CASE STUDY

tucuvi

Autonomous Post-Emergency Follow-Up for Discharged Patients

The implementation of Tucuvi's Conversational AI at Hospital Universitari General de Catalunya, part of the Quirón Salud Group, has led to significant improvements in post-emergency discharge follow-ups. **LOLA's automated follow-up calls increased patient response rates from 13% in the initial patient portal form to 50% response rate through LOLA's calls.** After implementing Tucuvi, the hospital optimized clinical workflows, reduced administrative workload, ensured timely follow-ups and accurately identifying patients with severe alerts, leading to better patient outcomes and more efficient use of healthcare resources.

> *LOLA has made our follow-ups more efficient,* ***giving us more time to prioritize patients, focus on their specific needs, and reduce administrative work****, allowing us to concentrate on high-value tasks that make our day-to-day much more productive.*
>
> *Emergency doctor, Hospital Universitari General de Catalunya*

Hospital Universitari General de Catalunya
Grupo quirónsalud

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KEY METRICS

Results (March - November 2024)

6,650 Patients called

16,525 LOLA call attempts

13.2% Response rate via the portal

50% Response rate with LOLA

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CONTEXT

Hospital Universitari General de Catalunya - Grupo Quirónsalud

+297
Beds

1,191
Employees

164,000
ER visits/year

Hospital Universitari General de Catalunya
Grupo quirónsalud

INTRODUCTION

Hospital Universitari General de Catalunya managed post-emergency follow-ups using a manual, telephone-based process. **The clinical team aimed to contact patients within 48 hours after discharge to assess their recovery and identify potential complications.** At that time, without a digital patient form available, all follow-up data was collected manually during calls made by the clinical team.

The hospital's administrative team was the responsible for scheduling follow-up calls for doctors based on the order in which patients were discharged. However, this method didn't allow for prioritizing calls based on the medical urgency of each patient's condition.
As a result, doctors manually called patients following the discharge order and filled out forms during these calls. **Due to limited capacity and the large volume of calls to be made, not all patients were reached within the ideal 48-hour window**.

In its ongoing commitment to continuous improvement and high-quality care, the hospital introduced a formulary in their digital patient portal to streamline the follow-up process, reduce the administrative burden and free up doctors from spending valuable time calling every patient. Although the response rate through the portal was 13%, it revealed key insights into patient engagement, **highlighting the need for a more effective solution to achieve timely identification of high-risk patients** and paving the way for the next stage of innovation.

This strategic approach seeks to replace a manual follow-up system with a proactive solution to ensure timely identification of critical alerts, optimize clinical workflows, and enhance patient care without overburdening healthcare teams.

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STRATEGY & IMPLEMENTATION

1 Challenge

The hospital implemented Tucuvi and LOLA to automate the post-emergency discharge process, reduce workload, and use clinical resources more efficiently.

2 Solution

Tucuvi collaborated with the hospital team responsible for post-discharge care to configure LOLA's conversations and workflow according to the processes they already had in place.

- LOLA, Tucuvi's virtual clinical assistant, transformed the process by **autonomously calling all patients who hadn't completed the form within 72 hours of discharge, achieving a response rate of 70% over the ones who answered**.

- With the objective of reducing the clinical team's workload and improving process efficiency, LOLA's expected outcome was to call more patients in a shorter period of time and increase the probability of reaching out the patient.

- Once LOLA contacts the patient by phone, it fills out the form, and doctors review the alerts and responses. Based on this information, one of three actions is taken: scheduling an in-person consultation, arranging a remote appointment, or concluding the treatment. This proactive approach also **reduced unnecessary returns to emergency services**, as patients received timely interventions without needing to reconsult in person.

- **The primary goal of identifying patients with severe alerts was successfully achieved, as the objective of detecting those with critical conditions was fulfilled**. This not only streamlined the triage process but also provided significant added value to the project by enabling early interventions in high-risk cases.

3 Implementation

Tucuvi leveraged its secure and encrypted API to seamlessly integrate LOLA and the Tucuvi Health Manager Dashboard into the hospital's EHR system. This ensured a secure and efficient data flow, enabling timely and automated follow-ups. The implementation process was structured and collaborative, minimizing disruptions to clinical workflows.

6 WEEKS

Kick-off and connectivity

Tucuvi worked closely with Quirón's IT and administrative teams to establish a secure VPN connection. During this phase, the communication schema between the hospital and Tucuvi was designed to ensure compliance with strict security and privacy standards.

4 WEEKS

Integration tests

LOLA's protocol was aligned with Quirón's data model to facilitate seamless data exchange. Extensive testing was conducted using synthetic data to verify system reliability and performance before going live.

Go-Live and ongoing support

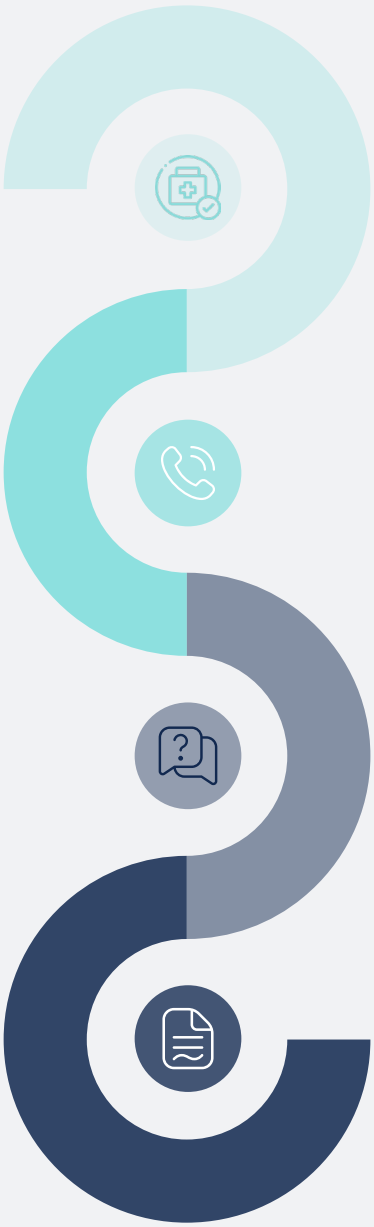
Tucuvi adopted a phased approach to implementation, starting with a small number of automated follow-up calls per day to monitor performance and address potential issues. After one week, the system was scaled up to handle the full patient volume, allowing for timely and efficient patient follow-ups.

This meticulous and well-coordinated process enabled the successful deployment of LOLA at Quirón, empowering the hospital to optimize its follow-up workflows, reduce administrative burdens, and prioritize patient care with confidence.

STRATEGY & IMPLEMENTATION

2 Solution

Post-Discharge Follow-Up with LOLA



01

48 HOURS AFTER POST-EMERGENCY DISCHARGE

The form is published on the patient portal.

02

72 HOURS AFTER DISCHARGE

LOLA receives a list of patients who have not completed the form and starts calling those who meet the criteria.

03

LOLA'S CALL PROTOCOL

LOLA makes several attempts to maximize reaching.

04

CLINICAL REVIEW

LOLA integrates the patient's responses into the form, which is then reviewed by the clinical team to determine the next steps.

RESULTS AND CONCLUSIONS

The implementation of Tucuvi's Conversational AI at Hospital Universitari General de Catalunya has led to impactful results in the post-emergency discharge follow-up process.

Since its launch in March 2024, LOLA has proven to be a transformative solution, optimizing patient follow-ups and resource allocation.

FOR THE HOSPITAL

- **LOLA has managed over 6,650 patient follow-ups, completing 16,525 call attempts.**
- By automating post-discharge patient follow-up, the hospital has optimized resource allocation and improved operational efficiency for clinical teams.

FOR PATIENTS

- **The response rate through LOLA was 50%,** a significant increase compared to the 13% response rate with the patient portal.
- **Patients were reached promptly for follow-ups 72h after discharge,** minimizing the risk of missed complications and ensuring continuity of care, which previously was challenging with manual processes.
- Thanks to LOLA, many patients no longer need to return to emergency services unnecessarily.

FOR HEALTHCARE PROFESSIONALS

- **The identification of critical cases has been a success**. 7% of the follow-ups resulted in severe alerts, **meeting the primary goal of detecting patients who require urgent attention and prioritizing care**. 75% reported no alerts, requiring no follow-up from the clinical team, demonstrating the efficiency in the triage process.
- This has reduced unnecessary workload, enabled early intervention in critical cases, and ensured a more efficient follow-up process, ultimately improving the quality of care.

Following the successful results of the program's initial phase, which was first implemented for **post-emergency abdominal trauma patients** (such as abdominal discomfort) and then extended to **orthopedic emergencies** (sprains, fractures, etc.), **Quirón plans to expand the initiative to include all post-emergency discharge patients**. This will ensure that more patients receive timely follow-ups and improved care coordination, further demonstrating the hospital's commitment to patient safety and quality care.

The next phase also involves rolling out LOLA across all hospitals in the Quirón group. Building on the success of the current program, this expansion will standardize follow-up processes and ensure consistent, high-quality care throughout the entire network.

With increasing patient volumes and limited resources, healthcare providers face the challenge of ensuring that every individual receives the attention they need, precisely when they need it. Tucuvi's conversational AI solution empowers Quirón to prioritize care efficiently, allowing clinical teams to focus on what truly matters: timely interventions that improve patient outcomes and safety.

RESULTS AND CONCLUSIONS

> *Tucuvi has been a game changer in reducing our administrative workload. It allows us to focus on delivering quality care while ensuring no patient is left without proper follow-up.*

Emergency doctor, Hospital Universitari General de Catalunya