Mental Health and Social Care Directorate

Scottish Government
Riaghaltas na h-Alba
gov.scot

E: Donna.Bell@gov.scot

Convenor
Criminal Justice Committee
Scottish Parliament

By email:
CriminalJustice.committee@Parliament.Scot

Our ref:

16th October 2026

Dear Convenor,

MENTAL HEALTH PARAMEDIC RESPONSE UNITS

Thank you for the opportunity to update the Committee on the pilot and proposed expansion of the Mental Health Paramedic Response Units (MHPRUs) which are also know as 'Triage Cars.'

The purpose of the MHPRUs is to reduce unnecessary hospital attendance, prioritise patient-centred care, and ensure that individuals in mental health crisis receive the right support, at the right time, in the right place. The Scottish Government is currently working with Scottish Ambulance Service to develop options to expand the mental health triage car scheme currently operating in Glasgow, Inverness and Dundee to every region in Scotland. There is currently 1 car operating in each of the three locations.

I am pleased to confirm that the MHPRU Evaluation is now available and I have included it as an annex to this letter for your information. Members will note the evaluation is positive, demonstrating that the service is helping to create one connected system, shifting more care to homes and communities, improving access and navigation, and helping to ensure hospitals can focus on urgent and specialist care.

This is achieved through a range of measures and models, including:

- Specialised Mental Health Expertise: Each MHPRU unit includes professionals with training in mental health, including access to mental health nurses either embedded within the resource or available for telephone advice. This ensures a more appropriate and informed approach.
- Access to Alternative Care Pathways: MHPRU teams are equipped with the knowledge and ability to refer patients directly to suitable community services or mental health support networks, reducing the need for hospital conveyance where clinically appropriate.
- Tailored Triage and Response Protocols: the MHPRU operates under customised triage frameworks that allow for flexible and patient-centred, better-informed decision-making, enabling better outcomes for individuals in crisis with access to wider health information.

As members would expect, the expansion of the service will be informed by a full assessment of the evaluation findings in order to develop a detailed expansion plan, including workforce requirements, resource implications and delivery timetable. We are currently working with the Scottish Ambulance Service to consider the findings ensuring the approach is evidence led and will achieve maximum impact.

The MHPRUs are only one initiative amongst our wider prevention-first approach to Mental Health and Wellbeing, most of which are highlighted in our recently published Mental Health and Wellbeing Delivery Plan 2026. This includes our commitments to:

- Expand Scotland's NHS 24 Mental Health Hub to include Psychological Therapies and invest an additional £3.5 million to make it easier for people to get the help they need which will reduce pressure on A&E and other emergency services.
- Develop emergency mental health responses through our new Crisis Framework for Children and Young People, and the Crisis Intervention Fund.
- Support the expansion of walk-in mental health hubs across Scotland, including the five 'Nooks' planned by SAMH.
- Continue to invest in community-based third sector support services through the Communities Mental Health & Wellbeing Fund for Adults.
- Continue supporting the successful national Distress Brief Intervention Programme which helps people get quick, effective and compassionate support when they are experiencing distress.

As noted by ACC Paton during her evidence session on 16 September, the Chief Constable and NHS Board Chief Executives are also working in partnership to jointly commission a whole system approach for mental distress and vulnerability demand. Recognising that this is not solely a policing issue but a whole-system challenge involving NHS Scotland, HSCPs, local government, third-sector partners and emergency services, they are developing a report and recommendations. We anticipate this will be available by December 2026.

Once approved by the Chief Constable and NHS Chief Executives this joint plan will be shared with Scottish Government Ministers for their consideration. The Scottish Government strongly welcomes this collaborative approach and we look forward to working with partners in supporting the delivery of the report's recommendations.

I hope this information is helpful to the Committee in their ongoing consideration of mental health and policing. I would, of course, be happy to provide further information if helpful.

Yours sincerely,

Donna Bell
Director of Mental Health and Social Care
Scottish Government

INVESTORS IN PEOPLE™ We invest in people Silver
disability confident LEADER



Mental Health Paramedic Response Unit Evaluation

June 2026

Contents

Introduction

2. Background – MHPRU 4
3 Aims and objectives 5
3.1 Aim 5
3.2 Objectives 6
4 Information sources 6
5 MHPRU operational models 7
6 Quantitative data on mental health callouts 8
6.1 MHPRU National Operational Demand 8
6.2 Time on Scene 10
6.3 Conveyance & non-conveyance 12
6.4 Reattendance 14
7 Qualitative Data 15
8 Discussion on key findings 16
8.1 Benefit to the patient 16
8.2 Benefit to the service 17
8.3 Benefits to wider system 18
9 Limitations 20
9.1 Data quality and coding consistency 20
9.2 Comparator choice and potential confounding 20
9.3 Limited outcome linkage and system-wide measurement 20
9.4 Generalisability and transferability 21
10 Recommendations 21
11 Conclusion 21

1. Introduction – Mental Health Priorities in Scotland

Mental health in Scotland remains a significant public health concern. Approximately, one in four people in Scotland experience a mental health problem in any given year, with growing self-reported prevalence of conditions, sustained levels of psychological distress, and notable inequalities across age, gender and socio-economic status[1]. These trends underscore the scale and complexity of mental health provision and further intensifying demand for community, primary care, and emergency mental health services.

In 2023, the Scottish Government published the Mental Health & Wellbeing Strategy which sets out a whole-system approach to improve mental health and wellbeing across the population, focusing on promoting good mental health, preventing mental illness, and providing timely accessible support and care for those who need it. It aims to reduce stigma, strengthen community-based support and ensure people can access the right care at the right time in the right place[2].

The Scottish Ambulance Service (SAS) is the main provider of emergency prehospital care to the population of 5.5m people in Scotland [3]. SAS receives on average 1500-1800 calls per month in relation to mental health. In response to this and in line with Scottish Government vision, SAS has prioritised developing enhanced care pathways, and responses to individuals who contact the service with a mental health need. SAS acknowledges the profound influence that trauma, deprivation, socioeconomic status, age and gender can have on a person's mental and physical health outcomes[4].

An important step towards innovating the SAS response to mental health has been the development of Mental Health Paramedic Response Units (MHPRUs).

[1] See https://audit.scot/uploads/docs/report/2023/nr_230913_adult_mental_health.pdf
[2] Mental health and wellbeing strategy - gov.scot
[3] Mid-2023 population estimates - National Records of Scotland (NRS)
[4] https://www.scottishambulance.com/media/sjuafcgh/202202_mental-health-project_06-main-booklet.pdf

2. Background – MHPRU

2.1 Mental Health Triage Car and Early MHPRU Development (2019–2020)

A six-week pilot (December 2019–January 2020) introduced direct mental health nursing input, with the MHTC staffed by a paramedic and a mental health nurse. The service operated during identified peak demand periods (Thursday–Monday, 20:00–02:00).

2.2 Evaluation of the MHTC

Early evaluation demonstrated reduced conveyance to A&E, indicating the benefit of specialist mental health assessment delivered in the community. Findings suggested potential system-wide benefits, including reduced pressure on SAS resources and emergency departments. These outcomes aligned with the wider development of crisis mental health services, including Mental Health Assessment Units (MHAUs).

2.3 Mental Health Paramedic Response Unit (MHPRU) Pilot (2020–2021)

In 2020, Scottish Government funding (Mental Health Strategy 2017–2027, Action 15) supported a 12-month MHPRU pilot across three sites. Six paramedics were recruited in April 2021 to operate units in Glasgow, Dundee and Inverness, working in partnership with local mental health services.

2.4 Interim Evaluation of the MHPRU – Glasgow (2021)

The interim evaluation combined qualitative feedback from MHPRU paramedics with quantitative analysis from SAS Business Intelligence, though data were limited by paper-based documentation.

Comparative analysis demonstrated lower conveyance rates (figures 4 and 5) for MHPRU-attended incidents (22.5%) compared with standard A&E responses (56.8%). Qualitative findings associated reduced conveyance with access to specialist mental health assessment, availability of care plans, improved information sharing, and strengthened referral pathways.

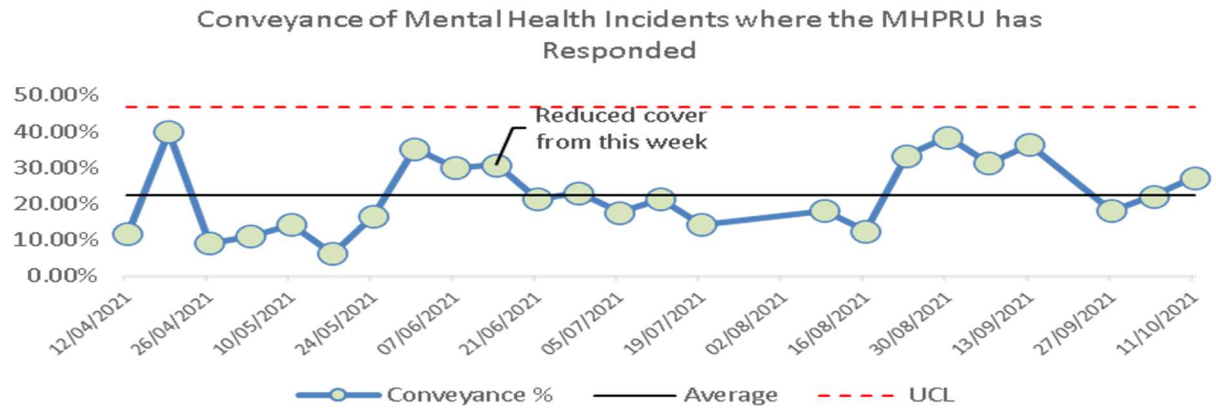


Figure 4

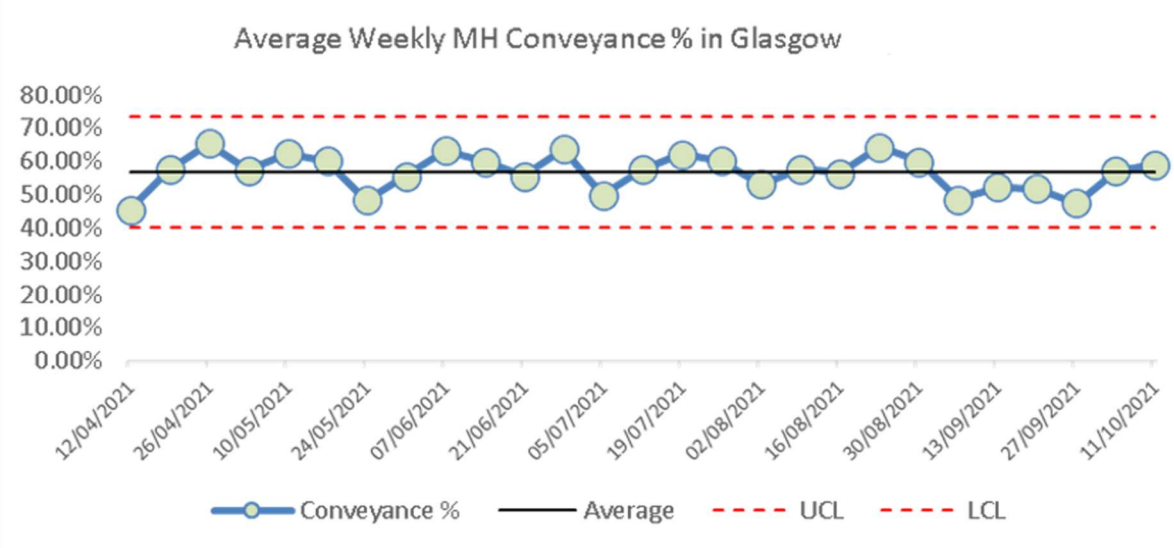


Figure 5

3 Aims and objectives

3.1 Aim

The aim of this evaluation is to assess the effectiveness, impact and value of the MHPRU service across Scotland, examining its contribution to patient care, service

delivery, the wider health and social care system, and to identify areas for further development and improvement.

3.2 Objectives

The objectives of this evaluation are:

- Describe and compare the operational models of the MHPRU across the three geographical areas (West, North and East) highlighting variations in staffing, hours of operation, and integration with local mental health services.
- Analyse quantitative activity and performance data to compare MHPRU responses with standard A&E ambulance resources, including demand patterns for mental health-related callouts, time spent on scene, conveyance and non-conveyance rates, reattendance within 28 days.
- Assess the impact of MHPRU on patient outcomes and experience, including the extent to which patients are supported and managed safely within the community, reducing the need for attendance at hospitals.
- Evaluate the benefits of the MHPRU model for SAS, including workforce confidence, clinical decision making, access to mental health expertise and use of alternative pathways.
- Explore the wider system impact of the MHPRU, particularly its contribution to reducing pressure on emergency departments, improving triage to appropriate services, and supporting national mental health priorities.
- Identify learning, limitations and opportunities for future development, including recommendations to inform service improvement and alignment with national policy and strategic priorities.

4 Information sources

Information sources for this evaluation comprised a mixed-methods approach drawing on both quantitative and qualitative data. Quantitative activity and performance data were extracted from Scottish Ambulance Service (SAS) Business Intelligence systems, focusing on mental health–coded incidents attended by MHPRU and standard A&E resources between 1 April 2024 and 31 March 2025. This included analysis of operational demand, time on scene, conveyance and

non-conveyance rates, and reattendance within 28 days, with linked hospital admission data reviewed where available to support interpretation. Qualitative evidence was obtained through service user and carer feedback commissioned via Voices of Experience (VOX) Scotland, exploring experiences of MHPRU compared with standard ambulance responses. The evaluation was further informed by previous MHPRU and Mental Health Triage Car evaluations, local operational intelligence from MHPRU sites, and relevant national policy and strategic documents to contextualise findings and align conclusions with wider mental health priorities in Scotland.

5 MHPRU operational models

The SAS deploys both standard A&E resources and Paramedic Response Units (PRUs). Standard A&E crews, usually a paramedic and ambulance technician, respond to 999 calls, provide treatment, and convey patients to hospital when needed, while PRUs are typically solo specialist responders who deliver rapid on-scene care and triage to support community-based treatment and avoid unnecessary hospital admissions.

The original ambition was to deliver a consistent MHPRU model across all sites, with a vehicle based at an MHAU and staffed out of hours by a paramedic and a mental health nurse. In practice, delivery varied across the three sites, reflecting differences in local service configuration, workforce availability, and environmental factors. These contextual influences affected both the timing of implementation and the operational arrangements of each MHPRU.

A summary of the current operational models can be found below (Figure 6)

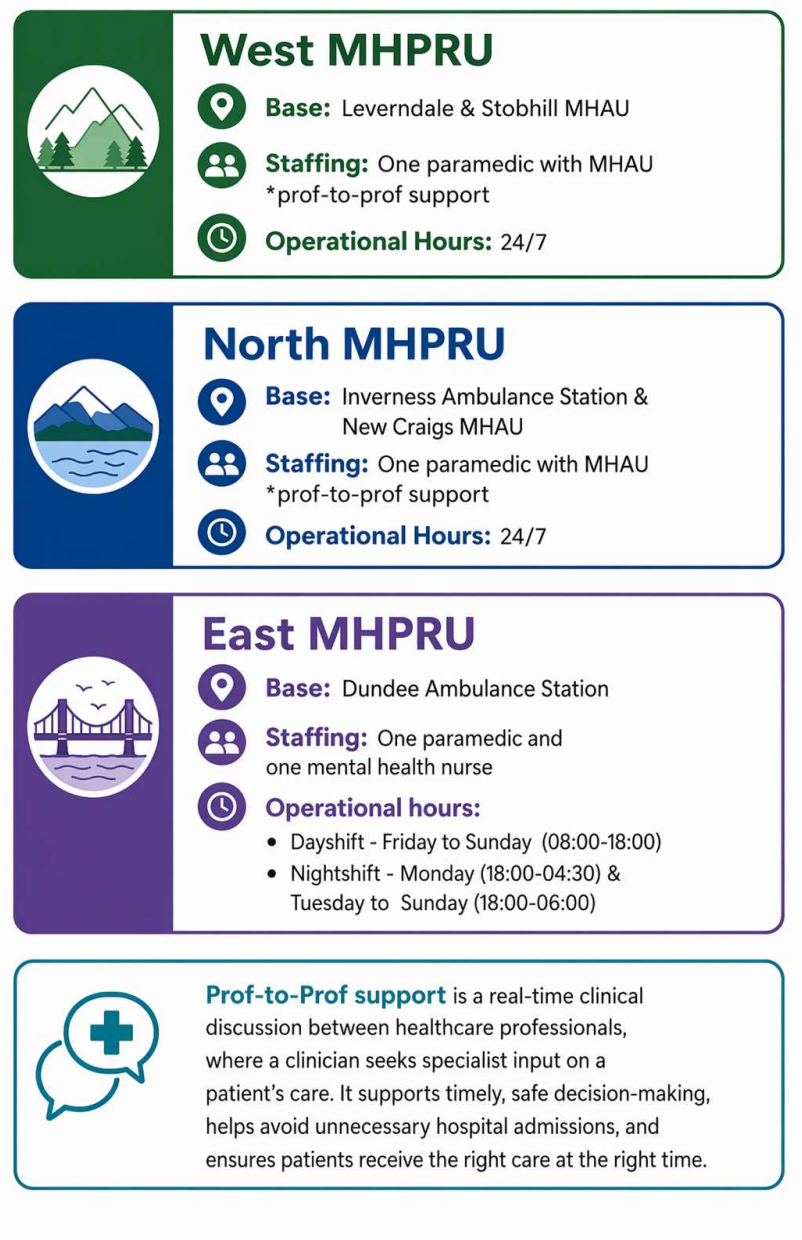


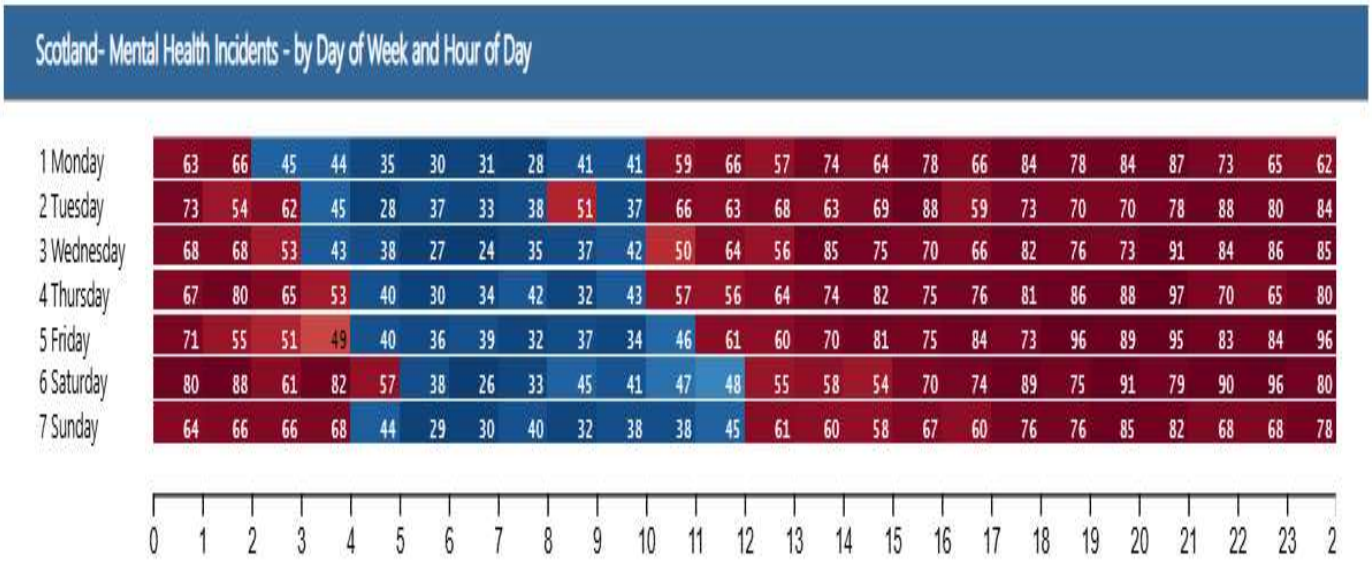
Figure 6

6 Quantitative data on mental health callouts

This data focuses on comparison of MHPRU and standard A&E resources in mental health crisis response.

6.1 MHPRU National Operational Demand

There were 18,479 code 25 mental health calls for the year 24/25, over 10,600 calls were attended details of which are discussed below.



Red = Highest Demand **Blue = Lowest Demand**

Figure 7

Figure 7 presents a strategic analysis of mental health related incidents requiring a Mental Health Paramedic Response, derived from a detailed heatmap examining the totality of 2024-25 demand by day of the week and hour of the day. Areas of highest demand are represented in red, with lowest demand shown in blue. This analysis is intended to inform decision-making regarding the optimal allocation of MHPRU resources. Distinct temporal patterns in incident demand are evident, identifying specific periods where increased paramedic capacity is required. These findings support the adoption of a more dynamic and responsive deployment model, enabling closer alignment of operational capacity with periods of highest need and facilitating improvements in service delivery and patient outcomes.

The busiest time for mental health incidents in Scotland in the areas where a MHPRU operates, according to the heatmap, is on a Thursday at 2100hrs (9 PM).

- This time slot has the highest recorded value: 97 incidents.

Other notably high-incident times include:

- Friday at 20:00 – 96 incidents
- Friday at 21:00 – 95 incidents
- Saturday at 20:00 – 91 incidents
- Wednesday at 21:00 – 91 incidents

These patterns suggest that late evening hours are peak times for mental health incidents.

The data also indicates that Friday, Saturday, Sunday and Wednesday consistently experience the highest volume of mental health-related incidents. Saturday records the greatest number of incidents, with demand peaking notably between 21:00 and 00:00 AM. In contrast, the lowest incident volumes are observed across all days between 4:00 AM and 8:00 AM. Monday and Sunday mornings in particular exhibit lower levels of activity, suggesting potential opportunities for reduced resource deployment during these windows. It is important to note that in Dundee, the mental health paramedic response unit does not operate a vehicle during Monday, Tuesday, and Wednesday day shifts. This operational constraint should be considered when planning service coverage and future resourcing strategies.

Peak hours for mental health-related incidents occur between 4:00 PM and 10:00 PM across most weekdays. Wednesday and Saturday evenings experience particularly high volumes, while Friday evenings between 7:00 PM and 9:00 PM show a significant spike in demand that would require strong paramedic presence to meet service needs effectively.

A clear temporal trend emerges, with incident volumes steadily increasing from around 10:00 AM, peaking through the late afternoon, and remaining elevated until approximately midnight. This pattern suggests that a static rostering model may not be sufficient, and that dynamic, time-sensitive deployment strategies would be more effective in matching resources to demand fluctuations.

6.2 Time on Scene

This report evaluates the average on-scene times for the MHPRU compared with standard A&E resources in relation to mental health crisis response. The analysis

seeks to assess operational efficiency, identify trends over time, and highlight periods of optimal performance to inform future service planning and strategic development.

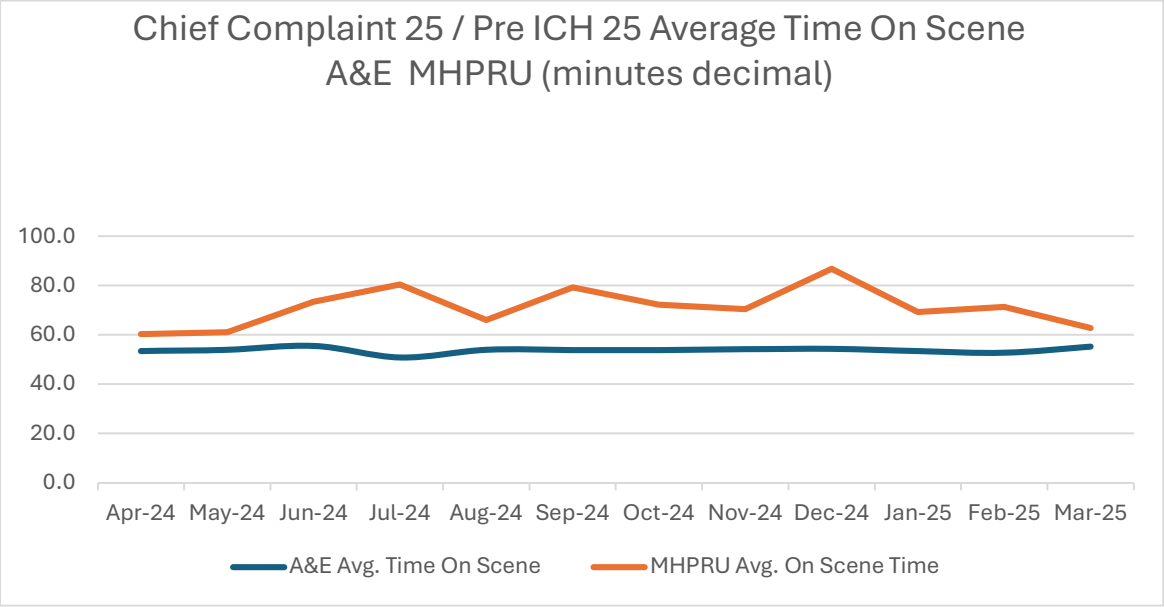


Figure 8 illustrates the monthly average on-scene times from April 2024 to March 2025 for both MHPRU and A&E ambulances, measured in decimal minutes. Over the reporting period, the MHPRU consistently demonstrates longer average on-scene times compared to standard A&E resources. This trend reflects the specialist and often more intensive nature of mental health interventions delivered by the MHPRU

Figure 8

The extended on-scene time exhibited by MHPRU units is consistent with the clinical complexities inherent in managing mental health crises. Interventions frequently involve detailed assessments, de-escalation efforts, safeguarding considerations, and engagement with mental health services to avoid unnecessary hospital admission.

The MHPRUs focus on resolving the crisis at scene where safe and appropriate. This reduces hospital conveyances, thereby alleviating pressure on emergency departments, improving patient experience by preventing long waits, and promoting access to more suitable mental health care services at an earlier stage.

Importantly, although MHPRU crews spend more time on scene, they convey patients to hospital less frequently than standard A&E resources. This approach reduces the demand on emergency departments, minimises patient waiting times at hospital, and ensures that patients receive appropriate care pathways in the

community more quickly. As such, longer on-scene times by MHPRU units represent a strategic investment in patient-centred care and system-wide efficiency

6.3 Conveyance & non-conveyance

Conveyance refers to the transportation of a patient by ambulance to a hospital or other healthcare facility. Non-conveyance refers to incidents that are managed and resolved at the scene, without the need to transport patients to a hospital or other healthcare facility.

Figure 9 below illustrates a comparative analysis of conveyance rates between the MHPRU (Inverness, Dundee and Glasgow) and standard A&E resources (nationally) from April 2024 to March 2025.

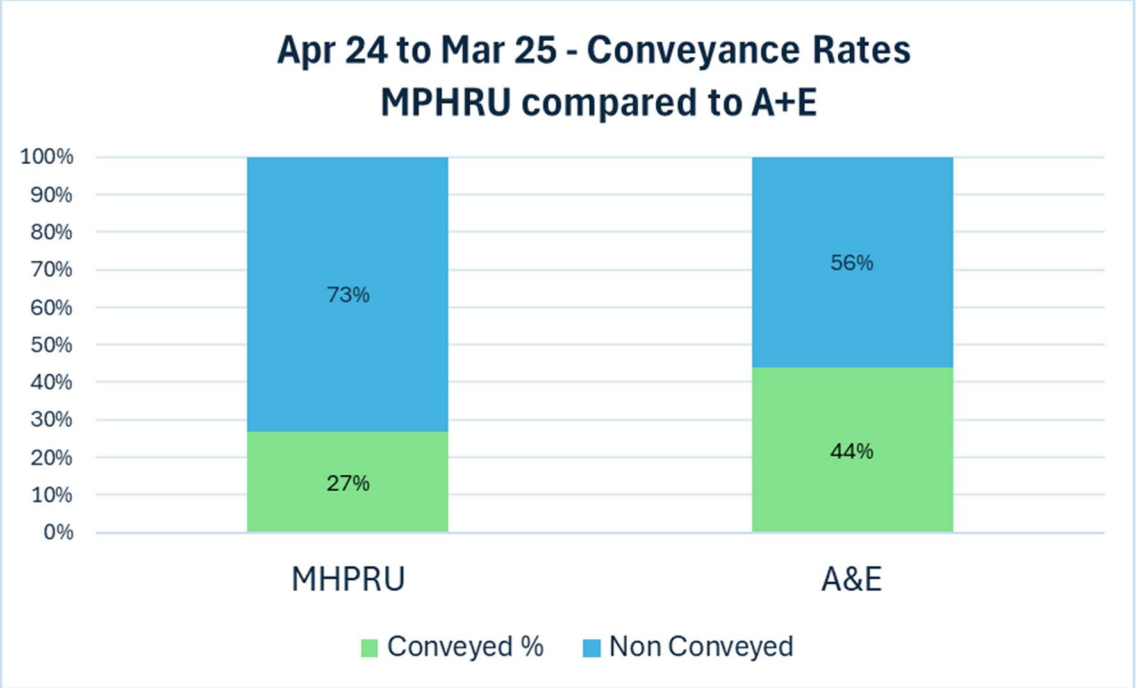


Figure 9

The data indicates that the MHPRU achieved a notably lower conveyance rate of just 27%, meaning that the 73% attended by the MHPRU were effectively supported and safely managed within the community without requiring transportation to an emergency department. This contrasts sharply with the traditional A&E ambulance model, where 57% of mental health presentations resulted in conveyance to hospital, and only 43% were managed without the need for transport.

People left at home were referred on to services such as the Distress Brief Intervention Service or the Crisis Distress Response Service for onward support if required.

A comparison of MHPRU conveyance rates between 2021–2022 and 2024–2025 (Figure 10) shows clear progress in reducing hospital conveyance and strengthening community-based care pathways.

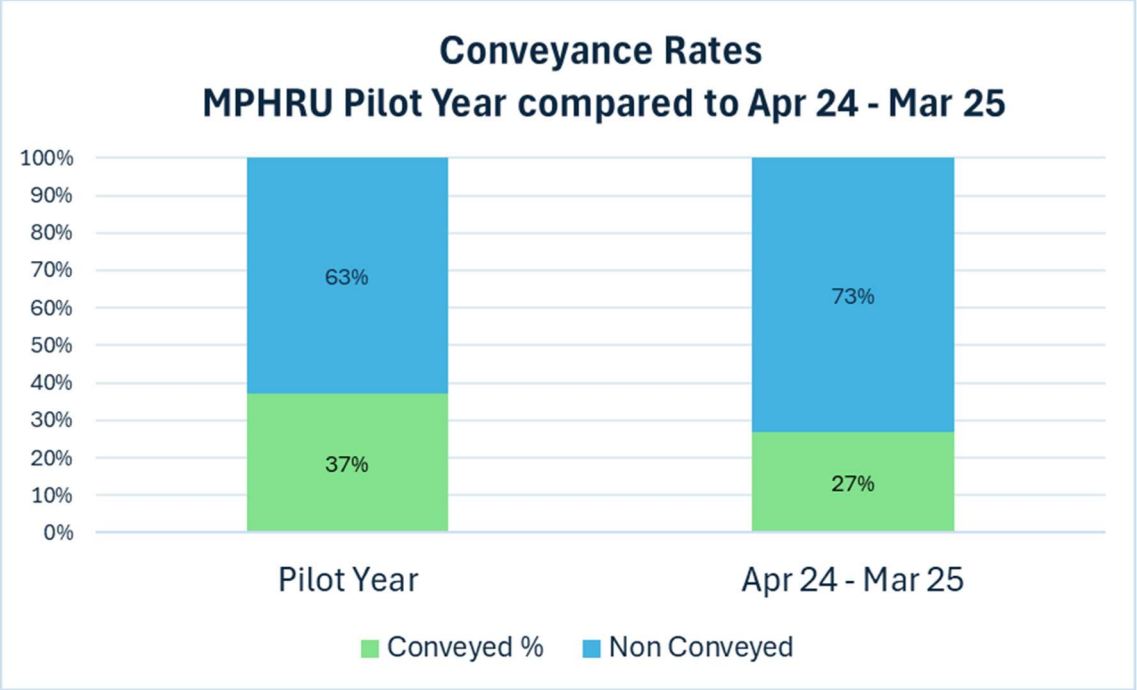


Figure 10

The non-conveyance rate rose from 63% to 73%, while the conveyance rate fell from 36% to 26% – a shift reflecting the MHPRU's growing emphasis on delivering timely, appropriate care closer to home.

This improvement highlights the impact of refined clinical practice, stronger links with community services, and enhanced training and education. By 2025, the MHPRU not only managed more cases without conveyance but did so with a more tailored, patient-centred approach. The trend also signals broader system benefits, such as reduced emergency department pressure and improved outcomes for people in mental health crisis.

This positive trend underscores the service's commitment to reducing unnecessary hospital attendance, prioritising patient-centred care, and ensuring that individuals in mental health crises receive the right support at the right time in the right place [5]. It reflects not only operational success but also a deeper systemic impact, easing pressure on emergency departments and improving patient outcomes.

The non-conveyance performance of MHPRU can be attributed to a combination of clinical expertise, alternative care strategies, and operational design:

- Specialised Mental Health Expertise: Each MHPRU unit includes professionals with training in mental health, including access to mental health nurses either embedded within the resource or available for telephone advice. This ensures a more appropriate and informed approach.
- Access to Alternative Care Pathways: MHPRU teams are equipped with the knowledge and ability to refer patients directly to suitable community services or mental health support networks, bypassing the need for hospital conveyance where clinically appropriate.
- Tailored Triage and Response Protocols: MHPRU operates under customised triage frameworks that allow for flexible and patient-centred, better-informed decision-making, enabling better outcomes for individuals in crisis with access to wider health information.

6.4 Reattendance

Following an initial call out of an ambulance to an individual, it is possible to track how many times SAS may reattend that person within 28 days. It is not possible for this to be a 100% accurate reporting measure as it relies on the person being at the same location, such as their home address, and providing the same details to the call handler such as their name and date of birth. Typically for a physical health need, attendance on two or more occasions to an individual within 28 days may indicate that the reason for the initial call out was not fully addressed or may suggest the person's condition has deteriorated.

[5] Right Care Right Place: guidance - gov.scot

In the case of mental health calls, we see that whether the patient was seen by the MHRPU or by a standard A&E resource, little difference is made to the chances of reattendance. For patient's triaged and discharged on scene by the MHPRU, 48% reattended within 28 days. For a standard A&E resource, 41% reattended within 28 days. In circumstances where a person was conveyed to hospital, 34% of MHRPU patients reattended, whereas 32% of patients seen by a standard A&E resource were seen again within 28 days.

Reattendance within 28 days is not a meaningful measure of success for mental health-related calls attended by either MHPRU or a standard A&E resource. Many individuals require ongoing, multi-agency support, and a single episode of care is rarely sufficient. Instead, linked hospital admission data provides a more useful comparison. While time spent on scene may hold therapeutic value, this cannot be captured through quantitative data alone; qualitative feedback would be required to explore this further. We are actively working with our patient experience team to explore how we continually collect and learn from this data.

7 Qualitative Data

The Scottish Ambulance Service Mental Health and Dementia Team commissioned Voices of Experience (VOX) Scotland to explore service user and carer experiences during mental health crises. Part of this report focussed on the MHPRU service in comparison to A&E ambulances. Participants were recruited from social media and lived experience groups with a focus on the three geographical areas that the MHPRU service operates. 11 people provided responses that provided both positive and negative views of accessing the service. The key themes that emerged were:

- Increase availability of MHPRU service nationally
- Raise public awareness of the MHPRU service
- Participants overall support the concept of the MHPRU and see its potential to offer a more appropriate and compassionate alternative to ambulance response in mental health crises

While the sample size was very small, the data still provides useful indicative insights but should be treated with some caution. As such, results are intended to inform local learning rather than support broad generalisation. Future work with a larger

sample size would strengthen service evaluation and allow more definitive conclusions to be drawn.

8 Discussion on key findings

8.1 Benefit to the patient

The Mental Health Paramedic Response Unit (MHPRU) model demonstrates measurable benefits for individuals experiencing mental health crises through the provision of compassionate, specialist care delivered within the community setting. The model supports increased resolution at scene and enables clinicians to spend more therapeutic time with patients. A key strength of the MHPRU approach is the ability to undertake comprehensive, in-situ mental health assessments and develop personalised care and safety plans, frequently avoiding the need for conveyance to hospital.

The MHPRU model is designed to prioritise rapid response while delivering specialist mental health expertise at the point of need. Timely attendance contributes to improved immediate safety and emotional stability for individuals in crisis and reduces the likelihood of escalation that may otherwise necessitate more intensive intervention or hospital admission.

Quantitative analysis indicates that 73% of patients attended by the MHPRU were able to remain at home, demonstrating a significantly lower conveyance rate compared to standard A&E resources. Where conveyance did occur, patients attended by the MHPRU were more likely to be admitted to appropriate specialist mental health services, suggesting enhanced clinical decision-making and more effective triage.
Improved patient outcomes associated with the MHPRU model were underpinned by the following factors:

- Access to clinicians with specialist mental health training, including paramedics trained in mental state examination and mental health risk assessment.

- Increased time on scene, which was used therapeutically to provide emotional support, assessment, and guidance. Patient feedback indicated that individuals felt listened to, supported, and actively involved in managing their crisis.

8.2 Benefit to the service

The Mental Health Paramedic Response Unit (MHPRU) service delivered a range of operational and clinical benefits for the Scottish Ambulance Service (SAS), primarily through enhanced care for individuals experiencing mental health distress and more effective utilisation of internal resources. It is important to acknowledge the significant national progress in the development and implementation of mental health pathways, which are now available to SAS crews across Scotland. These pathways support the delivery of care at the right time and in the right setting and are accessible not only to MHPRUs, but to many standard crews across almost all regions.

Key service benefits identified include:

- Reduced reliance on A&E conveyance, with MHPRUs demonstrating a non-conveyance rate approximately 17.5 percentage points higher than that of standard A&E resources on average.
- Improved inter-agency collaboration, particularly with local Mental Health Assessment Units and Health and Social Care Partnerships, facilitating more joined-up care and appropriate onward referral.
- Enhanced paramedic confidence and capability, with anecdotal feedback indicating improved knowledge of mental health presentations and increased awareness of available pathways and referral options.

Anecdotal feedback from MHPRU staff further highlighted that the specialist education and training provided as part of the MHPRU model contributed to increased confidence and preparedness when supporting patients in crisis. This training was perceived as distinct from the education routinely provided to standard A&E resource staff.

Paramedics also valued access to electronic health records (e.g. EMIS) and the availability of real-time clinical advice from mental health nurses. These elements were

reported to strengthen clinical decision-making, support continuity of care, and increase confidence in non-conveyance decisions.

However, it should be noted that standard A&E resources may also access similar clinical advice through Professional-to-Professional (Prof-to-Prof) support, where local mental health pathways are established and available within their region.

8.3 Benefits to wider system

System-Level Impact of the MHPRU Model

From a whole-system perspective, the Mental Health Paramedic Response Unit (MHPRU) model demonstrates clear benefits, including reduced pressure on emergency departments, avoidance of unnecessary hospital admissions, and contribution to a more integrated and trauma-informed approach to care delivery.

A key function of the MHPRU model is effective signposting, defined as the purposeful direction of individuals to the most appropriate mental health, community, or third-sector services in line with assessed need. This approach supports more timely and targeted interventions, while also addressing inefficiencies in system demand. Where clinically appropriate, diversion from acute pathways reduces ambulance conveyance, emergency department (ED) attendance, and prolonged waiting times within urgent and unscheduled care settings.

The integration of structured signposting within the MHPRU workflow also supports a more trauma-informed and holistic model of care. Individuals experiencing mental health crisis frequently encounter fragmented or siloed care pathways, which can heighten distress and contribute to disengagement from services. MHPRU clinicians, through their specialist mental health competence and knowledge of local provision, are well placed to mitigate this risk by facilitating immediate advice, referral, and onward connection to appropriate support. This includes crisis and home treatment teams, psychological therapies, social care services, and voluntary and community sector organisations. Such interventions promote continuity of care and may reduce the likelihood of recurrent crisis presentations.

System Outcomes

Observed outcomes for the wider health and care system include:

- **Improved triage and reduced inappropriate admissions:**
  Of patients conveyed by MHPRU crews, 44% were not subsequently admitted to hospital, compared with 62% conveyed by standard A&E resources. This suggests more effective identification and management of individuals who could be safely supported within the community.
- **Enhanced system efficiency:**
  Specialist MHPRU teams demonstrated appropriate use of referral pathways, contributing to reduced ED crowding and more effective deployment of secondary care resources.
- **Alignment with national policy objectives:**
  The model supports Scottish Government priorities relating to trauma-informed practice and the reduction of health inequalities, particularly within areas of socioeconomic deprivation.

Socioeconomic Context

The MHPRU vehicles operate within three geographic areas that include some of the most deprived communities in Scotland, as measured by the Scottish Index of Multiple Deprivation (SIMD):

- **Glasgow:** Approximately 44% of data zones fall within the 20% most deprived areas nationally.
- **Dundee:** Around 37% of the population resides within the most deprived SIMD quintile.
- **Inverness (Highland region):** Although deprivation levels are lower overall, specific urban pockets rank within the lower SIMD deciles.

Operating within these localities places MHPRUs in a strong position to deliver trauma-informed care to populations disproportionately affected by adverse childhood experiences, socioeconomic disadvantage, and systemic barriers to access[6]. The MHPRU model therefore contributes to reducing inequalities in access,

[6] https://simd.scot/#/simd2020/BTTTFTT/9/-4.0000/55.9000/

improving continuity of care, and delivering culturally and socially responsive support in the areas where a MHPRU is operating but does not provide a whole system reduction in inequalities.

9 Limitations

This evaluation should be interpreted in the context of several methodological and data-related limitations which may affect the strength of conclusions and the extent to which findings can be generalised across Scotland.

9.1 Data quality and coding consistency

Quantitative analyses rely on the accurate identification of *mental health–coded incidents* within SAS Business Intelligence systems. Variability in coding practices at call handling and clinician documentation stages may result in misclassification (e.g., mental health needs recorded under other presenting complaints such as intoxication, social crisis, or medical symptoms). This may lead to under- or over-estimation of true mental health demand and may influence observed rates of conveyance, time on scene, and reattendance.

9.2 Comparator choice and potential confounding

Comparisons between MHPRU activity and standard A&E resources are observational and not controlled for case-mix. MHPRU deployments are influenced by local dispatch arrangements, operating hours, geography, workforce availability, and site-specific service configurations. As a result, the MHPRU and standard A&E cohorts may differ systematically in acuity, complexity, safeguarding risk, and availability of alternative pathways at the time of attendance. These factors may confound observed differences (e.g., conveyance rates and on-scene time) and mean that findings should be interpreted as associations rather than causal effects attributable solely to the MHPRU model.

9.3 Limited outcome linkage and system-wide measurement

While linked hospital admission outcomes were reviewed where available, the evaluation is constrained by incomplete end-to-end data integration across pre-hospital care, emergency departments, inpatient admissions, and subsequent community service engagement. This limits the ability to assess longer-term

outcomes (e.g., sustained engagement with support, adverse events, repeat crisis escalation, or longer-term service utilisation) and to quantify system impact beyond the immediate episode of care.

9.4 Generalisability and transferability

MHPRUs operate within specific geographic areas, including communities with high deprivation, and within local systems that vary in availability of crisis services, MHAUs, and third sector supports. Results may not be directly transferable to regions with different service infrastructure, rurality, or workforce capacity. Scaling conclusions nationally should therefore be undertaken with consideration of local readiness, pathway maturity, and resource availability.

10 Recommendations

The learning from this evaluation requires focus for development in a number of areas. An oversight group will be developed to progress work on areas such as standardisation of the operating model and operating hours, education and training requirements of the workforce, data and outcome measures, time on scene and reattendance, lived experience feedback, fleet and dispatch requirements, triage arrangements and future expansion of the service.

.

11 Conclusion

This evaluation demonstrates that the MHPRU model is delivering more specialised, patient-centred mental health crisis care within the community. MHPRUs support individuals safely at home, reducing reliance on emergency departments where hospital attendance is not clinically required. Quantitative findings show lower conveyance rates compared with standard A&E resources, reflecting enhanced assessment, de-escalation, and direct referral to appropriate mental health and community services. Although MHPRU crews spend longer on scene, this reflects the complexity and therapeutic value of mental health interventions rather than operational inefficiency. Where conveyance does occur, patients are more likely to

be admitted to specialist services, indicating improved clinical decision-making and alignment with patient need.

Wider system benefits include improved inter-agency collaboration, increased workforce confidence and competence, and reduced pressure on emergency departments, supporting national priorities such as trauma-informed care and early intervention, particularly in areas of high socioeconomic deprivation. Reattendance within 28 days was not a meaningful outcome measure, highlighting the limitations of applying traditional emergency care metrics to mental health crises. Limited qualitative feedback further supports the value of specialist mental health ambulance responses. Overall, the evaluation concludes that MHPRUs represent a progressive development in pre-hospital mental health care, with continued investment, improved data integration, and pathway alignment essential to sustaining impact.