SECURE PATIENT TRANSPORT · UNITED KINGDOM

A secure patient transport operator replaced a subscription platform it had outgrown

We built a control-room dispatch panel and an offline crew tablet app. Now every trip, status change and handover is in one system the client owns and can change.

8,000+
secure transfers a year

$3,000
monthly savings on licences

8 mo
from kickoff to full launch

INDUSTRY **Secure & mental health patient transport**	LOCATION **United Kingdom**	TEAM **6 people: PM, designer, 3 developers, QA**
ENGAGEMENT **Fixed-price phases, then monthly team**	DURATION **8 months to launch · 3+ years together**	STACK **Flutter · Vue.js · Laravel**

ABOUT THE CLIENT

One of the UK's leading secure patient transport operators

The client moves people in mental health crisis between homes, police custody, hospitals and places of safety, 24 hours a day. Its crews work across the country, and a central control room plans and follows every journey.

Each trip carries clinical and legal risk. The control room has to know which crew is closest, what state the patient is in, and who took responsibility at every handover.

> Run non-emergency medical transport? The workflow is the same: booking, dispatch, a crew app, a signed handover and reporting.

24/7 control room

30+ specialist vehicles

THE CHALLENGE

A rented tool that couldn't keep up with the operation

The control room ran on a subscription MVP. Bug fixes took weeks and feature requests went nowhere, so the team filled the gaps with phone calls, spreadsheets and paper.

BUSINESS

No single picture of a trip

Bookings, crews, vehicles and reasons for a call lived in different places. Reports existed, but not the ones clients asked for, so the team adjusted them or filled the gaps by hand, about two days a month.

TECHNICAL

Live data with no signal

Crews often lose mobile coverage on the road. Status updates and handover signatures had to survive hours offline and sync without overwriting what the control room changed in the meantime.

DELIVERY

Replace it without stopping

The control room works around the clock. The new system had to go live while the old one stayed on, with no day of downtime and no week lost to retraining.

Cost of waiting: around $3,000 a month in per-vehicle fees for a tool the team kept working around, and no way to add the safety features the client needed.

WHY BYTECRAB AND HOW WE WORKED

Discovery first, then a working slice every two weeks

Experience with offline field apps
The client needed crews to keep working with no signal, which we had done for warehouse scanners.

Fixed price per phase
A clear cost before each phase instead of an open-ended contract.

They keep the code
After years of renting, owning the system mattered as much as the features.

WEEKS 1–3
Discovery
Sat with the control room, mapped every step of a trip and the data each step needs.

WEEKS 4–8
Design
Clickable prototypes of the panel and the tablet app, tested with dispatchers and crews.

MONTH 3–5
Core build
Bookings, crews and live statuses first, demoed every two weeks.

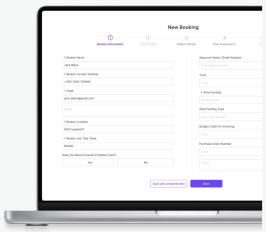
MONTH 6–8
Pilot and switch
A 2–3 month pilot on two bases, then the whole company moved over.

3+ YEARS
Long-term partnership
Reminders, safe destinations and e-signatures added after launch.

THE SOLUTION

One system for the control room and every crew

A web panel for dispatchers and a tablet app for crews, on one real-time backend.

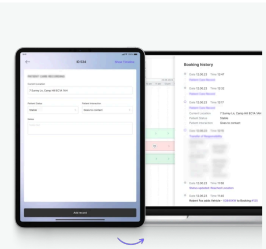


CLOSES THE BUSINESS CHALLENGE

Every trip in one control-room panel

Dispatchers create a booking with the caller, the patient's location, safety requirements and the reason for the call. They pick a crew and a vehicle, and the crew gets the job on the tablet at once.

- Crews, staff, vehicles and hubs in one directory
- Live status of every active job
- Reports for clients exported to PDF or Excel in one click



CLOSES THE TECHNICAL CHALLENGE

A secure crew app that works offline

Every sign-in is protected with two-factor authentication. Crews update the job and the patient's condition with or without signal. Each change joins a sync queue that never overwrites what the control room changed in the meantime.

- Four job statuses, with a reminder every 30 minutes
- E-signature at every handover: crew to crew and crew to hospital
- Request backup from the nearest hub

Two bases
Runs next to the old system

2–3 month pilot
Real trips, real crews

Training
Before each base moves

Whole company
No day of downtime

CLOSES THE DELIVERY CHALLENGE

Switched over without a day of downtime

The new system ran next to the old one during a 2–3 month pilot on two bases. Once it held up there, the whole company moved over.

- Training for the control room and crews before each base moved over
- A mistake-proof UX: one clear flow for each task, so steps are hard to skip

RESULTS

What changed after go-live

$36K
a year back from licence fees ($3,000 a month)

−40%
time from call to crew assigned

−70%
status calls between control room and crews

0
paper handover forms

METRIC	BEFORE	AFTER
Software cost	~$3,000 a month in per-vehicle fees	**Own system, no licence fees**
Call to crew assigned	~25 min	**~15 min**
Status updates	Phone calls to the crew	**Live on screen, reminder every 30 min**
Handover	Paper form	**E-signature stored with the trip**
Client reports	~2 days of manual work a month	**PDF / Excel export in one click**
New features	Weeks of waiting, often never	**Added by the client's request**

> See every active trip and crew on one screen.

> Prove who had the patient and when, at every handover.

> Ask for a feature and get it, instead of waiting on a vendor.

TECH STACK

CREW TABLET APP

Flutter · Dart · Offline sync queue · 2FA

CONTROL-ROOM PANEL

Vue.js · PrimeVue · i18n · jsPDF · SheetJS

BACKEND

Laravel · Laravel Echo · WebSockets

YOUR OPERATION

Running patient transport on a tool you keep working around?

Free 30-minute fit check. Tell us what your dispatch tool can't do today. If off-the-shelf fits you, we'll say so.



Stan Kuznietsov
CEO, ByteCrab

BOOK A CALL

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