

# ZOLL Data - EMS Analytics: One Platform, Multiple User Roles

## PROJECT OVERVIEW

I led UX design for ZOLL's analytics platform migration, creating a customizable dashboard system that transformed how EMS personnel, fire departments, and administrators explore operational data across Billing, ePCR, Road Safety, and CAD products.

## DESIGN PROCESS

I conducted field research with EMS personnel and firefighters to understand their data needs, then learned the Birst analytics tool to execute the migration. I developed a custom color palette, selected appropriate visualization widgets for each data type, optimized the widget layout, and successfully recreated Tableau visualizations within the Birst platform.

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## DASHBOARD PRODUCTS

**FULLPROD Overview** - Integrates EMS and billing metrics including unit utilization, emergency response times, and driver performance.

**EPBI (Emergency Pre-hospital Billing Intelligence)** - Tracks financial and claims management with metrics for claims status, payer mix, payment ratios, and patient transports.

**ePCR (electronic Patient Care Report) Dashboard** - Monitors clinical documentation and treatment metrics including completion rates, top interventions, IV/airway success rates, narcotics administration, refusals, and transports by call type.

**Billing Dashboard** - Displays billing operations including charges, accounts receivable, payments, and timely filing compliance.

**RSDIS Product Overview** - Monitors fleet and emergency response operations with ER response times, driver standards, vehicle utilization, and facility ordering patterns.

**Dispatch Overview** - Provides real-time dispatching operations with geographic response mapping, canceled calls, and unit utilization.

**Road Safety Overview** - Tracks driver performance and vehicle safety with ABC scoring, mileage trends, and geographic incident mapping.

# FULLPROD Product Overview Dashboard

Birst BI dashboard - redesigned from Tableau

Combines operational metrics from both emergency medical services and billing operations in six panels.

**ZOLL**

FULLPROD User Log out

FULLPROD Product Overview

Company: FULLPROD Select a Product

Unit Utilization

Completed PCRs

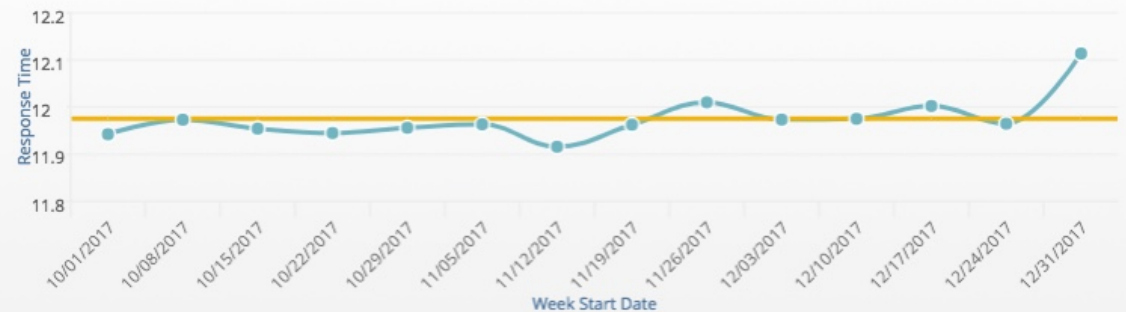
80%

PCRs Sent to Billing

49%



Emergency Response Times



PCRs Sent to State

90%

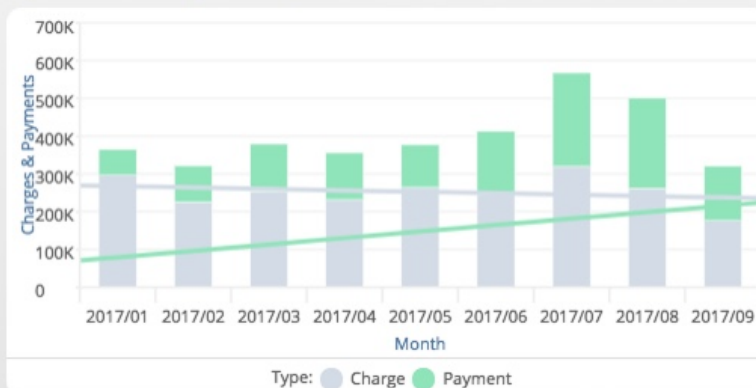
ABC Score

747

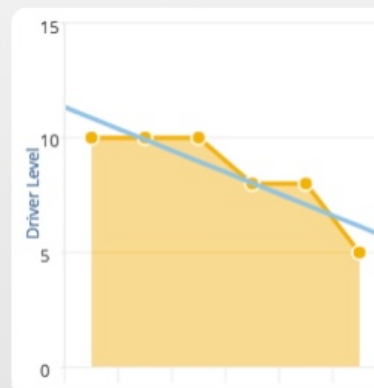
ER Response Time

12

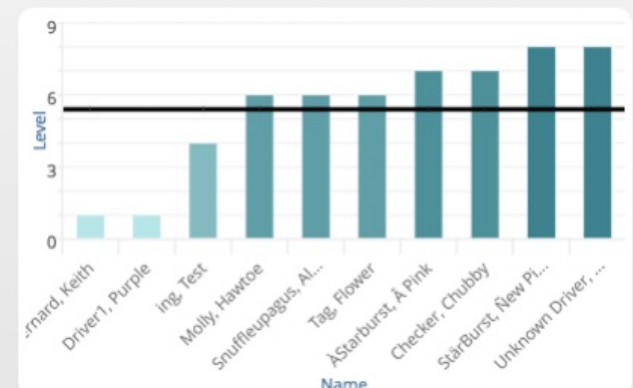
Payment to Charge Ratio by Month



Company Level by Month



Driver Level



# EPBI (Emergency Pre-hospital Billing Intelligence) Product Overview

Birst BI dashboard - redesigned from Tableau

Dashboard displaying key operational and financial metrics for emergency medical services.

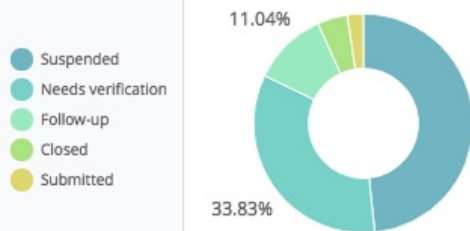
ZOLL

EPBI User Log out

EPBI Product Overview

Company: EPBI Select a Product

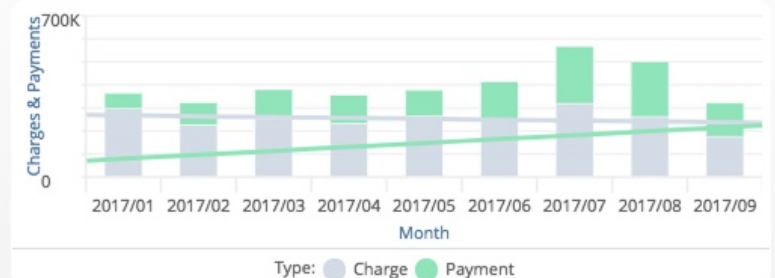
## Claims by Status



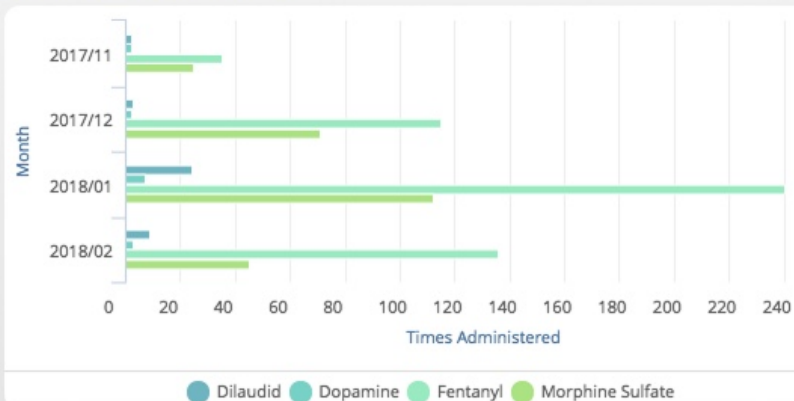
## Payer Mix Payments



## Payment to Charge Ratio



## Top Narcotics Administered



Complete PCRs - 72 hours

80%

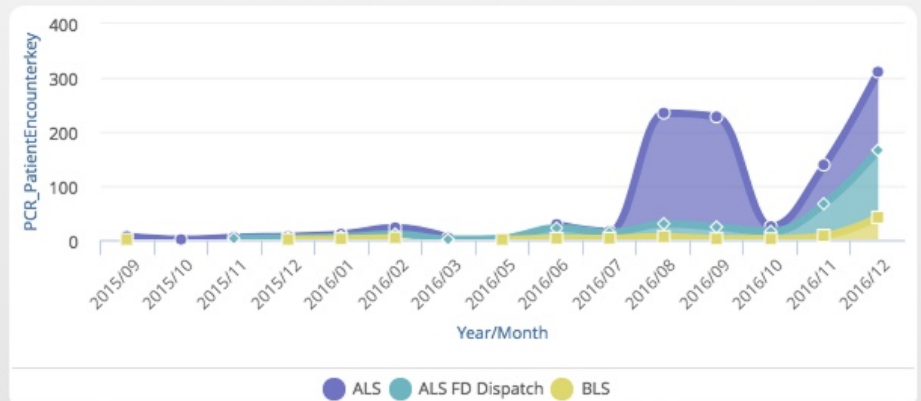
Sent to Billing - 72 hours

49%

Sent to State - 72 hours

90%

## Patient Transports by Call Type



# ePCR Dashboard (Electronic Patient Care Report)

Birst BI dashboard - redesigned from Tableau

A high-level operational view of EMS clinical documentation performance. Designed to help agencies monitor care delivery quality and reporting compliance at a glance.

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EPBI User Log out

ePCR Dashboard

Reports

Company: EPBI Select a Product

Sent to Billing - 72 hours

49%

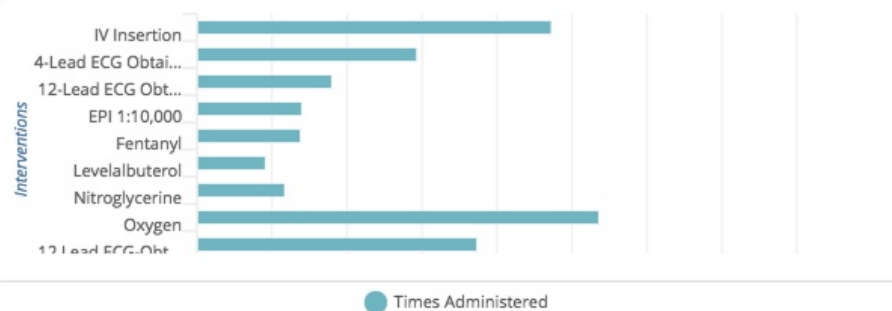
Sent to State - 72 hours

90%

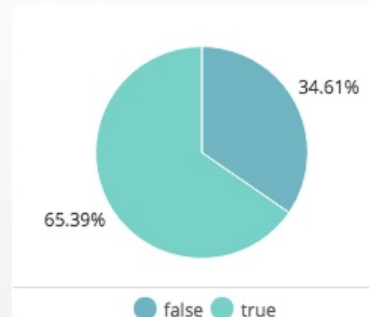
PCRs Completed - 72 hours

80%

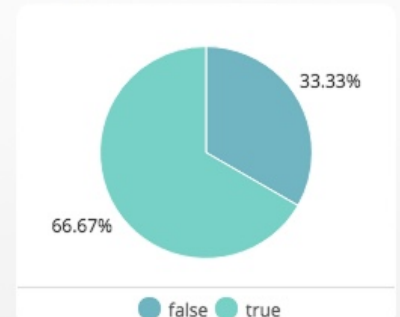
## Top Five Interventions



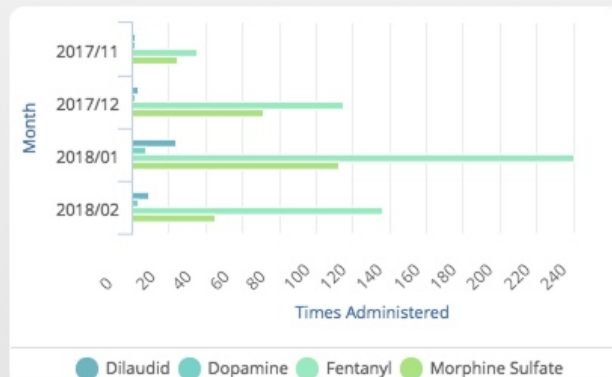
## IV Success



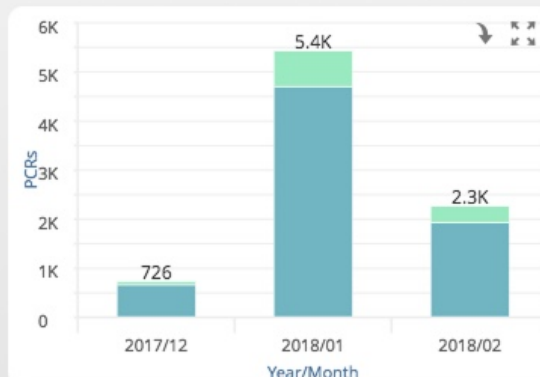
## Airway Success



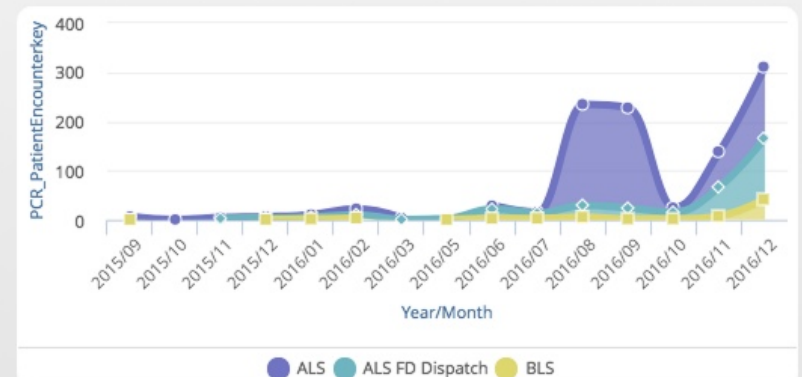
## Top Narcotics



## Refusals Ratio



## Transports by Call Type





# Road Safety Overview Dashboard

Birst BI dashboard - redesigned from Tableau

ZOLL's RSDIS system, monitoring driver performance and safety through five panels. Driver comparison against standards, key metrics, performance trends, and a geographic map of overspeed incidents.

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RSDIS User Log out

Road Safety Overview

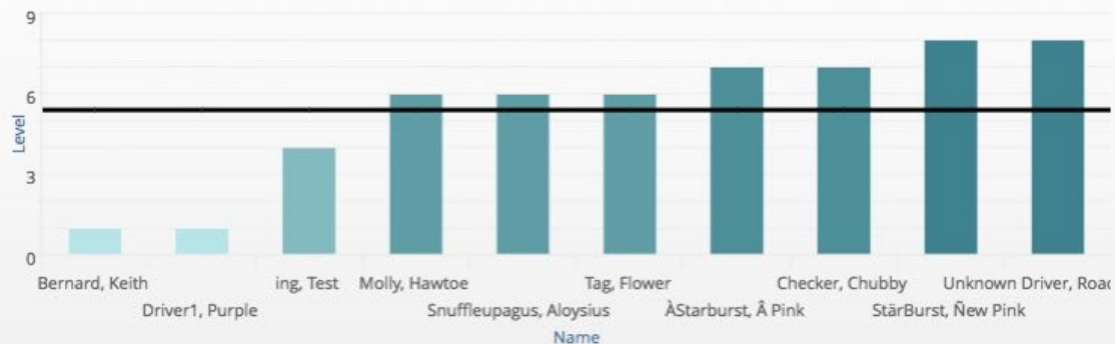
Driver's Dashboard

Fleet Dashboard

My Road Safety Reports

Company: RSDIS Select a Product

Above/Below Standard

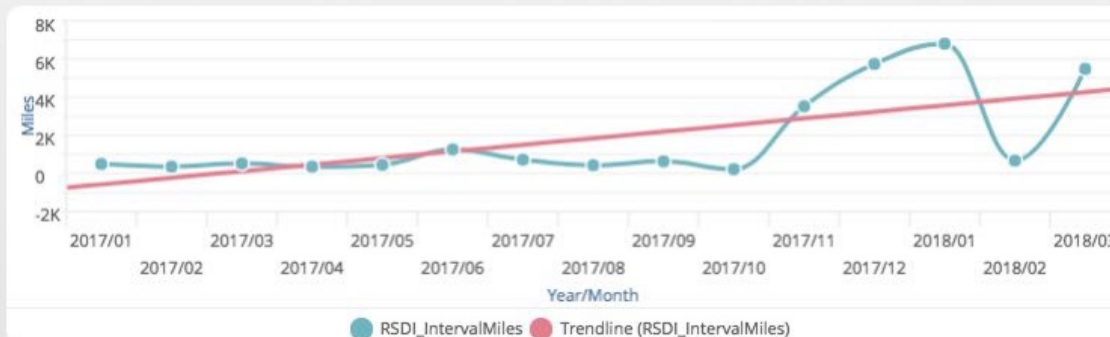


ABC Score  
**747**  
Miles Driven (YTD)  
**28K**

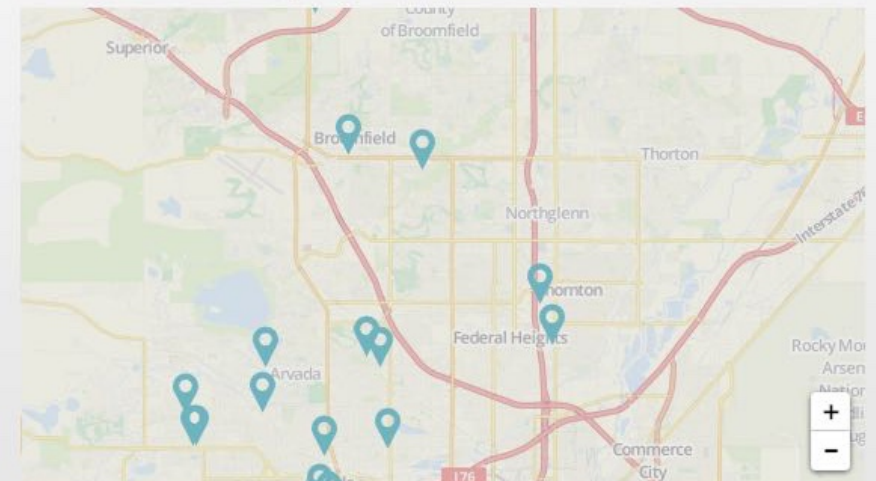
Company Level by Month



Miles Driven by Month



Extreme Overforce Overspeed Events MTD



# RSDIS (Rescue Squad Data Information System) Product Overview

Birst BI dashboard - redesigned from Tableau

Eight visualization dispatch panels tracking emergency response and vehicle fleet operations.

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RSDIS User Log out

RSDIS Product Overview

Company: RSDIS Select a Product

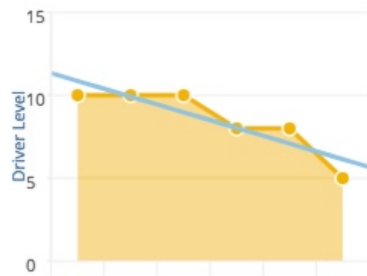
Company Level

ER Response Time

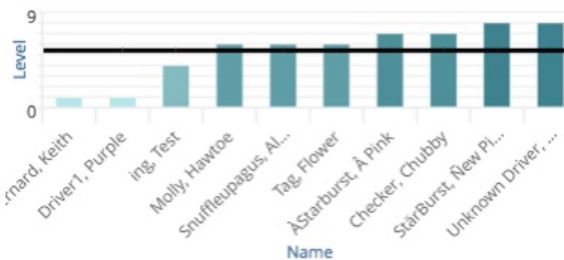
12.0

ABC Score

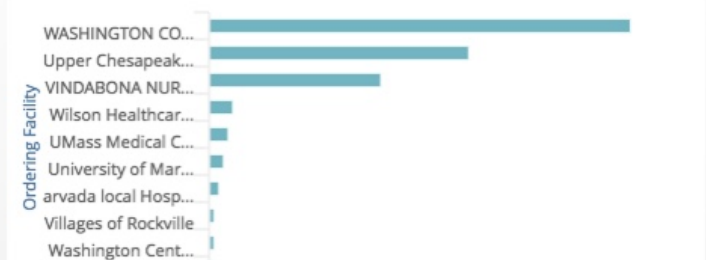
747



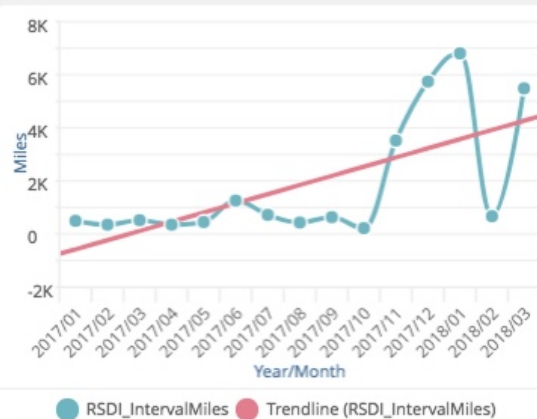
Driver Standard



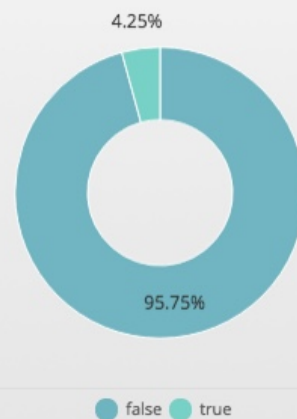
Top Ordering Facilities



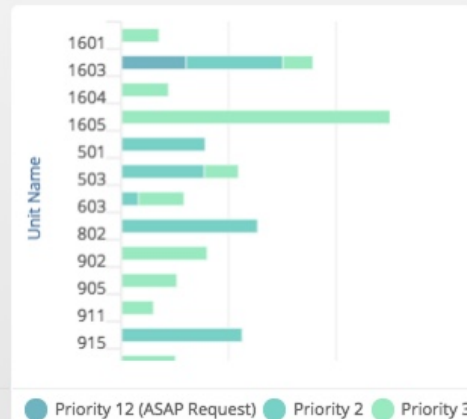
Miles Driven by Month



Long Distance



Today's Utilization Hours



ER Response Times



# Dispatch Overview Dashboard

Birst BI dashboard - redesigned from Tableau

ZOLL's RSDIS system, providing real-time operational monitoring for emergency response dispatching through seven panels.

