Long-term effects of an automated delirium risk assessment tool

the impact of PIPRA one year later

Dr. Ben Dodsworth
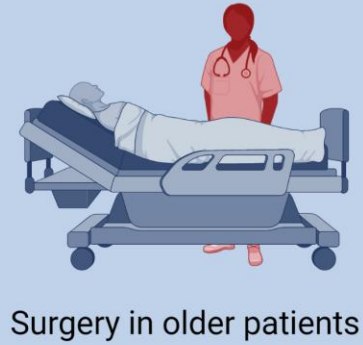CSO

PIPRA

ValueBased HealthCare | Prize 2023

CONFLICTS OF INTEREST

Co-founder, employee & shareholder of PIPRA AG

Delirium decision support system

PIPRA: Pre-Interventional Preventive Risk Assessment
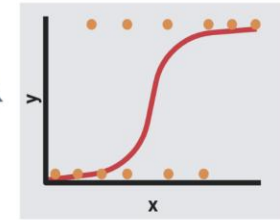
Surgery in older patients

Postoperative delirium (POD)

Training dataset: 2250 patients

Validation dataset: 359 patients

POD risk prediction algorithm

Patient POD risk stratification

Very high · High · Low · Medium

Targeted clinical prevention

Setting

- Swiss 335-bed hospital
- 12 months
- surgical inpatients
- non-cardiac
- age 60+
- routine data
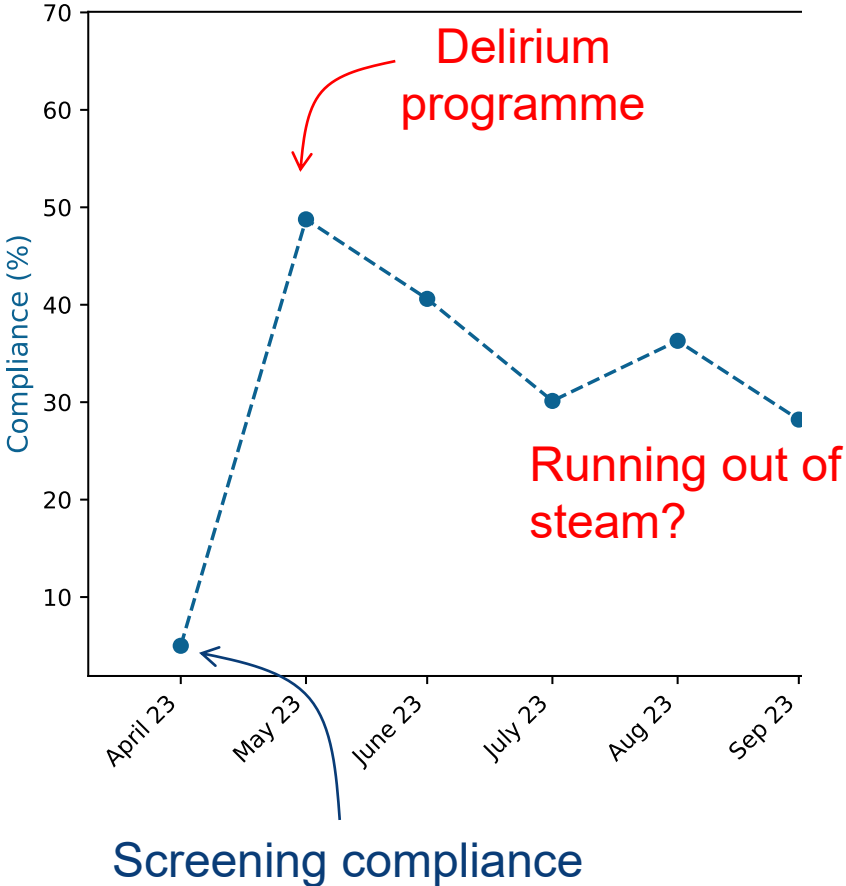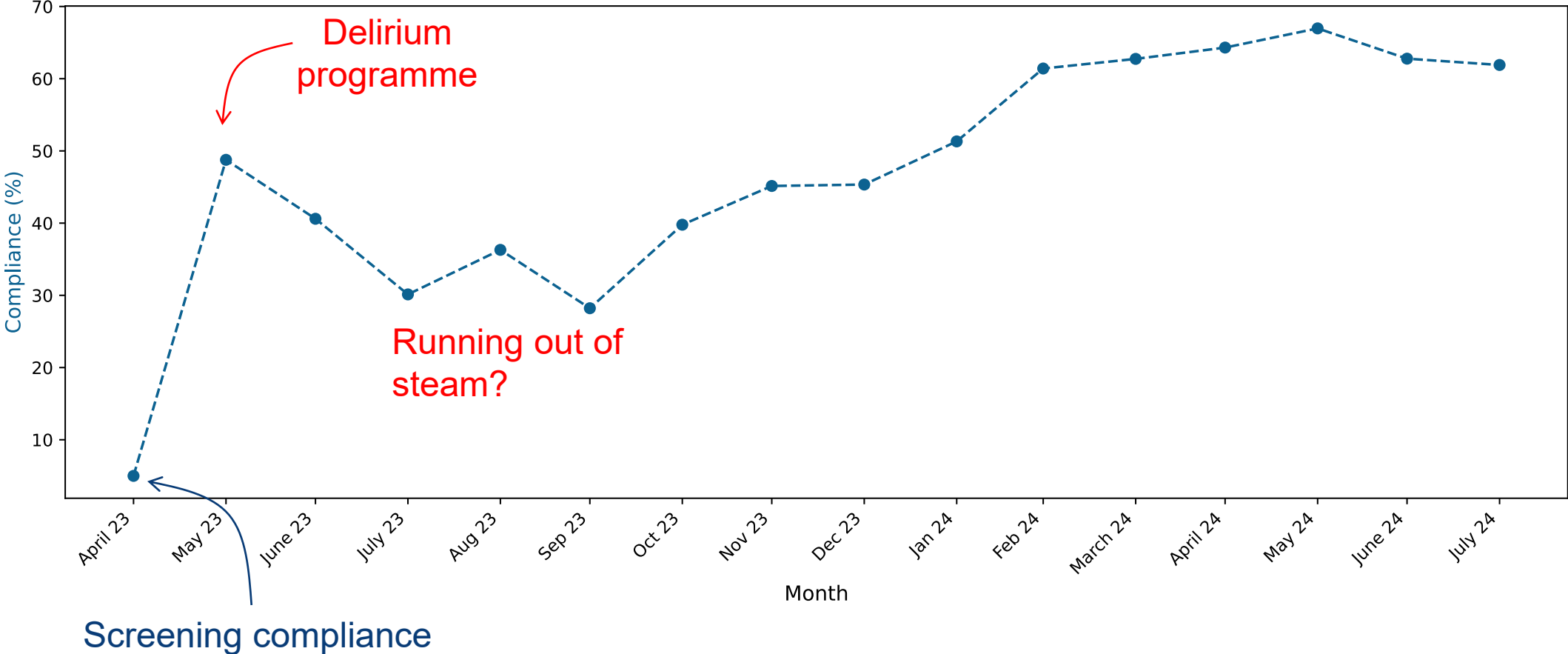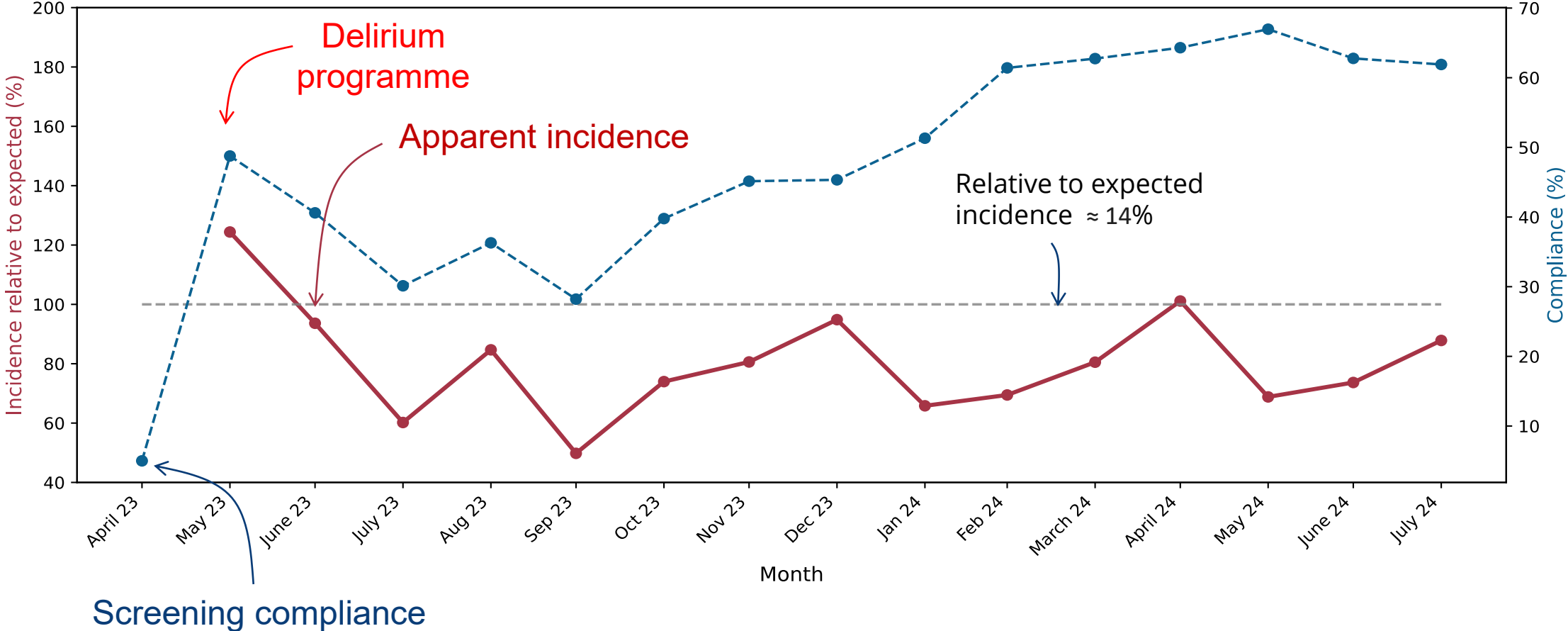- n= 4,670

Sound familiar?

PIPRA

Delirium programme

Compliance (%)

70
60
50
40
30
20
10

April 23   May 23   June 23   July 23   Aug 23   Sep 23

Screening compliance

100 % compliance = 3x/day per patient

Sound familiar?

100 % compliance = 3x/day per patient

Sound familiar?

100 % compliance = 3x/day per patient

Outcomes

100 % compliance = 3x/day per patient

Outcomes

Adjusted by model

Ignore patients with low screening

Apparent incidence

Relative to expected incidence ≈ 14%

Incidence relative to expected (%)

Month

Poster
51

100 % compliance = 3x/day per patient

Michaela Venturini
Data & A.I. Scientist

Outcomes

PIPRA

–31%

Delirium incidence

–0.65 days

Average reduction in
length of stay (LOS)

How did we do it?

PIPRA

CORE
AI-based automated delirium risk assessment

ADD-ON 1
Clinic-wide insights & compliance reporting
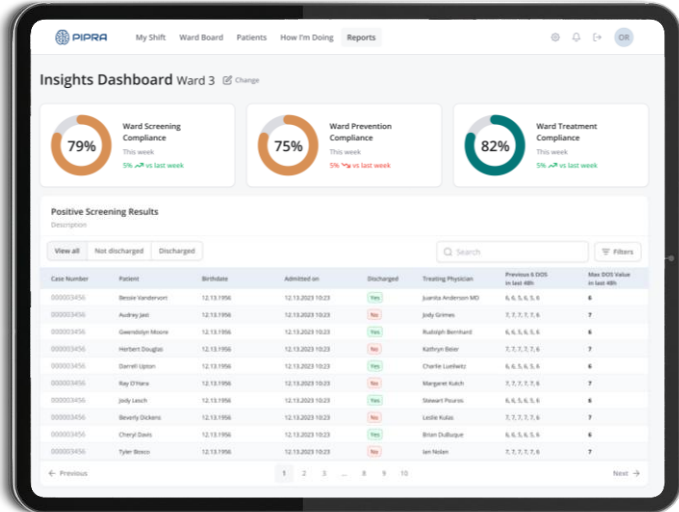
ADD-ON 2
E-Learning
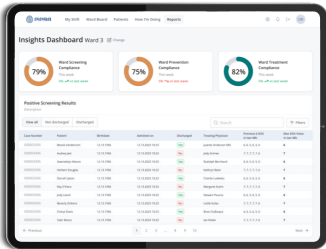
Risk Assessment

Reporting
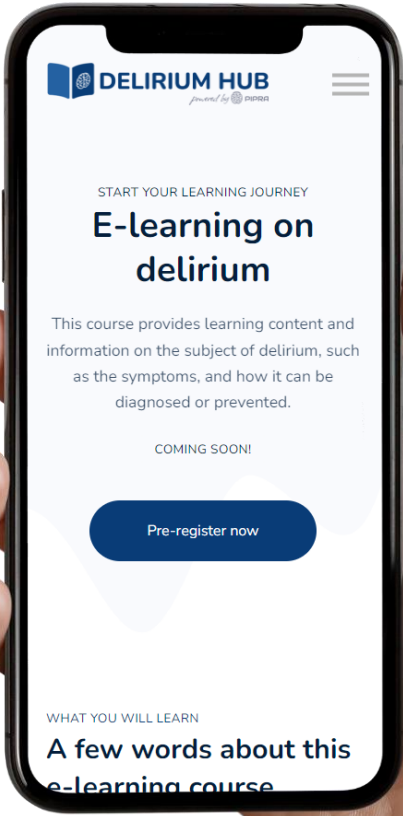
Training

What's next?
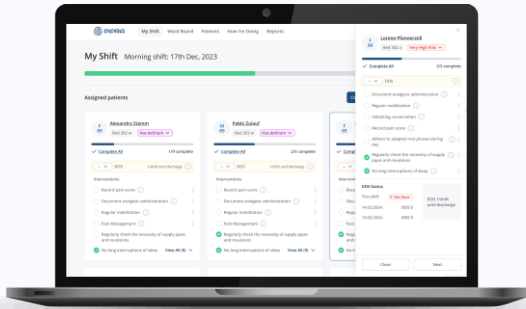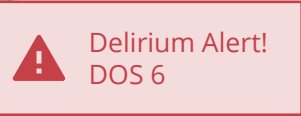

TODAY

TOMORROW

PIPRA Patient
At-home risk assessment & prevention

Clinical Delirium Suite
In-hospital prevention & treatment

DelirAlert
Automated delirium screening

Delirium Alert!
DOS 6

Thanks to the co-authors!

PIPRA

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Thanks for your attention

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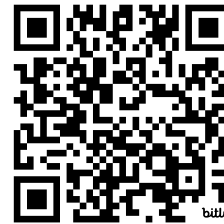
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powered by PIPRA

E-Learning

DELIRIUM HUB
powered by PIPRA

START YOUR LEARNING JOURNEY
E-learning on delirium

This course provides learning content and information on the subject of delirium, such as the symptoms, and how it can be diagnosed or prevented.

COMING SOON!

Pre-register now

WHAT YOU WILL LEARN
A few words about this e-learning course