

Unlocking potential

AI coaching in the NHS

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Alcoach.chat



Elect

Executive summary

"I just wanted to let you know that I have started to use the AI coaching. My first session was actually really helpful! I will definitely be accessing it more in the remaining weeks."
- AI coaching client

Executive summary

NHS Elect is a network for NHS and healthcare organisations, providing coaching and related services to senior clinical and operational leaders in that sector. In partnership with Alcoach.chat, NHS Elect conducted a pilot to evaluate the effectiveness of Alcoach.chat as a solution offering non-directive coaching conversations at scale. Over a three-month period, 53 participants from two NHS Trusts used Alcoach.chat for coaching conversations that supported users in setting goals, understanding themselves better and committing to actions.

Participants selected goal topics to work on and saw a 10% increase in goal progress after just one session on average. Self-efficacy ratings also improved, by 5% from 65% to 70%. Additional analysis found that Alcoach.chat showed no gender bias and increased in effectiveness the more it was used.

Over the following pages, we show how Alcoach.chat delivered tangible, measurable outcomes in this pilot on par with human coaching, yet with increased levels of access and efficiency.

Following this pilot, NHS Elect has selected to expand the pilot, incorporating learnings from this first stage to improve and increase the level of impact and the insights generated through research. As an innovator seeking to positively contribute to the evolving profession of coaching, Alcoach.chat welcomes additional organisations to initiate similar pilots, tailored to other contexts.

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Setting the scene

Introduction and context

The world is evolving rapidly, with organisations constantly seeking innovative solutions to address the complex challenges they face. Over the past several years non-directive coaching has emerged as a pivotal tool for unlocking potential for individuals and organisations. But the inherent reliance on qualified people to deliver coaching has historically limited its scalability and therefore impact (Isaacson, 2021).

Recognising this gap and the solution presented by AI-enabled conversations to facilitate self-reflection at scale, NHS Elect started exploring with Alcoach.chat a way to test the hypothesis that AI coaching could offer similar outcomes to traditional coaching, while opening up opportunities to increase its impact and efficiency. Dr David Tee was invited to act as an independent researcher to provide expert advice and draw reliable conclusions based on objective data.

The convergence of innovative technology, strategic vision and a commitment to driving tangible outcomes set the stage for a compelling case study on the transformative power of Alcoach.chat.

Approach

NHS Elect and Alcoach.chat initiated a pilot initiative that received ethical approval and aimed to evaluate the effectiveness of Alcoach.chat in meeting a variety of coaching needs as presented by several dozen users.

“Blimey that was very good! Better than most of the supervision sessions I've had in my many years as a practitioner. The only downside after one session is the lack of emotional intelligence and sense of humour, but in terms of focusing on the task in hand, 10/10. I'm looking forward to exploring further.”
- AI coaching client

Two NHS Trusts that are members of the NHS Elect network were approached to identify potential participants in the pilot. Participants volunteered and were under no obligation to take part. They were provided with access to a segregated instance of Alcoach.chat for a period of around three months. They were asked to complete a survey at the beginning of the period as well as at the end, to provide demographic data and capture any changes Alcoach.chat had made to goal attainment and self-efficacy.

Introduction to Alcoach.chat and NHS Elect

NHS Elect is a network for NHS and healthcare organisations, providing coaching and related services to senior clinical and operational leaders in that sector.

Alcoach.chat is a technology application designed to provide the user with text-based, non-directive conversations. Alcoach.chat uses a third-party large language model to generate responses within the conversation, with additional layers of prompting and logic ensuring that it remains aligned with good practice coaching philosophy and ethics, and follows a process to support the user in setting goals, committing to actions and increasing in self-awareness.

Alcoach.chat can identify goals, actions and learning achievements, track these on an ongoing basis and report at an aggregated level to provide additional insights across a client population while retaining privacy around the coaching conversations themselves. For the purposes of this pilot, NHS Elect chose for no data to be stored by Alcoach.chat so these features were not included.

Research findings

*"Thanks - I have done my first session this morning.
'Wow!' is all I will share for now!"
- AI coaching client*

The numbers

Between the dates of 8 November 2023 and 14 February 2024, 53 users conducted a coaching conversation using Alcoach.chat. 83% of these were female (17% male, 0% other), which is relatively reflective of the NHS England workforce (77% female). Participants were either coaches themselves or in positions of leadership, with ages ranging from 25 to 62, with an average age of 48.

81.1% of the participants only undertook a single session; 11.3% took two, 3.8% took three, 1.9% took four and 1.9% took five sessions. While no participant within the time period had access for longer than one month, the proportion of users returning is lower than would be expected based on use of the publicly-available version of Alcoach.chat. This may be because participants considered that they had "ticked the box" of having contributed to the pilot by having taken one session and therefore did not return. The return rate may also be naturally limited by the fact that email addresses had not been provided for data privacy reasons, meaning users were not automatically prompted to return to Alcoach.chat.

The goals

As part of the Grant et al. (2009) goal attainment measure, participants were presented with seven typical topics and asked to choose those that best represented what they wished to work on with Alcoach.chat. On average, participants selected four topics to work on, with eight having a single clear focus at one end of the spectrum, and ten choosing all seven at the other end (see Appendices).

Participants rated their goal for perceived difficulty (where 1 = very easy and 4 = very difficult), with an average rating of 3.4; Alcoach.chat was expected to deal with some challenging goals! Before Alcoach.chat was used, participants were asked how successful they had been in achieving their goal, providing an average response of 52%. Asked again after having used Alcoach.chat this had risen to 64%.

The goal attainment measure is generated by multiplying the difficulty in achieving the goal (3.4) by the degree of success (12%), providing a number on a scale ranging from 0 to 400 (in this instance: 40.8). This represents **Alcoach.chat users achieving a 10% increase in progress towards achieving a goal**, in most cases after only one interaction.



Research findings

*"Having a positive experience with this AI Coach."
- AI coaching client*

Self-efficacy

Self-efficacy – defined by Bandura (1977) as an individual's belief in their own capability to successfully execute and accomplish a specific task or set of tasks in various situations – is widely used as a measure of coaching effectiveness. Participants completed the Schwarzer and Jerusalem (1995) Generalised Self-efficacy Scale before and after having used Alcoach.chat, to determine the effect on self-efficacy.

One of the questions intended to be asked prior to participants' use of Alcoach.chat was not included in the pre-coaching survey. As a result, reasonable assumptions have been made in the calculations presented here and readers should hesitate to place full reliance on the precise outputs.

Prior to the participants using Alcoach.chat, self-efficacy scores ranged from 35% to 85%, with a mean self-efficacy score of 65%. Following use of Alcoach.chat, participants' self-efficacy scores ranged from 35% to 100%, with a mean self-efficacy score of 70%. In other words, **users of Alcoach.chat reported an average 5% uplift in their ability to succeed at desired tasks.**

Other observations

Applying a 95% confidence interval to the data generated in the pilot enabled the following conclusions to be drawn:

- The older the participant, the more focused they were on their goals.
- The younger the participant, the more likely they were to choose 'Learning needs' as a goal.
- Clients that focused on 'Constructive leadership' were the most likely to take multiple sessions.
- Clients that chose 'Work challenges' were most likely to make the most goal progress.
- Those that presented with the most progress with their coaching goal also recorded the greatest improvement in their self-efficacy.
- There was no difference in the effectiveness of Alcoach.chat based on gender.
- There was a statistically significant correlation between the number of times a participant used Alcoach.chat and their goal attainment progress.



Conclusions and next steps

*"I have had one go. It's amazing, very intuitive and I found it really useful. Great coaching questions."
- AI coaching client*

Conclusions and next steps

All stakeholders in the pilot are delighted by the findings; such clear positive impact in both self-efficacy and goal achievement progress demonstrates that Alcoach.chat can deliver positive outcomes at scale and at a fraction of the price of human coaching. While no party involved believes that AI coaching can, should or will wholly replace human coaching, it is clear that Alcoach.chat can provide people who historically would have never had the option with access to effective, high-quality coaching conversations.

NHS Elect is intending to expand the pilot to a larger group of users, with specific steps in place to improve the quality of the data even further. Specifically, participants in the next stage will be automatically "nudged" to have additional sessions, in order to maximise the potential impact.

Alcoach.chat is keen to continue to contribute to the future of the coaching profession and would welcome other organisations interested in running similar pilots to enquire about the role Alcoach.chat can play in people strategies and interventions across a diverse range of environments.

Acknowledgements and contact details

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Appendices

Topics selected

- 68% To explore more positive strategies for managing the challenges I face at work
- 66% To gain greater self-awareness, self-confidence and resilience in my role in the NHS
- 62% To gain greater clarity regarding my own career direction
- 62% To expand my knowledge of resources available to support me in my role and in my professional development
- 49% To identify my own learning needs and develop a meaning personal development plan
- 45% To improve my communication style
- 43% To increase my understanding of constructive leadership

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Thank you

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