Heim

Whitepaper

Routes to better care

Community Nursing in Focus

October 2025

Contents

Executive Summary	3
Introduction	7
Pilot	10
Key findings	14
Challenge 1: Route mapping and caseload optimisation	18
Challenge 2: Lack of real-time geolocation	23
Challenge 3: Forecasting demand and capacity	31
Summary of recommendations	35
References	38

Executive summary

"Senior staff spend 40% of their time manually allocating patients and plotting travel routes"

Executive summary

As the newly released NHS 10 Year Plan focuses on shifting care out of hospitals into community settings, understanding and improving ways of working for community nurses is becoming ever more vital. These expert staff provide leadership, clinical skills, and knowledge to support patients at home and maximise their independence.

Until now, it has not been clear how time is spent, how it can be recovered, or how existing systems and processes are creating inefficiencies and driving up costs. Heim has partnered with Lewisham and Greenwich NHS Trust to shine a light where there has previously been little to no data, and to discover ways to optimise workflows.

Although this is a deep dive into the experiences of teams within one specific trust, similar experiences will be felt in teams across the country. This is not an extraordinary case, but rather is indicative of the wider context in which NHS community teams are operating - where technology is unevenly available and used, and manual processes and systems are the norm.

Using our ambient tracking app and proprietary caseload allocation algorithms, Heim compared the status quo at Lewisham and Greenwich with the optimised alternative, and found several areas for capacity increase:

Executive summary

- A senior staff member (usually a band 6 or 7 nurse) spends up to 40% of their time manually allocating patients and plotting travel routes. The results of their efforts are often inconsistent and result in nurses spending excess time on the road, reducing patient-facing time, resulting in excess mileage claims and staff frustration.

- Demand and capacity assessment is complex and heavily reliant on manual processes; we found it routinely overestimates the time it will take to deliver care by 50%. This artificially restricts the team's capacity, limiting the number of patients that could be seen in a day. While recalibrating this assessment could unlock more capacity, any resulting increase in workload would, of course, remain subject to, and bounded by, safer staffing levels.

- The use of Heim scheduling algorithms to optimise allocation of visits against multiple objectives and constraints would enable the team to deliver the same caseload with 42% less mileage and more time available to intervene earlier with patients at home, supporting independence and reducing acute demand.

- A lack of real-time tracking and feedback from field staff hampers coordination for urgent callouts and joint visits. Each urgent call takes an average of 43 minutes to assign, while staff often wait up to an hour each time for a partner to be available for a joint visit. This 43 minutes is often made up of staff trying to coordinate the individual team members whereabouts, directly related to the lack of real time visibility.

- Staff expressed a strong preference for enhanced lone-working features and real-time visibility to support reassurance.

Executive summary

Heim have built the tools to tackle these inefficiencies in practice.

Our company brings together clinicians and technologists to build intelligent workforce coordination and scheduling technology.

By combining advanced routing, decision support, and automated demand and capacity planning, Heim's caseload allocation algorithms ensure that the right person is in the right place at the right time.

Simulations have shown that by using these tools, LGT's four adult community nursing teams could unlock significant capacity improvements enabling more proactive care in the community, reducing deterioration and preventing unnecessary acute admissions.

At a national level, applying the same approach across the NHS would reduce administrative burdens and free up valuable time for staff to see more patients. This would directly support the mandate to shift care from hospitals into the home in practice and unlock the 4% mandated productivity uplift.

Introduction

"The root of many problems lies in poor data visibility"

Introduction

Background to pressures in community care

NHS organisations face mounting pressure to deliver more care in community settings than in hospitals. This shift, mandated by the NHS Long Term Plan and the 2025 Government Mandate to NHS England, and now the NHS 10 Year Plan, positions community care as the cornerstone of future healthcare delivery. Success depends on community nursing teams operating at peak efficiency without compromising care quality.

Community nursing teams are essential to this transformation, but they're already stretched to capacity. Administrative burdens like documentation and scheduling tasks consume approximately one-third of clinicians' working hours (Moulds and Horton, 2024), stealing precious time from patient care. Travel inefficiencies compound the problem, with community nurses spending up to 37% of each shift on the road rather than with patients (NHS England, 2023).

These operational challenges are devastating for an already depleted workforce. The UK now faces a shortage of over 10,000 district and community nurse positions, a 40% decline in the past decade (The Queen’s Institute of Community Nursing, 2019). The consequences ripple through the entire system, with missed care in the community leading to patient deterioration and avoidable admissions. Preventable hospital admissions have surged 20% in areas with community care gaps, costing the NHS billions annually (Nuffield Trust, 2018). Optimising community nursing is therefore not only about efficiency, but about safeguarding acute capacity. Meanwhile, demand for healthcare climbs steadily, with over 15 million people in England requiring ongoing support for long-term conditions (The King’s Fund, 2018).

Introduction

The root of many problems lies in poor data visibility. While secondary care has undergone systematic digital transformation over the last two decades, community teams remain largely in the dark. Field workers lack reliable insights into travel patterns, workforce availability, and task allocation trends, making it nearly impossible for managers to optimise resources or implement sustainable improvements (NHS England, 2023).

Addressing this information gap was central to our project with Lewisham and Greenwich NHS Trust. We conducted in-depth field research, shadowing over 1000 hours of nursing time to reveal patterns in operational behaviours. Using this insight, we identified three areas where technology could tackle the most significant issues, and have built the tools to do this in practice.

Pilot

“Lewisham and Greenwich Trust wanted to try out an innovative approach to resolving some of its challenges with providing care in the community, and partnered with Heim”

Pilot

About Heim

Heim began as a tech-enabled clinical network, designed to deliver near-patient care in the home. Since launching in summer 2023, we have shown our ability to build technology that makes in person clinical care at home efficient and scalable, creating a unique nationwide network of >365 practitioners who have delivered high quality clinical care to >25,000 patients.

These practitioners use Heim's technology to be matched to patients based on skill, proximity and continuity of care. Our companion app helps them navigate to visits, manage tasks, and flag urgent safety concerns. Heim is now focused on bringing its technology to the service of NHS teams, leveraging our routing algorithms and learnings to reduce administrative burden and maximise patient-facing time.

Lewisham and Greenwich context

Lewisham and Greenwich NHS Trust (LGT) is a combined acute and community trust covering central south east London. Like many organisations, LGT is actively seeking ways to increase capacity to support the shift of care into community settings announced in the 10 Year Plan. For the trust, the first step on this journey was to focus on driving insight across its district nursing operations.

By partnering with Heim, LGT leveraged our innovative solutions and data engineering expertise to gain deep insights into how time is used. Together, we worked to establish the baseline of LGT's district nursing activities and understand opportunities for optimisation, cost-saving, and cash-releasing improvements.

Pilot

Aims

01 Map current processes

Understand the current workflows and standards in one of LGT's neighbourhood community teams, including caseload allocation, urgent call-outs, joint visits, predicting demand and capacity, safety, claiming mileage, and planning routes.

02 Identify opportunities for improvement

Identify opportunities to optimise workflows and standards, with the goals of improving patient outcomes and releasing financial resources.

03 Improve data visibility

Improve visibility and better understand patient needs, team activities, and current ways of working.

Pilot

Heim gathered data about how staff spent their time over a four week ‘diagnostic period’, using the Heim Companion App for ambient tracking, in person nurse shadowing, online surveys, and structured staff interviews.

We tracked 17 staff as they visited patients, before carrying out in-depth analysis of this data and running simulations of alternative, optimised workflows - like route planning and staff allocation - using Heim’s own algorithms. We also compared actual visit lengths to predictions made using the trust’s internal demand and capacity prediction tool.

The analysis allowed us to understand the differences between the reality of staff experiences and an optimum scenario enabled by technology. This allows clear and data-informed recommendations for improved practice.

Key findings

“Senior nurses spend as much as 75% of their time on non-patient-facing work ”

Key findings

Workforce strain & capacity

Comunity nurses work incredibly hard - but time pressures contribute to workforce strain

75%

Senior nurses spend as much as **75%** of their time on non-patient-facing work - including caseload allocation, audits and coordination of urgent unplanned visits.

>1.3h

On average, staff spend **>1h20 minutes** travelling **per day**

<4h

Timeliness against the four-hour urgent response standard varies; real-time tools could support consistently meeting targets.

Key findings

Coordination challenges

1h

Joint visits are time consuming due to inconsistent planning and coordination practices, with staff often waiting up to an hour for their second pair of hands.

80%

80% of staff said that figuring out who is nearest to an unplanned callout and geographical grouping of visits were the **biggest challenges** to efficient scheduling.

>2.9h

It took an average of **43 minutes** for duty nurses to work out staff members' location when assigning each urgent call out, with **44%** of duty nurses assigning more than four urgent call-outs per day. This equates to **2 hours and 52 minutes** each day - **35%** of an 8 hour shift.

Key findings

Characterising optimisation opportunities

By using advanced heuristics algorithms, Heim was able to free up significant nursing time to be spent where it's most impactful; at the patient's side.
Three key drivers of optimisation contributed to the findings:

Travel time

Top of license allocation and reduction of administrative workload

Recalibrating the existing clinical capacity planning tool using real geolocation data

The following sections outline the results of our study, grouped into three themed 'challenges'.

Challenge 1

"Community nursing teams are losing valuable patient-facing time because visits aren't planned efficiently"

Challenge 1: Route mapping and caseload allocation

Community nursing teams are losing valuable patient-facing time because visits aren't planned efficiently. On average at Lewisham and Greenwich NHS Trust (LGT), it takes an experienced staff member 3-4 hours to allocate a single day's worth of visits for a team of 17 - that's up to 50% of their working day, every day.

Visits should be assigned using a complex mix of staff location, skills, and clinical constraints; however, EPRs don't give staff visibility over true geographical proximity or day-to-day caseload variations. A multi-objective optimisation problem at such a scale is a computational challenge that requires algorithmic support to balance all constraints effectively. Without dedicated scheduling software, staff often group by postcode as a practical workaround.

The result is a time-consuming allocation process and poorly optimised routes. Daily schedules often involve long and/or zig-zag journeys between patients, with last-minute changes and lack of real-time team visibility of colleagues' locations or traffic conditions. As a result, staff are spending far more time on the road than necessary - at LGT, this worked out as a median of 81 minutes per clinician per day, or 15 days across the team per month.

The below figures visualise how geographical grouping allows the same number of patient visits to be undertaken whilst travelling shorter distances between visits and reducing crossover.

Challenge 1: Route mapping and caseload allocation

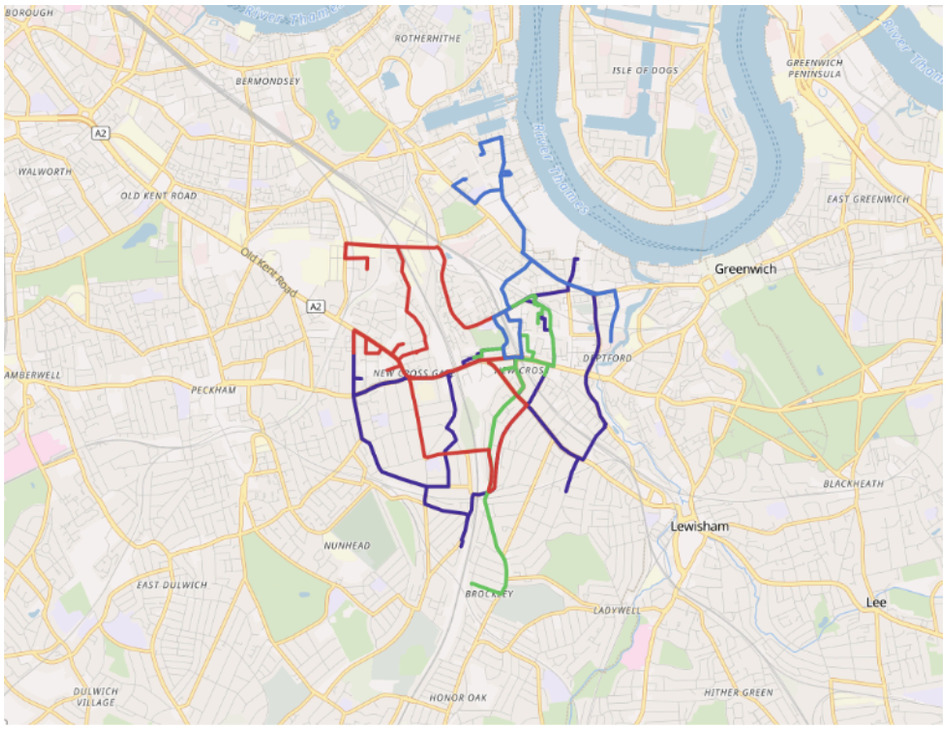


Figure showing non-optimised routing for Band 5 nurses

Figure showing optimised routing for Band 5 nurses using Heim's algorithm

Challenge 1: Route mapping and caseload allocation

Reasons for not assigning patients in a similar location to the same staff member are manifold. They include poor surfacing of all of the information required by the EPR in one area and in a consistent manner - for example, the postcode of the visit, time constraints or expected duration.

This highlights a significant opportunity to optimise visit scheduling according to skill mix and geography.

Current EPR routing functions may not fully account for live traffic or dynamic changes.

One staff member reported a journey taking 25 minutes instead of the EPR-predicted eight - putting them behind schedule for other visits. This experience is common, making accurate planning and coordination for joint visits difficult.

Challenge 1: Route mapping and caseload allocation

Staff voices

Staff surveyed reported the greatest challenges when scheduling visits to be:

- Dealing with unplanned call outs / figuring out who is near to a visit with the right skills (80%)
- Geographical grouping (i.e. which visits are near each other) (80%)
- Poor visibility on patient and visit requirements, e.g. first visit, joint visit, must be done before 11am (70%)

'I went to SE4, SE8, SE13, SE14 and SE15 and I was spending more time driving than seeing patients'

'Sometimes you've got one patient on one side of the road, and another opposite – but are only assigned to one.'

Recommendation 1:

Implement an automated scheduler

Workforce time saving

At LGT, an automated scheduling tool, like Heim Flow, would save approximately 3.5 hours of clinical time each day in visit scheduling alone, alongside more efficient routes. Across a year, this equates to 53 days worth of senior nursing time saved across the team, potentially releasing capacity for an additional 5,618 patient visits per year. With this one swift improvement, LGT would exceed NHS England's mandated 4% productivity uplift (NHS England, 2025) by a factor of four.

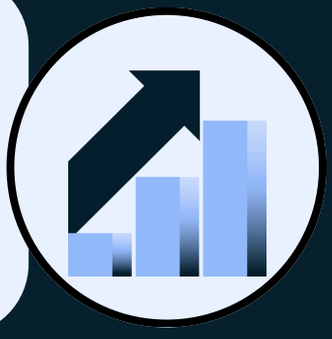
Algorithmic time saving

We took historical data from LGT and ran it through Heim's algorithm to create a simulated, optimised version of the same caseload. Compared to the actual staff routes (based on tracking data), Heim's schedule cut travel significantly:

- 10.7km on the road (-42%)
- 54 minutes driving (-62%)

per day, per staff. **This equates to over 40,000km/year, or 136 days in the car.**

As well as reducing mileage spend, route optimisation supports the NHS's Net Zero initiative, including specific targets for 'sustainable travel strategies' to be introduced at an integrated care board (ICB) level by 2026 (NHS England, 2023).



Challenge 2

"Community nursing staff operate without real-time visibility of colleagues' locations or progress"

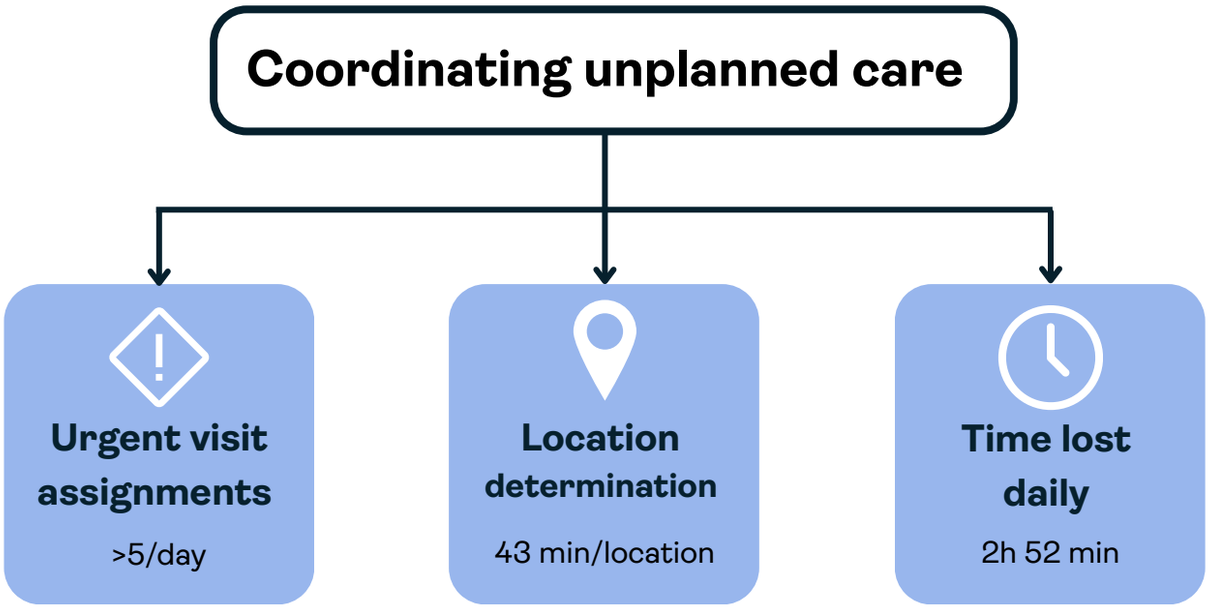
Challenge 2: Lack of real-time geolocation

Unplanned care coordination

The need for unplanned and urgent care in the community is rising. As care moves out of the hospital and into the community, caseloads increasingly represent patients who would have previously been treated in hospital - meaning needs are more complex and often require nurses of a higher band.

Many district nursing teams have a designated Band 6 or 7 ‘duty’ nurse to focus on these patients, and whose role includes coordinating care as well as treating patients.

Heim found that just coordinating joint care was incredibly time-consuming, taking several hours each day across the team.



Challenge 2: Lack of real-time geolocation

Unplanned care coordination

Currently, community nursing staff at LGT don’t have real-time visibility of colleagues' locations or progress, making it difficult to identify nearby available support for urgent tasks. Staff therefore rely on manual processes, including phone calls and ‘best guesses’ about where colleagues might be.

The absence of real-time coordination capabilities creates a cascade of events that directly impact both staff productivity and patient care quality.

Manual coordination processes consume significant administrative time, reduce responsiveness to urgent situations, and limit the ability to optimise resource allocation.

Urgent referrals require verbal relay of information that increases error risk and documentation gaps. When there are difficulties identifying appropriately skilled staff nearby, duty nurses resort to completing visits themselves regardless of complexity.

This pulls them away from other critical responsibilities and prohibits them from working at the top of their licenses.

Challenge 2: Lack of real-time geolocation

Unplanned care coordination

The reliance on verbal communication for sensitive information increases the risk of errors and incomplete documentation, while the inability to track visit completion in real-time undermines real-time decision-making and capacity planning.

Without predictive visibility into staff locations and availability, the service cannot respond proactively to schedule changes or emerging urgent care needs, making it harder to optimise operations and patient flow.

Staff voices

"(It) would be great if the app could pin location – then you wouldn't have to call around and ask who can come. You could just look."

"When you're in the community and get a call-out text, you have to explain it over the phone to someone else because you can't forward it or add it to the schedule."

Challenge 2: Lack of real-time geolocation

Joint visits, where two staff members attend a patient together, are necessary for clinical, mobility, or safety reasons. However, aligning staff schedules can be challenging, due to patient, traffic, or staffing factors. This is especially true for joint visits across more than one team, when the community nursing team must coordinate with other specialist teams such as tissue viability nursing.

Without dedicated scheduling tools, joint visits can create challenges in maximising staff time and minimising delays, often leading to unplanned overtime. Current manual coordination processes add to staff workload and can make it harder to maintain seamless care. A single delay can derail multiple schedules due to the interdependency created by joint visits. This also undermines efforts to deliver geographically optimised or skills-aligned scheduling.

Our live tracking showed nurses waiting up to an hour for their joint visit counterpart, sometimes leaving the patient's home to go to another visit and coming back later. Tracking data shows that this example is typical: on average, staff wait 37 minutes for every joint visit to begin.

Across the average of 5 joint visits per day, empty 'wait time' totals approximately 185 minutes - the equivalent of 7 patient visits every single day.

'To organise joint visits – I can spend over an hour chasing [other staff].'

'You end up having to work after hours just to complete the list.'

Challenge 2: Lack of real-time geolocation

Staff safety

Community staff frequently work alone in patients' homes, during early morning or late evening hours. Existing lone working devices have usability issues, which limited adoption — a challenge seen across many trusts nationally.

Staff highlighted that existing tools do not always fully meet their needs in high-risk situations, and modernised solutions would enhance safety and reassurance.

Staff emphasised that enhanced lone-working solutions could provide greater reassurance, helping to reduce stress and support wellbeing and retention.

Staff voices

"At the moment I walk with keys in my hand, especially on dark evenings in winter."

"We used to have a body camera but it was very noisy and would go off randomly."

Recommendation 2:

Implement real-time tracking & intelligent predictions of staff locations

Through Heim's real-time tracking of staff locations, community nursing teams could rapidly identify appropriately qualified clinicians to carry out urgent referrals, saving 2 hours and 51 minutes of clinical time each day. Additionally, implementing intelligent predictions of staff locations could enable this one community nursing team to save 92 minutes of clinical time per day - felt through halving joint visit waits.

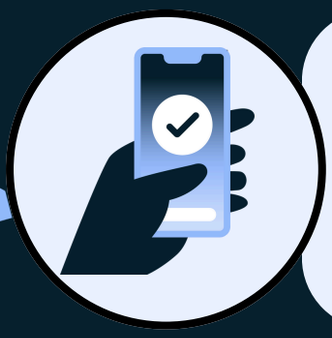
Automated tracking would enable faster assignment and coordination across integrated neighbourhood teams. Currently, audits are conducted monthly to track urgent call-outs and monitor performance against targets. Tracking software could automate this process and provide real-time insights to help maintain and improve performance. Specific recommendations would support LGT to consistently meet these targets, supporting excellent patient outcomes.

Recommendation 2:

Implement real-time tracking & intelligent predictions of staff locations

Safety benefits

As with many community nursing teams, lone working tools and practices - like body cameras, personal alarms and other recording devices - are outdated and no longer suit the realities of community nursing.



Live geolocation tracking, used in conjunction with other existing procured safety systems, would bring lone-working practice in district nursing into the 21st century. The tool should include:

01 Visibility of, and connection with, members of field staff at all times during their shift

02 In-built safety features, including discreet alerts to be used in the event of an issue

03 The ability to automate safety audits and identify high-risk hotspots to allow for safer rota design.

Challenge 3

“There is a huge gap between estimated capacity and actual capacity in district nursing ”

Challenge 3: Forecasting demand and capacity

Existing demand and capacity tools lack the real-world evidence to keep up with a community nursing caseload, roster and skill mix that changes hour-to-hour.

Every team and every neighbourhood is different; whilst one may have a demographic of younger patients struggling with severe mental illness and unable to self-administer insulin, a neighbouring district may have fewer visits with frail, multimorbid patients requiring multiple interventions per day.

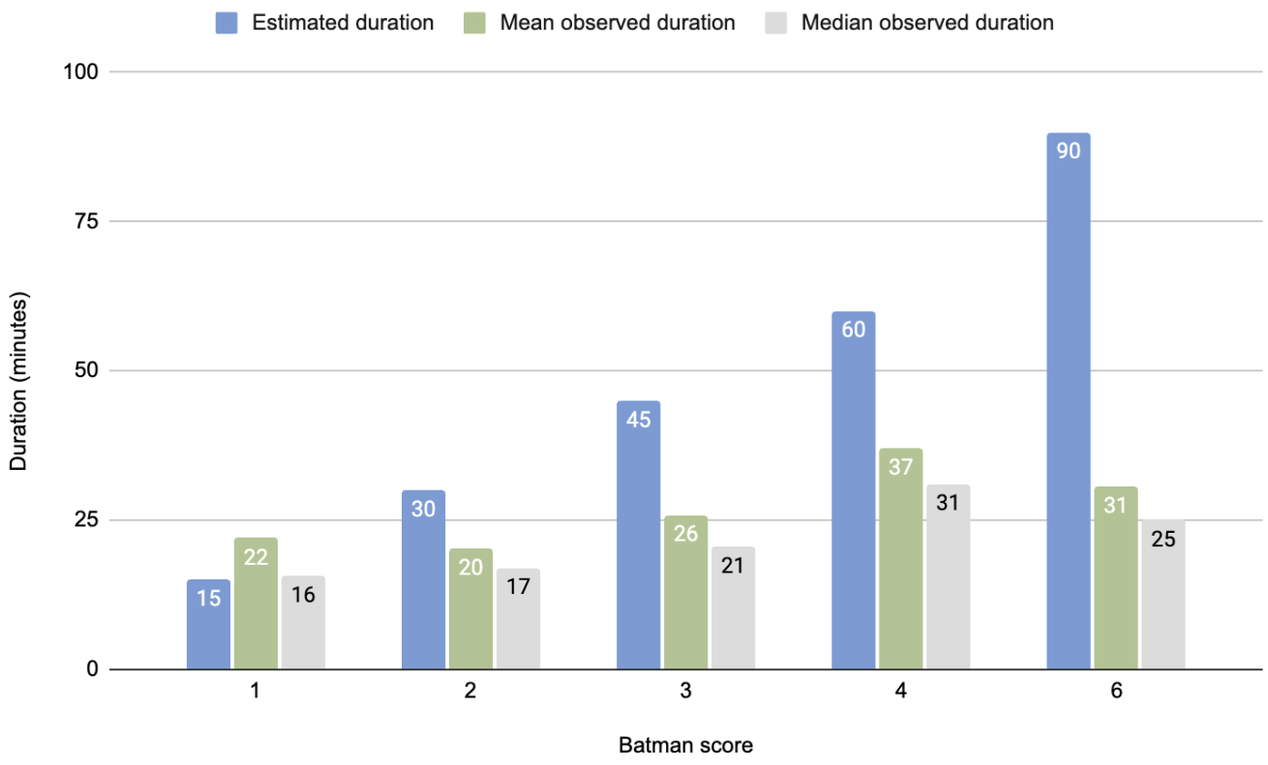


Figure 17: Graph to show difference between estimated vs observed duration of visits

Challenge 3: Forecasting demand and capacity

Lewisham and Greenwich Trust's (LGT) community nursing service uses an internal demand and capacity tool to estimate duration of tasks and allow them to plan visits. Staff are asked to update the appointment notes to reflect the actual duration of the task after each visit, so that future visits can be planned accordingly.

However, Heim's analysis indicated a difference between estimated and observed visit durations, reflecting the difficulty of capturing real-time data in busy services. The knock on effect is artificially restricted capacity for clinical care, and a suggestion that this time is used elsewhere, such as in administrative tasks or on the road. If demand and capacity tooling was automated, the trust could not only better understand their caseload, but also plan it more efficiently to maximise patient-facing care.

Estimated duration	Median observed duration	% difference
15	16	+1%
30	17	-43%
45	21	-53%
60	31	-48%
90	25	-73%

Table 5: To show difference in estimated vs observed duration of visits by task

Recommendation 3:

Automate prediction of task duration

We recommend ambient live location sharing of staff to automate check in and check out at each patient visit. This will allow oversight of how time is being spent in the field - a basic metric for effective care planning - without burdensome administrative audits for nursing staff.

For example, insulin visit durations were overestimated by 50% at LGT during this study. Re-rating just these tasks would reduce the forecast of time spent with patients by approximately 630 minutes per day across the team. By ensuring demand and capacity forecasts are grounded in real-world data, community nurses can use this time more effectively, contributing to the 5,196 additional patient hours available for direct care, admission avoidance, and easing pressure on hospital services.

Implementing software for scheduling automation can also provide the foundation upon which to deploy demand and capacity forecasting tools which could support workforce and capacity planning.

If used across multiple teams, such as district nursing and urgent care response, an automated demand tracker could give real-time updates on illness burden and patient demand, and identify patterns of patient and organisational behaviours.

Summary of recommendations

This study by healthtech innovators Heim, conducted in partnership with Lewisham and Greenwich NHS Trust (LGT), has uncovered where the right technology can propel community nursing into the future.

Technology is a significant enabler of more efficient processes, and deploying solutions that automatically plan routes, provide visibility of staff on shift, and more effectively predict capacity could have a huge impact on the efficiency and effectiveness of community teams, as well as protect against morale damage.

When we simulated alternative scenarios using Heim's tools in place of existing manual processes, enabling more proactive care in the community, reducing deterioration and preventing unnecessary acute admissions.

If realised across the NHS - where community teams face similar challenges to those experiences at LGT - this increased capacity could see more patients being treated in the community every year, supporting this long-held policy ambition.

Game-Changing Solutions

Heim's proprietary algorithms and real-time tracking technology demonstrated transformative results:

Smart allocation saves **3.5 hours** of clinical time daily, creating capacity for **5,618** additional patient visits annually – exceeding NHS England's 4% productivity target in one action

Heim's intelligent routing cuts travel time and mileage by at least **42%,** saving over **40,000km** annually in a team of 100, while supporting NHS Net Zero goals.

Live location tracking halves the **3 hours** wasted daily coordinating urgent care, while providing comprehensive lone worker protection that 100% of staff demanded.

Altogether, tech used to automate demand forecasting releases **74 hours** per week for enhanced patient care by accurately predicting visit durations.

Summary of recommendations

These findings provide a roadmap for sustainable, technology-enabled healthcare delivery that will allow the safe transition of care from traditional hospital settings into the community as a matter of routine.

These tools will be a key enabler for achieving the ambitions of the NHS's 10 Year Plan and for sustainably meeting rising demand.

With the right technology, community nursing teams can reclaim nearly a fifth of their working time for what matters most: caring for patients.

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Appendix available on the digital copy at https://www.heim.health

Get in touch

Dr Elle Clarke, Medical Director
elle.clarke@heim.health

Kelly Klifa, CEO
kelly.klifa@heim.health

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