



# PubNub

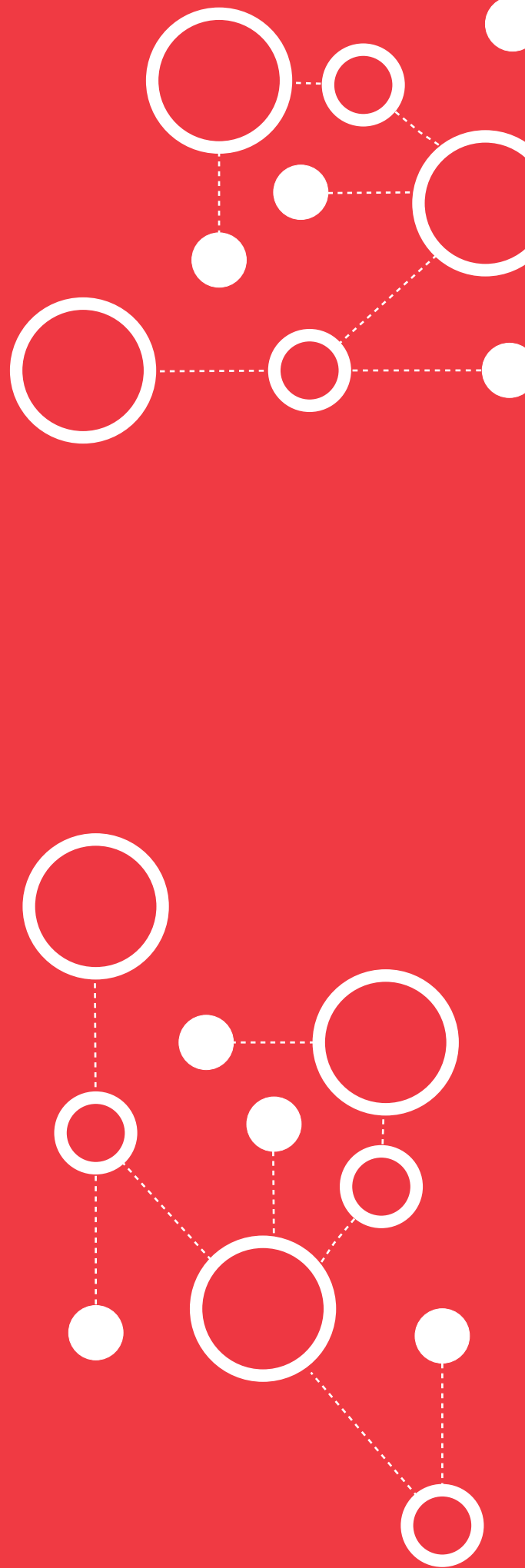
## HEARO

### Case Study

#### **Meet Hearo**

Operating out of the Springfield area, Hearo is dedicated to helping patients live more independently. To accomplish this, they provide healthcare agencies, assisted living facilities, and in-home care organizations with remote patient monitoring platforms.

Hearo uses both sensors and software to create these remote patient support platforms.



They also enable patients to speak 24/7 with their remote care team through voice and video.

Unlike others in the remote healthcare space, Hearo considers themselves to be provider-first. Their technology allows home care providers to create their own virtual support teams so that they don't have to outsource. When patients need help, they can talk to their direct care providers to receive personalized treatment, rather than strangers who aren't familiar with their conditions and needs.

"Independence is one of our core tenets," said Myke Bates, Co-Founder and CTO at Hearo. "Our goal is to enable our customers so that they can create the support systems they need to so that their patients can have as much control as possible over their own health and wellness."

To provide their customers with the most reliable, real-time, and feature-rich remote patient monitoring, Hearo turned to PubNub.

## Releasing new features overnight

Alongside being both a co-founder and the CTO, Bates was also the sole developer for the first year of Hearo. He was responsible for building the platform from the ground up.

When he started building out Hearo, he mostly worked with SignalR to handle the messaging components.

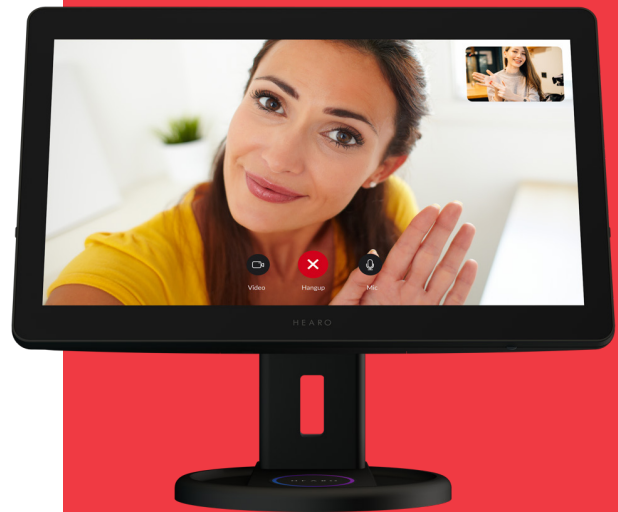


“Being the first-class citizen in the .NET world, it made all the sense to use SignalR,” said Bates. But when Bates started to develop a new core feature of the Hearo platform, he ran into some problems.

In preparation for a tradeshow, Bates was trying to roll out the ability to let customers and patients send messages to multiple or specific users, groups, channels, and locations. “I just kept hitting walls,” said Bates. “And I thought if there’s a limit here then we’re definitely going to keep having limitations in the future.”

Frantically searching for a solution, Bates remembered PubNub—who had been recommended in developer communities he’s a part of. “When I started building in PubNub, I was shocked by the extent of the client libraries,” said Bates. “That’s how I knew PubNub would be up to the task.”

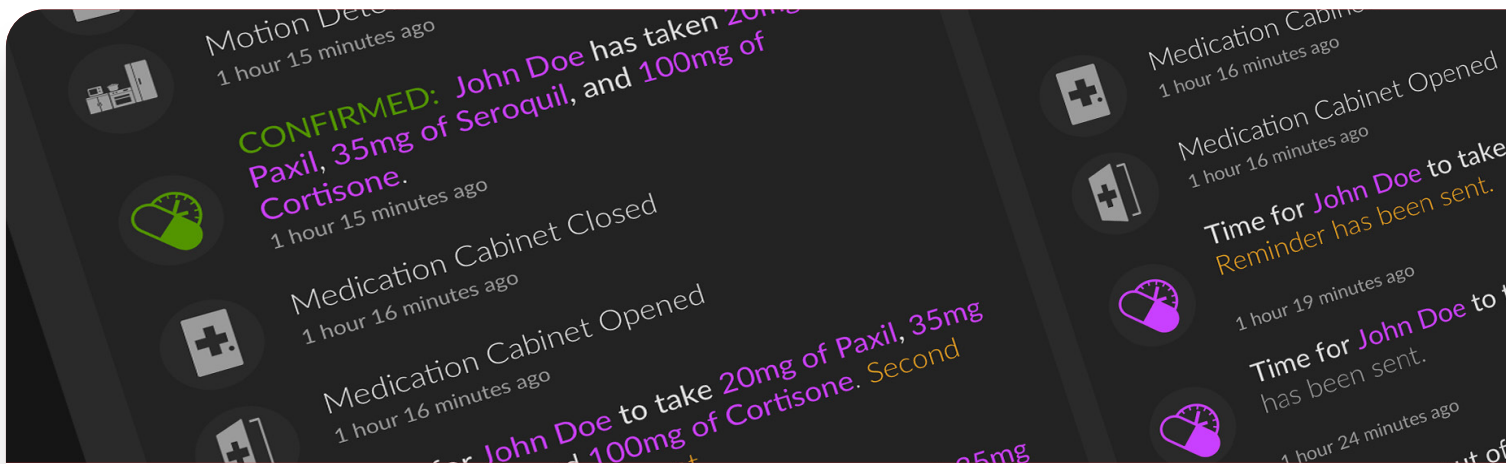
Bates was able to roll out his messaging feature overnight because complex, multi-party messaging workflows are built right into PubNub. His messaging was up and running right before the trade show and he saved 80+ hours of development time. “And since then, quite literally every new feature and function we add to Hearo now uses PubNub,” said Bates. “PubNub makes our platform possible.”



## Powering a connected, flexible, and real-time IoT platform

Following their initial success, Hearo now relies on PubNub to signal and connect every part of their IoT platform. “It’s nice to know that we don’t have to worry about what languages or platforms to use, because I know PubNub will support the tools we choose,” said Bates.

A core tenet of Hearo’s platform is utilizing data from multiple sensors. Their customers use a variety of sensors, like door, bed, and fridge sensors to track patient movement, sleep, and eating habits in real time.



Hearo relies on PubNub to ensure that millions of sensor events are accurately captured and pushed through their rules engine that triggers an appropriate response—like turning on lights or sending an alert to a nurse.

Before PubNub, if these sensors lost internet or server connectivity, all data would be lost. As a result, alerts might not be sent and patients might not get the attention or support they need.

But now, Hearo can retain all sensor data even if their systems go offline. When systems come back online, PubNub immediately re-establishes the connection and pushes this stored data. “PubNub has given us a fail safe so our customers don’t have to worry about losing critical information,” said Bates.

Patients and their care teams receive alerts as well as chat, voice, and video messages through Hearo’s desktop, iOS, and Android apps. By relying on PubNub to ensure proper signaling is taking place, Hearo can now ensure all alerts, calls, and messages are in real time and being sent to the right users, channels, and locations. “With PubNub, our entire platform is immediate and in real time so our customers are always getting the information they need to best help their patients,” said Bates.

Additionally, because of PubNub’s library of SDKs, Hearo can confidently add on new sensors, client platforms, and hardware because they know that PubNub will support any tech stack.

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**I know I don’t  
have to worry  
about our  
future product  
infrastructure  
with PubNub.”**

Myke Bates

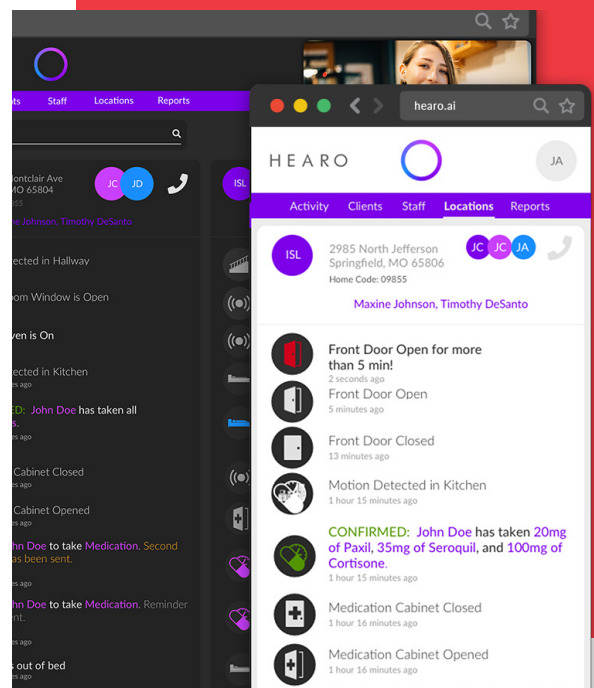
Co-Founder and CTO at Hearo

## Future-proofing and scaling with PubNub

Over the past six months, interest in Hearo has spiked to new heights. With the onset of COVID-19, the importance and value of remote healthcare has become very clear. As a result, Hearo has seen an influx of usage from current customers and interest from prospective ones.

In light of this increased traffic and interest from COVID-19, Bates has been focused on the future of Hearo's product offering—what new features to add and how to scale it for a larger customer base and higher usage rates. “The last thing I want to worry about on top of all our product roadmapping is the actual logistics of how we're going to scale the messaging component of our platform,” said Bates.

As Hearo's customer base continues to expand, Bates is confident that PubNub will be key to ensuring smooth growth for the company. “I know I don't have to worry about our future product infrastructure with PubNub—if anything, I'm excited.” said Bates. “We're just scratching the surface of what we can achieve.”



## Increasing patient independence

Ultimately, with PubNub, Hearo has been better equipped to achieve their mission: increasing patient independence.

“What we're seeing is that customers have started to remove overnight staff,” said Bates, which helps their customers save on overhead costs.

“And this also has huge implications for patients,” said Bates. “There's no longer somebody in their house, sitting on their couch, when they're sleeping. That alone is a massive win. And in all sincerity we can only power this capability because of PubNub.”