

How long will I have to wait in the ED?

May 25th, 2016

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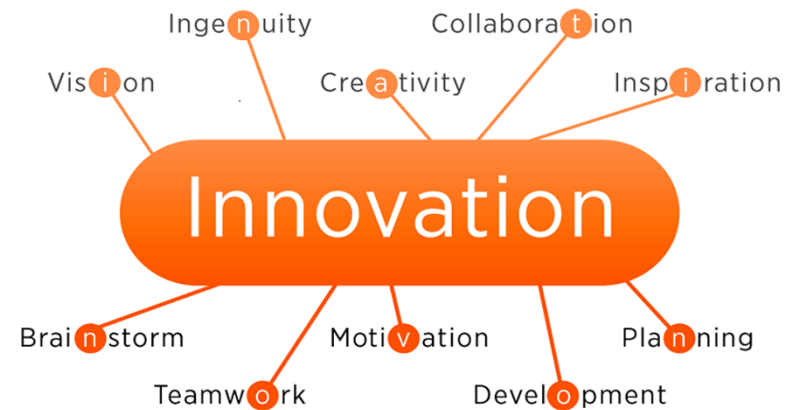
CEO & President

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Kenneth N. McKay, PHD

Chief Scientist



Who we are



- Based in Kitchener-Waterloo, Canada's technical hub
- Incubated in 2011 at St. Mary's General Hospital
- In over 25 hospital sites in less than 5 years
- Community to academic to systems - 150 beds to 2,200 beds
- Recognized award winning technology



Our solutions



Oculys
Performance

Oculys
prEDict

Oculys
KeepNTouch



Ontario Centre of Excellence
AdvancingHealth
Oculys stayTrack | Oculys miTrack



Oculys prEDict



Oculys
prEDict

Oculys prEDict broadcasts a hospital's Emergency Department performance to the community and hospital team members.



Oculys prEDict



If you are in need of serious medical attention, CALL 911 or go to your nearest emergency department.

Patients

Being Treated: 17
Waiting: 8

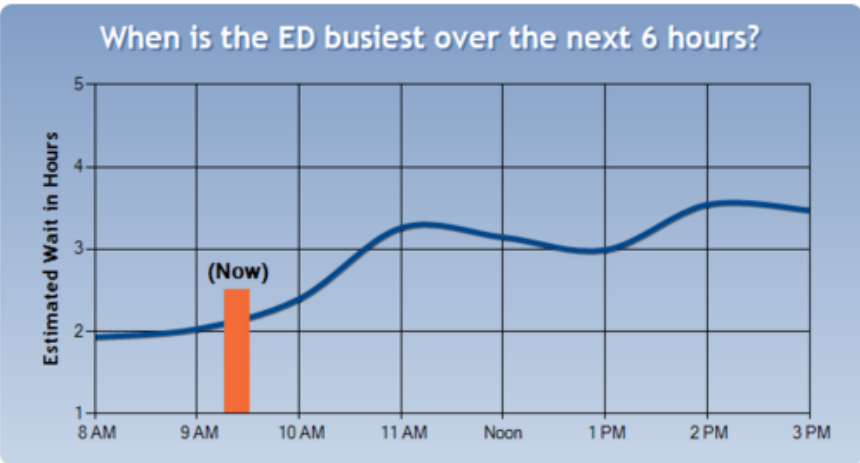
Estimated Wait Time

Last Update
2.5 hrs
9:35 AM

For a Doctor or Nurse Practitioner

- Alternatives to ED**
(Call to confirm hours)
- Call your doctor or go to [Health Care Connect](#)
 - [Telehealth Ontario](#)
Phone: 1-888-797-0000
TTY: 1-888-797-0007
 - [K-W Westmount Urgent Care Clinic](#)
Hours: 8:00-5:00 Mon-Fri
8:00-3:00 Weekends/Holidays
Phone: 519-745-2273
 - [Laurentian Walk-In Clinic](#)
Hours: 9:00-5:00 Mon-Fri
9:00-3:00 Weekends
Phone: 519-570-3174
 - [K-W Fairway Urgent Care Clinic](#)
Hours: 8:00-5:00 Mon-Fri
8:00-3:00 Weekends/Holidays
Phone: 519-748-2327
 - [Weber Medical Centre](#)
Hours: 2:00-8:00 Mon-Fri
Phone: 519-748-8933
 - [Cambridge Walk-In Clinic](#)
Hours: 8:00-4:00 Mon-Wed
8:00-5:00 Tues, 8:00-1:00 Fri
Phone: 519-854-2260
 - [Walk-In Clinic \(University\)](#)
Hours: 9:00-8:00 Mon-Fri
10:00-2:00 Weekends
Phone: 519-725-1514
 - [K-W Walk-In Clinic \(The Boardwalk\)](#)
Hours: 9:00-8:00 Mon-Fri
Phone: 519-779-4098

Due to rapidly changing demands in the Emergency Department, and the need to see the sickest patients first, your own wait time may be more or less than the time displayed here.



Patient Care in Real-Time

Forecasting vs Predictive Analysis



➤ Forecasting as it is taught

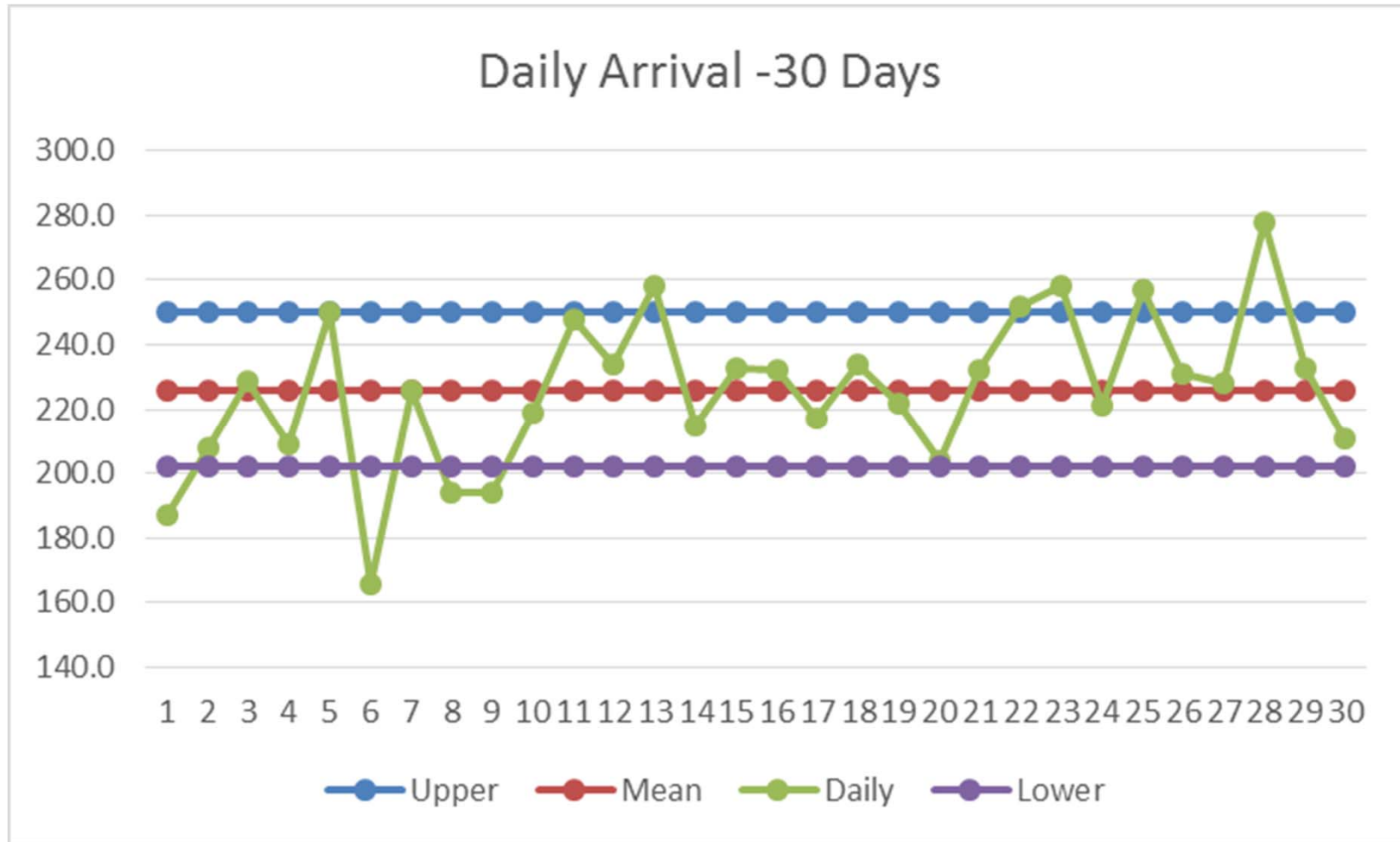
- If forecasting X, then use historical time series of X to forecast future X
- Works well in certain situations
- High level, aggregate level
- Good data, clean data, lots of it
- Relatively stable cause & effect relationships, patterns (seasonality)

➤ Predictive analysis

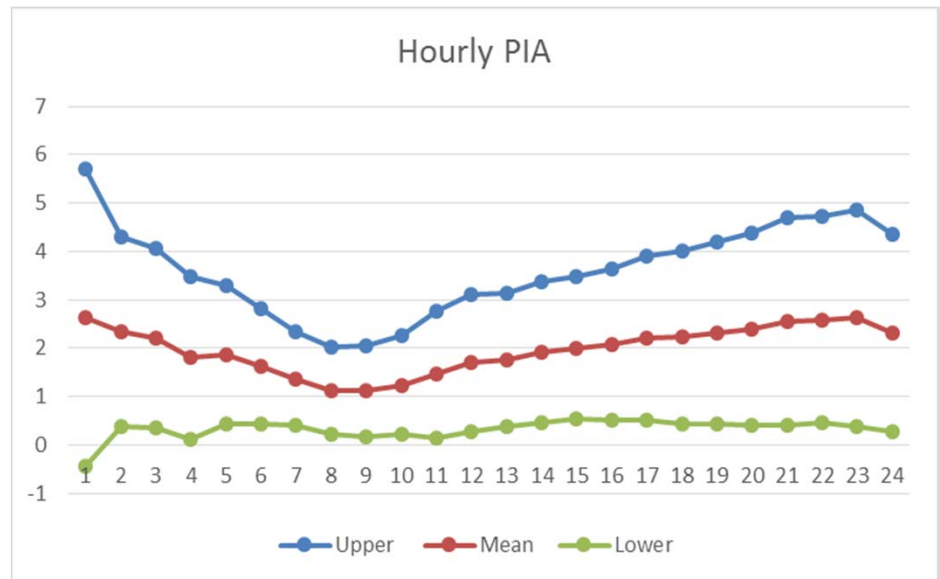
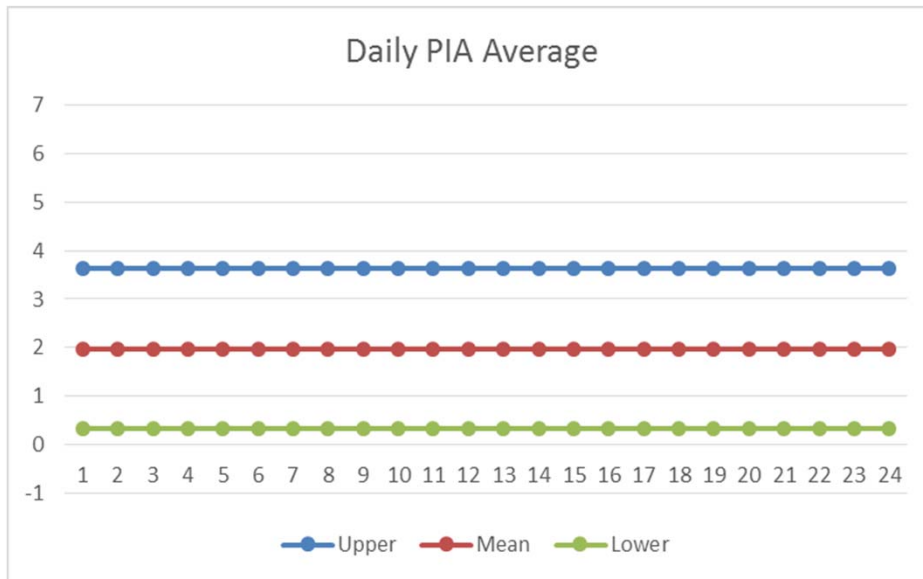
- Can include algorithmic, pattern analysis, machine learning approaches as well as elements of forecasting
- Can be at lower level, use situational data



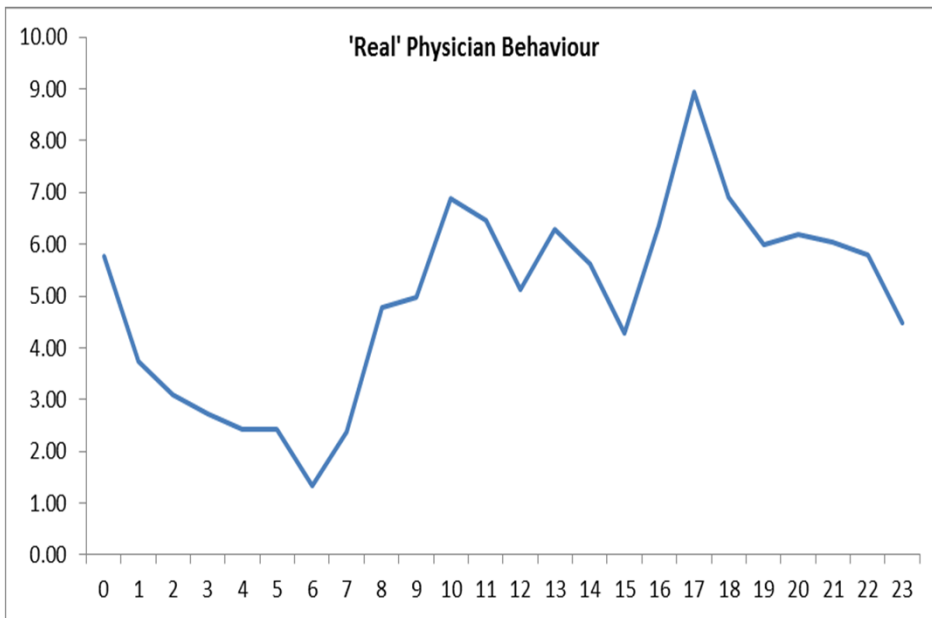
Some Aspects Defy Patterns



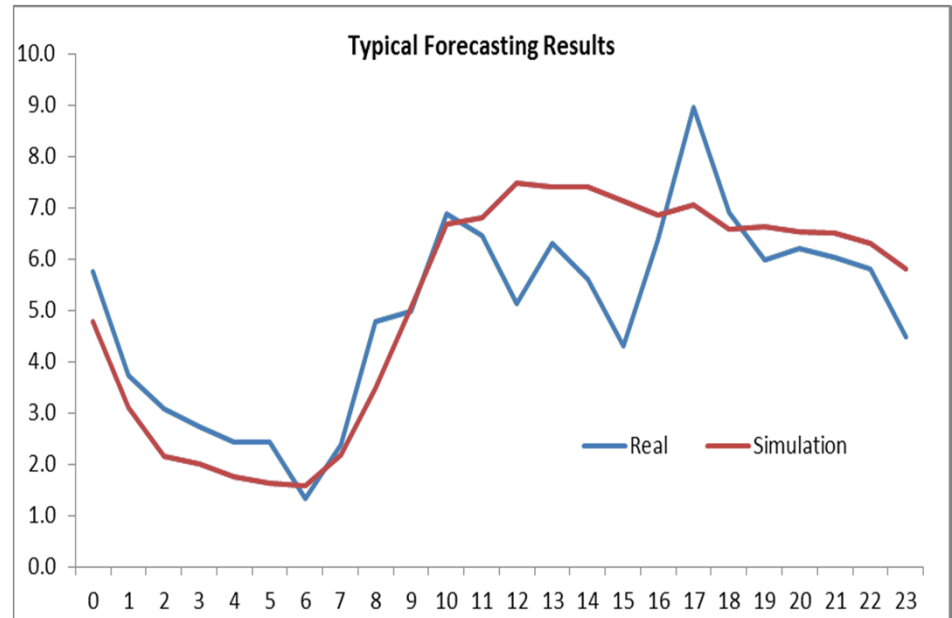
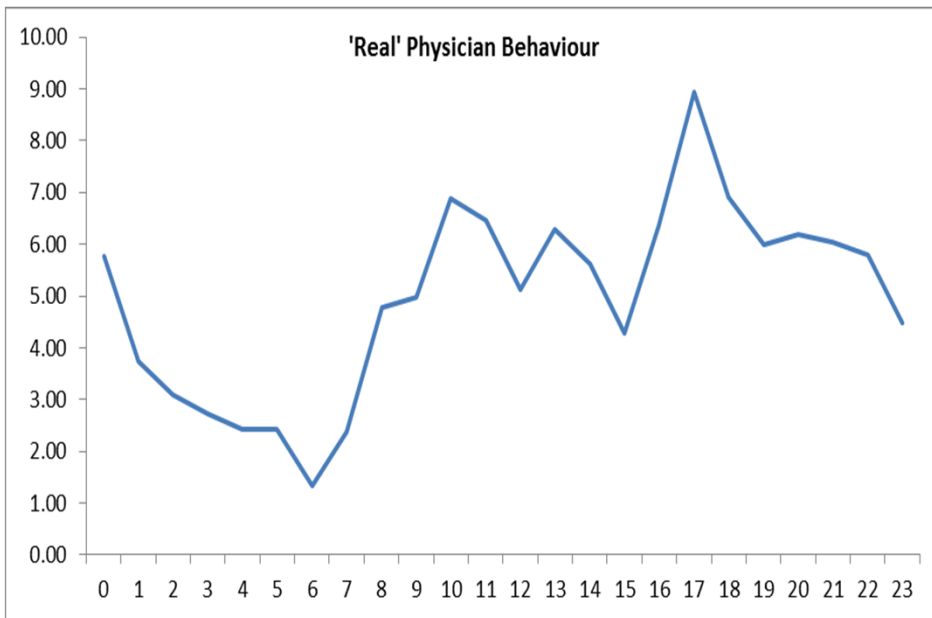
Some Aspects Defy Aggregation



Some Aspects Defy Forecasting



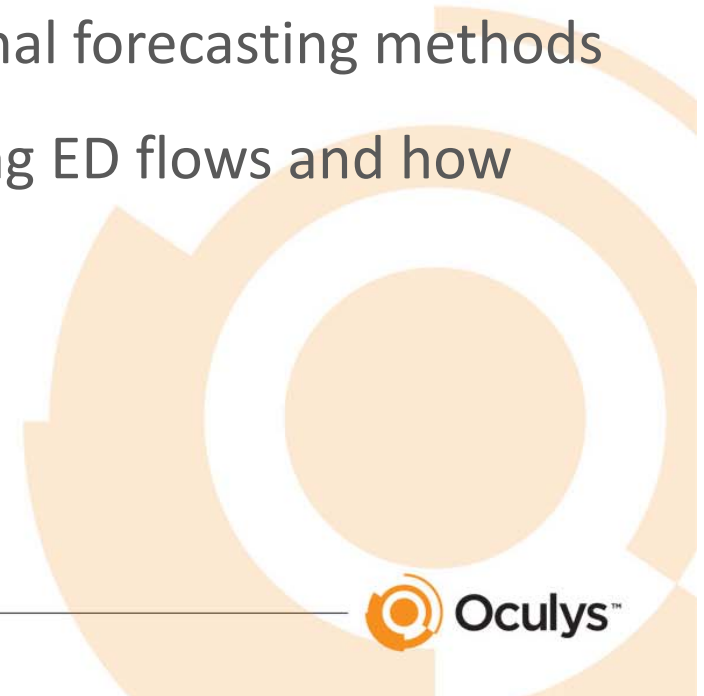
Some Aspects Defy Forecasting



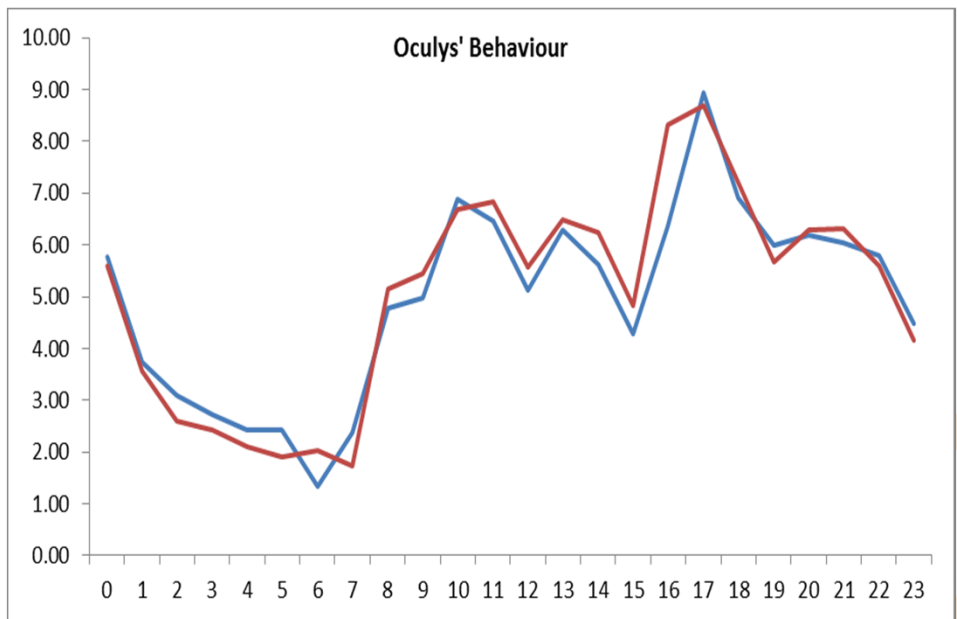
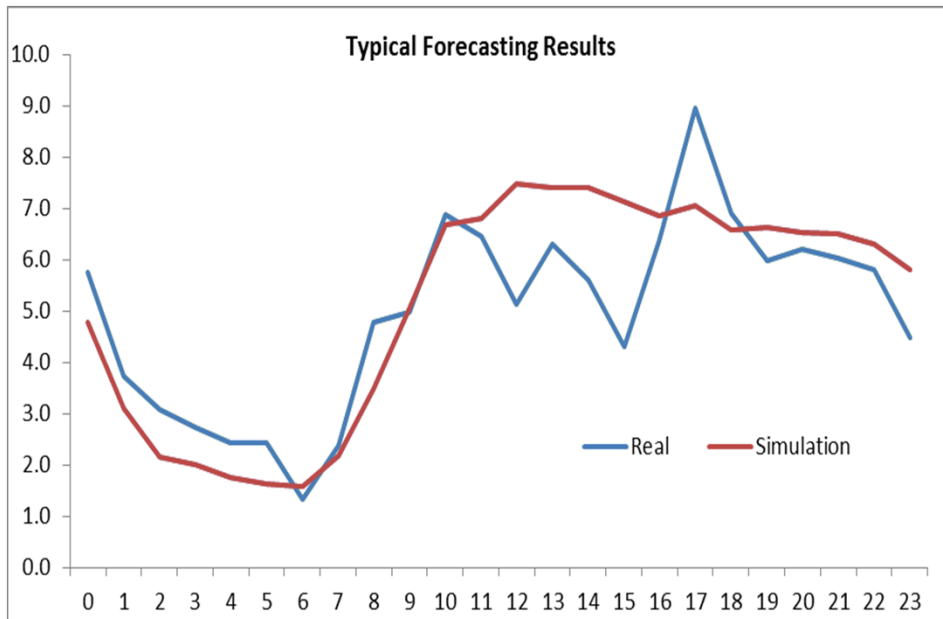
Oculys 'Behavioural' Predictive Analysis



- It is a multi-stage heuristic algorithm
- Uses a combination of adaptive methods
- Based on insights obtained from clues and signals in the data feeds
- Core approach is NOT based on traditional forecasting methods
- Core approach is based on understanding ED flows and how they behave



Oculys Results



Thank You!



POWERED BY

Oculys™

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