# An implementation science evaluation of Scotland's first Heroin-Assisted Treatment (HAT) facility: Recommendations

Background

The following recommendations were developed by the research team through a five-stage research process (Figure 1) informed by data collected through interviews with: Heroin-Assisted Treatment (HAT) clinic patients and staff; and staff from external services which interacted with the clinic (e.g. Social Work, Housing, Criminal Justice). Findings were used to develop the recommendations concerning specific barriers and facilitators to engagement in the service, and comparison between participant expectations of the service prior to opening with their real-life experiences. Draft recommendations were subsequently presented and discussed in stakeholder events with HAT clinic staff (both front line and strategic); a professional stakeholder group; and people with lived and living experience of heroin use. Feedback from these sessions was used to further refine the recommendations into a final draft, categorised within individual, service and environmental level contexts and factors.

Figure 1: research process stages for the development of implementation recommendations
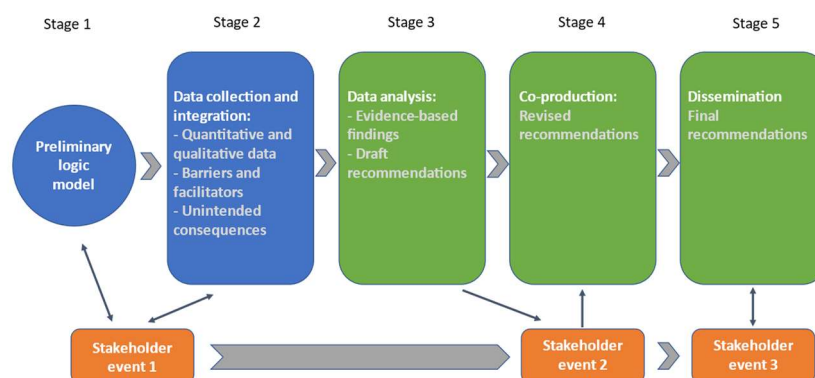
In presenting the recommendations, we have focused on issues that are most amenable to change and most relevant to others developing similar services whilst remaining true to the original aims and objectives of the research. Each set of recommendations is presented alongside a brief overview of evidence underpinning them generated from our data.

Audience

These recommendations are for policymakers and service commissioners who are considering setting up a HAT service. They are also aimed a current HAT service providers to support patients to engage with HAT more effectively and staff to maximise its potential benefits. Recommendations will help understanding of key individual, service and environmental level issues that need to be considered in implementation. The recommendations will also inform those setting up a service by promoting consistency and quality on key implementation issues, derived from real-world evidence.

Implementation recommendations should be used alongside Public Health England guidance[1] on commissioning and providing injectable opioid treatment for people with opioid dependence who have not responded to oral treatment, and Scottish Government Medication Assisted Treatment standards[2] to enable the consistent delivery of safe, accessible, high-quality drug treatment across Scotland.

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[1] Injectable opioid treatment: commissioning and providing services - GOV.UK (www.gov.uk)
[2] Medication Assisted Treatment (MAT) standards: access, choice, support - gov.scot (www.gov.scot)

INDIVIDUAL-LEVEL
Recommendation 1
Referral processes to HAT should adopt an individualised approach
Evidence
HAT staff found that treatment needs were distinct for each patient, as each had different social, accommodation, substance use, and service engagement history, as well as other contexts, which affected referral attempts. The HAT service specifically targeted those who had been unable to meaningfully engage with services in the past, therefore initial contact in many cases was challenging. An individualised approach that takes these contexts into account was reported to be vital for successful engagement. In addition, implementing a model where patients were a meaningful part of decision making gave patients some control over the process, for example with timing of referrals. Staff reported this increased likelihood of engagement. Referrals also tended to be more successful if timed with "windows of opportunity". These were periods where potential patients had increased levels of stability and were suggested to be better equipped to consider the unique aspects of involvement with the HAT service, for example during a residential stay in a drug crisis centre, or in acute care after an overdose. Patients and staff also recounted another facilitator, that if patients had a good understanding of what happened in the HAT clinic, and what it would mean for them, they would be more likely to choose to engage with the service.
Recommendations
a) Referral and recruitment approaches should be individualised for each patient. This means considering patient choice, taking account of issues beyond substance use including but not limited to: individual social networks; mental and physical health issues; living conditions; trauma experiences, and any other individual context that may affect treatment engagement. Different locations may have different substance use patterns and associated challenges which should also be considered. b) It should not be assumed that HAT at surface level will be automatically taken up by patients who are offered it. Patient choice and autonomy should be prioritised, as HAT places high demands on patients in terms of intensity of attendance and therapeutic commitment. Therefore, there must be a clear discussion and explanation of the service, its aims, individual objectives, and individual potential care plans within the HAT process prior to engagement to ensure patients understand what to expect. c) Referral processes should be flexible enough to adapt to "windows of opportunity" where patients may have increased potential to engage with HAT due to temporary improvements in stability. These should not be a pre-requisite for recruitment, but should instead be used to facilitate the process if available. d) Peer-based sessions where potential patients meet with those already engaged with HAT could be beneficial to providing clear understandings of what would be involved in participating in HAT. e) Referral processes should ensure the start of treatment is not delayed once a referral has been initiated, as this may have a negative impact on willingness to engage.

Recommendation 2

HAT care packages should be tailored to individual needs, co-produced, flexible, and non-punitive.

Evidence

All participants suggested that the HAT service was successful due to an individualised approach to care. This was facilitated by daily engagement which resulted in in-depth knowledge of diverse patient needs, such as: mental health and experiences of trauma; substance use patterns; physical health and capacity; holistic needs; recovery capital and many other aspects. Individualised flexibility allowed the service to account for this patient diversity, and importantly react and adapt to sometimes unpredictable consequences of treatment and general day to day lived realities of the complex patient group.

Patients were also given autonomy in their engagement with the service, for example co-production in decision making about: diamorphine doses; holistic engagement; treatment timelines; and addressing mental health issues. However, this autonomy existed within reasonable limits to ensure patients and staff remained safe. In cases where disruptive patient behaviour became a risk to staff or other patients, or was sustained to the point of interrupting effective engagement, staff attempted to re-engage patients through non-punitive approaches, which were found to be effective at maintaining engagement. Some staff found it difficult to adapt to this approach, especially those who were more accustomed to traditional structured services with specific timelines and exclusionary consequences for non-compliance.

Recommendations

    a) To maintain patient engagement, flexibility of approach, i.e. taking into account patient choice, and individualised characteristics and contexts, should form the basis of the service model.

    b) Whilst services should aim to be as flexible as possible to individual choices and needs, this should be balanced with the needs of staff, as well as the potential increased resource costs that come with this approach. This should be considered in service design, staffing, and resource allocation.

    c) Ongoing dialogue concerning service ethos, and approaches to care provision around flexibility, should continue with staff at all levels to maintain understanding and buy-in of the recommended approach.

Recommendation 3

Respectful relationships between HAT staff and patients are essential to patient engagement and outcomes; and should be formally supported.

Evidence

All internal participants suggested that the key to HAT service success was the relationships of trust between patients and staff. Through daily contact, staff were able to develop understandings of what was acceptable to, and worked for, individual patients, and what aspects of engagement had to be more carefully negotiated. Patients in particular felt they could be truthful with staff and trusted them to have their best interests drive decision making, which was the main reason they continued to engage. However, close daily relationships sometimes came at the cost of potentially increasing the emotional toll of negative occurrences on both patients and staff, such as patient incidents in the service, or negative experiences outside the service. In addition, there were situations where patients were described as becoming overly reliant on one individual staff member, and others where

patients and staff perceived particular individuals as getting preferential treatment, among other perceived inappropriate interactions between patients and staff. A balance based on ongoing learning had to be developed in order that staff-patient relationships could continue to facilitate engagement without increased risk of negative impact.

Participants, particularly patients, reported that staff turnover was detrimental to patient engagement, with patients reporting the process of trust building having to restart, and requiring significant support to do so, whilst also contributing to patient engagement fatigue in the long term .

Recommendations

a) Trusting relationships between patients and staff are a key facilitator of success within the service model and should inform service development and implementation. The most important aspect of these relationships from patient perspectives, is that they feel listened to, and the service feels safe.
b) Staff should be adequately trained and supported closely to be able to manage these relationships, in particular how to process the potential daily challenges that patients might face, for example: violence; negative outcomes from substance use; coercion etc.
c) Patient and staff engagement should be as consistent as possible, but with more than one member of staff to mitigate against over-reliance and absence, and to prevent potential engagement fatigue on the part of patients.
d) Given inherent risks, there should be considerable oversight of relationships between staff and patients, and these should be discussed regularly as a team and with patients themselves where appropriate. Mechanisms to ensure these principles could include de-escalation training and support, and peer mentoring for patients.

Recommendation 4

Shared expectations of treatment duration should be acknowledged by staff and patients.

Evidence

The majority of patients who commenced HAT in its first year were still engaged with the service after one year, a substantial improvement on levels of previous service engagement. However, patients and staff alike were concerned about how transition away from HAT would be carried out, particularly because the service was so different to other services in terms of the prescribing of diamorphine, and the intensity of the daily contact. Participants made suggestions of hypothetical facilitators for successful transition: for example, the potential use of oral diamorphine (subject to changes in licensing restrictions) as a transition away from injectable diamorphine that could mean more opportunities to collect medication at other services; having a stage of overlap with receiving services e.g. community addiction teams; and coordination with community-based recovery organisations. These options were still in development; however, they should be considered in the design and implementation of other services.

Recommendations

a) The nature of transition depends on potential treatment outcomes. Outcomes of service engagement should be discussed and agreed from the beginning of service development, as these may be diverse for the patient group, and could significantly affect service ethos and design. This process should be carried out for a range of potential outcomes, and in the interest of transparency, these options should be presented to patients and the wider service network during the referral process.

b) Patients and staff should have regular reviews of their agreed outcomes for treatment, and what this means for potential timelines and transition pathways, from the beginning of their engagement. Decision making should be co-produced, with multiple options provided for the patient, as patients may have differing needs and expectations. This may change throughout the treatment process, so should be an ongoing dialogue.

c) Staff and patients should have access to information resources with information on transition options.

d) Wider relevant community networks should be identified from the outset of service design and integrated into the transition process. It is vital for the service to develop partnerships with these networks in order to facilitate patient engagement with these resources in the transition process. These community networks may also include social networks such as family support.

e) Although current licensing arrangements do not permit prescription of diamorphine for non-injecting related administration (e.g. oral, nasal), services should consider mechanisms which may permit exploration of alternative strategies such as via research frameworks.

SERVICE-LEVEL

Recommendation 5

HAT services should be resourced to provide mental health care via informal support through everyday interaction; and specialist intervention where required.

Evidence

Staff emphasised that all patients had profound mental health needs. Whilst mental health work was able to be carried out with some patients, some patients and staff felt it was not to the extent they had expected. This was due to a lack of physical space, initially a lack of dedicated resource, constrictions on time in service and staff availability due to COVID-19, and in some cases the extreme complexity of trauma and mental health needs in the patient group. Later in the service provision, permanent, dedicated mental health staff were recruited which helped progress mental health work. However, there were still concerns about a lack of dedicated physical space for mental health work. Patients also highlighted that mental health engagement was something they wanted as a priority, but was one of the most challenging issues for them to deal with, so required substantial support. Importantly, patients and staff both reported that patients had to have a certain level of stability, safety, wellbeing and recovery capital to be able to engage with mental health issues, requiring a lead in of "pre-work" through informal everyday service engagement. This was primarily done through development of relationships of trust with empathetic staff, as well as facilitation of improvement of health and wellbeing.

Recommendations

a) Service design should identify mental health needs as a priority, with an individualised and patient led approach to engagement.

b) Patients will most likely not be able or willing to engage with deep mental health therapy (e.g. trauma counselling) until foundations and resources for this are established through "pre-work". To facilitate this, all staff should be trained to engage with patients in a trauma informed manner, regardless of their role.

c) There should be dedicated resources (e.g. time and space) in service available for mental health support, such as one to one interactions in private spaces, that do not compete with other service needs. Space should be comfortable and non-clinical in design.
d) Specialist mental health expertise (e.g. via Clinical Psychology) should be readily available for patients either in-house or externally, with well-established pathways to facilitate in-reach or referral if necessary.

Recommendation 6

Resources should be committed to make sure that the whole person and their needs are addressed (e.g. physical health, housing, relationships, life skills) including within HAT services and through in-reach from key external services.

Evidence

Some staff participants suggested they were not able to carry out holistic support to the extent they wanted to. The main reason cited for this was the COVID-19 restrictions placed on the service which meant there was insufficient time and resource to address the range of other [non-substance use related] needs in some cases. However, staff also suggested that dedicated resource across the service for holistic care would have been helpful in improving opportunities to carry out this support. One area that was highlighted as particularly beneficial for patients was ensuring safe and secure housing conditions.

All participants suggested that inter-service working, cooperative case management and consultation between the HAT service and other services within the local network such as housing services worked well where it was available. Unfortunately, this was severely impacted by COVID-19, with many services including the HAT service running at diminished capacity. However, being able to coordinate with other service providers in the acute, primary care and third sectors, facilitated many of the holistic improvements for patients.

Recommendations

a) Services should have dedicated internal resources for holistic support (i.e. scheduled time and staff capacity), and these should not compete with other service demands. Staffing resource should account for the potential complexity of dealing with holistic needs with a diverse patient group.

b) Holistic care plans should be developed through co-production with patients, as each patient may have differing priorities concerning holistic support, with some patients having profound needs, and others not wishing to engage, and the service approach should have sufficient allowances for this.

c) There should be a dedicated physical space within the service where patients can discuss their holistic needs with staff in privacy. This space should be comfortable and non-clinical in design.

d) Securing safe accommodation for patients should be a priority of holistic care.

e) A strategy for connecting HAT services to external resources for referral and for in-reach into the service regarding holistic care should clearly defined from the outset of service design and implementation.

Recommendation 7

HAT service design and built environment should be patient, rather than clinically, focussed.

Evidence

Staff and patients suggested that the HAT service design felt overly clinical. Whilst some areas required this (e.g. infection control and observational measures within injecting rooms), other areas in the service could have been more comfortable, softer, and less clinical in nature. This was suggested to be a facilitator to making patients feel comfortable, and less likely to associate the service with previous potential negative engagement experiences in acute settings. Staff also identified some security issues, such as the one door for entrance and exit, and the layout of the reception area, which they felt could potentially increase risk of negative incidents. Staff and patients also wanted patients to be able to treat the service as a hub, where they could attend for a range of help and holistic care, but the clinical environment meant patients were less likely to want to stay at the service for holistic work to be carried out.

Recommendations

a) Internal spaces within the service should focus on patient comfort where this is possible, as patient comfort can help to remove barriers to engagement. Overly clinical spaces can have negative connotations for patients, and therefore should be avoided where possible.
b) For new HAT services, people with lived and living experience of drug use should be involved in the design of services where possible.

Recommendation 8

Staff recruitment should be tailored to the unique needs and demands of working within HAT.

Evidence

Staff participants suggested the service was demanding to work in for a variety of reasons including: the intense daily contact with patients; the extreme nature of substance use by patients; associated harms and lived realities of the patient group (e.g. relapse, violence, transactional sex, severe trauma); and the novel nature of the service in terms of prioritising engagement and the low thresholds around patient behaviour. In addition: the process of permitting, observing, and advising on injecting drug use; the perceived high diamorphine dosages; and patient reactions to diamorphine i.e. concerning levels of sedation, were extremely challenging for staff. It was reported that some staff members had not been able to maintain roles due to these issues. As such, staff participants suggested prospective staff had to have appropriate skills and experience to fit with the service's ethos, and be trained and supported accordingly.

Recommendations

a) Prospective staff should have the opportunity to observe the service model prior to employment, to ensure they understand explicitly what the service entails, feel comfortable with the approach, and have reasonable expectations. To facilitate this, bespoke materials should be created which describe the day to day working of the service across different roles. Capacity for observational visits or shadowing should also be afforded for prospective staff, but delivered with minimal disruption to patients.

b)	Services should proactively explore links with academia to allow student placements (e.g. nursing, pharmacy) within the service and to develop a pathway for potential future staff.
c)	Appropriate and ongoing training should be available to staff, and dedicated time allocated for continued professional development specific to HAT-related approaches e.g. trauma-informed approaches to care.

Recommendation 9

Staff wellbeing should be prioritised through appropriate resources, supervision and training.

Evidence

Staff burnout was perceived to be an increased risk in the HAT service compared to other healthcare settings for a variety of reasons including: the unique flexible and non-punitive service approach being more demanding; the uniquely complex patient group; a perceived lack of variety within roles; challenges around patient behaviours; and occurrences where they felt there was a lack of patient improvement and throughput in the service. The HAT service had support in place for staff throughout its function, including a clinical psychologist who had regular support and supervision sessions with staff. This was identified as absolutely vital in protecting staff and preventing burnout.

Recommendations

a)	Ongoing support and supervision of staff wellbeing, and reflexive practice in this, must be a core structured activity. As well as individual support and supervision, there must also be team level group support and supervision, as team dynamics have a significant effect on service capacity and staff wellbeing.
b)	Staff should have dedicated and accessible mental health and professional support within the service via an in-house psychologist.
c)	To prevent burnout, it may be achievable that staff are rotated between HAT and other services in the local network, for example community-based outreach services, crisis centres, and other connected services. This must be balanced against potential negative consequences for patients around high levels of rotation of staff, and the effects this has on relationship building. However, if staff are reaching burnout, patient needs will not be met regardless.

ENVIRONMENTAL-LEVEL

Recommendation 10

HAT service location should be accessible, safe and close to key external services

Evidence

Staff and patients suggested that the location of the HAT clinic was a barrier to engagement, as it was difficult for some patients to reach on public transport. Taxis were sometimes sent to pick up and drop off patients, but some staff reported that this was expensive and unsustainable. Some patients stated that they had missed appointments because of difficulties travelling. In addition, some felt that the service location (next to a homeless health service) increased the likelihood of them encountering people from their previous drug using networks, which could generate stress and a risk of relapse. Staff suggested

however, that it was important for the clinic to be in proximity to other services, such as GPs, housing officers and blood borne virus teams at the adjoining homeless addiction team service.

Recommendations

a) The service should be in an easily reachable location near public transport hubs to enhance accessibility. Wider provision through regional hubs should also be considered.
b) There should be balance between HAT accessibility and co-location with other linked services covering addictions, mental and physical health, and holistic needs (e.g., primary care, BBV, housing, life skills support) to help address wider complex needs of patients. Co-location also allows development of already existing networks and settings as a platform for HAT, as well as reducing the cost burden associated with creating an entirely new service setting.
c) Service providers should consider patient safety risks (e.g. interaction with peers) associated with co-location in service design and delivery, and patients should be appropriately supported to navigate them.

Recommendation 11

HAT services should have multiple referral pathways from statutory and non-statutory services, including via assertive outreach

Evidence

Participants reported that the referral process to HAT was complex for multiple reasons: lack of understanding about what HAT is among prospective patients and the local service network that generate referrals; a harm reduction approach within HAT which may contrast with recovery/abstinence goals of other local services within the network, potentially causing stigma among individual referrers; and a target group of patients with multiple complex needs at the most extreme ends of addiction. In addition, to prevent the HAT service from the perceived risk of oversubscription, there was initially only one referral pathway from a single service; a homeless addiction team. This meant that people who might have benefited from the HAT service had to be engaged with the homeless addiction team first. Over time it became clear that oversubscription was not an issue; rather, the single pathway was creating a bottleneck in the referral process and unnecessarily limiting numbers. The HAT service subsequently moved to a lower threshold model of multiple sources for identification and referral of prospective patients, which enabled a more comprehensive view of the target population, and a more effective referral pathway.

Recommendations

a) HAT should have multiple referral pathways from a range of diverse services to ensure functioning referral mechanisms, and that patients most appropriate for the service are identified for engagement. Examples of these could be: street-based outreach services; homeless healthcare hubs; acute care (hospitals, accident and emergency); harm reduction services; addiction services; GPs; criminal justice settings; and community-based settings such as recovery cafes, hostels, etc.
b) Referral pathways should be developed in partnership with the local service network. HAT may not be widely understood across the network, therefore resource should be given to making sure that HAT processes, outcomes, and how to identify appropriate potential patients, are comprehensively communicated from the outset. HAT services should also routinely review referral pathways with local service network partners in order to remain connected to those services in meaningful ways that encourage regular referrals.

c) Who comprises "appropriate" patients should be explicitly clarified within the service design and development processes, but reviewed on a regular basis. Criteria such as "those who have not responded to conventional treatment" should be clearly defined from the outset and communicated to staff, service users, and the local service network.

d) HAT services should be fully integrated within the local service network to mitigate perceptions of overspecialisation or "exclusivity" from potential referrers which may act as barriers to referrals from other services.

e) Statutory basis for referral (i.e. where a patient has to be already engaged with another service prior to referral), should be removed to ensure that bottlenecking does not occur in the referral process, and that potential patients are not being excluded.

f) An assertive outreach approach should play a key part of referral processes, as this circumvents engagement barriers from other potential referral services acting as gatekeepers and has the potential to reach those least engaged with the local service network who might benefit the most from HAT. Assertive outreach also benefits from connections to existing outreach networks to take advantage of existing resources and relationships of trust.

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