

Case Study

77% reduction in Referral to Treatment time for Routine Referrals

Summary of success

The implementation of Tucuvi's Conversational AI at South Warwickshire NHS Foundation Trust's Wheelchair Service has transformed referral management and clinical efficiency.

By automating the initial screening of referrals, LOLA, Tucuvi's clinical AI Agent, **eliminated the patient backlog, reduced referral-to-screening times from five weeks to less than one, and cut referral-to-equipment handover time for routine cases by 77%.**

This freed over 50% of clinical time, allowing healthcare professionals to focus on more complex patient needs and improving overall service delivery.

100%

Elimination of the backlog for 100 % patients waiting to be screened

x5

Access. Referral-to-screening time reduced from 5 weeks to less than 1 week

77%

Reduction in referral-to-equipment handover time for routine referrals

>50%

Reduction in clinical time allocated to screening.

PATIENT SATISFACTION

>80%

Clients rated their experience as good or excellence

92%

Felt comfortable speaking with LOLA

ANALYSIS

Introduction

Before implementing Tucuvi's clinical AI Agent, the occupational therapy team at **Warwickshire's Wheelchair Service** faced significant challenges in managing patient referrals efficiently.

The primary challenge was a lack of clinical capacity to screen referrals in a timely manner, resulting in increasing waiting times for patients.

Despite their best efforts, the average waiting time for screening was 5 weeks, with the longest wait reaching 13 weeks. The service's target was to screen all incoming referrals within two working days, regardless of the referral priority. **This delay not only increased the administrative burden on the clinical team but also affected timely access to essential wheelchair services for patients in need.**

Clinicians were scheduled three days a week (totalling 22.5 hours) to complete referral screening during 'Duty' time and would typically screen eight service-users per day (7.5 hours). Due to overall service demands and capacity challenges—such as sickness, staff leave, demand for clinics, and management of duty—the **waiting list continued to grow rather than decrease**. As a result, the service faced an accumulation of 163 referrals (62 'known' users and 101 'new' users) waiting to be screened, some for up to four months. Consequently, the NHS England target of 18 weeks from referral receipt to equipment handover was not being met.

In 2023, South Warwickshire NHS Foundation Trust partnered with Tucuvi to optimize their referral screening process by implementing LOLA. This strategic move **aimed to reduce the workload for the clinical team while ensuring that patients received faster access to services and a more consistent referral screening experience.**



Incorporating LOLA into the wheelchair service was a key step in addressing the growing waiting list, eliminating the backlog of referrals waiting to be screened and freeing up the clinical team to focus on more complex cases and high-value tasks.

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The service now is able to manage the day-to-day referrals without accumulating a new waiting list.

Occupational therapy team member

Objective

Transform the wheelchair service's referral screening process from a reactive, manual system into a proactive, efficient, and standardized workflow that optimizes clinical team resources and ensures timely patient care.

Solution

Tucuvi collaborated with the clinical team to **configure a referral screening protocol** tailored to the specific needs of the wheelchair service.

Upon receiving a referral, LOLA calls and engages patients with them through natural, conversational AI to collect essential health and service-related information. This process mirrors the manual screening traditionally performed by the team, ensuring that **clinical accuracy and quality standards are maintained**.

LOLA's ability to identify patients requiring immediate attention allows the clinical team to focus on priority cases, significantly reducing delays and eliminating the referral backlog. Additionally, **LOLA enables the team to classify referrals based on urgency (P1, P2, or P3)**, ensuring timely care and faster intervention for those with urgent needs.

By automating routine tasks, the team could reallocate their time to more complex patient needs, enhancing both efficiency and patient outcomes.

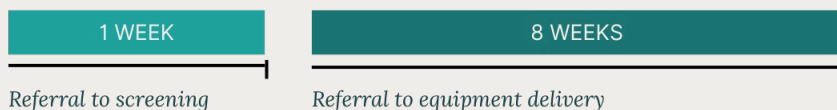


With LOLA, the wheelchair service achieved a 77% reduction in referral-to-equipment handover time for routine cases, transforming patient care delivery and clinical efficiency.

Before Tucuvi



After Tucuvi



RESULTS AND CONCLUSIONS

The implementation of Tucuvi's Conversational AI at Warwickshire's Wheelchair Service has led to transformative outcomes in referral screening efficiency and staff wellbeing.

For the service

- **80%** of users rated their experience as **good or excellent**.
- **92% felt comfortable** speaking with LOLA, and no one reported feeling uncomfortable about future interactions.accelerating the patient intake process and improving service efficiency.

For patients

- **77% reduction in referral-to-equipment handover time for routine referrals**, decreasing from 35 weeks to just 8 weeks, enabling patients to receive necessary interventions much sooner.
- **Complete elimination of the backlog for patients waiting to be screened**, ensuring no delays in initial assessments and faster access to care.
- **5x Increase in access**: Referral-to-screening time reduced from 5 weeks to less than 1 week, significantly accelerating the patient intake process and improving service efficiency.
- **Over 50% reduction in clinical time allocated to screening**, from 22.5 hours per week to 10.5 hours per week, allowing healthcare professionals to dedicate more time to complex cases and high-value clinical tasks.

For healthcare professionals

- **Alleviated workload pressure**: The significant reduction in the waiting list has enhanced the efficiency and manageability of daily operations.
- **Increased control and reduced overwhelm**: Wheelchair service professionals, who previously felt overwhelmed by the high volume of referrals, now feel more in control due to timely access to referral screening conversation outcomes.
- **Improved workflow**: Clinicians can process referrals more efficiently. For example, one clinician managed to work through 9 referrals in just 2 hours, noting this as a significant improvement.

These outcomes highlight not only operational efficiency but also the positive impact on staff wellbeing, a key factor for service retention and receptiveness to new technologies.

The successful integration of Tucuvi's AI demonstrates the potential of clinical conversational AI to support healthcare teams in delivering timely, high-quality care while fostering a more sustainable and supportive working environment.

