Scottish Government
Riaghaltas na h-Alba

Evaluation of Hospital at Home in Scotland: Phase 1 Findings Report



Health and Social Care

social research

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Short Summary of Findings

The high-level summary of findings set out below is based on feedback from NHS Scotland workforce involved in either delivering Hospital at Home (H@H) or referring patients into H@H services. Their views were captured through an online 'workforce' survey (Nov 25 - Jan 26), focus groups and interviews (March 26). Note that the brevity of this summary precludes the full breadth and depth of findings from being presented. These findings comprise Phase 1 of the H@H evaluation; the upcoming Phase 2 will produce an impact evaluation through interviews with workforce, H@H patients and their families/carers, as well as an economic analysis.

Nature and scope of Hospital at Home

The research found a very mixed understanding of the scope, principles and practices underpinning H@H. Considerable differences in how services are being delivered was evident in research findings. Feedback suggests that the heterogeneity of delivery is driven by a lack of standardisation in how services were historically set up and an absence of clear guidance on how new services should be set up, meaning much of this is/was left to local decision makers. Furthermore, views were expressed that the service was still subject to rapid change, often on a very regular basis, linked to funding and other decisions. This made it difficult to keep abreast of what H@H currently entailed, even in longer established services.

The referral process

Of referrers who completed the 'workforce survey' (n=136), around half described the process of referring a patient to H@H as mostly or almost always straightforward, around a third as sometimes straightforward and sometimes difficult, and a minority as mostly or almost always difficult. The findings demonstrated a clear buy-in for the H@H service among the majority of referrers, both in terms of their willingness to actively refer patients, and their confidence in the quality of patient care provided by the service. Additionally, communication from H@H teams was generally described very positively. However, referrers did raise frustrations with the referral acceptance decision process, which was perceived to be inconsistent at times. Views were also shared that the number of patients accepted into H@H might be diminished by referrals being rejected due to a lack of capacity within the H@H teams, and an absence of H@H provision out-of-hours. Another concern among some referrers was a lack of clarity on where responsibility sat - between primary care and secondary care - for a patient referred into H@H.

The delivery process

Most deliverers reflected positively that their H@H team comprised a strong mix of staff from different professional backgrounds, with different expertise. Effective delivery processes within teams and strong senior promotion of H@H were also believed to be present. Many deliverers mentioned Point of Care testing as a key strength of the H@H service, as well as access to remote monitoring. Conversely, challenges affecting optimal delivery were frequently mentioned in relation to staff

shortages (including for specific or specialist staff), and staff recruitment/retention (linked to the short-term funding model). Some gaps or limitations in the availability of IT hardware and software were cited, as well as with accessing social care and community services input.

Suggestions for the future

Maximise optimal delivery by:

- Continuing to embed strong links and communication between H@H teams and their local referral pathways.
- Continuing to build teams with different professional backgrounds, expertise and specialties, with clear and robust delivery and improvement processes in place and with collegiate culture.
- Ensuring that strong senior promotion of the service remains in place, and that communication on the expansion of the service is universally received.
- Continuing to roll out expanded use of equipment enabled Point of Care testing and remote monitoring.

Alleviate existing barriers by:

- Ensuring that referral eligibility criteria are clear and well adhered to (by both delivery teams and referrers), and that referral acceptance decisions are made consistently on this basis.
- Minimising inefficient use of staff time, including through more and better-connected IT equipment, virtual assessment when appropriate, and funding for dedicated driver support.
- A funding model which supports teams to have greater and more consistent staff resource, facilitating increased capacity to take on referred patients and potentially to implement longer hours of operation and additional geographical coverage.

Executive Summary

Background

Hospital at Home (H@H) is described as an intervention which provides time-limited, acute care, face-to-face to suitable people in their home, a relative's home or in nursing homes (Public Health Scotland (PHS), 2026). This can be as an alternative to a hospital admission or early supported discharge from hospital. For the purposes of this evaluation, specified related admission alternative services which provide clinical care for patients who would otherwise have been admitted to hospital are also included within the scope. H@H aligns with the commitment within NHS Scotland's Operational Improvement Plan, to shift the balance of care from acute hospitals to the community.

A number of different H@H services (or 'pathways') exist across Scotland. These include:

- **Acute / Older adult services** - provide care for adults, including frail or older people, suffering with acute illnesses and health conditions requiring secondary care assessment and intervention.
- **Respiratory Services** - specialist support to patients with breathing conditions.
- **Heart Failure Services** - specialist support to patients with heart failure.
- **Outpatient parenteral antimicrobial therapy (OPAT)** - provide IV or complex oral antimicrobial therapy for suitable patients.
- **Paediatrics and Neonatal** - specialist support to patients under the age of 16 years.

Given the significant financial investment to support the expansion of H@H services in Scotland[1], and recognised gaps in existing research evidence around delivery and impact of H@H services, the Scottish Government commissioned an evaluation of H@H to support learning, continuous improvement and assess cost effectiveness.

The evaluation comprises two distinct phases. This report focusses on Phase 1, a process evaluation, exploring views of the H@H delivery and referral workforce in relation to effective processes, blockers and aspects of service delivery requiring improvement.

[1] NHS Scotland's Operational Improvement Plan includes an additional £220 million investment, as contained within the 2025-26 Scottish Budget. A portion of this funding was used for the expansion of Hospital at Home services to 2,000 beds by December 2026.

Methodology

Phase 1 of the evaluation comprised two distinct elements:

- An online 'workforce survey' which included separate questions for those delivering H@H services (i.e. 'deliverers') and those who refer patients into H@H (i.e. 'referrers'). A total of 236 responses were received: 100 deliverers and 136 referrers.
- Focus groups with deliverers and referrers - 3 with deliverers (13 participants) and 3 with referrers (6 participants), plus individual/paired interviews (including with 7 deliverers and 2 referrers), meaning 28 participants in total.

Main Findings: Nature and Scope of Hospital at Home

Absence of a unified understanding of H@H

In focus groups and interviews with referrers, there was very mixed understanding of the scope, principles and practices underpinning H@H, largely because there was no one model employed across the country and no single definition available.

Among delivery staff, ambiguity around scope was also present, underpinned by a perceived disconnect between how services were labelled and their referral criteria. Similarly, some H@H pathways were delivering services consistent with other parallel pathways but under a different name.

Changes and variation linked to funding

Views were expressed by both deliverers and referrers that the service was still subject to rapid change, often on a very regular basis, linked to funding and other decisions. This was the case even in longer established services, and made it difficult to keep abreast of what H@H currently entailed.

Absence of standard protocol

Staff reflected that there was no clear guidance around how services should be set up, and much of this was left to local decision makers. As such, views were shared that some areas had decided to set up and run H@H in an almost exploratory way or in a phased way that enabled a test of change, or multiple tests of change. Feedback from interviews and focus groups suggests that a lack of standardisation in how services have historically been set up and run means there is no clear guidance for 'new' teams or services. For newer and developing pathways (including Paediatric and Neonatal pathways) there was also some uncertainty around how to define scope, primarily as most previous/existing services and definitions in place to guide them were for adult and older patient groups. The recent involvement of Public Health Scotland in defining H@H was mentioned as being helpful in allowing teams to refine, align and understand better what their service should look like against a standard model.

Variability of delivery models

Considerable differences in how services are being run was evident in research findings. This includes both where services are based and leadership structures within teams. Some teams had a greater focus on admission avoidance, while others focussed on early supported discharge. Variability in the maturity of different services was also evident.

Expansion of the service

Mixed views around expansion were expressed. Some respondents in well established services felt that, while they knew there was a commitment to expand the service, it was less clear if this meant increasing volume of activity, or growth into new service areas or geographical regions. It was also unclear if expansion would mean an increase in staff to help meet any increase in service provision. Unless expansion was matched with sufficient resources (both staff and materials) it was felt that existing quality of care standards could be compromised. Expansion has also not been clearly operationalised or quantified at the micro/local level.

Main Findings: Referral into Hospital at Home

Frequency of referrals

Just over a third (35%) of referrers in the workforce survey said they referred to a H@H service very or quite often, 31% 'not often' and 27% reported doing so 'rarely', 'very rarely' or 'never'. A small minority (7%) responded that they were not aware of any H@H provision in their Health Board[2]. Most referrers who took part in interviews or focus groups reported that they regularly referred into H@H. This ranged from daily (for paramedics) to weekly or monthly for GPs, showing significant variation in use of H@H between individual practitioners.

Ease of referrals

Around half (51%) of workforce survey referrers who had previously completed a referral said that the referral process was mostly or almost always straightforward, whilst 15% said that it was mostly or almost always difficult. A third (34%) reported the process was sometimes straightforward and sometimes difficult.

Those working in General Practice were the most likely to describe the referral process as mostly or almost always straightforward (62%) compared to those working in emergency medicine and primary care out-of-hours.

Those who rated the referral process as always or mostly straightforward were significantly more likely to agree or strongly agree (compared to others) that: they had confidence in the quality of H@H care given to patients (93%, compared to 68%), the H@H team(s) in their area actively engaged with them to share patient

[2] Respondents who said that they were not aware of any H@H provision in their Health Board were routed directly to the end of the survey and were not asked any further questions. Those who said that they had 'never' referred into H@H were omitted from some, but not all, of the remaining questions - see the Workforce Survey Questionnaire in Appendix C.

referral criteria (67%, compared to 37%) and they had a clear understanding of the H@H referral criteria in their area (88% compared to 65%).

Referral: What works well

Buy in and utilisation of H@H

A clear majority of workforce survey referrers agreed (46%) or strongly agreed (48%) that, where clinically appropriate, they would actively seek to refer a patient to an available H@H service. Furthermore, around three in four agreed (38%) or strongly agreed (39%) they were confident that the H@H services in their area provide a high quality of patient care.

Qualitative responses from referrers also evidenced a positive view of the service, particularly aligned to the aim of reducing hospital admissions, sometimes in spite of a view that the existing delivery processes could be improved. A small number of staff explicitly indicated that they felt the scope and range of services offered could be expanded. Some workforce survey respondents suggested widening criteria for existing pathway(s), introducing new pathways or reintroducing pathways no longer in operation locally.

Engagement between H@H teams and referrers

Three quarters (75%) of workforce survey deliverers agreed or strongly agreed that their service proactively engaged with their referral pathways, whilst a smaller proportion of referrers (49%) agreed or strongly agreed that the H@H team(s) in their Health Board actively engaged with them/their team to share their patient referral criteria.

Communication from H@H teams was generally described in very positive terms by referrers who took part in interviews and focus groups. Face-to-face contact with teams was suggested as the best way to ensure that practitioners engaged in learning about the service.

Referral: Existing challenges

Capacity to accept referrals

Numerous referrers raised frustrations about a perceived lack of capacity in H@H services, which hindered the number of referrals they were able to make. Calls were made for real-time information around services' capacity, to reduce time spent referring a patient to H@H only for the referral to be rejected due to lack of capacity.

Limited visibility over service capacity was further exacerbated by there being multiple referral routes into H@H, i.e. via a Flow Navigation Centre, from GPs directly, from hospitals for early discharge and from the ambulance service.

Adherence to referral criteria

Some delivery staff reported that inappropriate referrals were being made (i.e. outwith criteria). In such cases, these patients were nonetheless sometimes accepted, whilst other times not. This corroborated a view from referrers that inconsistency in acceptance decisions was present.

Issues with the referral process were also raised by delivery staff in relation to the timing, volume and spread of referrals received at different points in the day. This affected decisions around which patients could and could not be accepted.

Referral decision process

Another common frustration aired by referral staff was around the decision-making process for referral acceptance or rejection decisions, specifically, inconsistent approaches taken by whoever answered the call in the local H@H team, leading to confusion for referrers. The wide range of other referral options that sit alongside H@H were also described as making the referral pathway landscape confusing for GPs/primary care clinicians. Qualitative feedback revealed views that the eligibility rules and scope for H@H could be too rigid in some cases.

Out-of-hours provision

Lack of out-of-hours[3] provision was consistently raised as something which diminished the volume of referrals that services can receive. Similarly, in interviews and focus groups, a common theme to emerge from delivery staff was frustrations that services could not take more referrals due to lack of senior staff availability outside of their core operating hours.

Clarity on responsibility for the patient

A frequently cited concern among referrer focus group and interview participants was around who had overall responsibility for a patient at various points in their H@H journey and risks attached to ambiguity in responsibility. Others expressed concern for the sufficiency of expertise to cover the needs of all patients accepted, including non-specialist staff looking after patients in a non-hospital environment.

Main Findings: Delivery of Hospital at Home

Delivery: what works well

Delivery teams' skills and experience

In the workforce survey, 67% of deliverers agreed or strongly agreed that the skill set in their team was sufficient to meet requirements. In interviews and focus

[3] Hospital at Home services in Scotland do not provide a 24-hour service. Whilst there are a wide range of delivery models, most services deliver care 5 or 7 days a week, for 10 to 12 hours a day (often 8am to 6pm or 8pm). In this context, Out-of-Hours refers to the periods outwith the working hours of the local service.

groups, most delivery staff also reflected that their local H@H teams comprised a strong mix of staff from different professional backgrounds, and with different expertise, and considered this a strength of the H@H model.

Point of Care testing and equipment for specialist treatment

A large number of deliverers across the survey and focus groups mentioned Point of Care (POC) testing as a key strength of the H@H service, as well as being able to provide intravenous antibiotics or fluids, and oxygen.

Remote monitoring

Access to remote monitoring[4] was praised as assisting delivery of H@H, and was perceived as largely welcomed by patients as a way of helping them to retain ownership over their care (although it was recognised that some patients and their families/carers could experience challenges with the equipment).

Senior leadership promotion and support

Deliverers indicated in survey responses that they felt there was some (38%) or strong promotion (44%) of H@H by their senior leaders. Those who reported strong promotion were significantly more likely than others to agree or strongly agree with a number of statements about their team, including that: they had the required medical equipment (79% compared to 51%), they were able to fill vacancies quickly and effectively (51% compared to 16%) and they had enough staff in their team (46% compared to 25%).

In interviews and focus groups, most referral staff also noted that there appeared to be strong leadership promotion of the service. However, among delivery staff, there was consensus that information about expectations, changes to the service and future plans were not always sufficiently well communicated to teams.

Teamwork, processes and training

Workforce survey findings suggest that deliverers felt that their teams' had appropriate processes in place, including relevant training and professional development opportunities (69%), clear goals and strategies for improving efficiency and expanding their service (59%), clearly defined and agreed referral criteria (81%) and clear processes for gathering and responding to feedback (78%).

Others cited a strong sense of 'team' and the collegiate nature of the approach that had built up locally among the practitioners. Calls were made, however, for more career development and training opportunities for staff, including protected 'time out' for this.

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[4] Remote monitoring involves the use of devices to monitor patients' physiological parameters and detect any deterioration. In NHS England, 'virtual wards' and services that solely deliver remote monitoring can be referred to as Hospital at Home. However, this does not meet the NHS Scotland definition. Remote monitoring is in use in some areas in Scotland, but it is adjunctive to face-to-face care in the context of H@H.

Engagement and collaboration

Most H@H teams felt that their services integrated well with wider health and social care services in their area. Effective partnership working was also identified, underpinned by multidisciplinary and collaborative teamwork and communication.

Patient awareness and understanding

Awareness of H@H among the patient population was seen to be reasonably strong. It was perceived though that not all patients had sufficient clarity around their admission to H@H in terms of who was managing their care and that more could be done to raise awareness among the public.

Delivery of Hospital at Home: Existing barriers

Staffing levels, recruitment and retention

Over half (56%) of workforce survey delivery respondents disagreed or strongly disagreed that there were enough staff in their team to meet the level of demand. Half of delivery respondents also disagreed or strongly disagreed that their team was able to fill vacancies quickly and effectively.

Similarly, staff shortages, problems with staff recruitment/retention (including protracted recruitment processes), and gaps in specific or specialist staff input affecting delivery were prominent qualitative themes.

Medical equipment availability

Delivery participants felt that, while generally well provided for, some gaps remained in equipment availability. This included insufficient: supplies/cartridges for POC testing, ultrasound machines, portable x-rays and equipment for bladder scans. Access to equipment that was easier to manoeuvre was also encouraged.

IT equipment availability and remote working

Only 49% of workforce survey delivery respondents agreed or strongly agreed that they had the required IT equipment to undertake their work effectively. Many highlighted a need for additional IT equipment (especially laptops for all staff to enable real-time information gathering), as well as a more efficient remote working environment and streamlined software infrastructure that allows key medical documentation to be accessed promptly. Poor connectivity was also a problem reported by some.

Funding structures

A lack of specificity and certainty regarding funding was seen to impact teams' planning. It was felt that while the overall Scottish Government funding allows Boards to tailor services to local needs, having a clear stipulation on what proportion of money should be dedicated to H@H (including potential new pathways) was seen as something which might be helpful.

Again, staff shortages were seen as being linked to short-term funding for H@H, acting as a barrier to recruitment and retention. Among referral staff qualitative feedback hinted at perceptions that the funding of H@H services was sometimes at the expense of other services across the NHS.

Travel and transport

Time spent travelling was identified as an inefficiency by deliverers in different teams and contexts (i.e. rural areas with long distances between sites, and urban areas where traffic congestion could cause delays). Suggested solutions included funding for dedicated driver support.

Access to social care and community services

Limited availability and inequitable access to wider social care was raised, i.e. to support relevant individuals at home whilst experiencing acute illness, even when H@H was in place to meet the patient's acute medical needs. Difficulties in accessing services provided by community rehabilitation teams and physiotherapists was also raised as a current barrier to effective delivery.

Reliance on families and carers

Success of H@H was also described as being very much dependent on the home environment in which the patient lived and the wider support available to them (i.e. those living with family or carers may be more likely to have support to enable them to complete an episode of H@H care than those who lived alone). However, in cases where patients were reluctant to engage with H@H, this was typically seen as being linked to the patient's view that it may impact negatively on their family/loved ones.

Suggestions for the future

Maximise optimal delivery by:

- Continuing to embed strong links and communication between H@H teams and their local referral pathways.
- Continuing to build teams with different professional backgrounds, expertise and specialties, with clear and robust delivery and improvement processes in place and with collegiate culture.
- Continuing to roll out expanded use of equipment enabled Point of Care testing and remote monitoring.
- Ensuring that strong senior promotion of the service remains in place, and that communication on the expansion of the service is universally received.

Alleviate existing barriers by:

- Ensuring that referral eligibility criteria are clear and well adhered to (by both delivery teams and referrers), and that referral acceptance decisions are made consistently on this basis.

- Minimising inefficient use of staff time, including through more and better-connected IT equipment, virtual assessment when appropriate, and funding for dedicated driver support.
- A funding model which supports teams to have greater and more consistent staff resource, facilitating increased capacity to take on referred patients and potentially to implement longer hours of operation and additional geographical coverage.

Conclusion

Phase 1 of the evaluation revealed a number of effective processes and practices currently in place, and service elements which could usefully be replicated nationally. The research also revealed a number of challenges from the perspective of the workforce, as well as learning linked to the geography, maturity and nature of the different services being offered. These point to a range of possible improvements that could be implemented.

Background

Evaluation scope and definitions

Hospital at Home is described as an intervention which provides time-limited, acute care, face-to-face to suitable people in their home, a relative's home or in nursing homes (Public Health Scotland (PHS), 2026). This can be as an alternative to a hospital admission or early supported discharge from hospital. For the purposes of this evaluation, specified related admission alternative services which provide clinical care for patients who would otherwise have been admitted to hospital (e.g. patients attending an outpatient clinic to receive Outpatient Parenteral Antimicrobial Therapy (OPAT)) are also included within the scope. Both Hospital at Home and specified related admission alternative services have been collectively referred to as H@H+ (PHS, 2026) but in this report the term H@H will be used to capture both. The full definitions for Hospital at Home and specified related admission alternative services can be found in the quarterly summary of Hospital at Home activity data published by PHS (2026).

Policy and delivery context

For a number of years, there has been significant pressure on the health system in Scotland, including on unscheduled care (Audit Scotland, 2025). These pressures are demonstrated, for example, when considering acute specialties hospital occupancy which have been above the optimal level of 85% from 2015-16 to 2024/25, with the exceptions of 2020/21 and 2021/22 (PHS, 2025a). Given the existing pressures and with analysis of possible future demand on the system showing a projected increase in unplanned acute hospital admissions between 2024 and 2034 (PHS, 2025b), significant reform and renewal of the NHS has been proposed to ensure the NHS is sustainable for the future (Scottish Government, 2025). One of the commitments within NHS Scotland's Operational Improvement Plan is to shift the balance of care from acute hospitals to the community (Scottish Government, 2025). Hospital at Home is cited in the Operational Improvement Plan as one of the programmes to support this transition, as it aims to help avoid admissions into hospital and support early discharge.

Prior to the programme being referred to as H@H, the term 'Virtual Capacity' (Scottish Government, 2023) was used to refer to inpatient care and treatment being provided in alternative settings. Virtual Capacity covered distinct condition specific services namely Acute/Older adults (at that point in time this service was referred to as Hospital at Home), Heart Failure, OPAT and Respiratory (Scottish Government, 2023)[5]. These services are included within the present H@H definition as are Paediatric and Neonatal services. It is important to emphasise that these services were not all introduced at the same time and Heart failure,

[5] In previous work by the Scottish Government, 'Connect Me' - with a focus on Covid remote health monitoring - was also included within Virtual Capacity, however, it is not included under the existing H@H definition.

Paediatrics and Neonatal services are viewed as the latest to be introduced and developed within H@H.

Alongside this, the more established pathways (e.g. Acute/Older adults) also vary in their maturity across NHS Boards. For instance, as seen in the Healthcare Improvement Scotland (HIS) annual report (2025b), whilst an Acute/Older adult service may be well-established in one NHS Board, elsewhere the service can be relatively new. As mentioned by HIS (2025a), H@H services develop at different rates (and are structured differently) subject to resource availability and local demand. The existence of specific H@H services varies across different territorial Health Boards[6].

At the point of fieldwork (November 2025 to March 2026) there was some form of H@H available to patients in every territorial Health Board[7]. However, because some H@H services are delivered at a Health and Social Care Partnership (HSCP)[8] level, the service is not currently available to patients in certain areas of some Health Boards.

The current H@H services and their respective definitions are provided below (PHS, 2026). These services are provided either in the patient's own home, a relative's home, a nursing home or in a non-admitted setting under the alternative to admission outpatient service[9]. Each of these H@H services aim to prevent hospital admission or enable early discharge from hospital:

- **Acute / Older adult services** - provide care for adults, including frail or older people, suffering with acute illnesses and health conditions requiring secondary care assessment and intervention.
- **Respiratory Services** - specialist support to patients with breathing conditions.
- **Heart Failure Services** - specialist support to patients with heart failure.
- **Outpatient parenteral antimicrobial therapy (OPAT)** - provide IV or complex oral antimicrobial therapy for suitable patients.
- **Paediatrics and Neonatal** - specialist support to patients under the age of 16 years.

Figure 1, below, demonstrates the admission avoidance and early supported discharge referral pathways into H@H services (HIS, 2025a).

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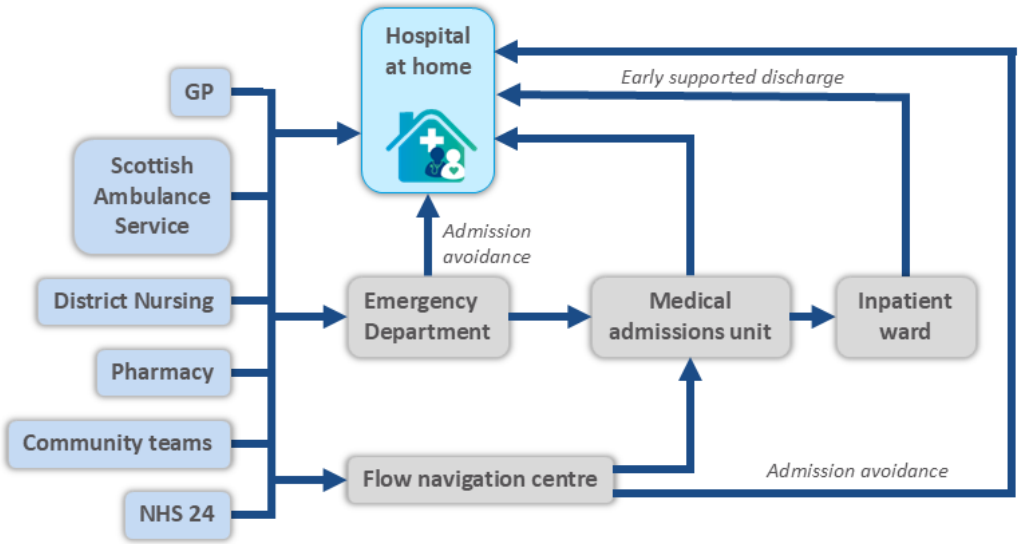
[6] There are 14 territorial Health Boards in Scotland which cover specific geographical regions (e.g. NHS Ayrshire and Arran, NHS Borders, etc.) and are responsible for the healthcare of their population (Organisations - Scotland's Health on the Web).

[7] Please note, the H@H service in Dumfries and Galloway was suspended in December 2025.

[8] HSCPs | HSCScotland

[9] For H@H, an alternative to admission outpatient service involves a patient attending a clinic for a short appointment, which may be a consultation with a specialist healthcare professional, a test, scan or procedure/treatment. This does not require an overnight stay.

Figure 1: Hospital at Home referral pathways (HIS, 2025a)



For admission avoidance, referrals are made by professionals who the patient has presented to in the community. This can include their GP, the Scottish Ambulance Service, District Nursing, Pharmacy, Community teams or NHS 24.[10] The professional may decide to refer the patient to the Emergency Department, a Flow navigation centre or if eligible, the patient can subsequently be referred to receive acute level care via H@H, as an alternative to an inpatient stay. If a patient is referred to the Emergency Department or Flow navigation centre (recognising that the Emergency Department could also be the first place a patient goes for help) they could subsequently be referred into H@H or they may be admitted into a Medical admissions unit. Following assessment in the Medical admissions unit, a patient could be referred into H@H. In other instances, the patient may be admitted to an inpatient ward but subsequently referred into H@H to finish their treatment at home, hence reducing their length of stay in hospital which would be referred to as an early supported discharge pathway (HIS, 2025a).

The information provided in this Policy and delivery context section, outlining the variations in clinical specialisation, target population, maturity and referral dynamics should offer an indication on the heterogeneity of the services which are delivered across the scope of H@H in Scotland. Readers should be cognisant of this heterogeneity when interpreting the findings presented in this report.

Existing H@H data and evidence

Previously, data collection had been undertaken by HIS for the Acute/Older adult service with quarterly publications providing insight into the delivery of this service

[10] It should be noted that the community-based referral routes (e.g. GP, Pharmacy, etc.) outlined in Figure 1 are an illustration of potential routes, but this should not be considered as an exhaustive list.

across Scotland. While data were collected for other services, methodologies varied and a lack of consistency meant that a national overview of H@H delivery could not be determined.

Given that a commitment was made to expand H@H beds to at least 2,000[11] by the end of December 2026 (Scottish Government, 2025), a new standardised approach to data collection across the various services was required. PHS were therefore commissioned by the Scottish Government to develop and support the data collection and reporting of H@H activity across all of these services. As part of this work, the national definitions provided earlier in this report were developed (PHS, 2026).

On June 30th 2026, the second quarterly summary of H@H activity, using a standardised approach was published by PHS (2026). This presented the number of patients accepted into and discharged from 43 H@H services (both H@H and specified related admission alternative services) across all Health Boards between February and April 2026. As the data collection is in its early stages, the data are recognised as provisional. Across Scotland, 7,506 patients were accepted onto a H@H service and 7,101 were discharged. Of the 7,506 patients accepted onto a H@H service, 20% were treated via an alternative to admission outpatient service. Rejected referrals are also recorded, by source of referral and reason for rejection. Between February and April 2026, 31% of rejected referrals were coded as 'no capacity', whilst 24% were coded as 'inappropriate referral'. In the same period, GP and primary care accounted for almost half of all rejected referrals (48%), whilst inpatient ward referrals accounted for 30%. This may reflect the higher overall volume of referrals from these sources rather than a higher rejection rate.

In addition to activity data, there is empirical evidence on various aspects of H@H (e.g. patient satisfaction). HIS (2025a) conducted a literature search to explore the current evidence on Hospital at Home. Whilst the literature search identified high-quality evidence for older adult H@H pathways, there were notable gaps identified for disease specific pathways and patient and caregiver satisfaction. No studies were identified looking at the impacts on adults under the age of 65. These findings corroborate recommendations from a Scottish Government (2023) report which advocated for additional research and analysis into a number of H@H components. Additionally, McGlen, et al (2026)[12] recently published a qualitative research study which aimed to explore the key factors that enable or impede the successful development and implementation of H@H services in NHS England, which may offer some parallels with Phase 1 of this evaluation, given the focus on process and the sampling of NHS workforce.

[11] It should be noted, as set out by PHS in their March 2026 management information release on H@H activity, that accurately converting community-based activity into "bed equivalents" is complex because H@H capacity is flexible and does not operate like fixed inpatient beds in a hospital.

[12] Enablers and Barriers Affecting Implementation of Hospital at Home Services in England – A Regional Qualitative Study of Hospital at Home. | Published in The Journal of Advanced Home Medicine

Evaluation purpose, structure and aims

Given the significant financial investment[13] to support the expansion of H@H services, and the notable evidence gaps mentioned above, there is an increased need for data on the implementation, delivery and impact of H@H to support learning, continuous improvement and to assess H@H's cost effectiveness.

Subsequently, a Scottish Government research team (based in the Whole System Intelligence Analysis Division, Directorate for the Chief Operating Officer NHS Scotland) undertook a procurement exercise which resulted in an evaluation of H@H services being commissioned to KSO Research. Whilst the majority of the evaluation delivery will be conducted by KSO Research, the Scottish Government research team led on an earlier research component of the evaluation (the workforce survey, discussed later in this report) and act as evaluation managers for the evaluation contract. A logic model, which aims to set out the objectives of H@H as well as the inputs and activities which are needed to achieve these, has also been developed by the Scottish Government research team (see Appendix A). This has been used to support the development of the evaluation's aims.

The H@H evaluation is split into two phases. Phase 1 is a process evaluation of H@H services. This report focusses on Phase 1 and includes findings from the workforce survey as well as subsequent workforce focus groups and interviews with relevant NHS workforce involved in delivering H@H services or referring patients to them.

Phase 2 will be an evaluation of the impact of H@H services. This will involve patient and family/carer interviews, workforce focus groups and/or interviews and quantitative analysis assessing the impact of H@H on relevant NHS Scotland system performance metrics. An economic component to explore the cost-effectiveness or value for money of the H@H intervention will also be included in the Phase 2 report.

The aims of the evaluation as a whole are to provide an improved understanding of the following:

- Effective processes, blockers and aspects of service delivery requiring improvement from the perspective of the delivery and referral workforce.
- The impacts of the H@H service from the perspective of the workforce.
- The experience and impacts of the H@H service from the perspective of patients and their families/carers.
- The impact of H@H services on relevant NHS Scotland system performance metrics.
- The cost-effectiveness or value for money of the H@H intervention.

[13] NHS Scotland's Operational Improvement Plan includes an additional £220 million investment, as contained within the 2025-26 Scottish Budget. A portion of this funding was used for the expansion of Hospital at Home services to 2,000 beds by December 2026.

Methodology

Phase 1 of the research comprised two distinct elements which both sampled Health and Social Care professionals involved in the delivery of or referral to H@H**:**

- An online survey designed and administered by the Scottish Government between November 2025 and January 2026.
- Focus groups and interviews, conducted in March 2026.

A detailed description of the methodologies used to deliver each of these elements is provided in Appendix B, whilst the high level overview is described below.

Workforce survey

The purpose of the workforce survey was to gather the views and experiences of NHS Scotland staff involved in H@H services, including those in teams delivering H@H care to patients and those who refer patients to a H@H service. An online survey was administered in late 2025 which asked a total of 27 questions (see Appendix C). Separate questions were asked of those involved in delivery of H@H services (i.e. 'deliverers') and those involved in referring into H@H (i.e. 'referrers').

A total of 236 responses were received, comprising 100 respondents delivering H@H services and 136 respondents referring patients into H@H services. Respondents came from a broad range of professional backgrounds and worked across multiple different territorial Health Boards**.** The full sample profile is shown in Tables A1 to A3 in Appendix B.

Workforce survey data were exported to SPSS (a statistical analysis platform) for analysis. Frequencies (counts and percentages) were run for all closed question responses. Where crosstabulations were conducted, only differences between groups which are statistically significant ($p \leq 0.05$) are reported. Data from all open ended workforce survey questions were analysed thematically.

Workforce focus groups and interviews

Workforce survey respondents were invited to opt in to further qualitative engagement by way of a focus group or one-to-one interview. As numbers who opted in this way were relatively small, invitations to take part in the research were also cascaded to various professional networks, which resulted in a higher uptake (as detailed in Appendix B).

A total of six online focus group sessions were run - three with delivery staff (attended by 13 participants in total) and three with referral staff (attended by six participants in total). In addition, nine participants took part in individual/paired interviews - (including seven delivery staff and two referral staff). Overall, 28 participants took part, representing a wide range of professional backgrounds across 10 territorial Health Board areas (further information can be found in Appendix B).

All qualitative engagement sessions were voice recorded with permission from participants and transcribed verbatim. Thematic analysis was undertaken to expose

key emerging themes across all sessions. Anonymised verbatim quotes were selected for inclusion in the report to highlight key findings.

Caveats and reporting conventions

Participation in both the workforce survey and focus groups and interviews was on a self-selecting, opt in basis. This may have resulted in some sampling bias in the views and experiences that were captured. For example, those who took part may have been more or less familiar with H@H, or may have taken part because they had particularly strong views or experiences compared to other colleagues. Due to the sampling strategy, the total number of individuals who received the workforce survey is unknown, and therefore a response rate cannot be calculated.

Throughout the report, those who took part in the workforce survey are referred to as ‘respondents’. Those who took part in interviews or focus groups are referred to as ‘participants’. This is to make the source of the feedback clear, as well as to highlight where there were differences in findings between the different cohorts. It should be noted, however, that some people who took part in the survey may have been the same people that took part in the interviews and focus groups. This categorisation is, therefore, for reporting clarity only. In addition, where reference is made to ‘respondents’ or ‘participants’, this typically refers to both delivery and referral staff (unless otherwise stated in the text).

While the range of respondents and participants was quite diverse (both in terms of the geographical areas that they worked in and their professional roles), not all Health Board areas were represented. There was also no representation from some groups of primary and secondary care professionals, meaning that the feedback should not be generalised from either the workforce survey or qualitative engagement. The profile of respondents/participants in each element of the research was also different and so findings from each research element should be considered as complementary (i.e. in some cases findings were consistent between research strands and in others cases they differed).

It should be noted that not all workforce survey respondents answered each question. In the reporting of the findings, unless otherwise stated, ‘I don’t know’ responses have been excluded from analysis. The number of respondents answering each question (excluding ‘Don’t know’ responses) is shown on charts and tables. Furthermore, the number of interview and focus group participants was relatively small overall, and staff represented a wide range of different backgrounds and experiences. As a result some views were expressed by only one or two individuals. Where views were provided by only one participant, this is flagged in the reporting of the findings.

Percentages presented in the Tables or Figures throughout this report are shown to zero decimal places. Some of the descriptive text included alongside Tables or Figures will refer to findings in a combined or banded way (e.g. agree or strongly agree, etc.). Where banded findings are presented in the text the banded total may not match the sum of the constituent figures presented in the table, and may vary by plus or minus 1 percentage point (e.g. 10% and 10% presented in a Table may

sum to 19% or 21% when banded, given that the 10% presented may denote 9.5% to 10.49%). Further denotations used in this report are as follows:

- “#” denotes a response option which has been suppressed to mitigate disclosure risk.
- “0%” denotes a percentage which is <0.5%, presented to zero decimal places.
- “None” denotes a response option which received 0 responses.

It became evident in the interviews and focus groups that participants were using different terminology to describe the same concepts. For example, some staff spoke of H@H ‘pathways’, while others spoke of H@H ‘services’, yet both were used in the same context. As such, the terms have been used interchangeably through the report. Similarly, when asked about H@H pathways, some discussed referral pathways rather than the different services delivered by H@H teams. Further, some participants spoke about H@H affiliated or alternative services, instead of services which they recognised as being specifically branded as H@H, but felt that these were the closest fit to the model that was in scope of the evaluation.

Nature and Scope of Hospital at Home

This chapter explores the main feedback provided by delivery and referral staff in the workforce survey and interviews and focus groups around their understanding of the nature and scope of H@H. The sub-sections are based on salient key themes within the findings and the chapter also includes views given in relation to expansion of H@H services.

Absence of a unified understanding of H@H

Among referrers into H@H, there was very mixed feedback in engagement sessions in relation to a common understanding of the scope, principles and practices underpinning H@H. This was largely because there was no one model employed across the country and therefore no single definition available:

> "I feel I've never really had a really clear definition told to me, if that makes sense. It's more just kind of from, you know, word of mouth and kind of experience of finding out what they can and can't do and things like that. That's just how I've kind of come to get to where I'm at, if that makes sense." (Referrer: Allied Health Professional)

> "They seem to all be on subtly different levels, some quite dramatically different and some are looking at hospital admission avoidance, others are looking at facilitating discharge and some do both. Some will take referrals from hospital staff or from GPs and, again, there's variation in practice." (Referrer: Other)

While most referrers were aware of their main local service(s) some felt that there was potentially more breadth to the scope of the service(s) than they were fully aware of.

Among delivery staff, ambiguity around what was formally and informally in scope for H@H was understood to be driven by a perceived disconnect between how services were labelled and what their official referral criteria were:

> "I think on the ground, there's still lots of debate across services about what that looks like and who we can best help…for example, [local service] is specific to older people living with frailty, it's set at older people. But the frailty aspect of that hasn't been one of the admission and referral criteria and therefore there's sometimes uncertainty as to, should we be taking older adults who are not frail? Or should we preferentially focus on those living with moderate to severe frailty?" (Deliverer: Other)

Similarly, some H@H pathways were delivering services consistent with other parallel pathways but under a different name. For example, Intravenous (IV)

drug/antibiotic treatment or prolonged oral antibiotic treatment and patients with respiratory and heart failure conditions being cared for via the Acute/Older adult service, rather than dedicated services for these. Thus, while staff in some areas might describe offering, for example, respiratory services as part of H@H, this was not a dedicated Respiratory pathway.

A lack of clarity around the integration of specialist OPAT services into the wider H@H service was noted elsewhere:

> "…there's now this blurring where it gets quite confusing when our OPAT colleagues are coming under the umbrella and we're saying, we're delivering Hospital at Home bed numbers through OPAT. Whereas, actually, what is happening is that they're coming into our outpatient services for antibiotics or…they're living at home and going into a community hospital using a PIP line, having their antibiotics, then going home. And there's a bit of a mismatch or scratching of heads between the definitions now. It was quite simple beforehand but then they start to throw in other services." (Deliverer: Consultant)

In a different area, there was a suggestion that a broad raft of community services were being delivered which were perhaps not accurately being labelled as H@H:

> "…the health board gets credit for that if we say, well, this is part of Hospital at Home, even if, actually, the services are totally unrelated…it just ends up blurring the edges of what Hospital at Home actually is and I guess there's also an incentive to deliver things that aren't really Hospital at Home services. The definition involves being Consultant led…but again, there's a push to say that, actually, people with very remote medical supervision are delivering a Hospital at Home service because that looks good on the kind of reports from government. I think that's a fairly big issue cos it dilutes what Hospital at Home kind of actually is." (Deliverer: Consultant)

Comments were also made about the wide range of other referral options that sat alongside H@H, which made the referral pathway landscape confusing for GPs and other primary care clinicians when directing patients. It was suggested that confusion around H@H was simply subsumed into wider challenges presented by growing and ever-evolving referral routes presented to primary care.

Variability of delivery models

Feedback from across the different research elements suggests that there are considerable differences in how services are being run. This includes both where services are based, e.g. by staff in the community or by staff based within hospitals, and who is leading the service, e.g. Consultant led services and those led by other clinicians such as ANPs or Allied Health Professionals. Some teams also had a

much greater focus on admission avoidance, while others had a focus on early supported discharge.

There were no strong views around what 'type' of model worked best. Having a community-based team was seen as being beneficial for admission avoidance, since there would be engagement from primary care from the beginning of the process. Similarly, having Consultant led teams in the community was seen as a strength where it meant that there was always direct patient engagement:

> "…there's that option, with the majority of patients having been seen by a Consultant or at least discussed with a Consultant, so they are getting not a dissimilar level to if they were in the hospital. So, I think that - I would see that as a very positive thing in our service." (Deliverer: Consultant)

Feedback in relation to some of the newer or developing pathways, including Paediatrics and Neonatal services, suggests that these were also, necessarily, running slightly differently from adult services. Neonatal services, for example, were necessarily focused on early discharge rather than admission avoidance, since infants born prematurely were starting their life in the hospital, rather than in the community. Similarly, many sick children required an initial stay in hospital and the main aim for some Paediatric services was therefore early discharge smoothly and safely back to the home. While having a slightly unique model of operation, the fundamental principles for these newer pathways were still the same, i.e. to provide acute hospital level care within the home.

The different research elements show that there is also great variability in the maturity of different services

Changes and variation linked to funding

Even in longer established services, which precede the recent push to expand services and the commitment to deliver 2,000 beds in the Operational Improvement Plan (Scottish Government, 2025), views were expressed by both deliverers and referrers that the service was still subject to rapid change, often on a very regular basis, linked to funding and other decisions. This made it difficult to keep abreast of what H@H currently entailed:

> "My understanding of what the scope of Hospital at Home is, is something that changes every day. When I say every day, I really do mean the scope can change…You've also got various different ways of bending the rules or shaping the rules to suit yourself. So, as far as the scope is, the scope's quite clear in that we're looking to care after people at home, but what the criteria is and what the guidelines are change very, very rapidly…It's a very, very changeable environment, you know - I'm back at work tomorrow - I can go back in tomorrow and find a lot of things have changed." (Deliverer: Other)

Two referrers who worked across multiple HSCPs[14] cautioned that, as each HSCP had autonomy to decide what they were going to fund and how, this was resulting in variability of provision and inequitable access to the service, i.e. a postcode lottery. One of these perceived that differences in referral practices attached to different services may inadvertently exacerbate health inequalities:

> "If you don't have a national kind of agreed level of service, then what we're doing is just creating this sort of health inequality between certain HSCPs where, you know, particularly frail, elderly patients have access to a certain degree of care and not in other HSCPs." (Referrer: GP)

Absence of standard protocol

Staff reflected that there was no clear guidance around how services should be set up, and much of this was left to local decision makers. As such, views were shared that some areas had decided to set up and run H@H in an almost exploratory way or in a phased way that enabled a test of change, or multiple tests of change:

> "I don't think there is something out there to say what you should be doing and what your capacity should be, and that's something that we're probably finding really tricky when we're taking new patients on…" (Deliverer: Other)

> "The whole thing has been a learning curve and a massive quality improvement project with lots of tests of change. We started off doing supported discharge from hospital, just it was easier because we were based in the hospital and the patients had been assessed, so it allowed us to test…our assessment documentation and our pathways. But we developed lots of communication and networking with General Practice and the Scottish Ambulance Service and our A&E. So, we now have quite robust admission avoidance pathway." (Deliverer: Nurse)

Comments were made that while the recent PHS clarity around H@H was helpful in setting boundaries and providing definitions, there were still some issues with making practice entirely consistent with the definition. Primarily, this was related to the need for services to be delivered 'face-to-face'. This was often not possible in very rural or remote areas, and lack of access/connectivity to technology and the internet in some places (discussed more below) meant that even virtual 'face-to-face' was not achievable.

Interestingly, in a different area where all initial consultations were currently undertaken face-to-face, one practitioner questioned if it might be more efficient to use virtual consultations, since not all patients needed to be seen 'in person'.

[14] HSCPs | HSCScotland

A lack of standardisation in how services had historically been set up and run also meant that there was no clear guidance for teams who were only recently being set up. For newer and developing pathways (including Paediatric and Neonatal pathways) there was also some uncertainty around how to define scope, primarily as most previous/existing services and definitions in place to guide them were for adult and older patient groups.

Two delivery staff in different areas (one urban and one rural) explained that the recent involvement of PHS in defining H@H had been a huge help to teams in allowing them to refine, align and understand better what their service should look like against a standard model. Having such a definition was also seen as key in allowing any research around H@H to be more robust.

Expansion of the service

A lack of clarity around the expansion of H@H services was identified during interviews and focus groups with both deliverers and referrers. Some delivery participants in well established services felt that, while they knew there was a commitment to expand the service, it was less clear if this meant increasing the number of beds/places available for existing teams/services, growth into new areas, for example, neonatal care and paediatrics or different geographical regions. They were also unsure what expansion would mean for existing teams and whether there would be an increase in staff to help meet any increase in bed spaces.

In addition, there were questions over what it might mean for staff roles/responsibilities and working hours, for example, were staff being asked to cover a longer working day, weekends, evenings, etc. Specific concerns were also raised around whether the existing Consultant resource input to teams could handle any planned expansion. There was a sense that while ‘expansion’ was widely discussed and accepted as the future direction for H@H, this had not been clearly operationalised or quantified at the micro/local level. As one respondent framed it, “How big is big?” Additionally, in the workforce survey, views were shared that leaders also were not communicating clearly with teams what future expansion plans might mean.

Unless expansion was matched with sufficient resources (both staff and materials) it was felt that existing quality of care standards could also be compromised:

> “So, I think things are always done backwards. They expect you to increase the numbers [of patients] without increasing the number of staff, and you get the number of staff if you kind of meet those numbers. But the concerns that I have in relation to that is you’re pushing the existing staff harder and harder and potentially leading those members of staff to burn out because the focus is on increasing numbers with what’s existing rather than putting kind of extra people in place to increase the numbers.” (Deliverer: Advanced Nurse Practitioner)

Other foreseeable challenges with the expansion of H@H mentioned by participants included whether there would be a blurring of boundaries between

different pathways, for example, to help meet the needs of patients with related co-morbidities. The close association between respiratory and heart failure problems, for example, might mean that areas offering both pathways may encounter challenges around clear criteria for which pathway would benefit the patient most. There was also a risk that referral decisions may become based on local availability and capacity of different pathways, rather than being led by medical priorities.

The push from the Scottish Government, supported by investment, was seen as helping to drive H@H forward and ensure that it maintained momentum in recent years. Despite some concerns around the short-term nature of funding, there were views that H@H was seen as very much "in vogue" and was therefore attracting significant support from, and investment by, the Scottish Government which was a fundamental enabler.

Feedback was, however, received from referral participants which questioned the cost-effectiveness and evidence base for the service. This included comments which hinted that the funding of H@H services was sometimes seen to be at the expense of other services or investment in other areas across the NHS. This did not always sit well, and was seen as misguided by some.

One respondent explicitly questioned the extent to which the effectiveness of H@H had been fully evidenced before its roll out and expansion. Specifically, they posited that there may be some false underlying assumptions regarding the current main measurement of success, i.e. saving hospital bed spaces:

> "…it's not clear to me that this is a sensible thing for the Scottish Government to be embarking on because I think that there's a lack of randomised control trials looking at outcomes and there's a lack of solid cost-effectiveness data and that the evidence that I have seen has been dodgy in terms of it tries to translate patients in Hospital at Home as hospital beds they've saved and I think that's a very unsafe, unsound assumption to make." (Referrer: Consultant)

The view was that GPs were referring patients who were 'at risk' of referral to hospital but who would not necessarily or definitively end up being admitted. As such, there were views that it was unsound to assume that just because a patient was accepted into H@H that this meant they had avoided admission or that this had 'saved a hospital bed' in all cases.

Some others also questioned the cost-effectiveness of H@H per se, and felt that there was not sufficient evidence to show that it presented savings to the tax payer.

It should be noted that perceptions of cost-effectiveness were very much linked to the roles that people held, with some Allied Health Professionals perceiving that H@H provided excellent value for money for their area own practice.

Referral to H@H services

This chapter presents findings from the workforce survey, focus groups and interviews, exploring feedback in relation to the referral of patients into H@H. The chapter comprises three sections: 'Existing referral experiences', 'what works well' and 'existing barriers'. The 'Existing referral experiences' section provides findings from the workforce survey based on the frequency and ease with which respondents referred patients to a H@H service. The latter two sections are categorised into sub-sections based on salient key themes within the findings.

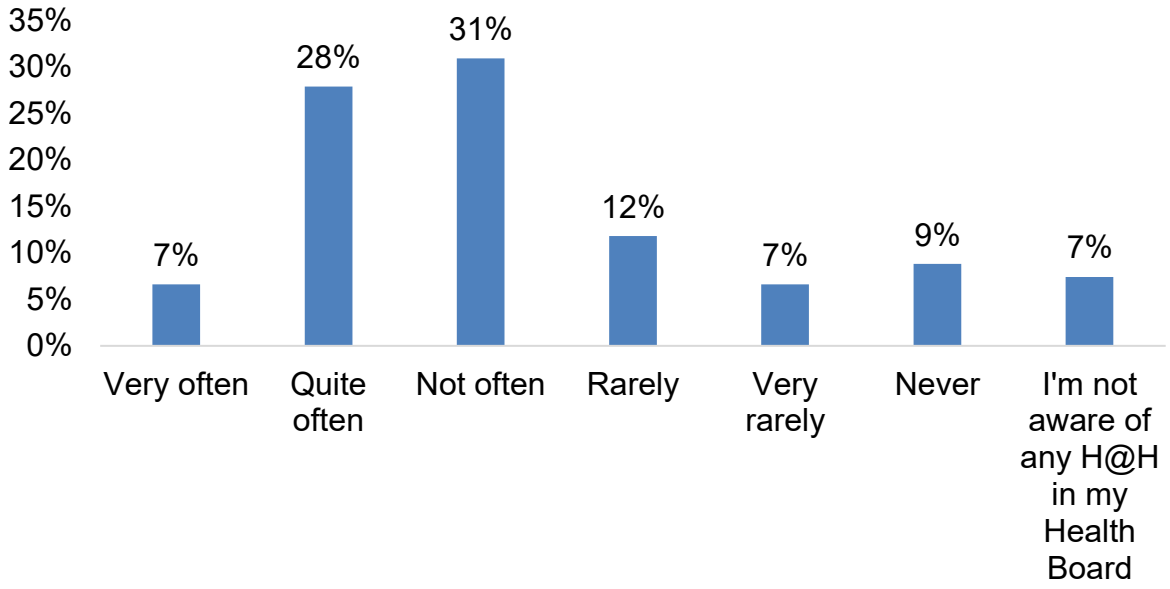
The presentation of themes into the 'what works well' and 'existing barriers' sections were based on the dominant perceptions within the findings, following thematic analysis. It should be noted, however, that the collective views from across survey respondents and research participants were very rarely homogenous. As such, themes within 'what works well' may also include contrary views, in the minority, which identify challenges, whilst themes within the 'existing barriers' section may also include positive views or suggestions for improvement opportunities.

Existing referral experiences

Frequency of referrals

Just over a third of referrers in the workforce survey said they referred to a H@H service very often (7%) or quite often (28%), whilst roughly three in ten reported doing so not often (31%), and a similar proportion either rarely (12%), very rarely (7%) or never (9%) (see Figure 2).

Figure 2: Self-reported frequency of referring into a H@H service (Referrers, n=136)



It should be noted that workforce survey respondents who said that they were not aware of any H@H provision in their Health Board were routed directly to the end of

the survey, and were not asked any further questions. Those who said that they had 'never' referred into H@H were not asked the following question in the survey[15] but were asked the remaining questions thereafter- see the Workforce Survey Questionnaire in Appendix C.[16]

Most referrers who took part in an interview or focus group reported that they "regularly" referred into H@H (although no clear definition of 'regularly' was provided and so this may have related to a broad range of different frequencies of referral depending on interpretation and role). Frequency of reported referral among participants overall ranged from daily (for paramedics) to weekly or monthly for GPs.

Ease of referrals

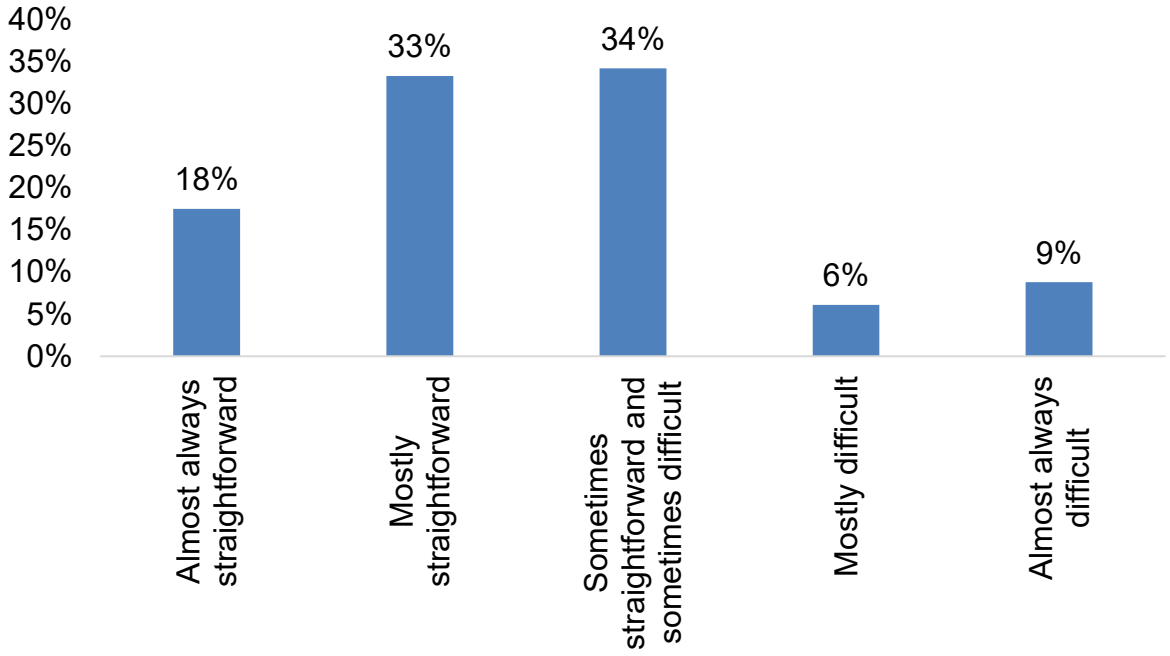
Around half of workforce survey referrer respondents who had previously completed a referral to H@H[17] said that the referral process was mostly (33%) or almost always (18%) straightforward. A minority said that it was mostly (6%) or almost always (9%) difficult. A third (34%) reported that the process of referring patients to a Hospital at Home service was sometimes straightforward and sometimes difficult (see Figure 3).

[15] Those who said that they had 'never' referred into H@H were not asked: How would you describe the process of referring patients to a Hospital at Home service? (Almost always straightforward, Mostly straightforward, Sometimes straightforward and sometimes difficult, Mostly difficult, Almost always difficult).

[16] Note that responses to open-ended questions suggest that some respondents who answered 'never', had previously referred to H@H, but no longer did so (often for reasons linked to perceived low levels of referral acceptance).

[17] Only referrer respondents who did not answer 'Never' or 'I'm not aware of any available Hospital at Home services in my Health Board' were asked how easy or difficult they perceived the referral process to be. Had all respondents been asked, it may have impacted the findings around perceived ease of referral.

Figure 3: Perceived ease of the referral process into a H@H service (Referrers, n=114)



The proportion describing the referral process as mostly or almost always straightforward showed significant variation by area of work (see Table 1). Those working in General Practice were the most likely to describe the process as mostly or almost always straightforward (62%). Although numbers are small, those in the ED/MIU based emergency medicine (100%) and primary care out-of-hours (83%) mostly described the process as something other than almost always or mostly straightforward.

Table 1: Reported Ease of Referring by Area of Work (Referrers)

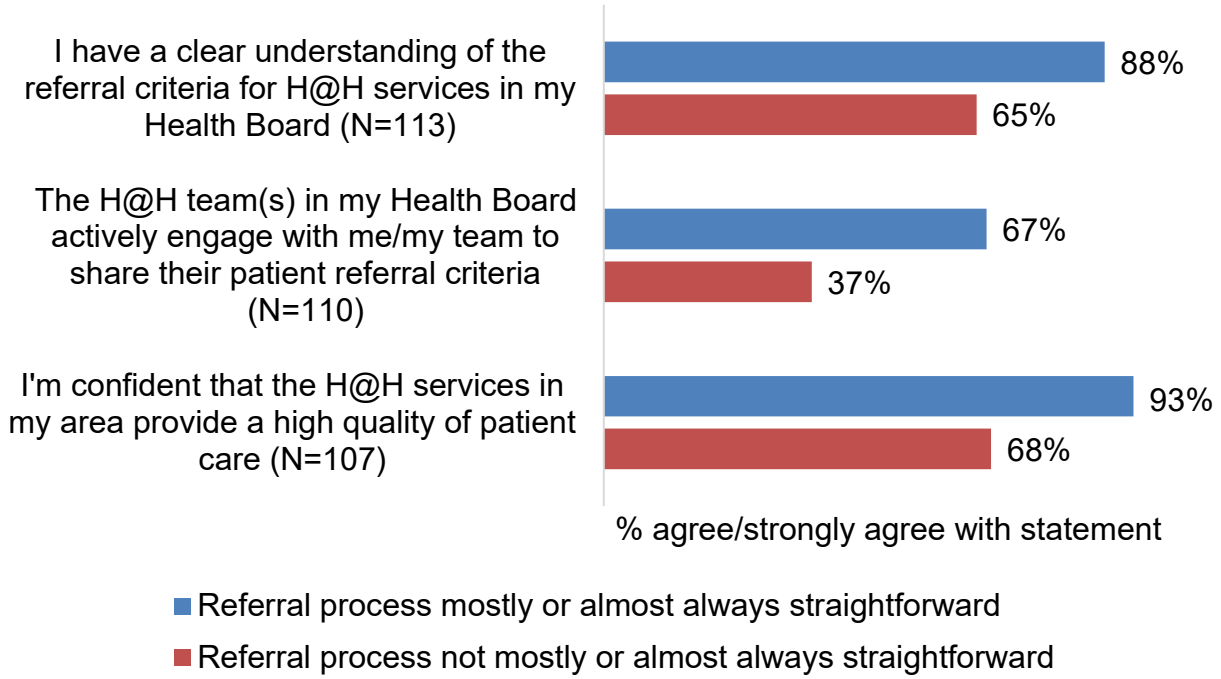
Area of Work	N	Mostly or almost always straightforward* %	Other response** %
General Practice	61	62%	38%
Hospital inpatient emergency medicine	12	50%	50%
Scottish Ambulance Service	22	45%	55%
Community/District Nursing	8	38%	63%
Primary care out-of-hours	6	17%	83%
ED/MIU based emergency medicine	5	None	100%
Total	**114**	**51%**	**49%**

Notes:
* 'Mostly or always straightforward' comprises two response categories: 'Almost always straightforward' and 'Mostly straightforward'.
** 'Other response' comprised three response categories: 'Sometimes straightforward and sometimes difficult', 'Mostly difficult' and 'Almost always difficult'.

As Figure 4 below shows, those who rated the referral process as always or mostly straightforward were significantly more likely to agree or strongly agree with a number of statements about the H@H service compared to other respondents. These included:

- That they had confidence in the quality of H@H care given to patients (93%, compared to 68%).
- That the H@H team(s) in their area actively engaged with them to share patient referral criteria (67%, compared to 37%).
- That they had a clear understanding of the H@H referral criteria in their area (88% compared to 65%).

Figure 4: Proportion of Referrers who Agreed with Statements about Hospital at Home by Perceived Ease of Referral Process



Notes:
'Referral process mostly or almost always straightforward' comprises two response categories 'Almost always straightforward' and 'mostly straightforward'.
'Referral process not mostly or almost always straightforward' comprises three response categories 'Sometimes straightforward and sometimes difficult', 'Mostly difficult' and 'Almost always difficult'.

Referral: what works well

Buy in and utilisation of H@H

Workforce survey findings showed that a clear majority of referrers agreed (46%) or strongly agreed (48%) that, where clinically appropriate, they would actively seek to refer a patient to an available H@H service, whilst just 4% disagreed or strongly disagreed. Furthermore, around three in four either agreed (38%) or strongly agreed (39%) they were confident that the H@H services in their area provide a high quality of patient care, whilst 8% disagreed or strongly disagreed with this.

Qualitative responses from referrers also evidenced a positive view of the service, particularly aligned to the aim of reducing hospital admissions:

"It's very helpful to facilitate an early discharge from the hospital where there is ongoing acute medical and multidisciplinary need. It is also helpful to provide an alternative to hospital admission." (Referrer: Consultant)

"Comprehensive service. Especially good for avoidance of hospital admission in frail/elderly/multimorbid patients. Very pragmatic approach." (Referrer: Consultant)

Support for the concept of the H@H service was also shared by some referrers, in spite of a view that the existing delivery processes could be improved:

> "Brilliant concept which needs more support. Even one patient accepted has marked benefit for the individual and for the hospital too. Frustrating that referrals are always challenged…The numbers that can be accommodated are too low." (Workforce survey response: Consultant)

A small number of referral staff explicitly indicated that they felt the scope and range of services offered could be extended to maximise access to a wider range or patients for whom H@H may be appropriate. This was especially the case where it was currently only open to older adults:

> "I find it quite challenging actually because…many of my patients do not sit under MFE [Medicine for the Elderly] umbrella as in Geriatric Medicine. Lots of them are younger and they have the same needs but have no service provision…we have so many patients who're in their 40s and 50s who are multi-morbid, who are housebound, who do not have access and support to that range of services and interventions which is sometimes challenging." (Referrer: Other)

One respondent also noted that they would like to see H@H used more for palliative care, if that is what the patient wished:

> "I've had a lot of…palliative patients as well that, again, have maybe slipped through the net and not only maybe need like community palliative care input but also I felt Hospital at Home would be appropriate and, unfortunately, they've not been able to…" (Referrer: Allied Health Professional)

Another participant noted that there was perhaps scope for secondary care colleagues to think more about H@H as an option when discharging patients. They perceived that this was currently an underutilised option which may be inadvertently and negatively impacting primary care workloads:

> "I think it would be useful if hospital colleagues maybe thought about Hospital at Home a bit more. Sometimes I find a patient is discharged from hospital, they're probably not quite ready for home and could have just done with that bit of extended medical support, because otherwise a GP will end up with a massive very complex patient who's not quite stable… So, maybe use Hospital at Home to just dial down the complexity before it becomes primary care again." (Referrer: GP Partner)

Engagement between H@H teams and referrers

Findings from the workforce survey showed that 75% of deliverers agreed or strongly agreed that their service proactively engaged with their referral pathways, for example, through sharing standard operating procedures and referral criteria, while only 13% disagreed or strongly disagreed. A smaller proportion of referrers (49%) agreed or strongly agreed that the H@H team(s) in their Health Board actively engaged with them/their team to share their patient referral criteria, whilst 28% disagreed or strongly disagreed. It is worth noting, however, that these findings cannot be compared like for like, as delivery and referral participants could have been reflecting on different services.

Communication from H@H teams was generally described in very positive terms by referrers who took part in interviews and focus groups:

> "…the local service has communicated well with us. They've come to speak to us to ask what we think, what we want to do. It appears to be reasonably advertised…there's an email address that we can refer patients to. So, no, I think, locally, they've done their best to try and set up a limited site to get started." (Referrer: Consultant)

Some referrer respondents noted that, while they recalled being sent emails, weblinks, information sheets, etc. about H@H by their local teams, these were not always read and often got lost in the plethora of other correspondence received by staff working in primary care. This was corroborated by a view that awareness for the service was variable among GP and Scottish Ambulance Service colleagues. Having face-to-face contact with teams was suggested as the best way to ensure that practitioners engaged in learning about the service:

> "..we get bulletins and emails and all sorts but…the majority of people don't really look at stuff like that, you know. I think if there was even more like, again physical contact, you know, if the pathways team were able to come out to stations or to hospitals and actually discuss that, you know, I think that would break some barriers for like people actually having knowledge about it." (Referrer: Allied Health Professional)

> "There are still cases where [the team] have to prompt like both SAS [Scottish Ambulance Service] and GPs to say, have you thought about this because there's still a lot of GPs that don't maybe recognise what we can and can't do from a service point of view." (Deliverer: Consultant)

Referral: existing barriers

Capacity to accept referrals

Around a quarter of the referral staff who took part in the survey, and a number of focus group and interview referral participants shared frustrations around the perceived lack of capacity in H@H services, which was hindering the level of referrals they were able to make:

> "I have given up attempts at using it due to the fact it's nigh on impossible to get a patient accepted. Even if they clearly fit the pathways shared, there is always an excuse as to why the service is unable to accept referrals. Patients from nursing homes that would be better cared for in the community are constantly brought to ED [emergency department] because there is no capacity in the service or crews just do not even attempt to refer." (Workforce survey response: Consultant)

> "Hospital at Home in my experience have only taken about 10% of my referrals. At weekends they have no doctor, and say they can only take a patient if I give them a treatment plan as the named Consultant. They often tell me they can't take a patient and I should phone the patient's GP to do a house call. Like many of these services…they are inaccessible in real terms and do little to prevent admission from ED [emergency department]." (Workforce survey response: Consultant)

> "…they've now started to reserve the right to email and say, we have no capacity today. Sometimes I phone them up and they'll say, our capacity is extremely limited…I think that can be a bit frustrating. But I think, in general, the process works well." (Referrer: GP Partner)

Others in primary care discussed how it would be helpful for them to access accurate, up-to-date or real-time information around capacity of H@H in their local area, to allow them to make informed referral decisions. Some time was currently wasted, they felt, assessing and considering if a patient was suitable for H@H only to be turned away when reaching the point of referral due to lack of capacity:

> "It would be helpful to understand the capacity on a daily basis and [among colleagues] there were questions about how we actually communicate that to individual clinicians who are seeing patients, so they know it's an option. I think sometimes it can be a little frustrating when you have perhaps assessed a patient and you feel as though the option is available and then, when you go to the individual team, you then realise that you're going to have to backtrack and end up with an admission because they clearly don't have the capacity on that individual day." (Referral: GP)

"More capacity and some way of knowing without calling them that they are at capacity." (Workforce survey response: GP)

Some participants noted that the challenge of limited visibility over service capacity was further compounded by there being multiple referral routes into H@H, i.e. via a Flow Navigation Centre, from GPs directly, from hospitals for early discharge and from the ambulance service.

Allied Health Professionals also described using the Joint Royal Colleges Ambulance Liaison Committee (JRCALC) 'app' and noted that this was particularly helpful in guiding referrals. The app details information on all current pathways open to referrals from paramedics, including H@H:

"So, that's where I always go to get the numbers for any pathway, not just Hospital at Home. That's very useful to have that…And then it also includes your inclusion and exclusion criteria for every pathway as well, which I find works quite clearly as well." (Referrer: Allied Health Professional)

Among those referral participants who used the JRCALC, it was noted that a new feature had recently been added to show bed availability for different referral pathways. This was seen as helpful in reducing time spent calling services to explore admission options only to be told that there was no availability.

Issues with the referral process were also raised by some delivery participants in relation to the timing, volume and spread of referrals received at different points in the day and their capacity to accept referrals at different times. In one team, staff explained that there was pressure to respond to referrals within a specified timeframe which meant that, if numbers were high, they were likely to close to any new referrals until the backlog was cleared or they freed up sufficient time to deal with new/incoming queries:

"So, it often feels like referrals don't come in until mid-morning, and then there's a hiatus of lots of them, and I think the team have a target about how quickly they respond, which leads to them feeling under pressure and often closing to referrals because they're worried that they won't get to see people quickly enough. So, I think there's some target about them having to respond within an hour, particularly if people haven't been assessed or haven't like got paramedic with them or somebody with them." (Deliverer: Other)

Adherence to referral criteria

Some delivery participants reported that not all referrals being made were appropriate. In some cases, where non-eligible referrals came in (i.e. those not complying with referral criteria), these were nonetheless accepted, whilst at other times not. This grey area was then having the onward impact of more non-eligible referrals being made, on the basis that previous similar cases had been accepted:

"…we do have set criteria but, more and more, we're getting patients referred that are outwith that criteria and the Consultants are actually happy to take that. So, that becomes more challenging for the people kind of triaging the referrals when they're meant to be kind of patients that you don't accept and there's a conversation with the Consultant and then, suddenly, they are accepted…all referrals become a little bit grey…" (Deliverer: Other)

Some delivery participants also noted that their service was receiving what they called 'soft' referrals. This was perceived to be because local GPs were very busy, and some home visits which may have previously been undertaken by GPs were being undertaken by ANPs, who in turn were potentially less likely to manage the patients themselves and so refer into H@H.

Alternatively, it was suggested in one area that GPs had become familiar with the H@H system and were using it as a way to fast-track certain aspects of their patient's care (where a visit from a district nurse may have been more appropriate, for example):

"…a GP knows the key words to say to the Flow Navigation Centre, who will then refer on to us correctly because of the information from the GP. But when we go out there, we find it's nothing like what we're asking for or looking for or supposed to be working with…We also find that GPs now are using us more and more as an emergency blood service. And what I mean by that is we can get referrals and get a referral in and we're there within an hour, so they'll get their bloods and if it's not done the technical way in the home, they'll get the bloods within a couple of hours. Now, a GP can't do that." (Deliverer: Other)

Referral acceptance decisions

A common frustration aired by referral staff in focus groups and interviews was around the decision-making process for acceptance onto H@H and, specifically, who was making those decisions. A view was shared that variation in the approach taken by whoever answered the call in the local H@H team impacted on whether a referral was or was not accepted, potentially leading to confusion for referrers:

"The challenge that is associated with lots of different routes in and different criteria, and criteria potentially could be different based on whether or not there's a nurse answering the phone or a clinician answering the phone at the Hospital at Home team. Sometimes it's a non-clinician because all the clinical staff are out working, which is of course appropriate, but their threshold for accepting a referral or accepting that risk is totally different as well. It's just not consistent for us in terms of a day-to-day knowing what we can and can't refer in…" (Referrer: Other)

"The criteria are fuzzy and it depends who speaks to you on the day." (Workforce survey response: GP)

"…it is all down to the consistency and thresholds of the individual who's on the other end of the phone, one week I can refer this, one week I can't. And I suspect that's not all down to the individuals…It's to do with the skill mix of the people on duty that day…" (Referrer: GP)

There was frustration in one area where referral calls were fielded by an administrative member of staff before the referrer could speak to a fellow clinician, which one perceived as a superfluous step in the referral process. Similar views were also shared in the workforce survey:

"The phones are answered by admin staff who do not have clinical experience and the referral process can be long and difficult due to this." (Workforce survey response: Advanced clinical practitioner)

A suggestion was made that referral processes can be complicated by unnecessary bureaucracy in the context of communication, insofar as the process often did not allow for easy conversations between referring staff and the H@H clinical team:

"There's been recent centralisation in [region] for referrals to all be coordinated through a central point through the Flow Navigation Centre and that has meant that the Hospital at Home team are not taking their own referrals and are not speaking to the people making those referrals. And my experience of my colleagues is that they find that very difficult, cos they don't feel that they have all the information that they previously had, and I guess some of those relationships can be strained by adding too many layers to the conversation." (Deliverer: Other)

In interviews and focus groups, there was a perception that the eligibility rules and scope for H@H was perhaps too rigid in some cases:

"…when you speak to somebody that is perhaps following protocol or looking directly at scope, there's less often space for that grey area where someone can say, actually, I understand what you're saying and I can see now why you phoned me. More often, you're likely just to get - no, actually, I don't agree with that." (Referrer: GP Partner)

Views were given as part of the workforce survey where respondents suggested that one key area for improvement might include widening criteria for existing pathway(s), introducing new pathways or reintroducing pathways no longer in operation locally:

"I feel the criteria for hospital at home has become more strict not taking chronically ill patients as not frail enough as per frailty scale." (Workforce survey respondent: Other)

"Expand eligible pathways - broaden inclusion beyond COPD to include Pneumonia (low risk), Bronchiesctasis, ILD, Palliative end of life respiratory care. Agreed rapid re-admission pathways." (Workforce survey respondent: Nurse)

As a point of note, survey respondents also suggested widening who can refer and under what circumstances e.g. being able to refer after remote consultations, being able to refer on the basis of a district nurse visit, etc.

"Being able to discuss and accept H@H referrals after a remote consultation, not just face to face. I appreciate some teams permit this but not many." (Workforce survey respondent: Other)

"I've been 'told off' for making a referral when I hadn't seen the patient myself, I as making the referral on the basis of a visit made by an experienced district nurse who provided a good history and set of obs. The referral was ultimately accepted but very reluctantly. Some flexibility here would be appreciated." (Workforce survey respondent: GP)

Out-of-hours[18] provision

Around a fifth of referrers in the workforce survey and several participants who took part in focus groups raised lack of out-of-hours provision as something which diminished the volume of referrals the service can receive:

"When H@H is available this can be very positive for patients and their families, however, H@H does not cover the full OOHs [out-of-hours] period, often shutting at 8pm and then patients are told to contact 111." (Workforce survey response: Allied Health Professional)

[18] Hospital at Home services in Scotland do not provide a 24-hour service. Whilst there are a wide range of delivery models, most services deliver care 5 or 7 days a week, for 10 to 12 hours a day (often 8am to 6pm or 8pm). In this context, Out-of-Hours refers to the periods outwith the working hours of the local service.

"The timing of the service is not adequate and I think the fact that referrals have to stop being received at about 4 o'clock in the afternoon, I guess doesn't align with where the demand is…I would like to see us being able to offer working in to the evening…and at the weekends in an ideal world…that would help the system, help the patients and help the flow of things…" (Deliverer: Other)

Similarly, a common theme to emerge from delivery participants was the frustration that services could not take more referrals, principally due to a lack of senior staff time outside of core operating hours. Even where services were open for 12 hours a day (e.g. 8am to 8pm), they were often unable to take referrals directly from the community after 4pm (as the chances of giving patients access to a GP or Consultant after that time was limited). A few referral participants mentioned that at weekends, some H@H services were only set up to take early discharge referrals (i.e. 'step downs'). This meant that ambulance crews, in particular, were unable to refer at the weekend, as well as out-of-hours doctors being unable to refer in.

One referrer also noted that their local existing out-of-hours service may be absorbing a reasonably high number of patients who might otherwise be accepted into H@H if the local service had extended hours of operation. Allied Health Professionals also reported that they were referring into other services where H@H may have been their preference, simply because of the time that they received the calls to attend a patient's home and the lack of out-of-hours service at that time:

"If that provision was there to be using the service, the Hospital at Home service after 6 o'clock, then potentially that might reduce hospital admissions presented with the correct patients at the right time." (Referrer: Other)

It is worth noting that, while some referral staff who engaged in interviews and focus groups expressed a slight lack of clarity around referral pathways out-of-hours, most did not feel that this presented them with any major challenges or concerns, as the backup option remained to refer a patient to hospital to mitigate any risk:

"It's a Monday, 9 to 5 service, it's not 24/7 and it's not weekends. I'm unclear what the out-of-hours pathway would be if the patient became unwell, but I guess they can come back to hospital, so that's not a huge concern for me." (Referrer: Consultant)

Where concerns were raised, these were mainly linked to the fact that risk for patients could not be managed unless there was full out-of-hours provision, and this meant that some decisions were being made to divert patients away from H@H who may otherwise have been deemed suitable:

"…there is a bit of clinical risk…that we don't have a clear out-of-hours provision. And actually, probably what happens is that changes our risk assessment on whether or not the patient would be suitable for that [H@H]…So, I think a slicker, safer out-of-hours process…might allow us to get more of those patients kind of seen through that route." (Referrer: Other)

When considering solutions to the out-of-hours problem, in one area where the H@H service had been expanded from 5 to 7 days a week, this was seen to work very well. It widened the window to all referrers, especially on Thursdays and Fridays, for people who needed input over the weekend. GP colleagues were also now able to refer right up to their closing time at 6pm, and referrals were also taken from A&E until 7pm.

One team also commented that they had introduced a process whereby one member of staff always had a mobile phone to answer any calls from patients who were unwell out-of-hours who may have otherwise ended up in hospital.

Clarity on responsibility for the patient

One of the most frequently cited areas of concern among referrers who took part in interviews and focus groups was around where responsibility would sit for a patient referred into H@H. Currently, there was perceived to be a disconnect between primary care and secondary care and who had overall responsibility for a patient once accepted into H@H.

Some referrers felt that there were risks attached to ambiguity in responsibility and that this was highest where acceptance onto H@H was delayed after the initial referral had been made:

"They've now started saying, so we agree that we should see this person but today's Monday, we can see them on Friday. Meanwhile, you hold that risk. I mean, I don't mind but I think to make the whole system work well, you need to have wheels that turn quickly." (Referrer: GP Partner)

Others expressed concern around whether all teams had sufficient expertise to cover the needs of all patients accepted with some discomfort around non-specialist staff looking after patients in a non-hospital environment. Concerns were also raised about responsibility for patients at different points in their H@H journey, and whether responsibility for their care sat with H@H, their local GP or wider social care practitioners:

"One of the areas that really isn't clear now that social care is under pressure, is where that responsibility lies. You might have got an elderly patient who needs a Hospital at Home team to do a bit of a medical sort out. I mean, it's not really clear who's going to pick up the pieces when the patient comes home and patients maybe end up contacting the practice saying, I'm on these antibiotics but I still can't

make it to the toilet. It's not always clear, you know, whose responsibility that becomes." (Referrer: GP Partner)

"…that timeframe when they've been accepted from Hospital at Home and you're waiting for that discharge letter, that is a little bit of a grey area that certainly needs kind of smoothed over, or the patients and their families to know exactly who they should be escalating things [to] - is it Hospital at Home? Is it the GP? And I'm not sure we've quite got there yet, certainly in our patch." (Referrer: GP)

While it was felt that communication from H@H teams would typically always be sent to GPs setting out aftercare plans (following discharge from H@H), this was often slow and not always readily forthcoming (meaning that there might be a period of time during which GPs were unaware that they were now holding responsibility for the patient again). This was an area where it was felt that tighter and more transparent, consistent practice could be set out:

"So there can, on the back end of it [H@H], be more work that needs done by the practice. That's not always the case when they're in-patients and so, from that point of view, you know, kind of the wrap around care afterwards is probably a little better organised, and sometimes we need to pick up some of the pieces." (Referrer: GP)

Similarly, some delivery staff commented that they would take active measures to avoid any prolonged period in the handover of patients due to concern around managing risk during the transfer of clinical responsibility. This meant, sometimes, closing the service for referrals unless they could be processed quickly.

Importantly, views around challenges with discharge from H@H (and associated ambiguity around responsibility for the patient) were not unanimous across interviews and focus groups. One GP commented that, as long as discharge from H@H was done in a timely manner, with communication being sent promptly to a patient's GP by H@H teams to alert them that the patient was now discharged back into their care, this was part of the process that worked particularly well (i.e. a smooth handover/transition process). Another GP flagged the handover of the clinical responsibility to the H@H team as a strength of their local service:

"…when it does work well, it works very well. It's responsive, there's a clear auditable trail…I can only really speak for myself but certainly the responsibility and the clinical responsibility is passed over to the team clearly and they are - you know, they'll give a time frame to myself and the patient when they're going to come and visit. It then is able to be responsive to the patient's needs and arrange equipment that would take other teams much longer to sort out in order to keep these individuals at home." (Referrer: GP)

Delivery of H@H Services

This chapter of the report presents findings from the workforce survey, focus groups and interviews, and explores the experiences of staff in relation to delivery of H@H services. The chapter comprises two sections: 'what works well' and 'existing barriers'. Sub-sections are included for both sections, based on salient key themes within the findings.

The presentation of themes into the 'what works well' and 'existing barriers' sections were based on the dominant perceptions within the findings, following thematic analysis. It should be noted, however, that the collective views from across survey respondents and research participants were very rarely homogenous. As such, themes within 'what works well' may also include contrary views, in the minority, which identify challenges, whilst themes within the 'existing barriers' section may also include positive views or suggestions for improvement opportunities.

Delivery: what works well

Delivery teams' skills and experience

In the workforce survey, around two thirds of delivery respondents agreed (51%) or strongly agreed (16%) that the skill set in their team was sufficient to meet their requirements, whilst around a quarter either disagreed (21%) or strongly disagreed (4%).

In interviews and focus groups, most delivery staff reflected that their local H@H teams comprised a strong mix of staff from different professional backgrounds, and with different expertise. This was viewed as a strength of the H@H model. The service also provided lots of opportunities for staff of different professional backgrounds to work collaboratively that more traditional service settings maybe did not afford. For some of the newer/developing pathways, being able to recruit a wide mix of staff, and doing so relatively quickly, was also cited as a key strength of the service:

> "I think we have a mixture of professionals in the team…which I think is a real positive. And I think there's lots of opportunities for there to be staff of different professional backgrounds working." (Deliverer: Other)

Point of Care testing[19] and equipment for specialist treatment

Overall, in the workforce survey, nearly two in three delivery respondents agreed (43%) or strongly agreed (20%) that they had the required medical equipment to

[19] Point of care testing allows certain diagnostic tests (such as blood or ultrasound tests) to be performed at the site of the patient without sample analysis in a hospital laboratory. This allows results to be received rapidly on site and, in Hospital at Home settings, means that routine tests could be performed in the patient's home.

undertake their work effectively, whilst a quarter disagreed (15%) or strongly disagreed (10%) with this.

A large number of deliverers who took part in the workforce survey and focus groups mentioned access to key tests and clinical equipment as being one of the main things that was currently working well. Whilst there was resistance by some staff to undertake the process - something that teams were working to address where appropriate - the introduction of Point of Care (POC) testing in particular was seen as a positive development:

> "We started using point of care blood testing equipment…I think are a game changer to help with efficiencies in the service because, with point of care blood testing, you don't have to wait for 3 hours while you take the bloods back to the lab. You can get an answer - not for everything - but some things there and then and make a decision. So, definitely that's been helpful." (Deliverer: Consultant)

Similarly, being able to provide intravenous antibiotics or fluids, oxygen, etc. was seen as a key strength:

> "We have oxygen cylinders that we're able to deliver at home and monitor them at home, which quite often prevents a hospital admission. So, I would say that that's a practice for us that reduces admissions on chronic COPD patients like frequent fliers that we get that would have previously been admitted to hospital. So, that's quite a good service that I think we have." (Deliverer: Other)

Limitations of POC testing and other equipment challenges were also identified and are discussed below (see 'Medical equipment availability').

Remote monitoring

Access to remote monitoring[20] was praised as assisting delivery of H@H among interview and focus group participants. Participants reflected that remote monitoring was also largely welcomed by patients as a way of helping them to retain ownership over their care:

> "We've also got remote monitoring that's working. We've done quite a few different systems and the patients, and the families love that aspect of it. They're taking part in the service, they're taking part in the care, and it gives them ownership of the whole cycle." (Deliverer: Other)

[20] Remote monitoring involves the use of devices to monitor patients' physiological parameters and detect any deterioration. In NHS England, 'virtual wards' and services that solely deliver remote monitoring can be referred to as Hospital at Home. However, this does not meet the NHS Scotland definition. Remote monitoring is in use in some areas in Scotland, but it is adjunctive to face-to-face care in the context of H@H.

While widely valued, one participant noted the limitations of remote monitoring. They suggested that it may increase the emotional and cognitive burden on patients' families/carers, which should be borne in mind, i.e. such systems might not be relevant for all patient demographics. If equipment or systems were used in cases where patients and their carers found it challenging, it was suggested this could result in additional unanticipated visits to the home for reassurance purposes, which could reduce the efficiency of the service and could be counter-productive:

> "We've introduced the [remote monitoring devices] system…in theory, that should cut down on some of our visits but, in practice, because we look after frailty, a lot of the patients and even their carers, husbands, wives, they find it quite challenging with the equipment…So, I think all these things are quite helpful in some ways, but…it's only for a specific group of patients, I think." (Deliverer: Other)

Senior leadership promotion and support

Deliverers were asked as part of the workforce survey to what extent their senior leadership actively promoted H@H[21]. Figure 5 shows that, overall, 18% indicated that there was limited, very limited or no promotion; 38% said there was some promotion; and 44% said there was strong promotion of H@H.

Figure 5: Perceived Levels of Promotion of Hospital at Home by Senior Leadership (Deliverers, n=100)

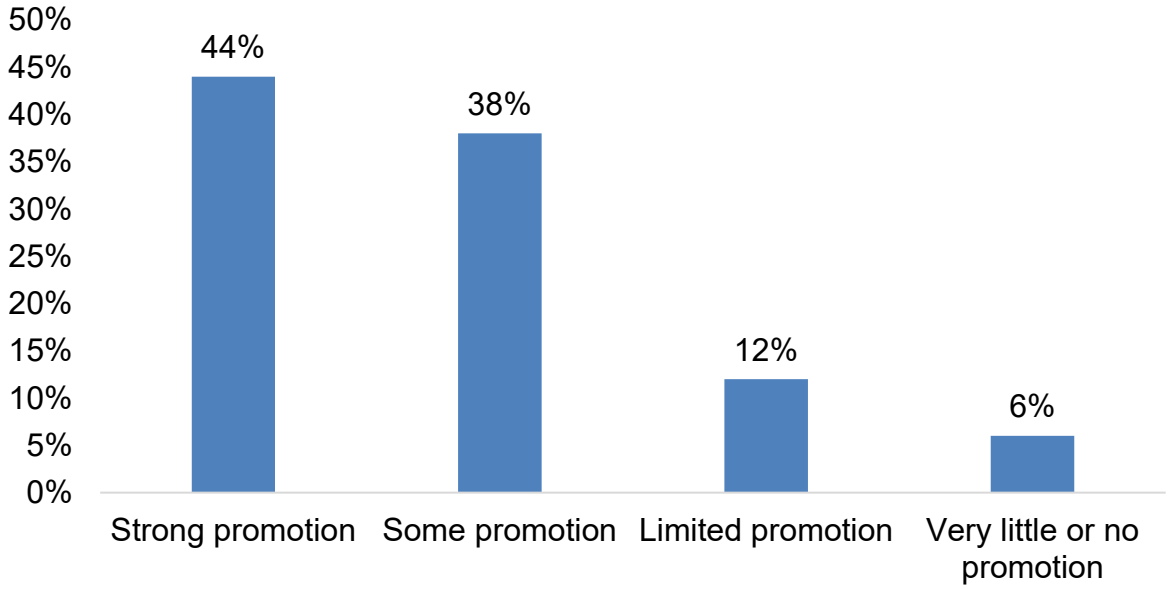


Table 2 below shows the proportion of delivery respondents who agreed or strongly agreed with statements about H@H, cross-tabulated by whether or not they reported 'strong promotion' of H@H by senior leadership. Those who reported

[21] A definition for 'senior leadership' was not provided to respondents, meaning interpretation of this term was based on the respondent's perception.

strong promotion of H@H were significantly more likely than those who did not to agree or strongly agree with each of the statements.

Table 2: Proportion who agree/strongly agree with statements about staffing, resourcing and operations by perceived senior leadership' promotion of hospital at home

Agree/Strongly Agree with Statement:	Strong Promotion of H@H	Not Strong Promotion of H@H
There are enough staff in my team to meet the level of demand	46%	25%
The skill set across my team is sufficient to meet our requirements	82%	56%
My team is able to fill vacancies quickly and effectively	51%	16%
I have the required medical equipment to undertake my work effectively	79%	51%
My team has clear goals and strategies for improving efficiency and expanding our service	80%	43%
My service has clearly defined and agreed referral criteria	91%	73%
My service proactively engages with our referral pathways, for example through sharing standard operating procedures and referral criteria	86%	67%

Note: 'Not strong promotion' comprises three response options 'Some promotion', 'limited promotion' and 'very little or no promotion'.

In interviews and focus groups, most referral staff also noted that there appeared to be strong levels of support for H@H among their respective senior strategic leads, with strong leadership promotion of the service:

"I think they do have a high level of visibility…I think it is robust and, yeah, I think there is fair leadership…I think they have created structures to support that." (Referrer: Other)

Different views were offered by delivery staff - among this cohort there was consensus that while there was strong leadership promotion and support for H@H, communication about expectations and rapid changes to the service and future plans were not always sufficiently well communicated to teams:

"I think certainly from that medical oversight, we have got that support and things, you know. I think it is just around probably that more of the on the ground, day to day, you know, roles who's doing what…people just feeling a little bit unsettled, change is happening and that's quite normal." (Deliverer: Allied Health Professional)

Teamwork, processes and training

Findings from the workforce survey suggest that delivery respondents' felt that their teams had appropriate processes in place, aligned to the HIS (2025a) Guiding Principles for H@H. Specifically, a majority agreed or strongly agreed that:

- Relevant training and professional development opportunities were available (69%, whilst 18% disagreed or strongly disagreed).
- Their team has clear goals and strategies for improving efficiency and expanding their service (59%, whilst 21% disagreed or strongly disagreed).
- Their service has clearly defined and agreed referral criteria (81%, whilst 11% disagreed or strongly disagreed).
- Their team has clear processes for gathering and responding to feedback from patients, families, referrers and other stakeholders (78%, whilst 9% disagreed or strongly disagreed).

Several participants viewed that a strength of H@H was the collegiate nature of the approach, and the strong sense of 'team' that had built up locally among the practitioners delivering on the ground:

"…we have got quite a close knit team that we all work from the same office, you know, so it's in one…there's good linkage and communication between the staff, so if there's any concerns, then it's kind of escalated quite quickly." (Deliverer: Consultant)

The standardisation of operational and management processes such as the use of Standardised Operating Procedures (SOPs) and effective use of clinical protocols was also mentioned as working well by just a few respondents:

"IV Fluids SOP has been completed for a more streamlined approach." (Workforce survey response: Nurse)

Some interviewees cited examples of practice which they felt could be replicated across Scotland to positive effect. This included opportunities for H@H team staff to work alongside specialists (e.g. heart failure specialist nurses) in a reciprocal way to help build relationships, collaborations and ease referral pathways going forwards. Examples of reciprocal shadowing of colleagues in other areas/teams are also covered in the "Engagement and collaboration" sub-section below. Importantly,

gaining or increasing knowledge across a range of professions and services involved in delivering H@H care was noted as enabler of success in the survey (by health professionals directly delivering H@H).

A view was also given that while integration of strategic planning, delivery of education, and professional development was currently very good both within and between local areas, there was less clinical integration.

While some H@H team members said that they had been well supported to attend relevant training, a suggestion was made that more could also be done to invest in training and development of H@H nursing staff specifically, including protected time away from clinical work to undertake learning:

> "I think we could do more to develop and support our staff, particularly our nursing and ANP colleagues…I think, again, the pressure for service delivery can often overlook their professional development." (Deliverer: Other)

Similarly, a view was given that professional placements within H@H teams could usefully become a part of core training for nurses or the core rotation for GPs in training, since it provided exposure to a different way of working which would be beneficial for everyone's learning.

Others questioned if robust training could be delivered when services were still evolving and ever-changing, since there were so many unknowns about H@H both now and in the future.

Engagement and collaboration

Feedback from delivery participants suggests that most H@H teams felt that their H@H services integrated well with wider health and social care services in their area. One thing that worked particularly well was where teams had established good working relationships with district nursing teams who could support the activities of H@H. In addition, where H@H nursing staff could access a patient's community notes, this was seen as particularly helpful in terms of sharing information.

Some teams had also undertaken reciprocal shadowing of colleagues in other areas/teams, which was seen as beneficial for sharing good practice. More reflective practice, collaboration and communication within and between teams (including different H@H teams, hospital clinicians and other stakeholders) was also encouraged for service improvement purposes, although it was recognised that there was currently often limited scope for this given workloads:

> "I think it's a mixture of people exchanging ideas, people being open to criticism or reflection maybe of what they're doing could be improved. But I think everyone is just so busy kind of fire-fighting, delivering a service, feeling like they're working hard but we need people to look up a bit and go, right, how could this be better?" (Deliverer: Other)

Across both new and more developed pathways, between and within different areas, there were also views among delivery participants that H@H services were engaging well with one another to share learning around 'what works' with H@H. The physical co-location of H@H teams was also seen as a strength where this existed.

Survey respondents, as well as interviewees and focus group participants also identified effective partnership working, underpinned by multidisciplinary and collaborative teamwork and communication as something that was working well:

> "Have been lucky to have an engaged respiratory Consultant and clinical lead MDT daily huddle - ensure safe decision making." (Workforce survey response: Nurse)

National conferences, facilitated meetings, local collaboratives and memos/publications linked to H@H were also seen as essential in helping to keep up momentum and allowing teams to share learning and experiences as the services evolved:

> "…we have attended like the HIS learning event. They have sort of some HIS events… a monthly meeting with clinicians involved throughout Scotland that are involved in Hospital at Home, so we do kind of shared learning throughout that." (Deliverer: Other)

While existing opportunities to attend conferences and cross-border meetings were present for senior and mid-level staff, more networking, knowledge exchange and educational opportunities were encouraged for lower graded members of H@H teams:

> "Networking with key stakeholders. Relationship between specialty and community nursing areas to establish skill set and provide support and education." (Workforce survey response: Advanced Nurse Practitioner)

Some deliverers spoke of challenges of raising awareness of H@H among community partners (including, for example, local social work services and third sector organisations). This meant that concerted effort was required including, for example, attending local community huddle meetings to discuss any particular issues around care needs or community team needs related to H@H patients.

Patient awareness and understanding

In areas where H@H services were well established, there were views that patients were aware of it as an option and some requested this when they felt at risk of a hospital admission:

"…people will proactively ask for Hospital at Home. Sometimes even when it's not appropriate, you know, somebody probably who does need hospital care but they don't want to go back into hospital because it's really not a nice experience for them." (Referrer: GP Partner)

Even in lesser established areas, staff felt that the public had an awareness that they could now be seen at home rather than in hospital, and this was met with a great deal of positivity.

Some referrers also noted that, while welcomed, not all patients had sufficient clarity around their admission to H@H and what this meant in terms of who was managing their care:

"There seems to be an issue sometimes with patients understanding whose care they're under while they're being looked after by the Hospital at Home team. We quite often get contact from patients while they're under the care of the Hospital at Home team." (Referrer: GP Partner)

Others noted that patients who called first responders might also be confused about H@H being offered as an alternative to admission, and that this sometimes created challenges for ambulance staff in explaining the H@H model and rationale to patients who were reluctant to engage:

"It's difficult sometimes, especially for those older people that we do tend to refer, you know, they very much are - if you phone an ambulance, you're going to hospital. They usually have their bags packed ready, you know. But then to try and explain, actually, you can unpack your bags and stay at home - they're like, what? That's not how it works!" (Referrer: Allied Health Professional)

Promotion of the service among the general public was suggested as one area where H@H teams could focus their energies more:

"…people have a level of expectation that a hospital is always the best place for them, I think there's still a percentage of the public who have that assumption. So, maybe something around that - this is who we are, this is what we do, if your GP suggest this, then consider it…" (Referrer: GP)

It should be noted that insight into patient experience and public awareness of the service will be covered during Phase 2 of the evaluation.

Delivery: existing barriers

Staffing levels, recruitment and retention

Around a third of workforce survey delivery respondents agreed (31%) or strongly agreed (3%) that there were enough staff in their team to meet the level of demand, whilst nearly three in five disagreed (31%) or strongly disagreed (25%) with this. Furthermore, only around three in ten agreed (22%) or strongly agreed (8%) that their team was able to fill vacancies quickly and effectively, whilst around half disagreed (29%) or strongly disagreed (21%) with this.

In corroboration with this, the main qualitative themes to emerge in relation to staffing were staff shortages, problems with staff recruitment/retention, and gaps in specific staff input affecting delivery. Indeed, staffing levels and staff retention were mentioned in almost half of all survey open text responses when asked to identify the main barriers that need to be overcome to improve the delivery of H@H. This was also identified by a number of participants as being a key issue:

> "Staffing!!!! We often don't accept patients as there is not enough staff to safely care." (Workforce survey response: Allied Health Professional)

Some participants mentioned that staff shortages were affected by protracted recruitment processes which meant there were delays in filling available posts. Short-term funding for H@H also made it difficult to both recruit suitable candidates as well as to retain them:

> "We're having quite a lot of staffing issues with quite a few vacancies at the moment, but still being expected to provide the same level of service and try and take as many patients as we can...waiting for jobs to go out to adverts to fill vacancies that have been sitting for a while." (Deliverer: Other)

> "Lack of permanent contracts discouraging people to apply for jobs when wanting to expand the service." (Workforce survey response: Advanced Nurse Practitioner)

Several survey respondents highlighted staffing shortages in specific specialties and at particular times, especially during weekends and evenings (linked to out-of-hours provision, discussed earlier in this report). Difficulties in backfilling unplanned absences was also noted in survey responses.

Another gap was in administrative support, with some delivery participants reporting that their teams were struggling with the heavy burden of administration generated by the H@H caseload and process:

"We're quite administrative heavy…we're doing the admission, we're doing the clinical assessment and the medicine reconciliation, and then we're coming back and [doing] the treatments and the formulation of the diagnosis and a treatment plan. And then we're coming back, admitting them on to TrakCare, doing all the writing up, you know, referring them for diagnostics, speaking to the Consultant, prescribing, putting all the admission drugs on to a prescribing system - so, yeah, it's a lot." (Deliverer: Nurse)

A suggested solution to managing staff shortages included sharing nursing provision across H@H teams where they were within the same HSCP or Health Board area. This was seen as something that worked well where it was currently in operation.

It was also posited that there was scope within multi-disciplinary teams to look at ways that staff from different disciplines could perhaps widen or expand their own existing practice, which would give H@H teams more flexibility and reach:

"So, there's nothing stopping us as a [Allied Health Professional] learning how to take bloods. There's nothing stopping us learning how to listen to a chest and start making those sorts of assessments…it's thinking about broadening our scope of practice…" (Deliverer: Allied Health Professional)

It was suggested that, if H@H staff could be trained and trusted to support one another in their respective routine tasks, such as gathering the data/metrics required for diagnosis/treatment, this might reduce demand on colleagues (who were often working part time hours for H@H), speed up service delivery for patients, and potentially mean that more people could be treated under H@H.

Similar sentiments were raised in relation to specialist support for services, e.g. from heart failure specialists, where this was currently not available. Participants suggested that introducing shared care for some patients may be appropriate where multi-disciplinary teams, comprising of more than one specialist, could usefully oversee a patient's progress. This was seen as something which will become ever more important over time as more and more patients were presenting with co-morbidities.

Having full-time or near full-time administrative support was seen as something which would be beneficial. Increasing the number of ANPs was also mentioned by one service, as something which would help them to better manage workload.

Limited pharmacy support within H@H teams was also identified as a challenge for teams, affecting their ability to gain access to required medication for patients at home in a timely manner. Most delivery participants reported that their team did not have a dedicated pharmacist, and some were operating with non-digital prescriptions, which added unnecessary risk and complications to case management:

"We really need pharmacy input just because of the patient population and the complexity, it's a huge amount of things that need pharmacy input in Hospital at Home." (Deliverer: Other)

Medical equipment availability

Across delivery interviews and focus groups, there was consensus that, while generally well provided for, gaps remained in equipment and materials available to some teams. This included insufficient supplies/cartridges for POC testing (plus difficult to manoeuvre equipment), limited numbers of ultrasound machines, portable x-rays and equipment for bladder scans, etc.:

"One of the challenges we have with point of care testing is getting the cartridges. Quite often, there's a short shelf life with them and, when we go to use them, they've expired and then we can't use the point of care testing when we need it." (Deliverer: Other)

"Own equipment for each person - i.e. ECG machine, scales etc. would be very beneficial." (Workforce survey response: Nurse)

Frail and older adults in one area were seen as potentially missing out of access to rehabilitative equipment in the home environment (e.g. adapted toilet seats) which they would otherwise be able to easily access in hospital:

"…if you need more than just a Zimmer frame, we can't necessarily get you equipment, toilet seats, these sorts of things, easily which, again, feels like we're not being treated like an acute hospital in that sense." (Deliverer: Other)

IT equipment availability and remote working

Around half of workforce survey delivery respondents agreed (39%) or strongly agreed (10%) that they had the required IT equipment - including hardware and software - to undertake their work effectively, whilst around four in ten disagreed (24%) or strongly disagreed (18%) with this.

Many survey respondents highlighted a need for additional IT equipment and resources to support case management and decision making. In the workforce survey open text responses, laptops were mentioned most often, with some respondents emphasising the importance of ensuring consistent access for all H@H staff to enable real-time information gathering:

"Everyone should have their own laptop, there isn't enough IT equipment in general and you have to come in early to ensure you have IT access." (Workforce survey response: Allied Health Professional)

Many survey respondents also highlighted the need for a more efficient remote working environment, particularly a streamlined software infrastructure that allows key medical documentation to be accessed smoothly and promptly. A few noted that this would reduce duplication across the different systems currently in use:

> "We could be more efficient with better IT systems that link between acute/intermediate/primary care, so that information can be shared with reduced duplication (or a single IT system?)" (Workforce survey response: Pharmacist)

Whilst delivery survey respondents noted that improvements with IT systems - in particular shared patient information across relevant services - were strengths of the service, two deliverers mentioned that necessary IT systems were not joined up, making it difficult to track a patient across the care process (for example, TrakCare). Furthermore, other respondents suggested that having a single discharge letter system for the whole of NHS Scotland along with national guidance in this regard was urgently needed.

Poor connectivity was also a problem reported by some participants who were involved in the delivery of H@H services in more remote and rural locations meaning that, even where people had sufficient IT resources and laptops, etc., problems could still ensue:

> "We all have laptops and in order to try and improve efficiency, we're meant to take these laptops out with us and kind of clock our patients in when we're seeing them. But, literally, 75 to 80% of the time, you don't get kind of cellular signal, and you can kind of be halfway through a clock-in and then lose it multiple times …that's one of the things that we find very difficult." (Deliverer: Advanced Nurse Practitioner)

To address poor connectivity, some delivery participants mentioned staff taking handwritten notes or completing paper proformas in patient's homes, which were later uploaded to digital systems. This created a duplication of effort for staff, introducing inefficiencies and increasing risks of errors or lost of documentation. Participants also highlighted that even in areas without connectivity issues, duplication sometimes persisted, with staff maintaining both paper-based and online records in the absence of having access to computers/internet in people's homes:

> "We use TrakCare and the nurses are able to upload notes onto that but it's not part of the patient's official record. So, they have to duplicate their information, so there is an electronic record for anyone like who is on site to be able to review the patient's notes if a nurse who is in the home updates that, but it's duplication for that staff member. They have to keep a record of it as a paper note and that forms their official clinical record which then gets scanned." (Deliverer: Manager)

Funding structures

A small number of participants mentioned that lack of specificity around funding could determine the shaping of services over time. A lack of certainty regarding funding was also seen to impact on how much planning teams could achieve. For example, in one area where a new pathway was being set up, there was uncertainty around how much of the funding given to the local Health Board for urgent and unscheduled care would be set aside for H@H and, within that, how much would be allocated for new service development:

> "So, the money's been given with a very broad open range, which means, essentially, NHS (region) then can decide where that funding goes." (Deliverer: Allied Health Professional)

> "Small pockets of fixed term money is just terrible for growing any kind of service, and that's what we've been facing the last few years. It's just short-term investment but no - what we need is long-term growth to make any meaningful impact." (Deliverer: Consultant)

While the flexibility of overall Scottish Government funding for H@H was seen as a strength in some ways (to allow local boards and teams to decide on what services would best meet local needs), having a clear stipulation on what proportion of money should be dedicated to H@H (including potential new pathways) was seen as something which might be helpful.

Travel and transport

Inefficiencies attached to significant amount of time spent travelling to and from patients' homes was raised as a challenge by staff from different H@H teams in different contexts (i.e. rural areas with long distances between sites, and urban areas where traffic congestion could cause delays travelling even short distances):

> "We probably have the opposite issues to the kind of rural guys in that we can actually be sitting in traffic for ages, stuck on the bypass for an hour to kind of get to one side of [the city] to another and, obviously, that does have an impact on capacity." (Deliverer: Other)

There was general agreement that a solution was needed (including, for example, funding for dedicated driver support) to ensure that teams could spend their time productively instead of driving, which took their attention away from clinical work:

> "…we do cover such a wide area, we can sometimes be travelling for quite a long time in order to carry out patient care…we've been talking about getting drivers as well to help us kind of note-taking sort of as we go round…" (Deliverer: Consultant)

A suggestion was also made in the workforce survey that there was a need for additional drivers to collect bloods. Indeed, one of the concerns that was offered around lack of POC testing was that the alternative could result in a significant amount of travel for staff, especially in rural areas, where testing occurred and the results required a (sometimes same day) return visit to the patient's home.

Access to social care and community services

Across all research strands, limited availability of social care to support individuals at home who may have increased care needs whilst experiencing acute illness was raised.

In focus groups, some H@H teams noted that they did not have priority access for home care provided by social services. They felt that some vulnerable patients under H@H were perhaps being overlooked or treated as less of a priority than similarly vulnerable adults in or leaving hospital, who would have a social worker assess if they did or did not need help in the community:

> "They're not being treated as if they're hospital inpatients, and that's not equitable if that's how we're positioning the service." (Deliverer: Other)

The lack of social care support for people in their own homes was also cited by a more rural team who noted that the absence of this care had been a determining factor in planning how they delivered their H@H service. They had observed over time that the main reason why some people who might have been suitable for H@H but who were not getting home on early discharge was that they did not have a care at home package in place. This was echoed by staff in other teams who noted that a cap on short-term care packages provided by the local authority meant that, quite often, patients could end up being admitted into hospital for that reason, even when H@H was in place to meet their acute medical needs.

In contrast, another more established urban service also noted that H@H may be working with patients who required wider social care as a priority, rather than medical care. The absence of such support meant that some patients under H@H were not necessarily 'hospital bound' patients based on clinical need, but would be admitted for social care needs instead:

> "…if the community services were probably better, then the patient may not have come to our service…there are some patients that we do get that, and that's partly primary care struggling, social work and home care struggling…if we didn't have a Hospital at Home service, would that patient have been admitted to hospital? Possibly not…occasionally, we do get patients that we're seeing that actually could have been a GP home visit rather than us." (Deliverer: Consultant)

Access to care integration and community rehabilitation teams, occupational therapists and physiotherapists was also raised as a current barrier to delivery. In one area, an issue was raised regarding differences in access to wider services

experienced by patients in H@H compared to traditional hospital settings. They explained that a lot of the pathways for accessing rapid rehabilitation required the patient to be admitted to the physical hospital, who would then access rehabilitation as a priority on discharge.

Integration with wider health and social care services was seen as less problematic among those working in Paediatric or Neonatal pathways where social care was less likely to be required. These pathways were, however, integrating well with midwifery colleagues and community midwives, with clear understanding of how services could work together and complement one another.

Reliance on families and carers

Interview and focus group participants perceived that patient's may sometimes opt out of receiving H@H care to avoid placing a burden of responsibility on their family/caregivers. Similarly, some may be encouraged not to accept a referral into H@H by relatives, for the same reason:

> "I'd say that I've had more resistance from relatives I think…than patients themselves…often, people will try and cope for as long as they can at home and often by the time we're thinking about a Hospital at Home referral, people are tired, they've had enough. They want an easier solution and that can be hospital sometimes…" (Deliverer: GP Partner)

Success of H@H was also described as being very much dependent on the home environment in which the patient lived and the wider support available to them (i.e. those sharing a home with family or carers were more likely to have support to enable them to complete an episode of H@H care than those who lived alone):

> "…it comes down to identifying the right patients, so the patients that do have some degree of family support and do have some social support…that's the most important thing when you're going to get a good outcome from using Hospital at Home that doesn't perhaps result in an admission within 24 hours or anything like that. You have to make sure that home environment works." (Referrer: GP)

The personal, emotional and social costs for carers attached to caring for someone at home was something that referrers viewed as important to consider when assessing the overall value of the service. It should be noted that insights from families/carers of H@H patients will be included in Phase 2 of the evaluation.

Key learning and areas for consideration

Phase 1 of the evaluation focussed on how H@H services are currently operating in Scotland, to identify what was working well, what was working less well, and where improvements could potentially be made. The research revealed a number of effective processes and practices currently in place, and service elements which could usefully be replicated or standardised nationally to maximise efficiency and impact. The research also revealed a number of challenges and aspects of service delivery requiring improvement from the perspective of the workforce, as well as learning linked to the geography, maturity and nature of the different services being offered. This chapter summarises key learning in each regard.

Key learning: Nature and Scope of H@H

- A wide range of different H@H service models are in place. In the absence of guidance around what services should look like or how they should be set up, services have developed to meet local needs. Funding and availability of staff both seem to be driving factors in service development.
- A lack of clarity around the scope of H@H exists, linked to the introduction of new pathways at different points in time under the H@H umbrella. This is compounded by issues around nomenclature, lack of a nationally unified definition (until recently), differing service provision in different Health Boards, and ever-changing nature of services over time (often linked to funding instability).
- The number and diversity of alternative referral pathways that exist alongside H@H creates a complex landscape for referrers when considered alongside the multiple different pathways that sit within H@H and their different operating arrangements in different areas.The absence of a standard model or operating protocol means that services often rely on iterative learning to influence service delivery in real time.
- While leadership promotion and support for H@H is evident at the macro level, improved communication around funding and local expansion intentions was encouraged between leaders and those delivering H@H services on the ground.
- While there is good awareness that expansion is required, there is less clarity around what this might look like in the immediate future and what it might mean for existing staff and resourcing allocated to teams.

Key learning: Referral

- Referrers generally appear to buy into the concept of H@H, show willingness to utilise the service, and have confidence that H@H services provide a high quality of patient care.
- H@H teams appear to be engaging well with professionals who refer into their services to raise awareness and build local rapport. However, not all

communication from H@H teams may be being absorbed by busy practitioners.

- Delivery staff suggested that referral criteria are not necessarily adhered to, whilst some referrers perceived there to be inconsistency in referral acceptance decisions within services.
- A perceived lack of capacity in H@H services was reported among referrers as something which may influence decisions around whether or not to refer into the service, as well as potentially hindering the number of referrals they were able to make
- Lack of up-to-date information about services' capacity to accept referrals was also cited as a hinderance, and it was suggested that existing operating hours limited the number of patients that could be referred.
- Some issues exist around shared understanding of where responsibility sits for patients at different points during their H@H care.

Key learning: Delivery

- Participants reported that their H@H team comprised a strong staff mix and attract confidence of referrers that they provide a high quality of patient care.
- Staff recruitment and retention was reported as one of the main challenges facing H@H teams, an issue often linked to short-term funding cycles. This lack of stability affects planning for future service delivery improvements and change. There may also be a need for more/more ready access to specialist staff to help support service delivery.
- Most deliverers appear to have access to the essential medical equipment that they need. Ability to offer services such as point of care blood testing are seen as strengths of the service (where available).
- Similarly, while deliverers appear to have access to the basic IT facilities required to deliver H@H services, access to more IT equipment, more robust Wi-Fi-connections, and integrated IT systems were encouraged.
- Remote monitoring was seen as a strength of the service.
- While H@H appears to integrate well with wider health and social care services, the absence of equitable access to social care support for patients is evident and may be impacting upon referral and delivery decisions, as well as care provision.

Geographical variations

Many of the findings presented above were generalisable across services of different levels of maturity, and in different geographical areas. Qualitative feedback did, however, reveal some nuanced differences in experiences that were linked to geography, as follows:

- Those in remote and rural areas reported finding it challenging to deliver services 'in person' in some cases due to the wide geographical spread of

patients. A reliance on technology in these areas is perhaps greater than other areas but this can be hindered by issues linked to digital connectivity.

- Absence of POC testing can be more challenging for services in rural areas where distance and travel time requirements prohibit the ability to get routine samples to hospital and respond back in the patient's home on the same day.
- Travel is an issue affecting both urban and rural teams, with either excessive travel times to patients' homes, or problems associated with congestion in urban areas acting as a barrier to service efficiency.

Suggestions for the future

Based on direct feedback from both the workforce survey respondents and qualitative engagement participants, and with reference to the H@H logic model (see Appendix A), the main areas where there is scope to optimise and improve the delivery of H@H to maximise referrals, efficiency and effectiveness appear to be:

Maximise optimal delivery by:

- Continuing to circulate and embed an awareness of the PHS H@H definition, to support more standardised understanding and application of service protocols.
- Continuing to embed strong links and communication between H@H teams and their local referral pathways.
- Continuing to build teams with different professional backgrounds, expertise and specialties, with clear and robust delivery and improvement processes in place and with collegiate culture.
- Ensuring that strong senior promotion of the service remains in place, and that communication on the expansion of the service is universally received.
- Continuing to roll out expanded use of equipment enabled Point of Care testing and remote monitoring.
- Building on existing good practice to further raise awareness of the breadth/reach of H@H services among GPs, other primary care colleagues and non-NHS staff, as well as the general population, to help meet associated H@H outcomes set out in the logic model (Outputs 5 and 8).
- Building on existing good practice to facilitate even more collaboration between teams/multi-disciplinary approaches.

Alleviate existing barriers by:

- Ensuring that referral eligibility criteria are clear and well adhered to (by both delivery teams and referrers), and that referral acceptance decisions are made consistently on this basis. This may help to reduce some existing lack of clarity among referrers and increase the number of accepted referrals into H@H (as per Outputs 2, 3 and 8 of the logic model).
- Providing more transparent, accessible and up-to-date information around service capacity to allow referrers to decide early on if H@H is a viable option

for presenting patients. Simpler or quicker referral processes could also be considered, including the ability to make digital/remote referrals and the use of central or single points of contact.

- Minimising inefficient use of staff time, including through more and better-connected IT equipment, virtual assessment when appropriate, and funding for dedicated driver support.
- Delivering a funding model which supports teams to have greater and more consistent staff resource, facilitating increased capacity to take on referred patients (in line with Output 3 of the logic model) and potentially to implement longer hours of operation (in line with Output 13 of the logic model) and additional geographical coverage (in line with Output 4 of the logic model).
- Exploring opportunities for joint working/sharing of caseloads between specialists to allow more referrals to be accepted and more nuanced patient needs to be met (see Outputs 9 and 10 of the logic model).
- Improved admission and discharge information/communication to ensure that responsibilities for the patient are clearly understood by medical professionals, patients and their families. This includes expediting and streamlining documentation and handover processes.
- Improving access to more and better-connected technology and reduction in the reliance on paper-based record keeping. Linked to this, a need to readdress the need for 'in person' assessment (and whether alternative virtual assessment may be appropriate) (in line with Output 11).
- Improving access to more medical and rehabilitative equipment and materials, with improved portability/usability of the same (also in line with Output 11).
- Better access to pharmacy resource for teams, to help meet patient's medical needs more speedily and create parity with acute hospital care in terms of access to medicines.
- More investment in staff upskilling/dedicated training (especially for nurse practitioners) and protection of time for staff to engage in networking, skills share, reflective practice and upskilling. This will assist with meeting the intended H@H outcome in the logic model around increased availability and take up of continuous professional development (Output 12).
- Achieving parity with inpatients for access to wider social care support to assist vulnerable patients to remain in the home, as well as improved collaboration with social care and equitable access to community rehabilitation teams that do not require people to be physically admitted to hospital (see Output 6 and Outcome 9 of the logic model).

Next Steps

The findings presented here reflect learning from Phase 1 of the evaluation of H@H. The next steps for the research will be to engage with patients, their families and carers to understand directly how they perceive H@H and how it has impacted on their health and wellbeing. While this research has also uncovered some early learning around impacts of H@H, more engagement with the workforce involved in

delivering H@H and their primary care colleagues is needed to explore in more detail what impacts they perceive the service is having (on themselves, the wider health and social care system, and their patients). Better understanding of the cost effectiveness of H@H is also required. Each of these will be pursued as the research moves to Phase 2 and will be reported in due course. Learning from the research, alongside other existing and forthcoming evidence on the activity of H@H teams being gathered by PHS will be used to ensure that future development and delivery of H@H is evidence led.

Appendix A - Hospital at Home Logic Model [22]

A logic model for Hospital at Home (H@H) was developed by social researchers within the Scottish Government to demonstrate how H@H is expected to work and outline what the programme is trying to achieve (Figure 6). It was recognised by the research team that to produce the logic model engagement with relevant policy colleagues and external stakeholders was required. To begin the process an example H@H logic model was drafted by the social research team prior to the initial workshops held with Scottish Government colleagues. Feedback from the initial workshops allowed the logic model to be updated for the subsequent workshops with external stakeholders and a small number of Scottish Government colleagues who did not take part in the initial workshops.

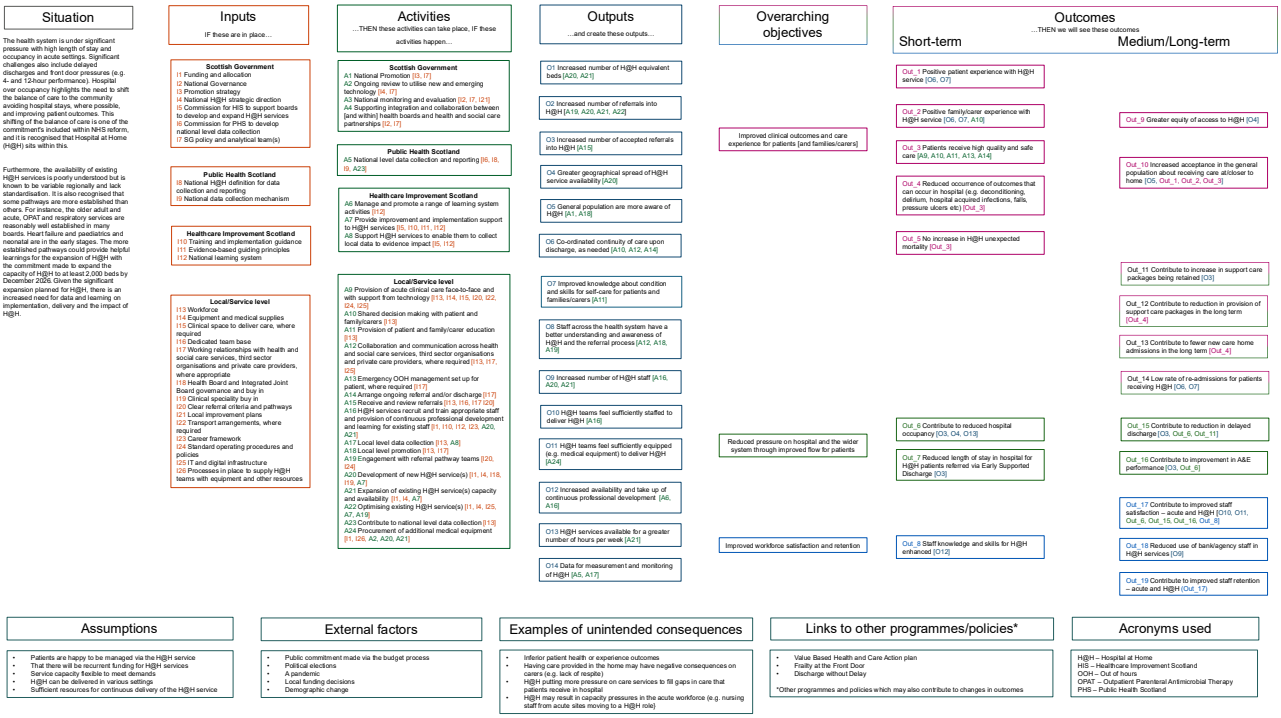
Feedback from these workshops allowed the research team to further review and refine the logic model. The opportunity to provide written feedback was also provided. Following this, additional feedback was sought from a Hospital at Home Data and Intelligence Workgroup and the Hospital at Home Programme Board. Comments from these groups and subsequent review by the social researchers overseeing the logic model led to the current version.

The logic model is divided into sections - situation, inputs, activities, outputs and outcomes. Inputs and activities have been organised under the relevant national organisation (e.g. Scottish Government) or at local/service level. The outcomes have been organised under three overarching objectives and split into short and medium/long term respectively[23]. Links between sections of the model have been proposed (e.g. between specific inputs and activities) based primarily on the social researchers' local knowledge of the programme. A helpful next step would be to review published evidence to identify which linkages have strong or no empirical support to guide future research and to allow the logic model to be updated accordingly. Assumptions deemed essential for H@H to operate, external factors, examples of unintended consequences and other programmes/policies which may contribute to changes in outcomes are also included within the logic model.

[22] Following the production of the logic model, sub-national planning structures have been introduced. It is anticipated that they will be key partners that the Scottish Government will work with in the future to support the design and development of services.

[23] Please note that some outcomes were viewed to sit under more than one overarching objective. These have been demonstrated in Figure 6 via the corresponding colours in their border and have been mentioned in the text-only description of the logic model.

Figure 6 - Hospital at Home Logic Model at May 2026. Please note this is a high resolution graphic and can be viewed more clearly by zooming in



Text only description of the Hospital at Home Logic Model at May 2026

Situation

The health system is under significant pressure with high length of stay and occupancy in acute settings. Significant challenges also include delayed discharges and front door pressures (e.g. 4- and 12-hour performance). Hospital over occupancy highlights the need to shift the balance of care to the community avoiding hospital stays, where possible, and improving patient outcomes. This shifting of the balance of care is one of the commitment's included within NHS reform, and it is recognised that Hospital at Home (H@H) sits within this.

Furthermore, the availability of existing H@H services is poorly understood but is known to be variable regionally and lack standardisation. It is also recognised that some pathways are more established than others. For instance, the Acute/Older adult, OPAT and Respiratory services are reasonably well established in many boards. Heart Failure and Paediatrics and Neonatal are in the early stages. The more established pathways could provide helpful learnings for the expansion of H@H with the commitment made to expand the capacity of H@H to at least 2,000 beds by December 2026. Given the significant expansion planned for H@H, there is an increased need for data and learning on implementation, delivery and the impact of H@H.

Inputs

Inputs from the Scottish Government include:

- Funding and allocation

- National Governance
- Promotion strategy
- National H@H strategic direction
- Commission for HIS to support boards to develop and expand H@H services
- Commission for PHS to develop national level data collection
- SG policy and analytical team(s)

Inputs from Public Health Scotland include:

- National H@H definition for data collection and reporting
- National data collection mechanism

Inputs from Healthcare Improvement Scotland include:

- Training and implementation guidance
- Evidence-based guiding principles
- National learning system

Inputs from local/service level include:

- Workforce
- Equipment and medical supplies
- Clinical space to deliver care, where required
- Dedicated team base
- Working relationships with health and social care services, third sector organisations and private care providers, where appropriate
- Health Board and Integrated Joint Board governance and buy in
- Clinical specialty buy in
- Clear referral criteria and pathways
- Local improvement plans
- Transport arrangements, where required
- Career framework
- Standard operating procedures and policies
- IT and digital infrastructure
- Processes in place to supply H@H teams with equipment and other resources

Activities

Activities undertaken by the Scottish Government include:

- National Promotion
- Ongoing review to utilise new and emerging technology
- National monitoring and evaluation
- Supporting integration and collaboration between [and within] health boards and health and social care partnerships

Activities undertaken by Public Health Scotland include:

- National level data collection and reporting

Activities undertaken by the Healthcare Improvement Scotland include:

- Manage and promote a range of learning system activities
- Provide improvement and implementation support to H@H services
- Support H@H services to enable them to collect local data to evidence impact

Activities undertaken at local/service level include:

- Provision of acute clinical care face-to-face and with support from technology
- Shared decision making with patient and family/carers
- Provision of patient and family/carer education
- Collaboration and communication across health and social care services, third sector organisations and private care providers, where required
- Emergency OOH management set up for patient, where required
- Arrange ongoing referral and/or discharge
- Receive and review referrals
- H@H services recruit and train appropriate staff and provision of continuous professional development and learning for existing staff
- Local level data collection
- Local level promotion
- Engagement with referral pathway teams
- Development of new H@H service(s)
- Expansion of existing H@H service(s) capacity and availability
- Optimising existing H@H services
- Contribute to national level data collection
- Procurement of additional medical equipment

Outputs

- Increased number of H@H equivalent beds
- Increased number of referrals into H@H
- Increased number of accepted referrals into H@H
- Greater geographical spread of H@H service availability
- General population are more aware of H@H
- Co-ordinated continuity of care upon discharge, as needed
- Improved knowledge about condition and skills for self-care for patients and families/carers
- Staff across the health system have a better understanding and awareness of H@H and the referral process
- Increased number of H@H staff
- H@H teams feel sufficiently staffed to deliver H@H
- H@H teams feel sufficiently equipped (e.g. medical equipment) to deliver H@H
- Increased availability and take up of continuous professional development
- H@H services available for a greater number of hours per week
- Data for measurement and monitoring of H@H

Overarching objectives

- Improved clinical outcomes and care experience for patients [and families/carers]
- Reduced pressure on hospital and the wider system through improved flow for patients
- Improved workforce satisfaction and retention

Short-term outcomes

The short-term outcomes under the improved clinical outcomes and care experience for patients [and families/carers] overarching objective are:

- Positive patient experience with H@H service
- Positive family/carer experience with H@H service
- Patients receive high quality and safe care
- Reduced occurrence of outcomes that can occur in hospital (e.g. deconditioning, delirium, hospital acquired infections, falls, pressure ulcers etc.)
- No increase in H@H unexpected mortality

The short-term outcomes under the reduced pressure on hospital and the wider system through improved flow for patients overarching objective are:

- Contribute to reduced hospital occupancy
- Reduced length of stay in hospital for H@H patients referred via Early Supported Discharge

The short-term outcome under the improved workforce satisfaction and retention objective is:

- Staff knowledge and skills for H@H enhanced

Medium/Long-term outcomes

The medium/long-term outcomes under improved clinical outcomes and care experience for patients [and families/carers] overarching objective are:

- Greater equity of access to H@H
- Increased acceptance in the general population about receiving care at/closer to home

A number of medium/long-term outcomes were viewed to overlap both the improved clinical outcomes and care experience for patients [and families/carers] and reduced pressure on hospital and the wider system through improved flow for patients overarching objectives. These are:

- Contribute to increase in support packages being retained
- Contribute to reduction in provision of support care packages in the long term
- Contribute to fewer new care home admissions in the long term
- Low rate of re-admissions for patients receiving H@H

The medium/long-term outcomes under the reduced pressure on hospital and the wider system through improved flow for patients overarching objective are:

- Contribute to reduction in delayed discharge
- Contribute to improvement in A&E performance

The medium/long-term outcomes under the improved workforce satisfaction and retention objective are:

- Contribute to improved staff satisfaction – acute and H@H
- Reduced use of bank/agency staff in H@H services
- Contribute to improved staff retention – acute and H@H

Assumptions

- Patients are happy to be managed via the H@H service
- That there will be recurrent funding for H@H services
- Service capacity flexible to meet demands
- H@H can be delivered in various settings
- Sufficient resources for continuous delivery of the H@H service

External factors

- Public commitment made via the budget process
- Political elections
- A pandemic
- Local funding decisions
- Demographic change

Examples of unintended consequences

- Inferior patient health or experience outcomes
- Having care provided in the home may have negative consequences on carers (e.g. lack of respite)
- H@H putting more pressure on care services to fill gaps that patients receive in hospitals
- H@H may result in capacity pressures in the acute workforce (e.g. nursing staff from acute sites moving to a H@H role)

Links to other programmes/policies

- Value Based Health and Care Action Plan
- Frailty at the Front Door
- Discharge without Delay

Appendix B - Methodology

An Evaluation Advisory Group (EAG) was convened by the Scottish Government research team to support the evaluation. Membership of the EAG includes a range of stakeholders (e.g. clinical representatives). The role of the EAG includes providing advice and feedback on various matters such as the methodology proposed and final outputs.

Health and Social Care Workforce Survey

Background and methodology

The development of the workforce survey content was led by government Social Researchers from the Whole System Intelligence Analysis Division. This involved extensive engagement with a range of stakeholders, including from within the Hospital at Home Programme Board group. The survey consisted of 27 questions, 22 closed and 5 open-text (see Appendix C). The workforce survey began with three contextual questions, designed to understand the respondents role and profession. It then split into two distinct 'routes', one for those delivering H@H care ('delivery' respondents') and one for those referring patients to H@H ('referral' respondents). One of the contextual questions asked respondents to identify what best reflected their "main area of work". Those who responded "Hospital at Home team" or "Specialist team which includes delivering Hospital at Home care" followed the survey route for those delivering H@H care, whilst the remaining respondents followed the survey route for those referring patients to H@H. At the end of the survey, respondents were asked if they would be interested in being contacted with further information about participating in a focus group session. Those who expressed an interest were asked to provide their email address for information about the focus groups to allow them to be contacted.

A snowball sampling approach was used to distribute the workforce survey, which was available for online completion only. An invitation email was developed, which included the survey's background information, the survey access link and the privacy notice, as well as a note to state that the invite was sent on behalf of the Deputy Chief Medical Officer. Given the broad and disparate nature of the target sample, a range of avenues were used to cascade the survey invite email, including via:

- The Hospital at Home Programme Board.
- The existing H@H adult network, managed by HIS.
- The existing H@H Paediatric and Neonatal network, managed by HIS.
- The Scottish Government's General Practice Policy Division.
- The Scottish Government's Primary Care Out-of-Hours Policy Unit.
- The Scottish Government's Allied Health Professionals Policy Unit.
- Existing H@H Heart Failure pathway network.
- Existing H@H Respiratory pathway network.

- Existing H@H OPAT pathway network.
- Stakeholder colleagues in the Scottish Ambulance Service.
- Stakeholder colleagues from the Royal Colleague of Emergency Medicine.

Recipients of the invite email were asked to take part in the survey, and to also share it within their respective areas of work. The first invite emails were sent on 24th November 2025, and a reminder was sent through most avenues during December 2025. This method aimed to reach a broad cross section of healthcare professionals across a wide range of geographies. Due to the sampling strategy, the total number of individuals who received the workforce survey is unknown, and therefore a response rate cannot be calculated.

Workforce survey response and profile

The following sections provide information on the workforce survey respondent cohort, including the volume of responses and contextual information on respondents' role, work area (e.g. General Practice, Emergency Medicine, etc.), Health Board, and H@H pathway involvement. The purpose of providing this information is to support interpretation of the findings and any sub-cohort divergences, not to provide a reflection of the distribution or nature of the H@H service workforce across Scotland. The survey sample should not be taken to be representative of the wider health and care workforce delivering H@H in Scotland.

A total of 236 respondents completed the workforce survey during the period from November 24th 2025 to January 19th 2026. As set out above, respondents were split into two cohorts: those delivering H@H care, and those referring patients to H@H. The responses received from each cohort were:

- 100 respondents delivering H@H services.
- 136 respondents referring patients into H@H services.

Across the workforce survey as a whole, responses were received from 13 territorial Health Boards (representing all Boards in Scotland except NHS Orkney), plus a small number (n=7) from respondents not based in a territorial Health Board[24]. However, there were no responses from deliverers in NHS Borders, and no responses from referrers in NHS Western Isles.

Workforce survey delivery staff profile

[24] Non-territorial Health Boards refers to the National NHS Boards who support the territorial Health Boards by providing national and specialist level services. These include: Healthcare Improvement Scotland, Scottish Ambulance Service, NHS Public Health Scotland, NHS National Waiting Times Centre, NHS 24, The State Hospital Board for Scotland and Public Services Delivery Scotland (merger of NHS Education for Scotland (NES) and NHS National Services Scotland (NSS)).

Table A1 shows the profile of deliverers by role. The most commonly selected roles were nurse (23%), followed by Consultant (19%) and Advanced Nurse Practitioner (16%).

Table A1: Profile of deliverers by role

Role	N	%
Nurse	23	23%
Consultant	19	19%
Advanced Nurse Practitioner	16	16%
Manager	12	12%
Allied Health Professional	11	11%
GP	6	6%
Other[25]	13	13%
Total	**100**	**100%**

Respondents who delivered H@H ('deliverers') described their area of work as either a 'Hospital at Home Team' (65%) or a 'Specialist team which includes delivering Hospital at Home care' (33%). Respondents in a 'Hospital at Home Team' are likely to deliver only H@H services, whereas those in a specialist team are likely to spend a proportion of their time delivering H@H and a proportion elsewhere.

Delivery respondents were asked which Hospital at Home pathways they were involved in delivering, with the option to select all that applied from the existing pathways: Acute/Older adults, Respiratory, Heart Failure, OPAT, Paediatrics, Neonatal. While just over half (53%) of deliverers said they delivered a single pathway, 47% reported that they delivered two or more pathways. Those in H@H teams (48%) were more likely than those in specialist teams (24%) to report involvement in the delivery of multiple pathways[26]. It should be noted that the presentation of these sample profile findings are not intended to offer an

[25] To support the mitigation against risk of respondent disclosure, a number of survey response options have been amalgamated into the 'Other' category presented in Table A1. This includes response options: Advanced Clinical Practitioner, Clinical Fellow, Pharmacist, Resident Doctor, Specialty Doctor. As such, the total presented for 'Other' is a sum of responses to these response options, and the 'Other' response option.

[26] It should be noted that the qualitative research reported here revealed that some individuals used the term 'services' instead of 'pathways' when referring to different H@H service elements, and this may have confounded responses to this question as provided in the survey, i.e. not everyone may have understood what was meant by multiple pathways.

assessment of the national landscape of service delivery, but rather to provide context in relation to the survey respondent sample.

Table A2 shows that three in four deliverers said they were involved in delivering the Acute/Older adults' pathway (either solely or in combination with other pathways). Neonatal and Paediatric pathways were the least common.

Table A2: Deliverers: Pathways Delivered

Pathways delivered	N	%
Acute/Older adults	75	75%
Respiratory	47	47%
Heart failure	43	43%
OPAT	28	28%
Neonatal	8	8%
Paediatrics	#	#

Note: Totals exceed 100% because respondents could be delivering more than one pathway.

It should be noted that the sample was a self-selecting sample and should not be considered as representative or a reflection of service provision across Scotland. Some notable variations in responses by pathway involvement and geographical area emerged, including:

- None of the ten deliverers in Greater Glasgow and Clyde said they delivered the Acute/Older adults or the Respiratory pathway.
- The Paediatric pathway was only selected by respondents in NHS Lanarkshire and NHS Tayside.
- The Neonatal pathway was only selected by respondents in NHS Greater Glasgow & Clyde and NHS Tayside.
- Those in a H@H team were more likely than those in a Specialist team which delivers Hospital at Home care to be involved in the delivery of:
    - the Acute/Older adults pathway (88% compared to 52%).
    - the Respiratory pathway (60% compared to 24%).

Deliverers were asked, in relation to the Hospital at Home pathway they were involved in delivering in their respective Health Board areas, how they would describe the current status of the service. As nearly half of respondents said they were involved in delivering more than one pathway, in many cases it was not clear which pathway their responses related to. Overall, however:

- Nearly half (48%) described their pathway as well established.

- 29% said it was reasonably well established.
- 14% said it had recently been introduced and was receiving referrals.
- 9% said that their pathway was under development but not yet launched or receiving referrals.

Those involved in delivering adult pathways were more likely to consider their pathway(s) as well established, whereas those involved in delivering child pathways were more likely to consider their pathway(s) as less established or under development.

Workforce survey referral staff profile

Table A3 shows the profile of the referrer respondents by role.

Table A3: Profile of Referrers by Role

Role	N	%
GP	61	45%
Allied Health Professional	26	19%
Consultant	17	13%
Advanced Nurse Practitioner	16	12%
Other[27]	16	12%
Total	**136**	**100%**

As set out in the Evaluation scope and definitions section at the beginning of the report, an admission to H@H can be as an alternative to a hospital admission or following a hospital stay as part of an early supported discharge. For context, GP referrers would be more likely to refer patients to a H@H service on an admission avoidance basis (although not exclusively). Conversely, Emergency Department/hospital-based staff (including Consultants, who made up 13% of the sample), would be more likely to refer into H@H as part of an early supported discharge.

Workforce survey data analysis

Workforce survey data were exported to SPSS for analysis. Data were cleaned, which included adding variable labels (question text) and transforming response data from text to numerically coded values with labels. The ‘I don’t know’ responses were coded as ‘missing’ which excludes them from analysis. Open-ended survey

[27] To support the mitigation against risk of respondent disclosure, a number of survey response options have been amalgamated into the ‘Other’ category presented in Table A3. This includes response options: Advanced Clinical Practitioner, Pharmacist, Nurse and Manager. As such, the total presented for ‘Other’ is a sum of responses to these response options, and the ‘Other’ response option.

responses were coded by theme, with the creation of multiple new variables to categorise text according to emerging themes. New variables were created which aggregated responses (e.g. ‘agree’ and ‘strongly agree’). Frequencies (counts and percentages) were run for all closed question responses.

Crosstabulations with chi square tests to test for significant differences were run for:

- All variables in the survey of deliverers and the survey of referrers (disaggregate and aggregate) by role - these did not show any significant differences.
- Level of promotion of the service (strong promotion; some/limited/very little or none) with level of agreement (strongly agree or agree; other response) with statements on staffing, resourcing and operation (survey of deliverers).
- All variables in the survey of referrers (disaggregate and aggregate) by area of work (General Practice; Scottish Ambulance Service; hospital inpatient emergency medicine; community/district nursing; primary care out-of-hours; ED/MIU based emergency medicine; Flow Navigation Centre).
- Perceived ease of referral (mostly or almost always straightforward; other response) with other variables on views of H@H (aggregate and disaggregate).

Where crosstabulations were conducted, only differences between groups which are statistically significant ($p<0.05$) are reported.

Health and Social Care workforce focus groups and interviews

Background and methodology

Qualitative research with relevant NHS workforce included online focus group sessions and individual/paired interviews.

Separate topic guides were developed for sessions with referral and delivery staff, which were also used for corresponding interviews. Materials were developed collaboratively by the research team and Scottish Government, and were designed largely to fit around the overall aims for the research and the H@H logic model. The majority of questions were process focused, although some did allow for early wider reflections on the impact and future of H@H for both patients and staff. Information sheets and privacy notices were also shared for comment and review, and copies of these were made available to all those invited to take part.

All of those who had indicated as part of their workforce survey response that they would be willing to be contacted for follow-up were invited to attend one of a series of scheduled focus group sessions, or to opt in to a one-to-one interview (if the pre-arranged sessions were not suitable). As the number of individuals who initially responded to this invitation was lower than anticipated, several booster activities were also undertaken. This included invitations to take part being cascaded via various relevant professional networks. A separate online opt in proforma was developed for this purpose.

Focus group and interview response and profile

A total of six online focus group sessions were run - three with delivery staff (attended by 13 participants in total) and three with referral staff (attended by six participants in total). Each session was facilitated by two researchers and questions were shown to participants on screen during sessions to aid discussions. All sessions lasted for one hour.

A total of eight interviews were also carried out (capturing views of nine staff). This included seven delivery staff and two referral staff. These were carried out either by telephone or online and lasted an average of just over 30 minutes. The 28 delivery and referral staff who took part in the qualitative engagement represented a range of different professional roles/functions. Participants included Consultants, Advanced Nurse Practitioners, GPs/GP Partners, Managers, Allied Health Professionals, Resident Doctors and those who described their role as 'Other'. There was also representation from 10 Health Boards, but none from NHS Borders, NHS Shetland, NHS Orkney or NHS Western Isles.

Focus group and interview data analysis

All focus group and interview sessions were digitally voice recorded with permission from participants and were transcribed verbatim to allow for iterative thematic analysis, to expose underlying themes that emerged naturally from the data.

All transcripts were read and initial categories within the data were identified (i.e. clusters of data were grouped and given descriptive labels illustrating key concepts). Coding of clustered data was carried out wherein categories were given analytical rather than descriptive labels and were further broken down where possible, to highlight nuances in the feedback given. The researchers undertook constant comparative analysis whereby, as more data were analysed, new categories were isolated and existing categories were broadened or made more sophisticated to accommodate new data samples (e.g. sub-categories). Any negative or outlier cases were identified and the analysis continued until saturation had been reached (i.e. all new possible extractions from the data were exhausted and no new themes were identified). Anonymised verbatim quotes were selected for key themes for inclusion in the report to highlight key emergent themes.

Appendix C - Hospital at Home Health and Social Care Workforce Survey Questionnaire 2025[28]

Q1. Which of the following best reflects your current role?

1. GP
2. Allied Health Professional
3. Nurse
4. Advanced Nurse Practitioner
5. Advanced Clinical Practitioner
6. Advanced Physiotherapy Practitioner
7. Pharmacist
8. Consultant
9. Speciality Doctor
10. Clinical Fellow
11. Resident Doctor
12. Manager
13. Other

Q2. Which NHS Health Board do you work in?

1. NHS Ayrshire & Arran
2. NHS Borders
3. NHS Dumfries and Galloway
4. NHS Fife
5. NHS Forth Valley
6. NHS Grampian
7. NHS Greater Glasgow and Clyde

[28] Please note that the individual statements in Questions 6, 7 and 14 were counted as individual questions meaning a total of 27 questions were included in the Workforce Survey. For most survey questions, respondents were able to select a single response from the options provided. The exceptions to this were questions which state “select all that apply” (whereby respondents could select multiple or all responses if they wished) and questions which state “Free-text question” (whereby respondents could type their response)

8. NHS Highland
9. NHS Lanarkshire
10. NHS Lothian
11. NHS Orkney
12. NHS Shetland
13. NHS Tayside
14. NHS Western Isles
15. NHS Golden Jubilee
16. I'm not based in a territorial Health Board

Q3. Which of the following best reflects your main area of work?

1. General Practice [Route to Q12]
2. Primary care out-of-hours [Route to Q12]
3. Hospital at Home team [Route to Q4]
4. Specialist team which includes delivering Hospital at Home care [Route to Q4]
5. Hospital inpatient emergency medicine [Route to Q12]
6. ED / MIU based emergency medicine [Route to Q12]
7. Scottish Ambulance Service [Route to Q12]
8. Community/District Nursing [Route to Q12]
9. Community Pharmacy [Route to Q12]
10. Acute setting/Secondary care pharmacy [Route to Q12]
11. Flow Navigation Centre [Route to Q12]
12. NHS 24 [Route to Q12]

Q4. Which of the following Hospital at Home pathways are you involved in delivering? (Select all that apply)

1. Acute/Older adults
2. Respiratory
3. Heart Failure
4. OPAT
5. Paediatrics
6. Neonatal

Q5. Thinking about the Hospital at Home pathway you are involved in delivering in your Health Board, how would you describe the current status of the service?

1. Well established
2. Reasonably well established
3. Recently introduced and receiving referrals
4. Under development but not yet launched or receiving referrals

Q6. Thinking about your team which delivers or is preparing to deliver Hospital at Home care, to what extent do you agree or disagree with the following statements:

a) There are enough staff in my team to meet the level of demand
b) The skill set across my team is sufficient to meet our requirements
c) My team is able to fill vacancies quickly and effectively
d) I have the required medical equipment to undertake my work effectively
e) I have the required IT equipment, including hardware and software, to undertake my work effectively

Response options = 1 (Strongly agree), 2 (Agree), 3 (Neither agree nor disagree), 4 (Disagree), 5 (Strongly disagree), 6 (I don't know)

Q7. Thinking about your team which delivers or is preparing to deliver Hospital at Home care, to what extent do you agree or disagree with the following statements:

a) Relevant training and professional development opportunities are available
b) My team has clear goals and strategies for improving efficiency and expanding our service
c) My service has clearly defined and agreed referral criteria
d) My service proactively engages with our referral pathways, for example through sharing standard operating procedures and referral criteria
e) My team has clear process for gathering and responding to feedback from patients, families, referrers and other stakeholders

Response options = 1 (Strongly agree), 2 (Agree), 3 (Neither agree nor disagree), 4 (Disagree), 5 (Strongly disagree), 6 (I don't know)

Q8. To what extent does your senior leadership actively promote Hospital at Home?

1. Strong promotion
2. Some promotion
3. Limited promotion
4. Very little or no promotion

Q9. What do you think are the main barriers that need to be overcome to improve the delivery of Hospital at Home Care? (Free-text question)

Q10. Please share any successful practices or processes that your team has introduced to improve your delivery of Hospital at Home Care? (Free-text question)

Q11. What do you think should be the key priorities for the future direction of Hospital at Home? (Free-text question)

Q12. How often do you refer patients to a Hospital at Home service?

1. Very often
2. Quite often
3. Not often
4. Rarely
5. Very rarely
6. Never [Route to Q14]
7. I'm not aware of any available Hospital at Home services in my Health Board **(Route to end of survey)**

Q13. How would you describe the process of referring patients to a Hospital at Home service?

1. Almost always straightforward
2. Mostly straightforward
3. Sometimes straightforward and sometimes difficult
4. Mostly difficult
5. Almost always difficult

Q14. To what extent do you agree or disagree with the following statements:

a) I have a clear understanding of the referral criteria for Hospital at Home services in my Health Board

b) The Hospital at Home team(s) in my Health Board actively engage with me/my team to share their patient referral criteria

c) Where clinically appropriate, I would actively seek to refer a patient to an available Hospital at Home service

d) I'm confident that the Hospital at Home services in my area provide a high quality of patient care

Response options = 1 (Strongly agree), 2 (Agree), 3 (Neither agree nor disagree), 4 (Disagree), 5 (Strongly disagree), 6 (I don't know)

Q15. In your own words, please share your views on the Hospital at Home pathway. This could include any positive impacts of the service, or any challenges or limitations with the service. (Free-text question)

Q16. What changes or improvements to the Hospital at Home referral process would support or encourage you to refer more patients to Hospital at Home? (Free-text question)

How to access the background or source data

The following statement(s) indicate the availability of the data which underlie the results of this publication (tick all that apply):

☐ Anonymised microdata (individual-level) are stored externally at <insert link to external archive website and give reference number for dataset> and availability is subject to their access procedures.

☐ Anonymised microdata (individual-level) are openly available from the Scottish Government website

☐ Aggregate data are openly available from the Scottish Government website

☒ Aggregate data are provided within this publication or its annexes.

☒ Data are held by Scottish Government and may be made available on request, subject to consideration of legal and ethical factors.

☐ Data are held by an external data controller and may be made available by them on request, subject to consideration of legal and ethical factors.

☐ Data cannot be made available due to legal, ethical or security considerations.

☐ Not applicable: This publication does not present any findings directly based on data.

social research

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