and Tetanus, should be completed within one month of the person starting on OAT
7	Waiting lists for people seeking OAT should be avoided. However, when a service is full, people should be placed on a waiting list for the shortest time possible (less than 1 month).
8	All people placed on the OAT waiting list should be told when they can expect to start their treatment
9	The cap on Level 2 GPs (specialist GPs qualified to initiate OAT and stabilise OAT drug doses) should be increased to reduce waiting times for people seeking OAT
	OAT drug choice and optimal dosing
10	People starting on OAT should be supported to make a fully informed choice between Methadone and Buprenorphine (Suboxone/Subutex), if both drugs are considered clinically suitable for that person
11	The starting dose for Buprenorphine (Suboxone/Subutex) is between 4 mg and 8 mg daily. Following review, this dose can be increased by 2-8 mg daily until the person is stabilised
12	People on OAT should be seen (face to face or remotely) by their prescribing doctor at least once a month
	Take-Away Doses
13	Once a person has stabilised on their OAT medication, their doctor should discuss the possibility of take-away doses (takeaways), with reduced supervised consumption, in line with the person's treatment goals
	Overdose Prevention
14	All people on OAT should be prescribed and encouraged to take a supply of Naloxone, particularly during high-risk periods (on waiting list; treatment initiation)
15	All people on OAT should be offered information and training on how to use Naloxone
	E-Prescriptions
16	Doctors prescribing OAT should continue with electronic-prescriptions directly to the person's pharmacy using the national electronic prescription transfer system (Health-mail)

"You should be building up trust with your doctor and reduced down to every two months, unless you want to have one (urine test), and request one" [Service User].

The final 16-item consensus recommendations for opioid agonist treatment following the introduction of changes during the pandemic as set out in the contingency guidelines (Table 2) was organised according to the following clinical domains: assessment (n=9), OAT drug choice and optimal dosing (n=3), take-home doses (n=1), overdose prevention (n=2) and other (n=1).

Discussion

Summary and interpretation of results

The emergence of the COVID-19 pandemic transformed how OAT was delivered, with the expansion of lower threshold care options (Krawczyk et al., 2021). While many authors have suggested that recent innovations should be continued beyond the pandemic, this is the first study to seek consensus, among a wide range of stakeholders, on whether recommendations introduced in emergency clinical guidelines should be retained beyond the pandemic. During the course of two Delphi rounds, consensus was reached for the continuation of 19 recommendations relating to assessment, OAT drug choice, take-away doses, overdose prevention and e-prescriptions. Notably, consensus was not achieved for OAT drug dosing and frequency of urine testing. This lack of consensus did not appear to reflect disagreements based on a provider-patient power dynamic, as there were mixed opinions within both groups.

With regards to assessment, there was a general consensus that changes introduced in Ireland during the pandemic should be retained such that all people seeking OAT should be offered a short health assessment with little or no waiting time, and that the treating doctor should start a person on OAT once the initial short health assessment is completed and the person meets the diagnostic criteria of opioid dependence with a positive urine to confirm recent opioid use. This deviates from pre-pandemic guidelines which recommend the completion of a full-health assessment before starting a person on OAT (Health Service Executive, 2016). However, supporting treatment initiation following a short health assessment, as described above, was

conditional on a full-health assessment being completed within one month. Furthermore, the continued use of telehealth or remote care beyond the pandemic was supported, particularly if an in-person assessment would delay access to treatment. However, this was conditional on any remote health assessments being followed-up with a face-to-face consultation within two to four weeks. The various considerations expressed by participants in relation to the development of these statements, reflected current literature regarding the potential benefits and challenges associated with increased access to telehealth (Hser et al., 2021; Krawczyk et al., 2021; Sugarman et al., 2021; Uscher-Pines et al., 2020). For example, participants acknowledged that offering patients a remote health assessment, allows for increased access to care and minimises travel requirements, particularly for those living in rural locations. However, this was clearly weighed against the need for some in-person contact with healthcare providers, which was considered necessary for the development of the therapeutic relationship and for clinical observations which may be lost via telehealth. The benefits and concerns expressed were similar to those reported by clinicians in the US who transitioned to telehealth during COVID-19 (Uscher-Pines et al., 2020). Similar to previous studies, participants also highlighted challenges in relation to lack of access to smartphones and phone charging facilities, limited broadband, language barriers and lack of privacy in the person's home or, for those who are homeless, no private location during remote consultation (Lin et al., 2019; Sugarman et al., 2021; Tofighi et al., 2022; Uscher-Pines et al., 2020).

There was also a consensus that patients should be supported in making a fully informed choice between methadone and buprenorphine, if both drugs are considered clinically suitable, rather than selecting methadone as first line treatment, as recommended in the pre-pandemic guidelines (Health Service Executive, 2016). This is consistent with WHO recommendations on the availability of OAT medications (WHO, 2009). However, consensus was not reached regarding optimal drug dosing. The recommended daily dose of 60-120mg of methadone for maintenance, was proposed in line with national (Health Service Executive, 2016) and international guidelines (Clinical Guidelines on Drug Misuse and Dependence Update 2017; WHO, 2009), and although the statement indicated that some patients may stabilise on a lower dose, and in some exceptional instances, a person may require a higher dose, consensus was not reached. This is an interesting finding, and possibly explains our previous findings from cohort studies of patients receiving OAT in specialist addiction services and primary care where the median dose was lower than the recommended maintenance dose of 60-120 mg daily for 41% of patients (Durand et al., 2020), and 38% of patients (Cousins et al., 2016), respectively. These results are consistent with a recent global review of clinical practices in relation to OAT, which suggests that many people are prescribed doses below that considered optimal for clinical benefit (Jin et al., 2020). Consensus was also not reached in relation to the optimal daily dose for buprenorphine. Clearly, there is a gap between recommended doses and current practice which warrants further investigation.

Recommendations regarding the frequency of urine testing during the stabilisation and maintenance phase of care were also clearly contentious, and consensus was not reached. Participants reported conflicting views regarding the role and value of urine drug testing. It is perhaps unsurprising that participants expressed mixed views as, although the use of drug screening in OAT is widespread (Degenhardt et al., 2019), the frequency of testing varies and appears to reflect philosophy and practice context rather than being evidence-based (Crowley & Delargy, 2020; Dupouy et al., 2014; Jin et al., 2020; McEachern et al., 2019). A recent systematic review concluded that there is insufficient evidence on the effectiveness of urine drug testing during OAT on patient outcomes (McEachern et al., 2019).

Consensus was achieved for all remaining recommendations, supporting an increase in take-away doses once a person is stabilised on their OAT medication, the continuation of e-prescriptions and increased access to naloxone and naloxone training. Increases in take-away doses were introduced in many countries during the pandemic (Krawczyk et al., 2021), and recent evidence from Canada suggests that increased take-away doses of OAT was associated with lower rates of treatment interruption and discontinuation at six-months, and was not associated with an increase in overdose-deaths during the same period (Gomes et al., 2022). While these findings are encouraging, as flexibility in take-away doses is valued by patients and associated with improved quality of life and retention (Frank et al., 2021), they should be interpreted with caution as the risk of residual confounding remains (Gomes et al., 2022). Furthermore, a subsequent analysis of the impact of COVID-19 on the provision of take-away doses of OAT in Ontario, Canada found that the observed flexibility in take-away doses was concentrated among individuals already receiving take-away doses pre-pandemic, with take-away prescribing trends reverting to pre-pandemic patterns towards the study end (November 2020) (Kitchen et al., 2022). An assessment of the impact of increased take-away doses is required in Europe, as the EMCDDA recently reported concern regarding diversion and misuse of OAT medications in Europe, evidenced by an increase in the demand for specialized treatment related to the misuse of OAT medications, and the number of deaths associated with these medications over the past 10 years (EMCDDA, 2021). For example, the most recent analysis of drug-poisoning deaths in Ireland identified an increase in drug poisoning deaths involving methadone between 2004 and 2017, with 48% of deaths involving methadone occurring in people who were not registered on the national OAT treatment register (Lynn et al., 2021).

Implications for clinical guidance

These consensus recommendations are intended to inform future policy decisions and discussions regarding the delivery of OAT, identifying which changes should be considered for integration into care models beyond COVID-19. It was very clear that there is a strong consensus to avoid or minimise waiting lists, and that greater access to rapid assessment with the possibility of some remote care should be considered. However, further research is needed to assess the effectiveness of telehealth for the provision of OAT, relative to in-person care, to inform the development of future clinical guidelines (Lin et al., 2019; Uscher-Pines et al., 2020). In addition, clinical guidelines in Ireland should be updated to allow for the continuation of e-prescriptions and for people seeking OAT to make a fully informed choice between methadone and buprenorphine, if both drugs are considered to be clinically suitable for the person, with access to naloxone and naloxone training. While the recommended therapeutic daily dose for methadone and buprenorphine should remain consistent with the current best evidence (Faggiano et al., 2003; Greenwald et al., 2014), efforts are clearly needed to address the discrepancy between optimal drug dosing and current prescribing practices (Durand et al., 2020; Jin et al., 2020), acknowledging prescriber and patient concerns as identified in this study. Finally, given the insufficient evidence base regarding the use of urine drug testing, and the lack of consensus in this study, further studies are warranted to assess the impact of drug testing on patient outcomes as noted by McEachern et al. (2019).

Strengths and limitations

The recommendations were developed using a two-step process involving (1) a comprehensive review of pre-pandemic guidelines and the national contingency guidelines and in consultation with key stakeholders, followed by (2) a two-round Delphi process. The Delphi process enabled communication from an expert panel reflecting the full range of stakeholders involved in both the delivery and receipt of OAT. A high level of engagement was achieved with 90% completing both rounds, with many detailed comments to justify their responses. However, it is important to acknowledge our study limitations. Firstly, this study related to national Irish guidelines, and involved an expert panel of people delivering or receiving OAT in the Irish healthcare setting. Secondly, despite our efforts to have a broad representation of both male and female

service users, only 29% of service users recruited to the expert panel were women, and there was no representation of non-binary identities. Although we had a lower representation of women in treatment, this reflects the gender profile of people in OAT in Ireland, as approximately 32% of people in treatment are women (Cousins et al., 2017; Durand et al., 2021). Thirdly, we focused on OAT and did not address broader issues such as polydrug use, homelessness or dual diagnoses.

In conclusion, consensus was achieved for 16 clinical guidance recommendations for safe access to OAT with minimal waiting time, supporting patient-centred care to promote health and well-being and prevent drug overdose. Notably, consensus was not achieved for OAT drug dosage and frequency of urine testing during the stabilisation and maintenance phase of care.

Ethics approval

The authors declare that they have obtained ethics approval from an appropriately constituted ethics committee/institutional review board where the research entailed animal or human participation.

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Declarations of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data are associated with this article.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.drugpo.2022.103768.

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