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### **Milestone intermediate care unit**

Integrated health and social care for people experiencing homelessness – A novel approach

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**Title:** Milestone Intermediate Care Unit: Integrated health and social care for people experiencing homelessness - a novel approach.

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## **Introduction**

Socially excluded populations, including people experiencing homelessness, suffer significant stigma, discrimination, and health inequalities. A homeless cohort with an average age of 42.8 years has been shown to have comparable multimorbidity to those aged over 85 years in the general UK population.(1) There is considerable excess mortality among those experiencing homelessness, related to multimorbidity, including drug and alcohol use, and mental health morbidity, at levels 2-5 times the rate in the age-standardised general population. (2)

Individuals experiencing homelessness often only access healthcare services at crisis point, using acute services because of lack of access to or engagement with primary and preventative health services, and experience longer hospital stays due to severe and complex health needs coupled with poor discharge arrangements. (3,4) People who are homeless are more likely to have experienced trauma than the general population, which can also influence patients' health care experiences and engagement in preventative care.(5) In Scotland, those who have ever been homeless accounted for 49% of outpatient appointments, approximately double the rate of the non-homeless, least deprived cohort, and are reported to miss 28% of their appointments.(4)

It is understood that integrated, multi-disciplinary intermediate services, providing trauma informed care, that can support planned discharge from acute services or prevent unnecessary admission, offer a valuable contribution to the healthcare journey for patients experiencing severe and multiple deprivation, including homelessness.(5,6) Trauma informed practice aims to increase practitioners' awareness of how trauma can negatively impact on individuals and communities, and their ability to feel safe or develop trusting relationships with health and care services.(5) It was a specific concern around step down care and discharge arrangements for patients admitted to acute services during the COVID19 pandemic that inspired the development of this novel service.

NHS Lothian, Scotland, provides healthcare services in Edinburgh city, as well as East, Mid-, and West Lothian to approximately 850 000 people.(7) At the start of the COVID-19 pandemic, Edinburgh had the 3<sup>rd</sup> highest number of homeless households in Scotland, and nationally COVID 19 widened the inequality gap across domains including accommodation and health. (8,9)

## **Solution**

MICU was set up in April 2020 during the COVID-19 pandemic, to provide patient-centred, trauma-informed holistic care. (10) Step-down intermediate care units have been shown to reduce the number of A&E visits and reduce the average length of inpatient admissions for those experiencing homelessness.(6) They are specifically recommended by National Institute for Health and Care Experience as a care option for people experiencing homelessness who have care needs that are not easily managed in the community either as a step down from acute services or as a way of avoiding unnecessary acute hospital admission.(11) MICU is a 10-bed residential unit offering 24/7 care to patients who are homeless or at high risk of homelessness.(10) Funding was provided through the Scottish Government Drug Deaths Task Force(12) and Edinburgh Health and Social Care Partnership as well as third sector partners, Waverley care.(10,13)

MICU is managed and delivered by Waverley Care, a human immunodeficiency virus (HIV) and hepatitis charity, in partnership with The Access Place, a specialist GP practice for homeless populations; (10,13) See Table 1 for the range of other partners involved in the management of and delivery of care in MICU. There is significant lived experience within the staffing. The Cyrenians, a homeless charity, alongside drug liaison nurses and clinical teams within acute settings identify individuals who are homeless or at risk of homelessness, who would have otherwise required hospital admission or ongoing secondary care. (14)

Healthcare services are delivered by both primary and secondary care practitioners through The Access Place and NHS Lothian acute hospitals. Services including mental health, drug and alcohol, welfare, housing and financial support are available. A weekly MDT is held to discuss admissions and discharges. Please see Figure 1 for an overview of the referral pathways, MDT members and services available. The criteria for discharge are that the patient should be clinically well with appropriate support for mental health, drug and alcohol needs and suitable accommodation in place. If discharge occurs before these criteria are met, e.g. if individuals do not adhere to the alcohol, drug, weapons or violence guidelines, an emergency support package is provided to ensure a safe discharge. Re-admission is possible if required.

## **Outcomes**

Between April 2020 and March 2023, MICU has supported 164 individuals with an average length of stay of 40 days. Table 2 provides cohort characteristics. Outcome data from this cohort indicates that MICU prevented homelessness. On discharge, 87% of individuals (41/47) who were in no fixed abode on admission were discharged to accommodation, and 12% (20/161) to better accommodation than their residence at the point of admission

(excluding those still resident at the time of data analysis). Examples of better tenancy accommodation includes increased security of tenure and accommodation more suited for their physical and mental health.

Of those returned to the same tenancy, 59% (45/76) were provided with increased housing support. A total of 8% (13/161) of individuals had unplanned discharges including self-discharge from MICU or being asked to leave or return to hospital or death. Post-discharge, 85% (136/164) of MICU service users received community support in terms of ongoing housing, recovery and homecare support. Nearly one-third (54/164) individuals were able to improve their income through increase in social security benefits, accessing grants and funds.

77% (126/164) of individuals in MICU were supported with substance use disorders through alcohol stabilising, medication assisted treatment plans, opiate substitution therapy and engagement with self-management and recovery training. A further 15% (24/164) were supported to successfully start and maintain treatment for Hepatitis C and HIV. Furthermore, 29% (48/164) service users had assistance to attend wound care appointments, reducing the risk of secondary infection.

MICU also facilitated community health provision; 56% (92/164) individuals were newly registered with a GP practice and gained access to primary care and community physiotherapy, the rest were already registered with The Access Place. The data also provided compelling indications that MICU reduced secondary health services costs. A total of 74% (122/164) patients were step-down referrals from NHS Lothian that would otherwise have needed to remain as inpatients either due to IV or complex oral antibiotic monitoring requirements, ongoing active alcohol and drug detoxification programmes, or a need for ongoing pain management or mental health support. Discharge to MICU for ongoing medical care saved a median of 5.5 occupied bed days/patient discharged amounting to a saving in acute care costs of £423,583. Furthermore, the programme supported 59% of (96/164) individuals to attend outpatient follow up appointments, saving the cost of potential missed appointments. The cost of running the MICU per annum is £890,000.

Qualitative feedback from service users collected through survey forms have demonstrated that MICU delivers care that is person-centred and trauma informed. Service user comments included the following:

*“[The service gave] time to really think, away from the chaos and constant stress of homelessness and addiction”*

*“[I] honestly think I would be dead if I hadn’t stayed there”*

*“It kept me safe, gave me a chance for a fresh start.”*

## **Conclusion and next steps**

MICU is closely aligned with the Scottish Government’s strategic goals of reducing homelessness and the significant health inequalities this cohort faces by providing a package of care enabling service users to address their health needs as well as the social, welfare, financial and housing support that will enhance their recovery and enable a successful discharge to safe and appropriate accommodation.(15) MICU removes the need for individuals experiencing homelessness to negotiate a complex, stressful healthcare system and provides a supportive environment to continue treatment. MICU is the only service of its kind in Scotland and provides a person-centred, trauma-informed model using a whole systems approach where service users can access a wide range of services in one place, i.e., a ‘no wrong door approach’. The next steps include securing ongoing funding and expanding services for MICU service users. The regional infectious diseases unit’s blood-borne virus (BBV) team has agreed to provide an outreach service of BBV testing, educational initiatives and offering harm reduction advice along with necessary equipment.

Table 1: MICU partners and their role

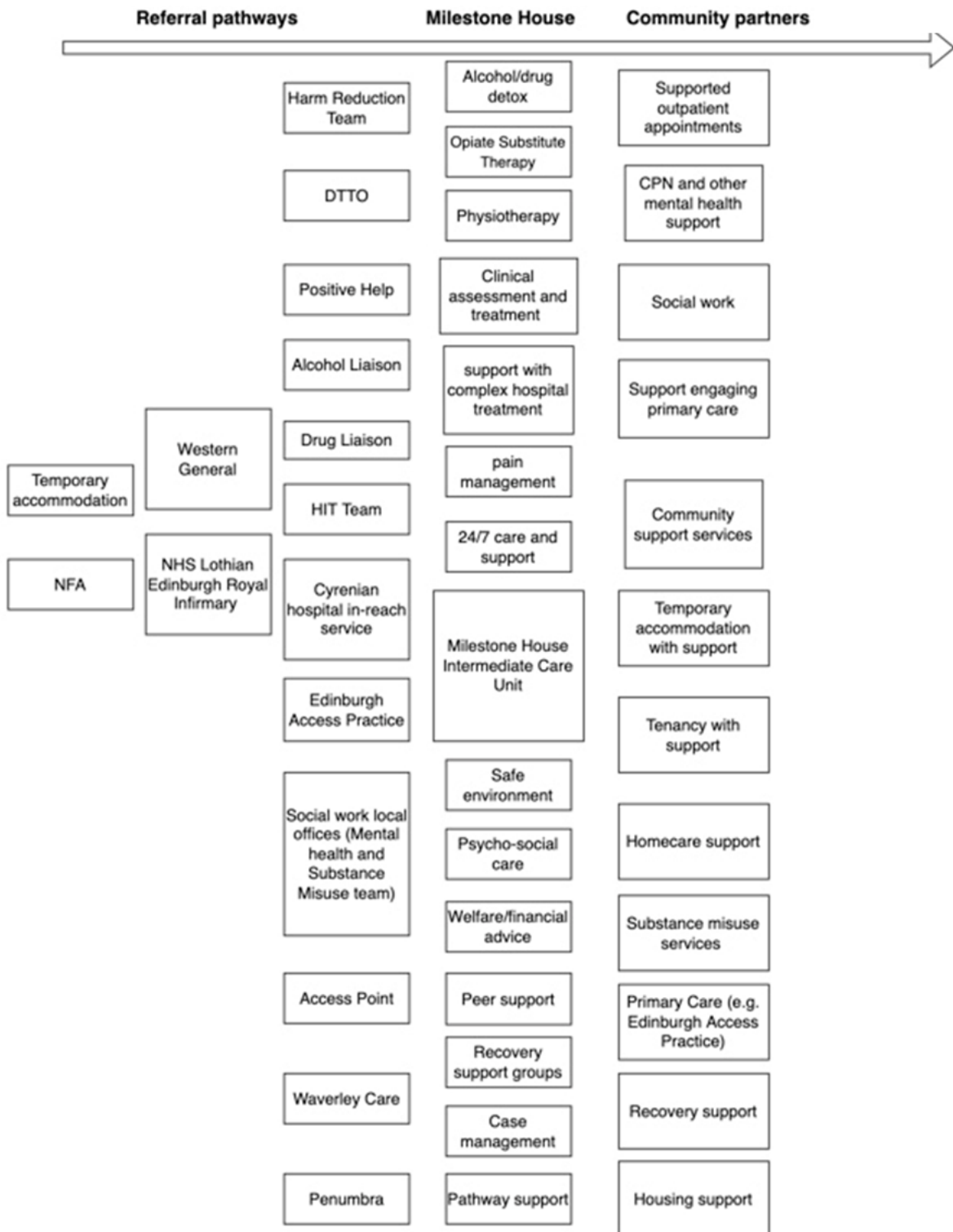
<b>Delivery Partner</b>	<b>MICU role</b>
Waverley Care	Deliver core registered care
The Scottish Government Drugs Deaths Taskforce	Core funding and coordinating future funding
The Access Place	Integrated services including housing, health, and social work
Cyrenians	Manage the pathways in and out of the unit and provide housing support
NHS Lothian Acute Healthcare	Provide referral and outreach clinical care for those in the unit
City of Edinburgh Council Housing	Provision of accommodation
Regional Infectious Diseases Unit	Acute care and outpatient services
Change, Grow, Live	Provide the in-reach drug and alcohol

	support for those in or leaving the unit.
Turning Point Scotland	Provide the in-reach drug and alcohol support for those in or leaving the unit.
Edinburgh Alcohol and Drug Partnership	Core funding and coordinating future funding
Edinburgh Health and Social Care Partnership	Integration of City of Edinburgh Council and NHS Lothian planning and delivering of all community health and social care services

Table 2: Cohort characteristics

Male: Female	123:41
Age, average (years)	45
Hospital stepdown: community admission: self-discharge	122:34:8
Length of stay, average (days)	40
Accommodation status on admission n (%)	
No fixed abode	47 (28.7)
Temporary accommodation	48 (29.3)
Tenancy	55 (33.5)
Tenancy awaiting repairs	5 (3.0)
Tenancy awaiting transfer	9 (5.5)

Figure 1: Demonstrates the referral pathways, integrated composition and services available in MICU. Penumbra; mental health charity, HIT team; home intensive treatment services for mental health, DTTO; drug treatment and testing order services, Positive Help; charity for people living with HIV and Hepatitis, CPN; community psychiatric nurse.





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