



# Magic Notes

Validation report



# Working in collaboration with



Kent County Council oversees social care and health across Kent. The council conducts care needs assessments (CNAs) and occupational therapy assessments to determine the level of support individuals require to maintain their independence, ensure their safety, and improve their quality of life within the community.



Beam build Artificial Intelligence (AI) tools, such as Magic Notes, with the aim of transforming frontline staff productivity and quality of care, increasing access to human-centred welfare services.



# Contents

<b>Executive summary</b> .....	<b>4</b>
<b>1. Introduction</b> .....	<b>5</b>
1.1. Context and background.....	5
1.2. Magic Notes.....	5
1.3. Purpose of the document.....	7
<b>2. Evaluation summary</b> .....	<b>7</b>
2.1. Implementation setting.....	7
2.2. Evaluation questions and domains.....	8
2.3. Data collection .....	9
<b>3. Validation methodology</b> .....	<b>10</b>
3.1. Validation approach.....	10
3.2. Validation methodology .....	11
<b>4. Validation of evidence</b> .....	<b>12</b>
4.1. Methodology validation.....	12
4.2. Effectiveness .....	13
4.3. Acceptability.....	17
4.4. Evidence standards framework for digital health technologies .....	24
<b>5. Limitations</b> .....	<b>25</b>
<b>6. Recommendations</b> .....	<b>26</b>
<b>7. Conclusion</b> .....	<b>28</b>
<b>8. References</b> .....	<b>29</b>
<b>9. Appendices</b> .....	<b>31</b>
9.1. Appendix A: Logic model output.....	31



# Executive summary

## Context

Research indicates that social care staff spend over 50% of their time on case recording, paperwork, documentation, IT tasks, and meetings (Burbidge, 2022), which limits the time dedicated to interactions with clients (people that draw on care and support; Samuel, 2022).

Magic Notes is a generative AI tool for recording, transcribing, and summarising discussions. Beam explored the potential for Magic Notes to deliver benefits to social care workers in Kent County Council. Unity Insights were commissioned by Beam to validate their findings as an independent evaluator.

## Validation of evidence

### Efficiency

Beam's evaluation confirmed that Magic Notes reduced administrative time and improved work quality, with minor inaccuracies in analysis not affecting the overall findings.

### Acceptability

Beam's evaluation suggested that Magic Notes improved the quality of conversations and written documentation, although further analysis is needed to better understand staff and client perceptions.

### NICE Evidence Standards Framework for Digital Health Technologies (ESF for DHTs)

The evaluation provided evidence to support standards 15 and 16 of the NICE Evidence

Standards Framework for Digital Health Technologies, showing Magic Notes delivered real-world benefits through user acceptability, time savings, and usage data. Broader replication in other areas is required to strengthen the evidence base to ensure the standards are completely fulfilled.

## Recommendations

- To produce more robust, role-specific data on time savings, conduct a time-and-motion study and include statistical testing for validity.
- To enhance survey analysis, incorporate PDQI-9 measures, statistical testing, and thematic analysis, while capturing demographic and accessibility data.
- To explore non-engagement and inform future implementation strategies and increase adoption, collect feedback from people who draw on care and support and staff who opted out of using Magic Notes.

## Conclusion

Analysis conducted by Beam correctly identified that Magic Notes reduced the administrative burden on staff, improving workflow efficiency and documentation quality. Looking ahead, future evaluations should increase the accuracy of data collection methods and analysis and incorporate client perspectives and demographic details to improve quality of analytical insights.



# 1. Introduction

## 1.1. Context and background

### Pathway

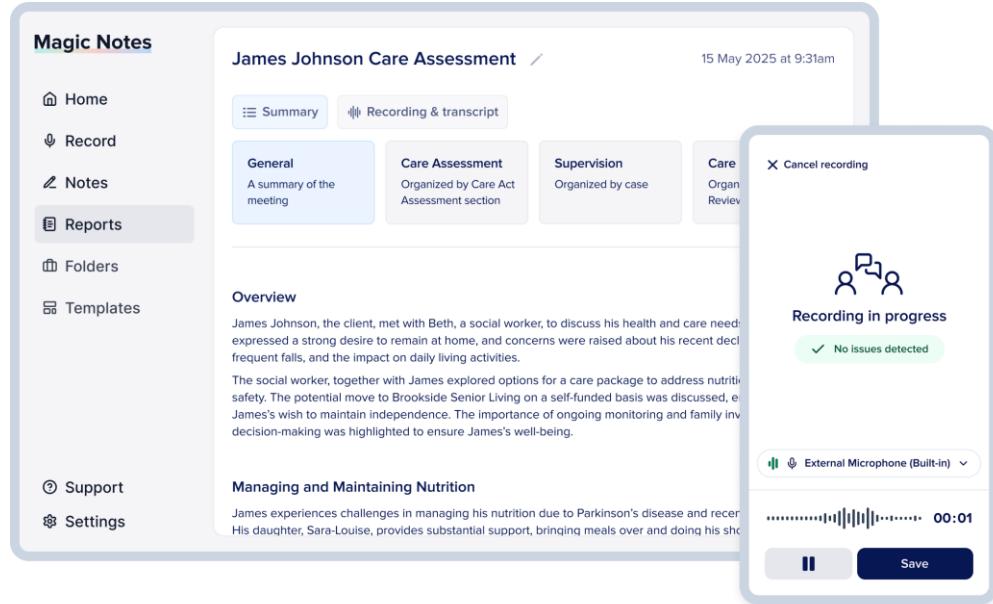
Adult social care practice in the UK aims to identify people's needs and prescribe care solutions that will then meet those needs. People working in social care are organised into multi-disciplinary teams (MDTs) that will typically include social care workers, occupational therapists, and clinical psychiatrists. Each profession is itself governed by a code of practice that defines standards that its members are required to meet during the course of their daily work. People that draw on care and support (clients) within the social care pathway will typically begin with a referral that triggers an initial meeting between themselves (and their carers) and a social care team member. The social care team member will then produce an assessment of the person's needs and a recommendation of how they may be met. Once the care package is approved by social care team management, its fitness for purpose will then be subject to periodic reviews with the person. Effective engagement with people that draw on care and support is key to ensuring that their needs are understood and supported. Meetings with people that draw on care and support are conducted either face-to-face or online with social care workers making notes of the contents of interactions to support writing their assessment reports.

### The problem

Social care workers spend a significant portion of their time on administrative tasks. Research indicates that they spend over 50% of their time on case recording, paperwork, documentation, IT tasks, and meetings (Burbidge, 2022). This administrative burden often limits the time they can dedicate to direct interactions with people that draw on care and support, which is a key aspect of their role and results in working beyond contracted hours (Samuel, 2022) and lower quality of staff-client interactions. Efforts to streamline these processes through more efficient systems could potentially double the time they spend with people that draw on care and support (Preston, 2022).

## 1.2. Magic Notes

Powered by Beam, Magic Notes is a web-based generative AI tool for recording, transcribing, and summarising discussions (Figure 1).



**Figure 1: Magic Notes platform visual.**

Recordings are uploaded as they are being recorded (every 10 seconds) and there is a four-hour recording limit. The recording is transcribed using Deepgram1 (a speech recognition platform that uses deep learning to transcribe and analyse audio recordings), which was adopted in mid-May 2025 because of its fast transcription times and better accuracy. The transcription is summarised by appending a template prompt and sending it to a language model (OpenAI) hosted on Microsoft infrastructure within the EU.

Magic Notes is designed to enhance the productivity of social care staff by automating the process of creating detailed assessments from recorded sessions. By recording their meetings, social care staff can receive comprehensive summaries and transcripts, significantly reducing the time spent on administrative tasks. This allows them to focus more on client interactions and less on paperwork, ultimately improving the quality of care provided. The time saved could also enable staff to see more people that draw on care and support within the same timeframe.

Routine data collection by Beam indicated that Magic Notes can:

- Save time
- Improve the quality of conversation and the quality of notes
- Ensure reports are delivered in a timelier manner.



## 1.3. Purpose of the document

Unity Insights were commissioned by Beam to conduct an independent validation of the roll-out of the solution within Kent County Council's social care setting. This validation report seeks to review the approach, analysis, and reporting of the evaluation conducted by Beam.

# 2. Evaluation summary

## 2.1. Implementation setting

The Kent County Council Adult Social Care team implemented Magic Notes within Adult Social Care Community Teams, which consisted of 29 staff members opting in to use Magic Notes, between 5<sup>th</sup> May 2025 and 27<sup>th</sup> June 2025. This period was named the '*test and learn pilot*'.

Staff members in the Adult Social Care Community Team were invited to use Magic Notes during the test and learn pilot. Training was delivered in person or virtually for staff who accepted the invitation, where staff could begin using Magic Notes for the first time at any stage of the pilot.

The main use cases for implementation within Kent County Council was across two assessments, summarised in Table 1. Staff could also use Magic Notes for '*general use*' tasks, such as taking meeting notes or case notes.

**Table 1: Test and learn pilot use cases for Magic Notes.**

Use case	Conducting staff member	Details
Care needs assessment (CNA)	Social care staff and social care officers	A care needs assessment is a process that evaluates an individual's care requirements to determine the types of services and support they may need.
Occupational therapy assessment	Occupational therapists and occupational therapy assistants	An occupational therapist assessment is a process used to evaluate an individual's ability to perform daily activities and identify areas where they may need support.



Templates were built by Beam to allow staff members to take notes through Magic Notes. Staff would select a template that suits their needs and start the recording. Four templates were used during the pilot period:

- CNA template
- Occupational therapist assessment template
- General use template
- Case notes template
  - This template was added towards the end of the pilot; before this, staff were using the general use template for case notes.

At the end of the conversation or meeting, the staff member would stop the recording, and the template would be completed using the information gathered in the recording, creating a report highlighting only the relevant information needed for the assessment selected. The staff member could then review and edit the information. Assessment reports were also sent to supervisor staff for editing and reviewing before being finalised and copied and pasted into Mosaic (a case management system for adult and children's services).

Staff were able to use Magic Notes on an '*opt-in*' basis, however not all staff used Magic Notes straight away, primarily due to technical issues with telephones. Over the eight-week pilot, 29 staff members used Magic Notes across four teams: community ( $n = 16$ ), occupational therapy ( $n = 10$ ), short-term pathways ( $n = 2$ ), and sensory ( $n = 1$ ).

In the current evaluation, Magic Notes was made available to social care under a pilot arrangement for use in meetings with people that draw on care and support. The aim was to explore the potential for Magic Notes to deliver benefits to social care workers, for example, by shortening the time that it would take them to file case notes after each client meeting.

## 2.2. Evaluation questions and domains

A logic model workshop was completed by Unity Insights at the start of the evaluation to identify impacts, outcomes, and metrics for measurement. The outcome of the logic model can be found in 'Appendix A: Logic model output' and was used to create the evaluation questions. As per the scope of the evaluation that was being validated by Unity Insights, the following questions were reviewed, with evidence provided by Magic Notes through implementation across the Kent County Council pilot examined:

- 1) Effectiveness
  - a) Does the introduction of Magic notes reduce the administrative time burden on the workforce?
  - b) Is there an improvement in adherence to best practices and quality of written work?



## 2) Acceptability

- a)** How do practitioners perceive Magic Notes, in terms of usability and effectiveness?
- b)** How has Magic Notes impacted practitioner wellbeing?

## Out of scope domains

The following domains were considered to be out of scope for the evaluation and validation process:

- Safety
- Accuracy
- Implementation
- Scale
- Value
- Health inequalities
- Environmental sustainability

## 2.3. Data collection

Data was captured and analysed by Beam throughout the pilot using a mixed-methods approach (quantitative and qualitative methods) across the range of users in social care roles.

### Quantitative insights

Usage data was collected by Beam through the Magic Notes system between 5<sup>th</sup> May 2025 and 27<sup>th</sup> June 2025 and analysed by Beam to obtain metrics such as the total number of recordings each week. Data was cleaned by sense checking that values were logical and analysed by frequency distributions.

### Qualitative insights

#### **Staff surveys**

Pre- and post-implementation staff surveys were created to assess the impact of Magic Notes through free-text and Likert scale questions. Surveys covered themes such as time savings, submission speed, conversation quality, detail captured within notes, ease of use, and the personal impact on staff and people that draw on care and support. It was assumed that staff consented to the survey by actively choosing to participate in the survey. The pre-implementation survey was distributed to 29 staff members via email with a link to the Microsoft Forms survey to collect



baseline survey data between 30<sup>th</sup> April 2025 and 9<sup>th</sup> July 2025. Overall, 26 staff members responded and Beam analysed Likert scale data by frequency distributions.

Beam cleaned the survey data through ensuring numerical outputs (such as estimations of time savings) aligned with feedback comments. For example, if a comment noted time was saved, but numbers show an increase in time when using Magic Notes, Beam would clarify the finding with the practitioner. Some data points needed to be translated to consistent metrics throughout responses, such as ensuring all data points were set to 'days' (one working day was assumed to be equivalent to 8 hours) or 'hours'.

The post-implementation survey was distributed to 29 staff members (who all used Magic Notes) as above to collect post-implementation data between 25<sup>th</sup> June 2025 and 9<sup>th</sup> July 2025. The number of responses was slightly lower compared to the pre-implementation survey ( $n = 18$ ). As with the pre-implementation survey, Beam analysed Likert scale data through frequency distributions.

### **Staff working group**

Feedback was also collected regularly through fortnightly staff working groups held between 2<sup>nd</sup> April 2025 and 9<sup>th</sup> July 2025, offering an open discussion to raise complication, learnings, and thoughts regarding the test and learn pilot. No set questions were asked within the working group, however there was a set agenda covering items such as feedback, updates from Beam and any emerging risks.

An average of 21 staff attended each session, where all 29 staff were expected to attend. An additional 13 staff members with relevant experience and associated divisions were also expected to attend, resulting in the total number of expected attendees to be 43 staff members. Data was collected within the staff working groups via note taking and use of Microsoft Copilot. No analysis was conducted on the staff working group notes. Instead, quotes were identified and used to build on other findings.

## **3. Validation methodology**

### **3.1. Validation approach**

Unity Insights operated as the independent validator of the evidence and evaluation work conducted by Beam, who were the creator of Magic Notes. The approach taken to the validation leveraged Unity Insights' experience as an independent evaluator that has conducted 1,000s of evaluation, research, and analytical projects with private organisations (innovators), NHS providers (PCNs, trusts, ICBs, and arms-length bodies such as Health Innovation Networks), social care



providers (county councils), funders (SBRI Healthcare and NIHR) and academic partners across a range of clinical pathways.

The NICE ESF was also leveraged, which informs the evaluation of digital health technologies (DHTs) for use in the NHS and social care system (National Institute for Health and Care Excellence, 2023). There are 21 standards arranged in five groups, where each standard is relevant for certain DHTs. Magic Notes is a Tier A technology, as its purpose is to release staff time and yields no direct care recipient (people who draw on care and support) benefit, or health and care outcomes.

Based on the evaluation scope, the standards examined were refined to the following list:

- **Standard 2 [design factors]:** *Incorporate intended user group acceptability in the design of the DHT.*
- **Standard 15 [demonstrating performance]:** *Show real-world evidence that the claimed benefits can be realised in practice.*
- **Standard 16 [demonstrating performance]:** *The company and evaluator should agree a plan for measuring usage and changes in the DHT's performance over time.*
- **Standard 20 [deployment considerations]:** *Describe strategies for communication, consent and training processes to allow the DHT to be understood by end users.*

The insights gathered from Beam was analysed against the above standards to determine the level and quality of evidence in fulfilling each standard.

## 3.2. Validation methodology

Beam provided Unity Insights with an analysis document containing hardcoded tables. Analysis, including formulae, was provided below the tables to show working by Beam. Unity Insights sense-checked the working provided through assessing whether the analysis was conducted correctly (including error checking and assessing whether the methods used were the most appropriate).

A report was also provided by Beam to Unity Insights, which highlighted the findings and interpretation of the analysis. Unity Insights checked the interpretation of the results in relation to the evaluation questions and explored whether the analysis fully and accurately answered each evaluation question.

The current document highlights the findings of the validation assessment conducted by Unity Insights on the work provided by Beam to assess whether Beam successfully answered the evaluation questions proposed. Unity Insights also assessed the extent to which Magic Notes satisfied standards within the NICE ESF for DHTs. From this, recommendations were suggested to improve the quality of future analytical findings.



# 4. Validation of evidence

## 4.1. Methodology validation

### Usage data

Usage data identified the number of users, number of recordings, and the duration of recordings. Metrics collected within the usage data were key in understanding whether staff were using Magic Notes. The correct methods of analysis were used, however there were some errors produced when performing the analysis. Statistical testing was not conducted on the usage data, representing a limitation of the analysis by preventing understanding of whether observed patterns or differences were statistically significant or attributable to random variation. To improve the analysis, statistical testing could be conducted to understand whether there were significant differences in the number of recordings or hours of recordings within each team, accounting for sample size. Identifying the total number of recordings and hours of recordings staff completed, whether using Magic Notes or not, would also provide a comparator to understand how often Magic Notes is used relative to current methods.

### Survey

There were 29 users of Magic Notes overall and the survey response rate was 90% ( $n = 26$ ) for the baseline survey and 72% ( $n = 21$ ) for the follow-up survey. Both surveys were completed by over half of Magic Notes users, suggesting that the survey was likely representative of the wider user population. Despite this, demographic data (such as whether staff had a disability or health condition) was unable to be collected so it is unknown whether the survey samples were an accurate representation of the wider population of Magic Notes users. Caution should also be taken when applying findings from the current evaluation to other cohorts; the samples may differ in terms of demographics and use cases.

The pre-implementation survey was completed between 30<sup>th</sup> April 2025 and 9<sup>th</sup> July 2025, whereas the post-implementation survey was completed between 25<sup>th</sup> June 2025 and 9<sup>th</sup> July 2025. It should be noted that there was overlap between the two surveys, therefore there is a possibility that some staff may have provided responses to the pre-implementation survey that were related to the post-implementation period and vice versa. This could lead to inaccuracies in the data.

As with the usage data, no statistical testing was conducted for the survey data. Incorporating statistical testing into survey analysis data would have allowed insight into whether differences in responses before and after Magic Notes implementation were statistically significant or due to chance.

Free-text responses were not analysed through thematic or sentiment analysis. Doing so would have provided a quantitative outlook on whether staff members had similar experiences and hence added further depth to the analysis provided. Despite this, free-text responses were still useful in



contributing to the evidence base set out by quantitative analysis. Future analysis should incorporate thematic and sentiment analysis to provide greater insight.

## Staff working group

Data was collected from staff working groups through meeting notes and transcriptions generated using Microsoft Copilot. Representative quotes were extracted to illustrate key aspects of the staff experience. While this approach captured valuable insights into staff perceptions, the absence of a formal thematic and sentiment analysis limited the analytical depth of the findings. Such analyses would have enabled systematic categorisation of the data into recurring themes and emotional tones, allowing for a more comprehensive understanding of staff sentiment. Additionally, reliance on manual note-taking and selective quoting introduced potential bias, as the interpretation and selection of quotes were subject to individual discretion. Thematic and sentiment analyses would have mitigated this by applying consistent criteria across the dataset, allowing for quantification of theme frequency and enhancing the robustness of the conclusions drawn.

## 4.2. Effectiveness

This section aims to validate Beam's answer to the following evaluation questions:

- a)** Does the introduction of Magic notes reduce the administrative time burden on the workforce?
- b)** Is there an improvement in adherence to best practices and quality of written work?

Headings throughout this section depict the interpretation from Beam based on their evaluation findings.

Overall, Beam was able to sufficiently answer both evaluation questions. Magic Notes did reduce the administrative time burden on the workforce and there was an improvement in quality and timeliness of work delivery. Although minor methodological limitations were identified in the analysis, when robustness was increased, the overall interpretation remained the same. To identify staff time savings with greater accuracy, a time-and-motion study is suggested. Improvements in quality of work due to Magic Notes were also identified by staff. Beam should continue to build the evidence base for the effectiveness of Magic Notes by replicating the evaluation within new implementation areas in social care to determine whether the same findings could be produced.

### **Magic Notes saved time for practitioners across all teams**

Time savings to complete tasks when using Magic Notes were identified through staff surveys. This identified the perceived time saving of staff, which was different to the actual time saving of staff. A more precise method for capturing time savings would have been through a time-and-motion study; however, this was not feasible within the scope of this evaluation. Therefore, collecting staff perceptions of time savings was the most suitable method of data collection. Future evaluations should conduct a time-and-motion study to increase the accuracy of data collected.



## ***Admin time savings***

One staff member noted: “*Magic Notes has helped me reduce my admin time significantly*”. Staff surveys suggested that Magic Notes yielded an average time saving of 7.2 hours per week when completing written admin and documentation. This figure was based on a blended average of time reported by all staff who responded to the survey pre- (20.4 hours) and post-implementation (13.2 hours), including those who only completed one of the two surveys. A more robust calculation, using data only from those who responded to both surveys, resulted in a time saving of 6.8 hours. Despite this adjustment, both figures (7.2 hours and 6.8 hours) are similar, therefore do not take away from the overall findings: Magic Notes reduced the administrative time burden for staff.

The percentage reduction in staff time spent completing written admin and documentation in an average week (a 41% reduction) was calculated by identifying the percentage difference for each user with and without Magic Notes and averaging across all users. Although this method was correct, results from two staff members that provided no response to the second survey were included in the average. A more conservative calculation including only responses from staff who responded to both surveys identified a lower percentage reduction in staff time spent completing written admin and documentation was identified: a 35% reduction. Despite this, the overall finding remains the same as Magic Notes did reduce administrative time for staff members.

The written admin and documentation survey question ‘*how much time do you spend on written admin and documentation in an average week*’ was intended to include time taken to complete CNAs and occupational therapy assessments, however the question could also be interpreted as the time spent on other admin tasks. Therefore, the wording of the question is subject to interpretation from the respondent.

One limitation of the above analysis involved some staff reporting no change in the time taken when using Magic Notes, however also reporting that Magic Notes saved them time. Further, some staff reported very large variation in time spent completing admin tasks (12 hours before; 0.5 hours after). Beam have asked the respective staff to clarify their answer, however at the time the report was published, not all responses were able to be corrected. This could impact the findings slightly.

## ***Occupational therapy assessment and care needs assessment time savings***

The above findings also apply for time savings identified when writing up CNAs and occupational therapy assessments, where a time saving of 2.7 hours (a 48% reduction) was suggested, however a time saving of 2.8 hours (a 48% reduction) was identified with more precise methodology. Despite minor methodological limitations, it can be concluded that Magic Notes yielded a reduction in the time spent writing CNAs and occupational therapy assessments. To improve the analysis further, understanding the breakdown by staff role and team could help evidence whether certain groups yielded a greater benefit over others. This insight could inform targeted implementation strategies, ensuring that the distribution strategy of Magic Notes is optimised to maximise impact.



## Staff were able to submit their work over three days sooner

Staff were also asked, “*How many days after meeting a resident are you able to submit your record of the assessment or meeting?*” The average reduction was calculated in the same way as the above survey questions, where the average reduction was suggested to be 3.5 days (robust value: 2.0 days). It was also noted that before using Magic Notes, three staff reported their submission time was usually two or more weeks after meeting a person that draws on care and support. When using Magic Notes, the longest reported submission time reduced to two days. This highlights that Magic Notes allowed reports to be submitted over two days earlier on average and with less variation in time to submission, suggesting the solution was effective in yielding efficient work submissions.

## The general summary was used broadly, and resulted in further time savings outside of assessments

Staff used the general meeting template for various uses, from reviews (25%;  $n = 5$ ) to team meetings (5%;  $n = 1$ ) and case notes (10%;  $n = 2$ ). The average reported time saving when using the general summary was 1.9 hours. Towards the end of the pilot, a new template was created for case notes (where nine recordings were logged) so the general meeting template did not have to be used for this. Beam noted that the amount of time saved on case notes (20 to 30 minutes) was lower than the reported average for the general summary (1.9 hours), however case notes were taken more frequently ( $n = 11$ ) compared to other general tasks. This implies that case notes did not take as long as other tasks where Magic Notes could be used, hence had a lower time saving compared to reviews or team meeting task recordings for example. The 20-to-30-minute time saving was noted by Beam to be a general observation from their understanding of practice and anecdotal staff feedback that case notes were made more regularly than whole assessments. This means that the finding could have been prone to bias. Future analysis should incorporate the time saved on case notes into a time-and-motion study (or staff surveys if more feasible) to ensure greater accuracy of findings.

A quote from one staff member further contributed to the evidence base gathered of using Magic Notes for case notes: “*Magic Notes have saved so much time when typing case notes, assessments, mental capacity assessments. PLEASE DO NOT TAKE IT AWAY! :)[sic]*”. This highlights the benefits of Magic Notes beyond CNAs and OTs; staff use Magic Notes for different uses where they see fit.

Staff provided free-text responses to the question “*When using Magic Notes outside of OT and Care Needs Assessments (i.e. using the General Summary), how much time, if any, do you feel you saved per use?*”, which resulted in an average time saving of 1.9 hours. The free-text nature of the responses meant that some staff did not respond with a numerical figure, hence their data was excluded from the analysis (for example, responding with “*It has halved my time*”). Most of the free-text responses were able to be accurately converted into an overall numerical figure that could be used to calculate the average. One free-text response noted “*At least an hour*”, which was converted into 1.2 hours. This data point may lack accuracy due to the ambiguity of the response. If this response was removed from the analysis, the average time saving overall would have



remained the same at 1.9 hours. Overall, the analysis did conclude that Magic Notes yielded time savings when creating general summaries.

## **Magic Notes enabled practitioners to have higher quality conversations with people that draw on care and support**

Without using Magic Notes, staff rated the quality of their conversations with people who draw on care and support at 6.8 out of 10. When using Magic Notes, staff rated the quality of their conversations with people who draw on care and support higher at 9.1 out of 10. Based on this evidence, Beam suggested that Magic Notes enabled practitioners to have higher quality conversations with people who draw on care and support. This claim was further strengthened by free-text staff responses, where staff appreciated the ability to connect, engage, and have client-centred conversations due to not relying on manual notes. Despite this, the number of positive comments related to this was not stated, therefore the extent to which this was apparent for staff was unknown. Future analyses should include thematic analysis and sentiment analysis to assign relevant themes and sentiments to free-text responses. This would quantify the free-text responses to allow insight regarding how many staff shared a similar experience.

***“Magic Notes has also improved the quality of my assessment as I have been able to converse with the client more effectively and the information that has been taken for the assessment has been a lot more detailed than I would have been able to record”***

- Occupational therapist survey respondent

It is important to note that the current evaluation did not explicitly examine the impact of Magic Notes from the perspective of people that draw on care and support. As a result, the perceived quality of conversations from client viewpoints could not be assessed. While staff were able to evaluate whether they had quality interactions that yielded sufficient information for their assessments, it remains unclear whether people who draw on care and support felt they were able to share all the information they wished to convey. It should be noted that one staff member recalled: *“Clients that have received a copy of their assessment feel that the assessment is accurate and detailed”*, suggesting client feedback is likely positive. Future evaluations should incorporate the client perspective to more comprehensively assess the effectiveness of Magic Notes in supporting meaningful and informative conversations.



## **Magic Notes increased the level of details captured and supported high quality written documentation**

Staff surveys included the question: “*How well are you able to capture the details of your conversations or assessments?*”. Responses were collected both before and after the implementation of Magic Notes. Prior to implementation, staff reported an average rating of 6.2 out of 10. Following implementation, this increased to an average of 8.7 out of 10, indicating a notable improvement in the ability of staff to document conversations and assessments. This suggests that Magic Notes contributed to enhancing the detail and quality of written records. Additionally, many practitioners reported that Magic Notes enabled them to capture more detail than they could manually. Despite this, the number of staff who provided this feedback was not recorded, limiting insight into how widespread this perception was.

### **4.3. Acceptability**

This section aims to validate Beam’s answer to the following evaluation questions:

- a)** How do practitioners perceive Magic Notes, in terms of usability and effectiveness?
- b)** How has Magic Notes impacted practitioner wellbeing?

Headings throughout this section depict the interpretation from Beam based on their evaluation findings.

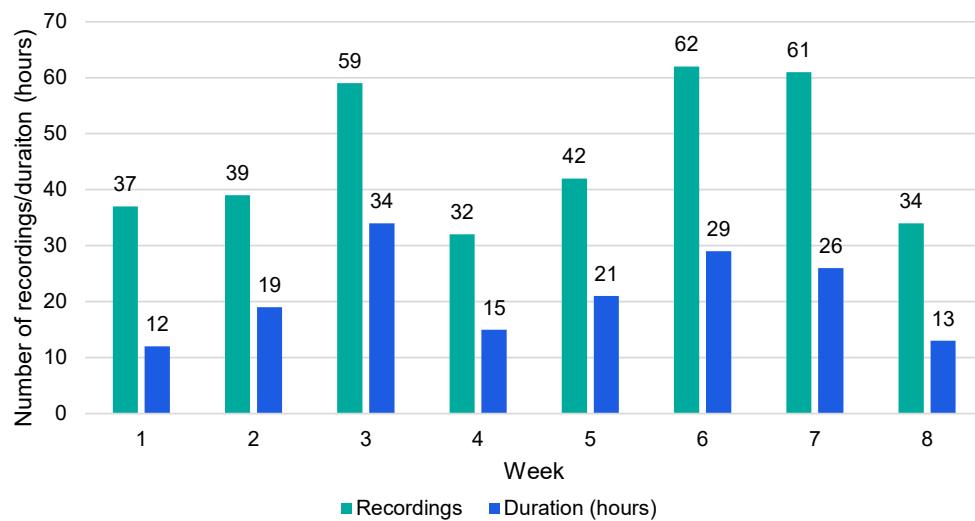
Overall, Beam was able to sufficiently answer both evaluation questions. To improve the analysis, Beam should analyse free-text survey and working group responses through thematic and sentiment analysis. Identifying themes in staff responses would identify the number of staff who noted the same theme to be identified and compared against the total number of staff. This would add further depth and understanding to the evaluation, ensuring an accurate reflection of the conversations within working groups. Beam should continue to build the evidence base for the acceptability of Magic Notes by replicating the proposed methodology within new implementation areas to determine whether the same findings could be produced.

### **Magic Notes was used 366 times during the test and learn testing period**

Across the implementation period from 5<sup>th</sup> May 2025 and 27<sup>th</sup> June 2025, 366 recordings (169 hours worth of recordings) were made. General meeting templates had the greatest number of recordings ( $n = 171$ ), followed by occupational therapy assessments ( $n = 128$ ) and CNAs ( $n = 58$ ). Case notes had the least number of recordings ( $n = 9$ ). This suggests Magic Notes was actively being used by staff, suggesting staff accepted Magic Notes as a solution. One way to improve the analysis further would be to compare the number of general meetings, occupational therapy assessments, CNAs, and case notes recorded that did not use Magic Notes to understand whether staff were using Magic Notes for the majority of their sessions.



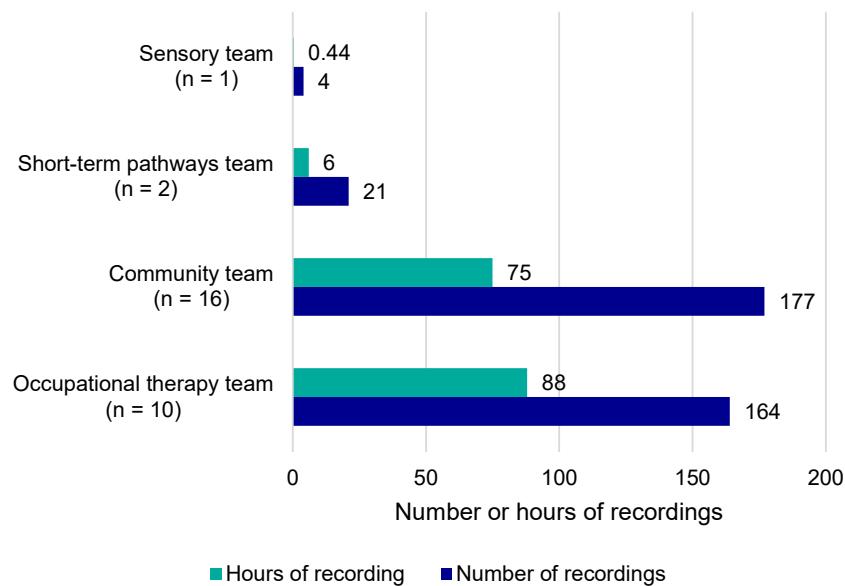
Beam examined the number of recordings and the duration of recordings by week between 5<sup>th</sup> May 2025 and 27<sup>th</sup> June 2025. Weeks 1 to 3 showed an increase in usage for the number of recordings and duration (Figure 2). Weeks 4 to 5 showed a decrease in usage, which Beam noted to be due to half term. Following the half term period, usage started to return to previous levels in week 6 onwards, with a slight dip in duration of recordings towards the end of the period in week 8 due to a significant amount of annual leave taken (however the number of staff members taking annual leave was unknown). The consistent usage of Magic Notes across the implementation period suggests that staff began to use Magic Notes and saw the benefit, resulting in further use across the period. This suggests that staff consider Magic Notes to be a usable and effective solution.



**Figure 2: Beam analysis of the number of recordings and duration in hours each week of Magic Notes implementation.**

### **On average, individuals in the testing group used Magic Notes two or more times per week**

Beam correctly identified that the community team had the greatest number of recordings ( $n = 177$ ); however, the occupational therapy team had the greatest number of hours recorded (88 hours; Figure 3). The sensory team had the lowest number of recordings and number of hours recorded. It is important to note that there was only one staff member within the sensory team who was using Magic Notes, compared to 16 and 10 in the community and occupational therapy teams respectively. This means that the findings from staff in the sensory team may differ should more staff use Magic Notes.



**Figure 3: Beam analysis to identify the number and hours of recordings in each team within the Magic Notes evaluation.**

## Staff found Magic Notes very easy to use regardless of confidence with new technology

Although the above statement suggests that all staff found Magic Notes “very easy” to use, 67% found Magic Notes “very easy” to use, 29% found Magic Notes “easy” to use, and 5% found Magic Notes “neither easy nor difficult” to use. This means that *most* staff found Magic Notes “very easy” to use. This was further strengthened by positive staff free-text responses: “*I would not describe myself as tech minded but found Magic Notes incredibly easy to use*” and “*I found Magic Notes could be tailorable to how I work. It was very easy to amend any errors. Overall I found it very good to producing a first draft and excellent for producing a summary of the visit*”. This suggests that most staff found Magic Notes an acceptable solution to note taking.

All staff (100%;  $n = 21$ ) reported that people who draw on care and support were either “*very receptive*” or “*mostly receptive*” to the use of Magic Notes. One staff member noted: “*The residents I met were very receptive to it and I was able to focus on them more rather than making sure I had written everything I needed to down*”. Despite this, one staff member recalled that “*Several declined due to concerns regarding use of AI, one declined due to personal feelings of risk of loss of practitioner skills*”. This suggests that there may be some apprehension from people who draw on care and support to accept the use of Magic Notes. Client surveys would highlight the proportion of people who draw on care and support who accept the use of Magic Notes to a greater accuracy. Despite this, it appears that people who draw on care and support were overall willing to adopt Magic Notes within their assessments.



Staff perceptions should continue to be monitored to understand whether this changes over time. Further, staff perceptions should be explored in other implementation areas to understand whether other sites achieve the same results as in the current evaluation.

All staff in the testing group said they wanted to keep using Magic Notes, identified through survey responses. Community staff members responded: *“Would love to keep this. I can see a huge benefit for the staff and residents of KCC”* and *“Magic Notes have save [sic] so much time when typing case notes, assessments, mental capacity assessments. PLEASE DO NOT TAKE IT AWAY! ABSOLUTE TIME SAVER!”*. Occupational therapist staff responded: *“I think it's brilliant. I really, really love it, and I don't like the thought of having to go back to how we were originally doing assessments”* and *“I see a wide use of Magic Notes through KCC with its ability to document supervisions, reviews, team meetings. I feel that Magic notes supports disability and using this across KCC would support the recruitment and retention of staff”*.

***“Magic Notes has impacted positively on the way I complete assessments... allowing good conversations. It is ... easily editable after completion. It is reliable ... I have confidence that it will capture what I will require. I feel the clients voice comes through... I do not want to go back to the old way of doing things”***

- Occupational therapist staff survey respondent

Staff wanted to continue using Magic Notes due to the time savings yielded. Saving time when writing notes reduces staff workload; lower workload is associated with less job burnout (Ziae et al., 2015), lower stress, and greater job satisfaction (Tentama et al., 2019). Although not examined in the current evaluation this suggests that Magic Notes could have a positive impact on staff wellbeing.

During the pilot, staff were invited to share feedback on every Magic Note output and share broader feedback with Beam. It was noted by Beam that these learnings fed directly into their product roadmap and user support plans. Table 2 highlights the suggested action from Beam with an assessment of the suitability of the action provided by Unity Insights.



Table 2: Beam pilot learnings with suggested actions from Beam. The suitability of the suggested action was highlighted by Unity Insights.

Pilot learning	Suggested action	Suitability of suggested action
<p><i>“Some staff initially expected perfect assessment from Magic Notes, rather than a first draft. This led to a sense of disappointment at small errors, when these errors can in fact be very quickly amended.”</i></p>	<p><i>“We plan to run dedicated webinars on use of customisation features to improve confidence. Internal guides for best practice on how to get the most out of Magic Notes for specific roles/teams may also be helpful.”</i></p>	<p>The proposed action is suitable. It is important to ensure internal guides are made available in new implementation areas in effort to convey information earlier.</p>
<p><i>“More templates would enable further time savings by facilitating effective use in further meetings (reviews, supervisions)”</i></p>	<p><i>“As many additional templates as required can be built as part of a rollout (with an annual subscription)”</i></p>	<p>The proposed action is suitable; however, it is also important to assess the effectiveness of each template.</p>
<p><i>“OTs reported some challenges with recording when moving around the property”</i></p>	<p><i>“We are currently exploring solutions – such as discrete microphones that could be attached to clothing or lanyards to hang the phone around the neck, making it easier for practitioners to move around whilst using MN [Magic Notes].”</i></p>	<p>Examining alternatives is suitable.</p>
<p><i>“Some staff were slow to make their first recording and required direct engagement and support”</i></p>	<p><i>“During a rollout there is more time to drive culture change. We have also found that support from team managers and ‘champions’ is an effective way to support further adoption”</i></p>	<p>The implementation plan should integrate time for team managers and champions to support new users and encourage uptake.</p>



Pilot learning	Suggested action	Suitability of suggested action
<p><i>“Audio quality issues impacted the overall quality of some recordings and summaries. A notification or warning would alert staff and allow them to improve the setup or take manual notes.”</i></p>	<p><i>“Push notifications being explored on our roadmap for later in 2025.”</i></p>	<p>Examining alternatives is suitable.</p>



## Initial challenges and blockers to adoption were addressed and overcome during the testing phase

Beam actively identified and addressed challenges and blockers to adoption such as:

- A delay among some staff in completing their first recording.
  - Resolution: Targeted support and outreach helped staff get started and several staff members ended up using Magic Notes regularly.
- Audio issues during training sessions affecting staff confidence with using Magic Notes.
  - Resolution: Individual testing before use with people who draw on care and support and providing tailored support to resolve any remaining issues.

This meant that Beam continuously aimed to improve staff acceptability in effort to improve the already positive perception of Magic Notes. Identifying and addressing challenges should continue and be integrated into future implementation plans within new areas of social care. This is beneficial as challenges may occur in some areas of social care, but not others. Identified challenges and resolutions should be combined across sites, creating a positive network effect for the improvement of the solution. One method of doing so is hosting regular learnings sessions with all implementation areas and creating a log of challenges and their solutions that can be regularly updated and shared with new implementation areas.

## Feedback demonstrated that Magic Notes supported accessibility by reducing barriers to documentation

Staff with disabilities and health conditions reported in working groups that Magic Notes supported accessibility by reducing barriers to written documentation. One staff member noted: *"I am deaf and found it really helpful as I rely on lip reading to a certain extent and do not make long notes"*. Others reported fewer headaches and shoulder pain due to repetitive typing. Despite this, it was unknown how many staff with disabilities or health conditions were in the sample and not all quotes were provided due to the long form nature of the working groups. Perspectives were not provided by all staff members, which could mean that not all staff shared the same opinion. Although this may be the case, no negative quotes around accessibility were noted, suggesting that Magic Notes was an accessible solution. In a larger user group, Beam noted they expected to see further accessibility benefits, supporting neurodivergent and disabled individuals by reducing typing strain, accommodating diverse workstyles, and making documentation more accessible. Future evaluations should identify the number of staff who have a disability or health condition and ask each staff member whether they considered Magic Notes to support improved accessibility. From this, adjustments could be made to improve Magic Notes further.

Physical improvements to staff were also noted, such as fewer headaches and alleviated shoulder pain: *"I was initially using Co Pilot [sic] but Magic Notes is different and has saved me time especially with issues with shoulder pain as a result of repetitive typing"*. This means that Magic Notes led to fewer physical consequences due to less typing required. In turn, this likely led to an improvement in staff physical wellbeing. To strengthen the evidence base, future evaluations



should examine how Magic Notes can impact staff physical wellbeing when staff begin to use Magic Notes. Monitoring this over time would also help determine whether the physical improvement remains.

## 4.4. Evidence standards framework for digital health technologies

### Demonstrating performance

#### ***Standard 15: Show real-world evidence that the claimed benefits can be realised in practice***

As highlighted in Section 4.3, the evaluation findings suggested that Magic Notes was acceptable to its users. Further, Magic Notes was designed to yield staff time savings. Staff surveys provided evidence that this was achieved, however conducting a time-and-motion study would allow greater accuracy regarding the extent of the time saving. Further, free text responses and staff working group quotes suggested that no negative impacts on people that draw on care and support or services were identified and that Magic Notes was successfully integrated into the routine of staff. This suggests that the evaluation provided evidence to support Magic Notes in fulfilling standard 15. The evidence base can be strengthened by conducting a time-and-motion study and replicating the evaluation in further implementation areas.

#### ***Standard 16: The company and evaluator should agree a plan for measuring usage and changes in the DHT's performance over time***

Throughout the evaluation, Beam measured weekly usage of Magic Notes. Beyond the evaluation, Beam should agree a plan with Kent County Council to continue to monitor usage data to highlight outcomes to contribute towards standard 16.

Magic Notes uses AI. Therefore in the future, Beam and Kent County Council must agree on post-deployment reporting of changes in performance such as any plans for updating Magic Notes (for example, retraining algorithms), processes for measuring performance (as a whole or within certain groups of staff, such as those with a disability), and agreeing who, how, and when performance changes should be reported. This will further contribute to Magic Notes fulfilling standard 16.

### How the evaluation contributed to other standards

#### ***Standard 2: Incorporate intended user group acceptability in the design of the DHT***

Magic Notes complied with standard 4 as Beam completed staff working groups and surveys to understand staff acceptability. Staff noted challenges and Beam responded by identifying resolutions to improve staff acceptability further. The evaluation also identified that Magic Notes was easy to use and that people who draw on care and support were receptive to use of Magic Notes, suggesting that the system was acceptable to those impacted by the system.



### ***Standard 20: Describe strategies for communication, consent, and training processes to allow the DHT to be understood by end users***

Throughout the evaluation, staff working group sessions were hosted to convey features, benefits, and challenges faced surrounding Magic Notes. This provided a clear communication flow between user and innovator, allowing staff members to have a clear understanding of how to use Magic Notes effectively. This contributed to standard 20. Quantitative data strengthened the evidence base surrounding this by highlighting consistent use of Magic Notes each week. Further, 95% of staff said that Magic Notes was easy to use, suggesting that Magic Notes was understood by staff members. If Magic Notes were to continue being used at Kent County Council, working groups and communication channels are recommended to continue to ensure that Magic Notes continues to be understood by its users regardless of any potential changes made to the system in the future.

## **5. Limitations**

During the analysis of usage data, a less conservative methodology was used, which lowered the robustness of the method used to evaluate the effectiveness and adoption of Magic Notes. Furthermore, no statistical testing was conducted on this usage data, leaving the findings without quantitative validation and open to question.

The survey data also lacked statistical testing, reducing the reliability of the results and limiting the strength of any conclusions drawn. Additionally, demographic data was not collected, making it unclear whether the survey responses are representative of the broader Magic Notes user base. Without this information, it is difficult to determine whether the insights apply equally across all user groups, raising concerns about potential bias in the findings.

Qualitative feedback collected through free-text survey responses was not analysed using thematic or sentiment analysis. As a result, valuable insights into user experiences may have been overlooked, reducing the depth and richness of the evaluation. In the analysis of time savings, some methodologies used to assess reductions in administrative tasks included methodological limitations, which could lead to differing conclusions regarding efficiency improvements. Further complicating the picture, inconsistencies were noted in staff reporting, for example, some staff indicated no change in time taken while also noting time savings, which undermined the reliability of the data.

Some survey responses could not be confirmed, introducing a degree of uncertainty to the overall results. Moreover, the calculation of percentage reductions in staff time included individuals who had not completed both pre- and post-implementation surveys, which may distort the true impact of Magic Notes on staff workload. In addition, time savings related to case notes were based on general observations and anecdotal feedback rather than systematic measurement, making these findings potentially biased and less credible.



The evaluation did not incorporate feedback from people that draw on care and support, omitting a crucial perspective on the impact of Magic Notes from those directly affected. Similarly, the number of positive comments about improved conversations with people who draw on care and support was not quantified, making it difficult to assess the extent of perceived improvements in communication. The number of staff who observed improvements in documentation quality was also not recorded, limiting the ability to evaluate this potential benefit.

The test and learn pilot was offered on an opt-in basis to encourage team engagement. As a result, participants may have had higher levels of motivation or a greater appetite for innovation compared to other teams or sites, which should be taken into account when considering the applicability of these findings to wider implementation. It is also worth noting that usage rates may continue to grow over time as teams embed Magic Notes into standard practice and as technical challenges are resolved.

The acceptability of Magic Notes was assessed only among participating teams and did not include input from people that draw on care and support or staff who did not opt into the pilot.

Consequently, reasons for non-engagement were not explored in this evaluation. Gathering insights from these groups could provide valuable information to inform future onboarding processes, refine the implementation approach, and improve the innovation itself.

Finally, the number of staff with disabilities or health conditions was not identified, and not all quotes from these individuals were included. This limits the inclusivity of the evaluation and may overlook important perspectives and potential accessibility challenges.

## 6. Recommendations

### **Conduct a time-and-motion study to identify time savings**

A time-and-motion study should be conducted to provide more detailed and reliable insights into time savings, addressing current survey data limitations. This study should include a breakdown of time savings by staff role and team, enabling more targeted strategies for improving efficiency. Additionally, statistical testing should be applied to determine whether the findings are significantly different and to increase the robustness of the analysis.

### **Examine usage of Magic Notes against a comparator**

Comparative analysis should be undertaken by examining Magic Notes usage against a control or comparator group. This would involve identifying and comparing the total number of recordings made with and without Magic Notes to better understand its impact on documentation practices.



## **Increase the quality of survey analysis**

Staff surveys should include a measure of note quality, such as the PDQI-9 (Stetson et al., 2017), and apply statistical testing where appropriate to improve accuracy. Free-text responses should be analysed through thematic and sentiment analysis to uncover deeper insights into user experiences. Furthermore, identifying the number of staff with disabilities or health conditions would help ensure the evaluation is inclusive and reflective of all user groups.

## **Understand why some people that draw on care and support and staff may opt out of using Magic Notes**

Collecting opt-out data and direct feedback from people that draw on care and support could provide valuable information to inform decisions aimed at increasing usage and, consequently, the value of Magic Notes. Similarly, gathering insights from staff who did not opt into the pilot would contribute to a more comprehensive evaluation and highlight potential barriers to engagement.

## **Replicate findings in other implementation areas**

To strengthen the evidence base, findings should be replicated in additional implementation areas within social care. This would help increase sample sizes and reduce the influence of biases observed in the current evaluation. Ongoing monitoring of staff perceptions across different areas over time would also support a more dynamic and sustained understanding of Magic Notes' impact.

## **Understand the environmental and health inequalities impact of Magic Notes**

The broader implications of Magic Notes, including its environmental and health inequalities impact, should be explored as part of the next phase of evaluation in alignment with NICE ESF for DHTs guidance. Understanding these dimensions would provide a more holistic assessment of the technology's value and implications for equity.

## **Continue to improve Magic Notes based on user feedback**

Continuous improvement of Magic Notes based on user feedback should remain a priority. Regular learning sessions should continue to be hosted to identify and resolve ongoing challenges. Additional templates should be developed and tested for effectiveness, while technical issues such as audio quality and recording limitations should be addressed. Future evaluations should also incorporate feedback from people that draw on care and support to ensure their voices are represented.

## **Agree on a plan for post-deployment reporting and measuring performance changes**

Finally, it is essential to establish a plan for post-deployment reporting and ongoing performance measurement. This will support continued learning, accountability, and informed decision-making as Magic Notes is scaled or adapted for broader use. Beam are currently allowing staff to access



Magic Notes for a month after the pilot whilst they determine whether Magic Notes will continue to be used at Kent County Council and a plan for next steps will be created.

## 7. Conclusion

Overall, the approach taken by Beam followed the key guiding principles of an evaluation, therefore results could be used to support future decision making. The validation report confirmed that Magic Notes successfully reduced the administrative burden on staff, improving the efficiency of their workflow. Staff members, on average, saved time on administrative tasks, allowing them to submit assessments promptly and focus more on client interactions. Additionally, the overall quality of documentation improved, and practitioners reported higher-quality engagements with people who draw on care and support, facilitated by the use of Magic Notes. The acceptance and usability of Magic Notes were also evident, with staff expressing strong support for its continued use.

The validation report also highlighted areas for improvement. The analysis of usage and survey data revealed some areas where methodological robustness could be increased to refine the findings further. Moreover, the evaluation did not incorporate the perspectives of people that draw on care and support or account for demographic details, which could provide a more comprehensive understanding of Magic Notes' impact. Addressing these limitations in future evaluations will be crucial in strengthening the evidence base and ensuring the continued success and acceptability of Magic Notes across broader implementation areas.



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# 9. Appendices

## 9.1. Appendix A: Logic model output

**Magic Notes - Logic Model**

**Description**  
Magic Notes is a generative AI tool for recording, transcribing and summarising discussions.

**Aim**  
The primary aim of this Logic Model was to explore the potential for Magic Notes to deliver benefits to social care workers, for example, by shortening the time that it would take them to file case notes after each client meeting, as well as the impact on the quality of written work, adherence to best practices and the acceptability of the solution.

	Impacts	Outcomes	Activities	Metrics
<b>Clients</b>	Quality of care	Faster documentation delivery Faster follow-up services Greater tailoring to individual voice - empowerment Faster feedback Improved layout of situation Improved ability to self-care, regain independence	Test and learn pilot Template creation and iteration	
<b>Workforce</b>	Job satisfaction (ease) Quality of assessment	Reduce administration time Increased consistency - template Further embedding of client voice Ease of completing administrative tasks More time spent supporting people and being creative Reduced Out of Hours working More complete identification of needs Upskilling of workforce on knowledge (domains of care act application)	Test and learn pilot Template creation and iteration	Out of hours working Staff retention Staff satisfaction Audit data
<b>Social care system</b>	Cost saving efficiencies	Reduce administration time Reduction in complaints	Test and learn pilot Template creation and iteration	Administration time
<b>Societal</b>				
<b>Inputs</b>	Staff training (in-person, virtual & 1 to 1) Information governance Standard operating procedures Comms	<b>Assumptions</b> Maximal adoption and usage during test and learn pilot Responsibility of staff to review and ensure accuracy of notes		<b>Risks</b> Workforce understanding of Magic Notes (effective training) Low practitioner uptake Lack of consent (opt-in) from those seeking support and care Responses more guarded due to being recorded IT issues and barriers to use



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