

Elimination of 30-Days readmissions of COPD patients

The implementation of Tucuvi's Clinical Conversational AI at El Baix Empordà hospital has led to significant improvements in COPD patient care. The transformation of COPD management where LOLA is doing autonomous follow-ups resulted in a **10.06% reduction in emergency visits** and a **5.52%**

decrease in hospitalizations, and the complete elimination of re-hospitalizations within one month post-discharge.

After implementing Tucuvi, the Hospital has enhanced patient monitoring and streamlined care delivery without additional strain on resources.

“

LOLA has revolutionized our COPD patient care. It allows us to identify and prioritize patients needing immediate attention, fostering a more proactive approach to care.

This has not only improved patient outcomes but also optimized our clinical team's time and resources.

Clinical Team Lead, El Baix Empordà Hospital

”





KEY METRICS



10.06%

Reduction in
emergency visits

5.5%

Reduction in
hospitalizationsComplete elimination of re-hospitalizations
30 days post-discharge.

83%

Patient
reach

90%

Patient
engagement

HEALTHCARE PROFESSIONAL SATISFACTION



67%

NPS



9.3/10

Average
satisfaction



CONTEXT

Hospital Baix Empordà,
Girona (Spain)

134

Beds

4

Basic Areas of Primary Care

1,280

Employees

140K

Population



INTRODUCTION

Before implementing Tucuvi, El Baix Empordà Hospital faced significant challenges in managing its COPD patient population, with only 1 in 4 patients aware of their diagnosis.

The hospital's Chronic Complex Patient Unit (CCPU) aimed to provide specialized care for complex chronic patients, including those with COPD. However, the **hospital's approach to patient follow-up was largely reactive**, relying on patients to initiate contact when they experienced problems.

This care process left healthcare professionals unable to proactively identify and address potential exacerbations, often learning about patient deterioration only after emergency department visits or hospitalizations occurred. Data from 2022 showed concerning trends: 40.6% of COPD patients required emergency services, 10.6% faced hospitalization, and 22.12% visited the emergency department within six months of their last clinic visit.

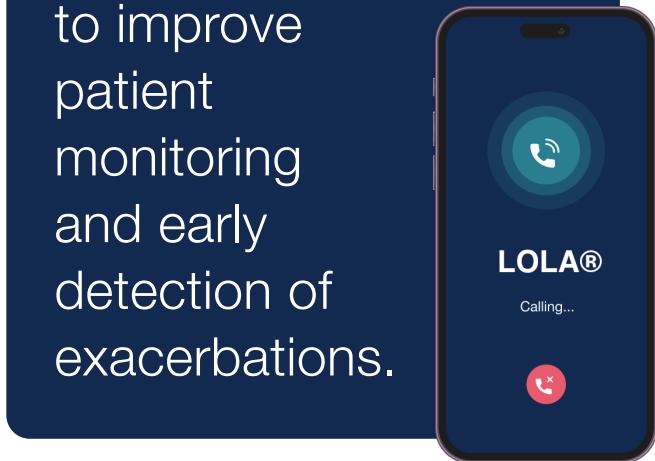
The situation was particularly serious during the winter months, from November to February, when COPD exacerbations typically spike. This seasonal rise in patient needs often led to **hospital overcrowding, forcing the suspension of other critical services** such as scheduled surgeries. The reactive care model not only compromised patient outcomes but also strained hospital resources, creating a cycle of crisis management rather than preventive care. Without a standardized, proactive

monitoring system, the hospital struggled to efficiently allocate its resources and provide timely interventions that could prevent complications and reduce the burden on emergency visits.

This situation highlighted the urgent need for improved patient monitoring and early detection of exacerbations. The hospital implemented Tucuvi to achieve this without imposing additional strains on human and economic resources.

This strategic approach seeks to streamline care, mitigate risks, and ultimately elevate the overall quality of COPD patient management.

The hospital implemented Tucuvi to improve patient monitoring and early detection of exacerbations.





STRATEGY & IMPLEMENTATION

6 weeks implementation

time from Kickoff meeting to first call

① Challenge

Transform the reactive, non-standardized approach COPD patient follow-up into a proactive, **standardized follow-up system that optimizes clinical team efficiency and improves patient outcomes.**

② Solution

The hospital partnered with Tucuvi to leverage Tucuvi's AI-powered virtual medical assistant, LOLA. Tucuvi's CE-marked solution for autonomous phone calls was the perfect fit for their patients' needs, offering a familiar and user-friendly approach that seamlessly integrates with existing clinical practices.

The clinical team, alongside Tucuvi, adapted Tucuvi's COPD protocols based on GOLD Clinical Guidelines to the specific realities of the hospital's care pathway, ensuring optimal patient care.

Given the rural nature and linguistic diversity of the patient population, there were initial concerns about acceptance and engagement. To address this, Tucuvi implemented a comprehensive measurement framework, allowing for real-time evaluation and continuous improvement throughout the project.

 **LOLA enables healthcare professionals to prioritize patients requiring immediate attention, facilitating proactive care and reducing hospital readmissions.**

③ Implementation

Tucuvi's implementation process demonstrates its adaptability and commitment to delivering value quickly. **Here's how the hospital transformed COPD care in less than 6 weeks.:**

• WEEKS 1-4

Protocol configuration

The key aspect of the protocols was about measuring the impact of COPD disease in the patient quality of life with CAT questionnaire, and the stratification of dyspnoea severity with the mMRC scale. In this initial phase, both clinical team and Tucuvi configured call frequency, alerts thresholds and considering what specific symptoms to monitor.

• WEEK 5

Healthcare professional training

The clinical team received comprehensive training on the Tucuvi Health Manager platform. They were also supplied with patient onboarding materials, all with the overarching goal of fostering high levels of patient engagement from the outset.

• WEEK 6 AND BEYOND

Go-Live and ongoing support

Following patient onboarding and LOLA's activation, Tucuvi maintained close collaboration with the clinical team through a tailored schedule of regular control meetings with the clinical team, gradually transitioning from intensive weekly sessions to monthly reviews over six months. This adaptive approach ensured seamless integration, allowed for quick resolution of any issues, and facilitated continuous optimization of the system. By maintaining close collaboration, the care team was able to maximize the benefits of the platform and deliver enhanced care to COPD patients.



RESULTS AND CONCLUSIONS

After implementing LOLA, the clinical team experienced remarkable improvements in patient care and operational efficiency:



This is a comparative analysis conducted on the results from October 2022 to April 2023 and October 2023 to April 2024. This comparison utilized data from the same cohort of patients from the Chronic Complex Patient unit across both time periods.

These outcomes demonstrate that LOLA effectively enables early identification of patients with clinical changes, allowing for timely interventions and reducing the burden on emergency services. However, the true impact goes far beyond these numbers.

The significant reduction in emergency visits and hospitalizations translates to a profound improvement in patients' daily lives. COPD patients at El Baix Empordà now report **feeling more secure and less anxious about their condition**, knowing they are continuously monitored from the comfort of their homes.

This increased sense of control and the ability to manage their condition more effectively at home has led to patients expressing an overall improvement in their quality of life, despite the ongoing challenges of COPD.



RESULTS AND CONCLUSIONS

In conclusion, the implementation of LOLA at El Baix Empordà hospital has proven to be a transformative strategy in improving COPD patient care. By leveraging technology to enhance patient monitoring and streamline care delivery, the hospital has not only achieved significant improvements in clinical outcomes and resource utilization but has also dramatically **enhanced the day-to-day lives of COPD patients**.

Leverage Conversational AI in healthcare sets a new standard for chronic disease management, putting patients' well-being at the forefront of healthcare delivery.

“

*While living with COPD is still challenging, LOLA has given me a greater sense of control over my condition. I can manage my symptoms better now, and overall, **I feel my quality of life has improved**. It's reassuring to know help is just a call away if I need it.*

COPD Patient - El Baix Empordà Hospital

”