ID Connect Overview for Nebraska DHHS

9/11/2023

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Infectious Disease Connect

Meet the ID Connect Team!

Caley Yakemowicz

Director of Customer Experience

Matt Davis

Director of Infectious Diseases
Pharmacy Services

Mike Rinaldi

VP of Clinical Solutions

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Getting Started with NHSN Reporting

ID Connect Services and Support

Tele-Infectious Diseases Consult
Tele-Infection Prevention

Tele-Antimicrobial Stewardship

Compliance Support

NHSN AUR Implementation

Technological Solutions

ILÚM Insight

NHSN AUR Reporting

Can provide implementation support, ILÚM Insight AUR reporting, or both depending on facility need

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Reporting Process

ID Connect Clinical and Technical Support

Build the Team/ Seek Expertise

Identify Vendor/ Reporting Software

Mapping/ Validation

Testing/ Reporting

Each step takes weeks to months
Proactive approach recommended!

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Implementation Process Map

We are here to help facilities through the implementation process!

- Getting started
- Location mapping
- Registering intent
- OID request
- Establish user roles/access
- Data mapping/navigating IDM for vendors
- Data validation
- Data quality checks
- Reporting plans/data sets
- Upload/download
- Initial data analysis/interpretation
- Vendor communication

Work with Ilum Insight or external vendors

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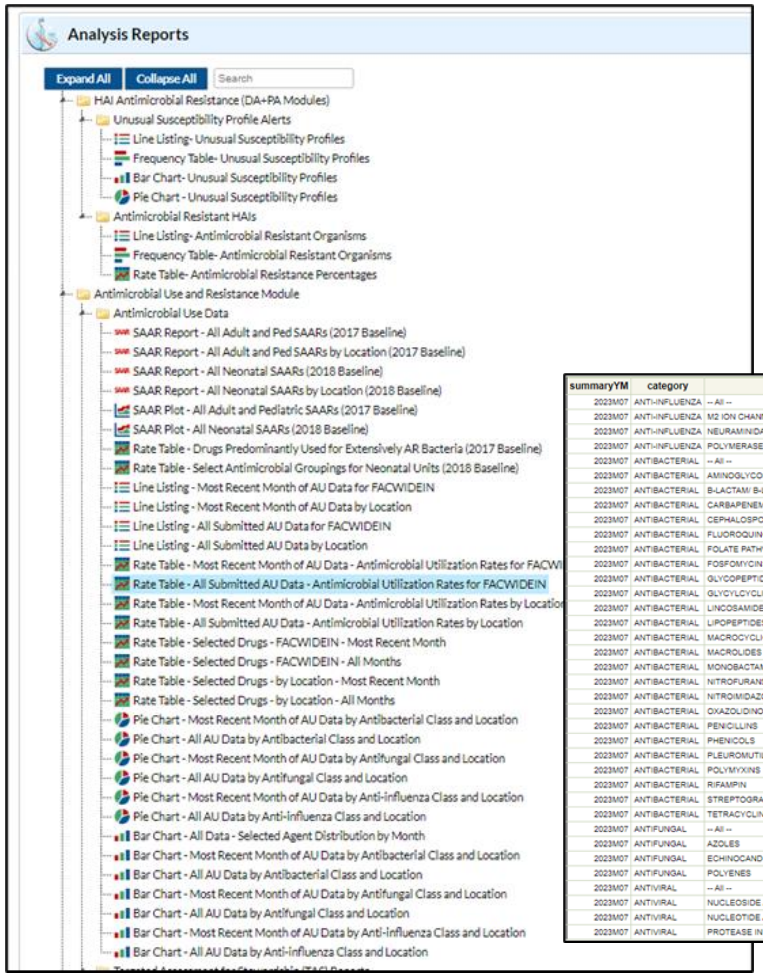
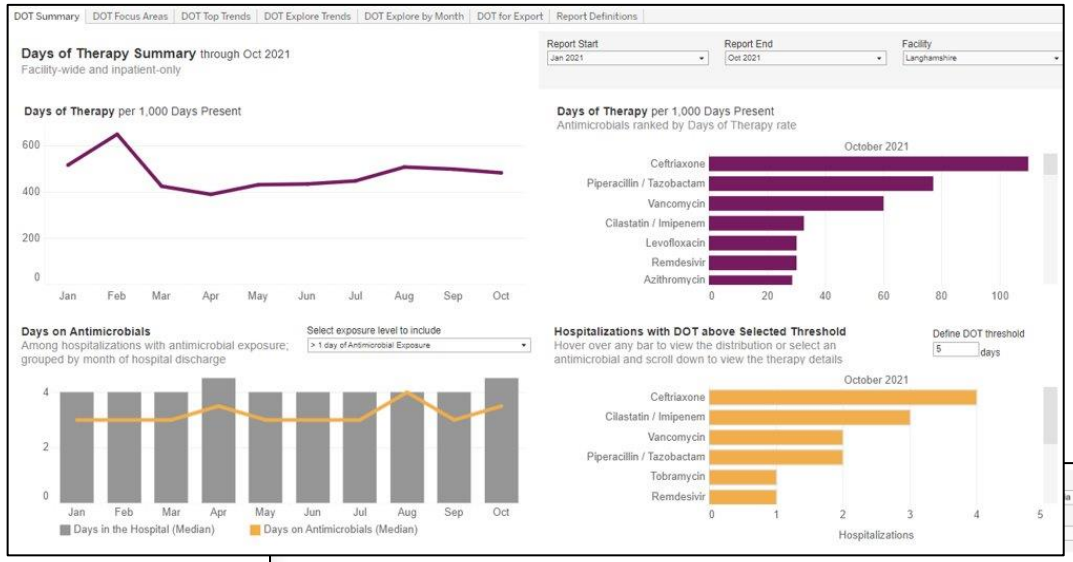
ILÚM Simplifies NHSN Reports for Users

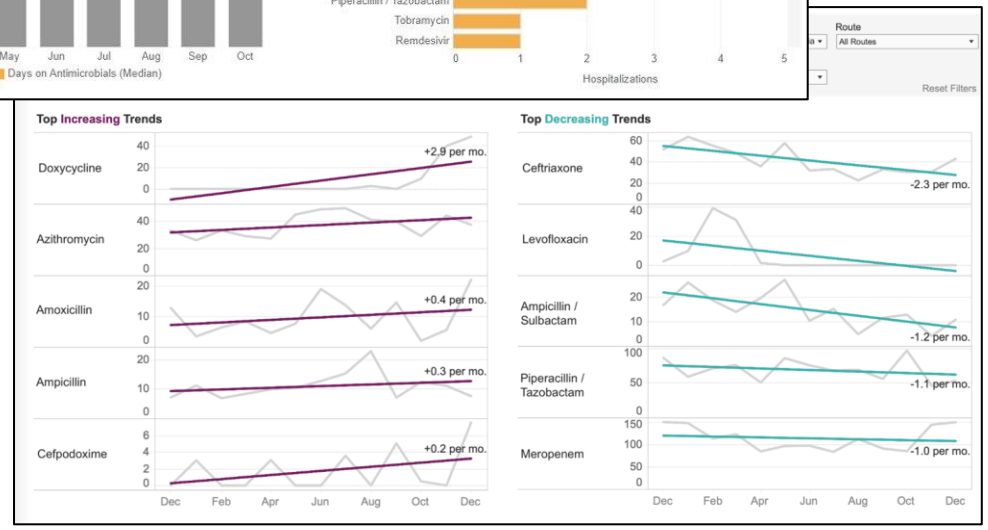
NHSN Native Reporting



summaryYM	category	class	antimicrobialDays	numDaysPresent	RateDaysPresent
2023M07	ANTI-INFLUENZA	-- All --	9	2193	4.104
2023M07	ANTI-INFLUENZA	M2 ION CHANNEL INHIBITORS	9	2193	4.104
2023M07	ANTI-INFLUENZA	NEURAMINIDASE INHIBITORS	0	2193	.
2023M07	ANTI-INFLUENZA	POLYMERASE ACIDIC ENDONUCLEASE INHIBITORS	0	2193	.
2023M07	ANTIBACTERIAL	-- All --	834	2193	380.301
2023M07	ANTIBACTERIAL	AMINOGLYCOSIDES	3	2193	1.368
2023M07	ANTIBACTERIAL	B-LACTAM/ B-LACTAMASE INHIBITOR COMBINATION	78	2193	35.568
2023M07	ANTIBACTERIAL	CARBAPENEMS	44	2193	20.064
2023M07	ANTIBACTERIAL	CEPHALOSPORINS	283	2193	129.047
2023M07	ANTIBACTERIAL	FLUOROQUINOLONES	33	2193	15.048
2023M07	ANTIBACTERIAL	FOLATE PATHWAY INHIBITORS	23	2193	10.488
2023M07	ANTIBACTERIAL	FOSFOMYCINS	0	2193	.
2023M07	ANTIBACTERIAL	GLYCOPEPTIDES	119	2193	54.264
2023M07	ANTIBACTERIAL	GLYCYLCYCLINES	0	2193	.
2023M07	ANTIBACTERIAL	LINCOSAMIDES	13	2193	5.928
2023M07	ANTIBACTERIAL	LIPOPEPTIDES	1	2193	0.456
2023M07	ANTIBACTERIAL	MACROCYCLIC	0	2193	.
2023M07	ANTIBACTERIAL	MACROLIDES	28	2193	12.768
2023M07	ANTIBACTERIAL	MONOBACTAMS	2	2193	0.912
2023M07	ANTIBACTERIAL	NITROFURANS	2	2193	0.912
2023M07	ANTIBACTERIAL	NITROIMIDAZOLES	40	2193	18.24
2023M07	ANTIBACTERIAL	OXAZOLIDINONES	13	2193	5.928
2023M07	ANTIBACTERIAL	PENICILLINS	139	2193	63.383
2023M07	ANTIBACTERIAL	PHENICOLS	0	2193	.
2023M07	ANTIBACTERIAL	PLEUROMUTILINS	0	2193	.
2023M07	ANTIBACTERIAL	POLYMYXINS	0	2193	.
2023M07	ANTIBACTERIAL	RIFAMPIN	0	2193	.
2023M07	ANTIBACTERIAL	STREPTOGRAMINS	0	2193	.
2023M07	ANTIBACTERIAL	TETRACYCLINES	13	2193	5.928
2023M07	ANTIFUNGAL	-- All --	16	2193	7.296
2023M07	ANTIFUNGAL	AZOLES	5	2193	2.28
2023M07	ANTIFUNGAL	ECHINOCANDINS	11	2193	5.016
2023M07	ANTIFUNGAL	POLYENES	0	2193	.
2023M07	ANTIVIRAL	-- All --	0	2193	.
2023M07	ANTIVIRAL	NUCLEOSIDE ANALOG	0	2193	.
2023M07	ANTIVIRAL	NUCLEOTIDE ANALOG	0	2193	.
2023M07	ANTIVIRAL	PROTEASE INHIBITOR	0	2193	.

ILÚM NHSN Reporting





ILÚM Insight Overview

A dynamic clinical decision support tool for management of daily Antimicrobial Stewardship actions:

- Easily customizable for institution- and user specific needs
- Improve efficiency with **real-time actionable alerts**
- Increase targeted intervention opportunities with bug-drug mismatch, IV to PO conversions, etc.
- Faster achievement of **time-to-optimal antibiotic therapy**
- Improved clinical communications
- Generates facility specific **antibiogram**(s)
- Approved **NHSN CDA vendor**
- TJC and CMS compliance
- Available as a web-based and smart-phone application
- **HITRUST** certified

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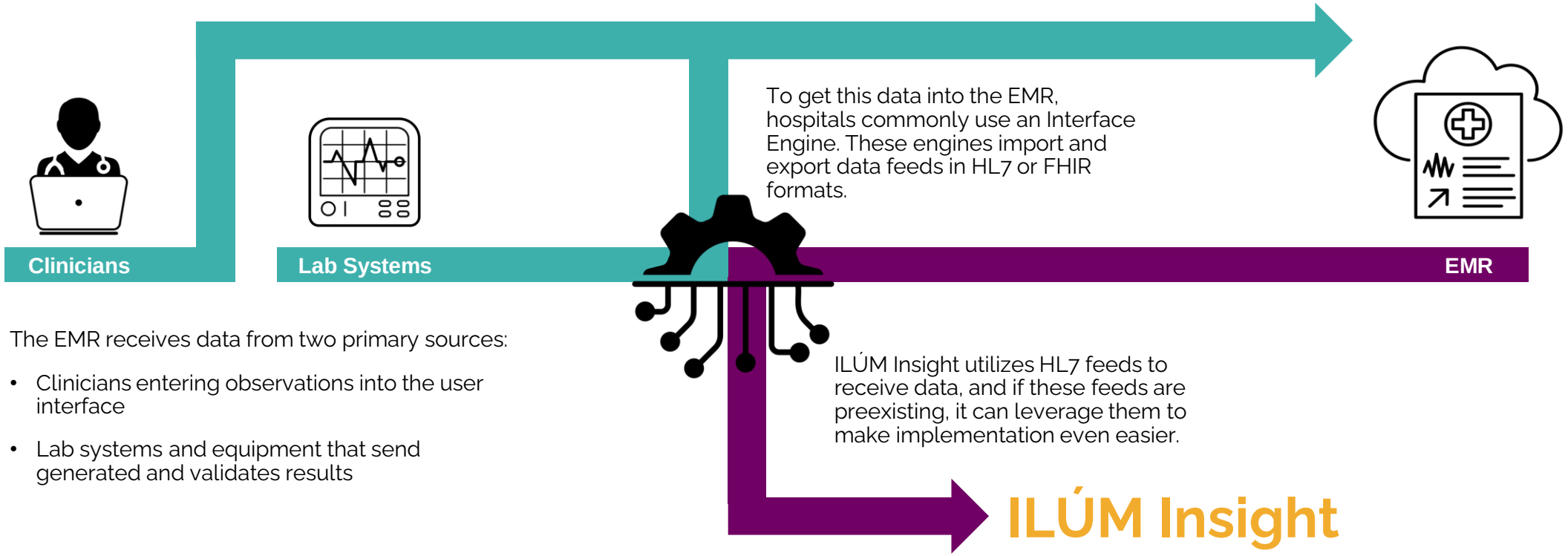
NHSN - Getting Data From the EMR to ILÚM Insight



The EMR receives data from two primary sources:

- Clinicians entering observations into the user interface
- Lab systems and equipment that send generated and validates results

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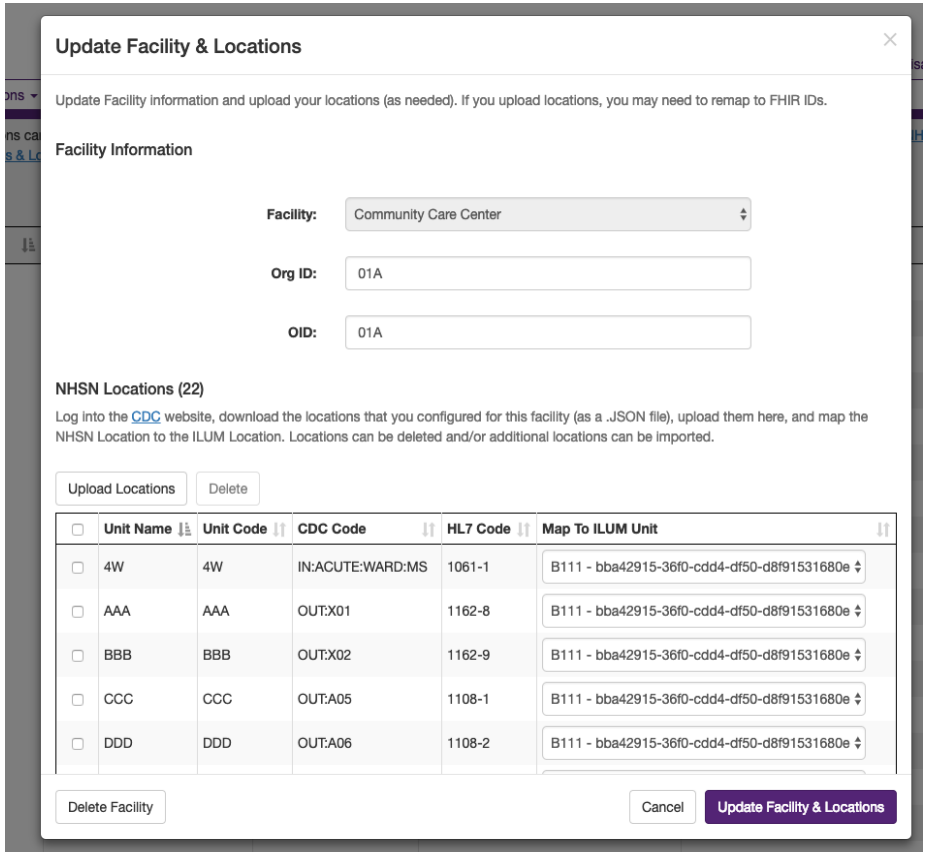
Running & Downloading AUR Reports in ILÚM Insight

Facility Setup in ILÚM Insight

- Provide your facility's Org ID and OID after facility setup is completed with CDC
- Unit names and codes will populate atomically in Insight
  - .JSON file will be provided to ID Connect from the CDC website (Pharmacy or technical resource will pull)



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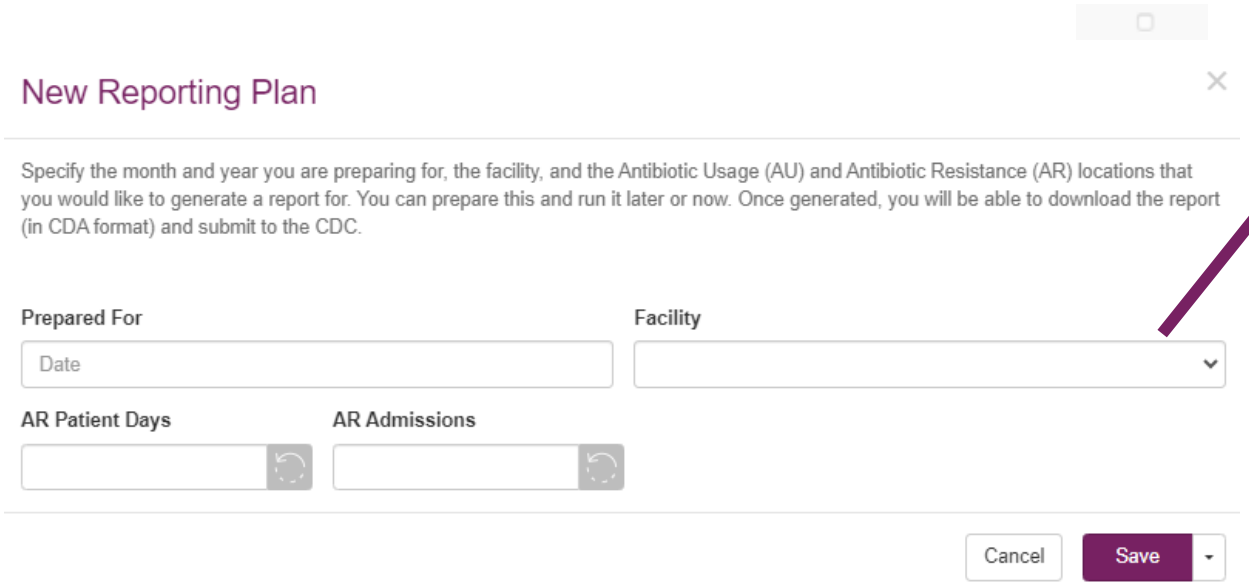
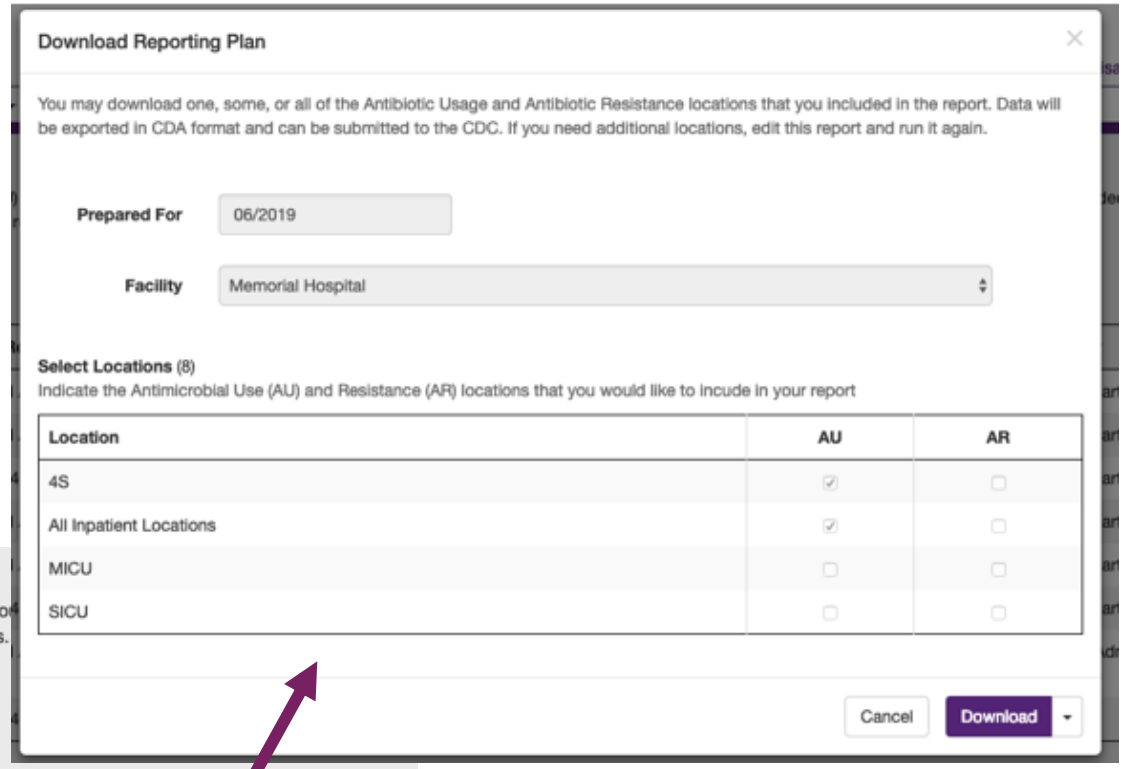
Running Reports in ILÚM Insight

- Define your NHSN reporting plan by selecting the Antibiotic Usage (AU) and/or Antibiotic Resistance (AR) units that you would like to report on and then run your reports
- Reporting plans are saved and can be edited month to month



Downloading Reports in ILÚM Insight

- Once reporting plans have been generated, you can download each report in CDA format and submit to the CDC
- You can edit, run, and download reports, as needed from the NHSN reporting homepage within ILÚM Insight



NHSN Reports

Define your NHSN reporting plan by selecting the Antibiotic Usage (AU) and/or Antibiotic Resistance (AR) units that you would like to report on and then running yo downloaded (in CDA format) and submitted to CDC. You'll need to complete your one time setup of your Facilities & Locations before you can start runnng reports. Setup Facilities & Locations.

New Report

Prepared For	Facility	Units Reporting On	Status	Last Run	Run By	Actions
09/2019	Memorial Hospital	AU and AR for 4S, All Inpatient Locations, MICU, SICU	Ready to Download	03/12/2019	Ross Martin	Edit | Run | Download | Copy
08/2019	Memorial Hospital	AU and AR for 4S, All Inpatient Locations, MICU, SICU	Ready to Download	03/12/2019	Ross Martin	Edit | Run | Download | Copy
06/2019	Memorial Hospital	AU for 4S, All Inpatient Locations	Ready to Download	03/12/2019	Ross Martin	Edit | Run | Download | Copy
05/2019	Memorial Hospital	AU and AR for 4S, All Inpatient Locations, MICU, SICU	Ready to Download	03/10/2019	Ross Martin	Edit | Run | Download | Copy
04/2019	Memorial Hospital	AU and AR for 4S, All Inpatient Locations, MICU, SICU	Ready to Download	03/10/2019	Ross Martin	Edit | Run | Download | Copy
03/2019	Memorial Hospital	AU for 4S, All Inpatient Locations, MICU	Ready to Download	03/11/2019	Ross Martin	Edit | Run | Download | Copy

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Next Steps

- Contact Mike Rinaldi at ID Connect to learn more about ILÚM Insight and to receive a more in-depth demonstration, including services around NHSN
  - Mike Rinaldi - mrinaldi@idctelemed.com

- View ID Connect webinars and publications here

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Appendix

ILÚM Insight Delivers Exceptional Results

Overall decrease in antibiotic use	**11% decline** vs. preceding 6 months
	20% decline vs. same time period in 2019
Improvement in durations of antibiotics	**0.88 fewer antibiotic days** per admission
	48% of patients were on antibiotics for **56% of their hospital stay** vs. 61% of patients for 68% of the hospital stay during same time period in 2019
Increased IV to PO conversion rates	37% converted to PO in 2019 vs. **54% converted to PO with ILÚM Insight (+17%)**
More patients received optimal therapy, and faster	**84% of antibiotic orders were optimized** with ILÚM Insight vs. 56% pre-ILÚM Insight.
	Time to optimal therapy was improved by **1 full day** on average
Improved pharmacist efficiency	**278% increase in the number of interventions** using the same staff
	As one pharmacist stated "prior to ILÚM Insight we needed to find the interventions, **with ILÚM Insight the intervention opportunities are presented to us**"

This community hospital was doing a good job of antimicrobial stewardship prior to implementation of ILÚM

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[1]*Open forum Infectious Diseases*, ofac235, https://doi.org/10.1093/ofid/ofac235. Published 09 May 2022

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What differentiates ILÚM Insight?

- White glove service throughout the life of the contract with oversight from ID/ASP experts
- Pre-configured for specific events based on hospitals guidelines (works “out-of-the-box”)
- Rule engine (expert system)
  - Subscriptions configurable by user for easy adding/removing/filtering of alerts
  - Real-time location based down to the unit
  - Delay rules and retraction rules reduces noise and ensure opportunity is still valid
- Mobile app with push notification
- Individual and teams-based workflow supported
- Robust reporting on process and clinical outcomes with one click drill down
- Continuous enhancements like patient care lists, resistance risk factor display and machine learning

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ILÚM Insight Features

ILÚM Insight delivers real stewardship excellence. From on-demand alerting to detailed reports and dosing management, **ILÚM Insight** provides features and tools to solve your Antimicrobial Stewardship needs

Product Feature	ILÚM Insight
Accessibility	
Web-based platform accessible from any system	✓
Full mobile support including on-demand push-notification alerting	✓
Unit- and teams-based clinical workflow management allowing alerts and notifications to be shared between stewardship personnel	✓
Secure individual- and team-based communication protocols that facilitate patient hand-offs	✓
Alert and Notification Management	
Customized notification editor optimized to have the greatest impact with the least amount of effort from stewardship pharmacists	✓
Notification templates allow for customization of drugs, organisms, and micro results for each rule	✓
Rule enhancement options that include delay and retraction elements to eliminate alert fatigue	✓
Improved category management organization options that drive accurate patient prioritization	✓
Ability to alert on bug-drug mismatches, antimicrobial timeouts, restricted drug lists, IV to PO opportunities, changes in serum creatinine, de-escalation, and more	✓
Patient Centric Management Tools	
Auto-add, real-time, and duplicate-free patient care lists that prevent the use of static lists that are quickly outdated	✓
Patient-snapshot views include a Resistance Risk Factor Display that highlights noteworthy organisms and results	✓
Easy-to-use intervention and activity tracking to follow all patient notification interactions	✓
Precision dosing with predictive clinical decision making via DoseMeRx	✓

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ILÚM Insight Features (Continued)

Product Feature	ILÚM Insight
Clinical Customization and Process	
Antibiogram generator based on your own facility- or system-level data	✓
Built-in ability to process antimicrobial related information such as allergy data	✓
ID approval tool and workflow for better management of medication use and costs	✓
Proprietary data mapping system that handles standardization of all medications, orders, and results, so pharmacists don't have to	✓
Reporting and Metrics	
Complete tracking of performance analytics, such as time to rule review and percent acceptance	✓
Built-in trending details on event categories and statuses to optimize stewardship programs	✓
Tracking of balancing measures such as readmission, C. Diff counts, in- hospital mortality, and antimicrobial restarts	✓
Antimicrobial order and order duration reporting	✓
Meaningful outcome measures including days of therapy, in the hospital, and on antimicrobials with IV to oral comparisons	✓
Calculated visual-deep dives into days of therapy (DOT) including trending, comparisons, and DOT rational	✓
Support and Customer Service	
Industry leading on-boarding, including full setup and ID Connect led data integration	✓
Ongoing customer success and support meetings beyond just technical integration	✓
In-app support and training for customers	✓

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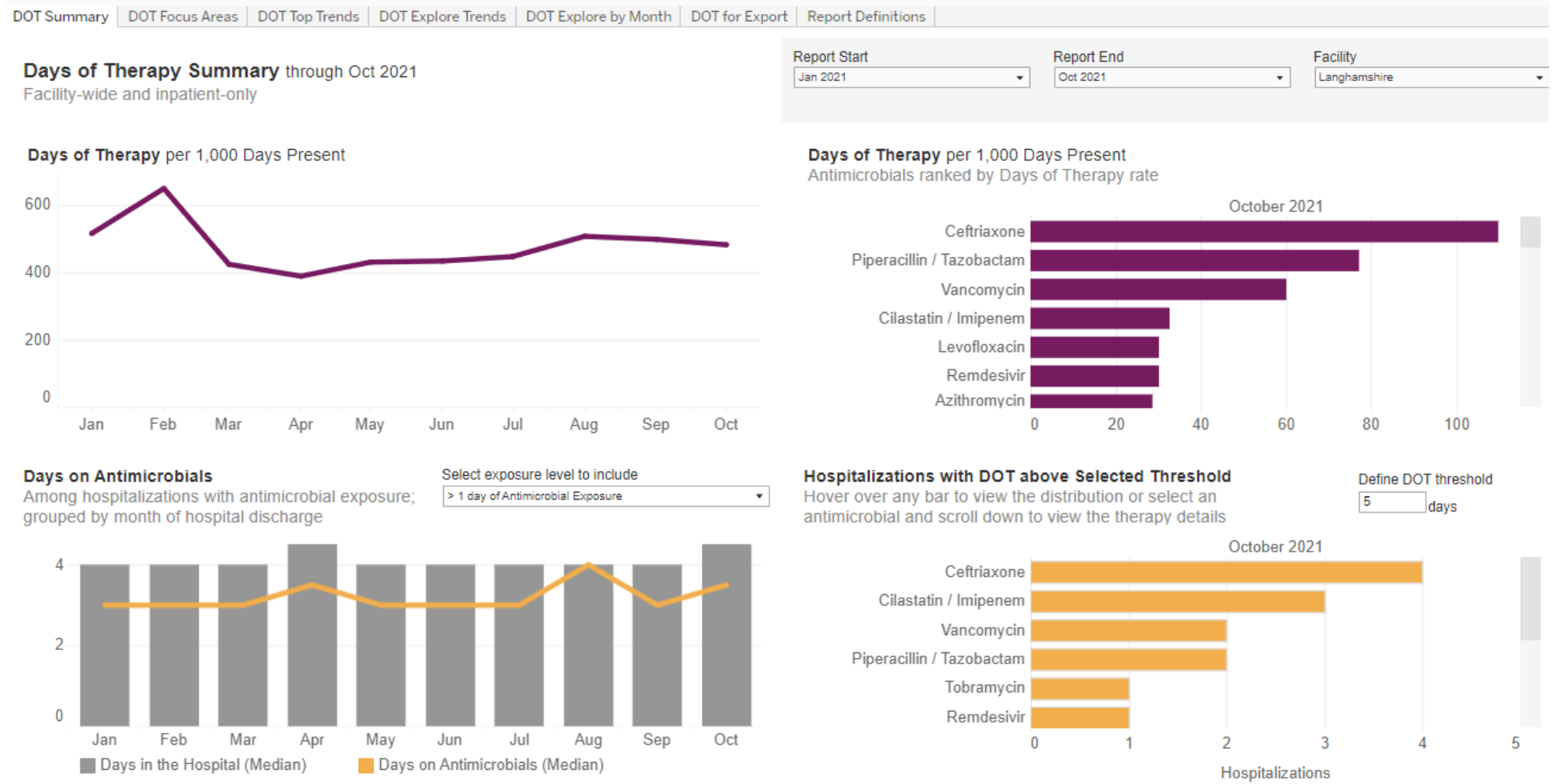
ILÚM Insight Reporting Capabilities

DOT Summaries



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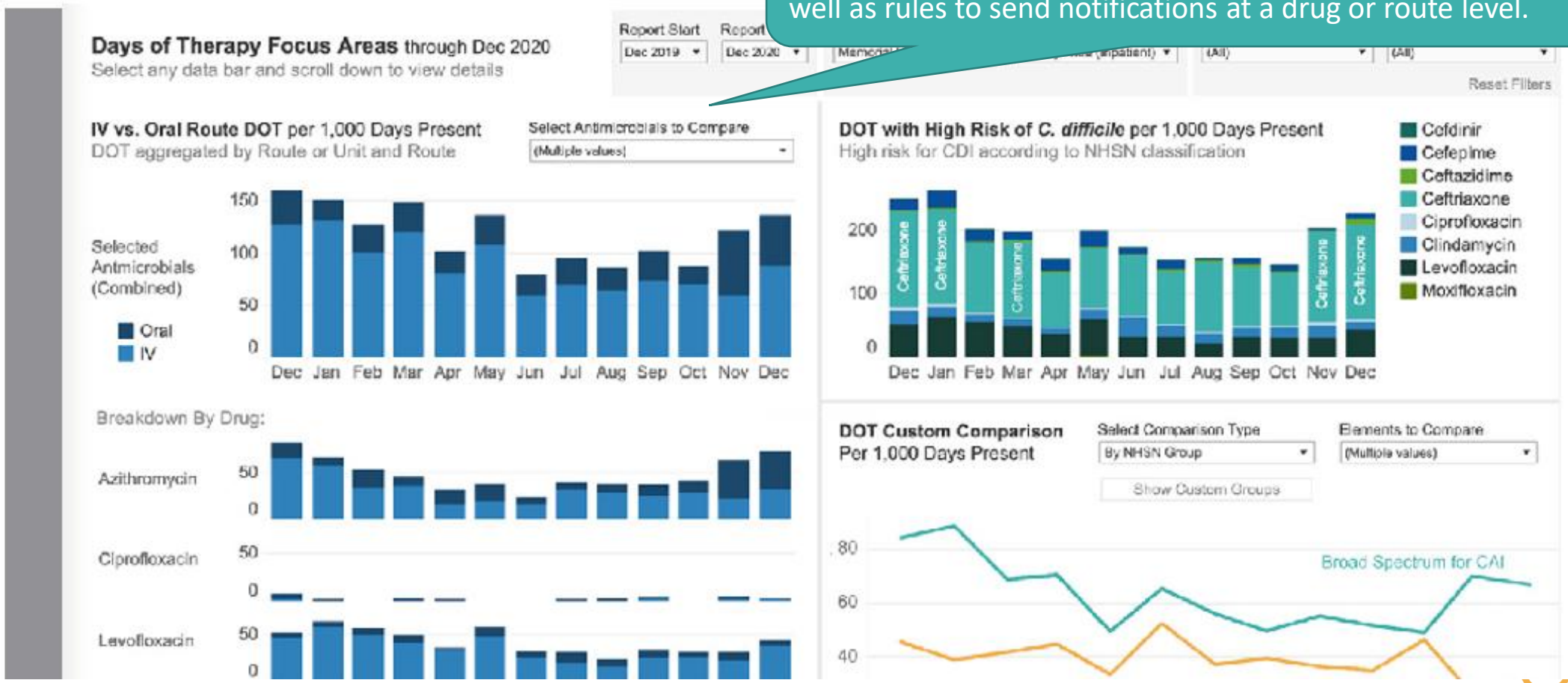
DOT Drill Downs

Our proprietary mapping system standardizes drugs, so we can roll up different routes and strengths into one for reporting, as well as rules to send notifications at a drug or route level.



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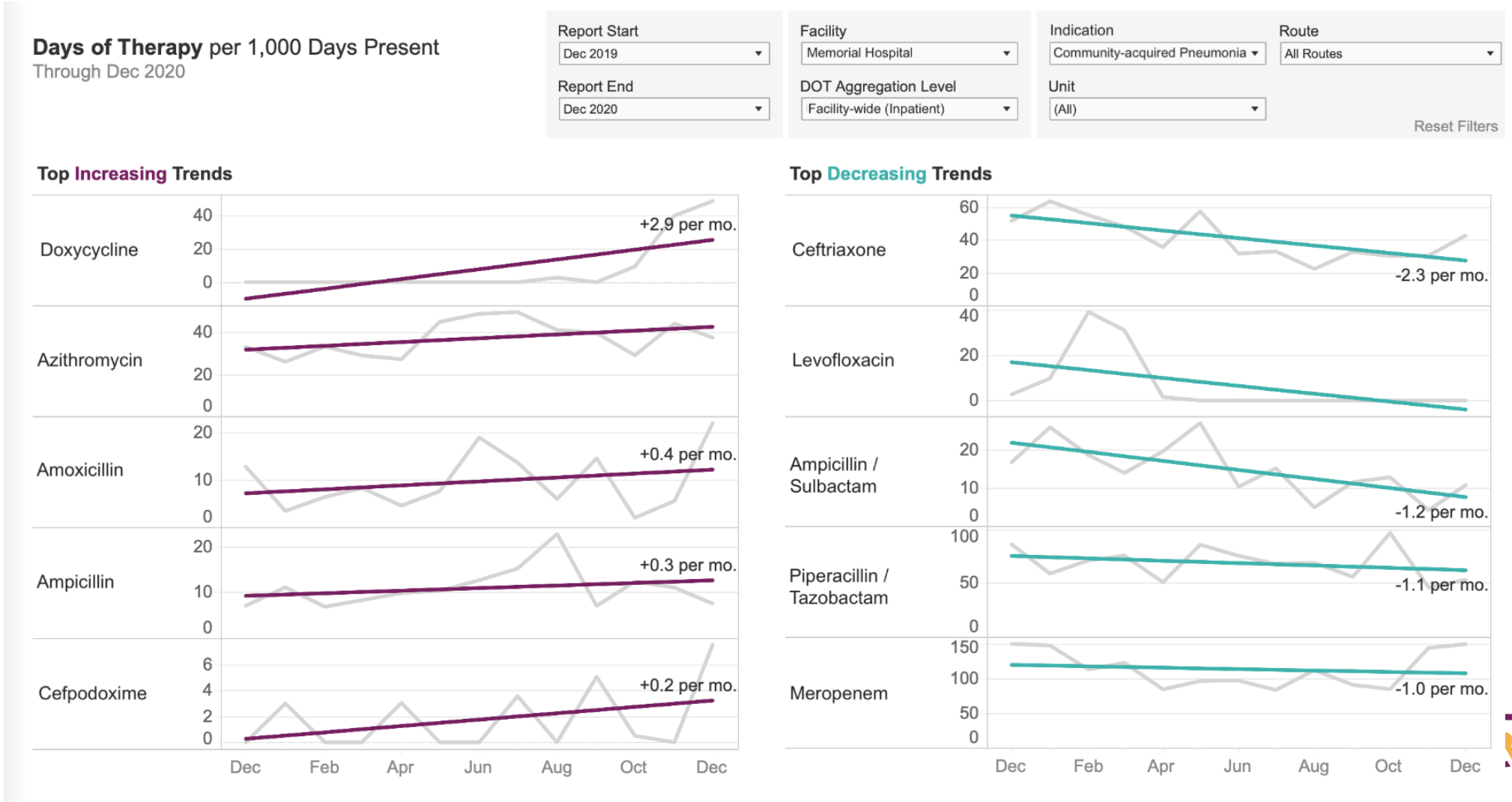
Antibiotic Use Trends



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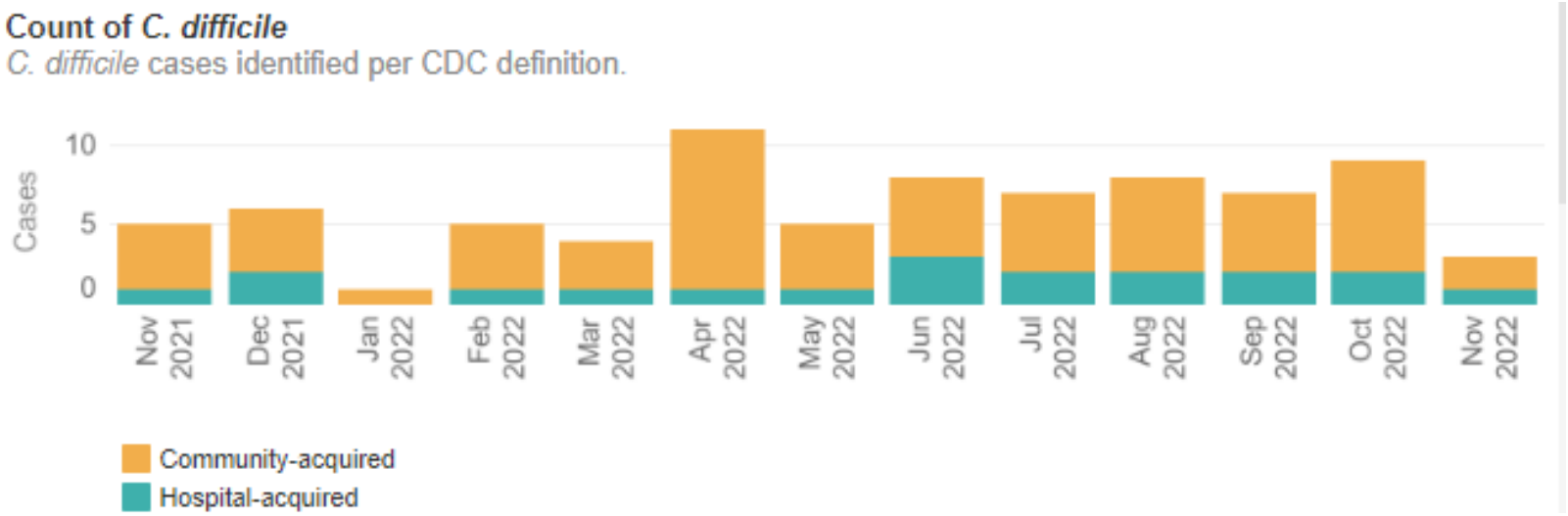
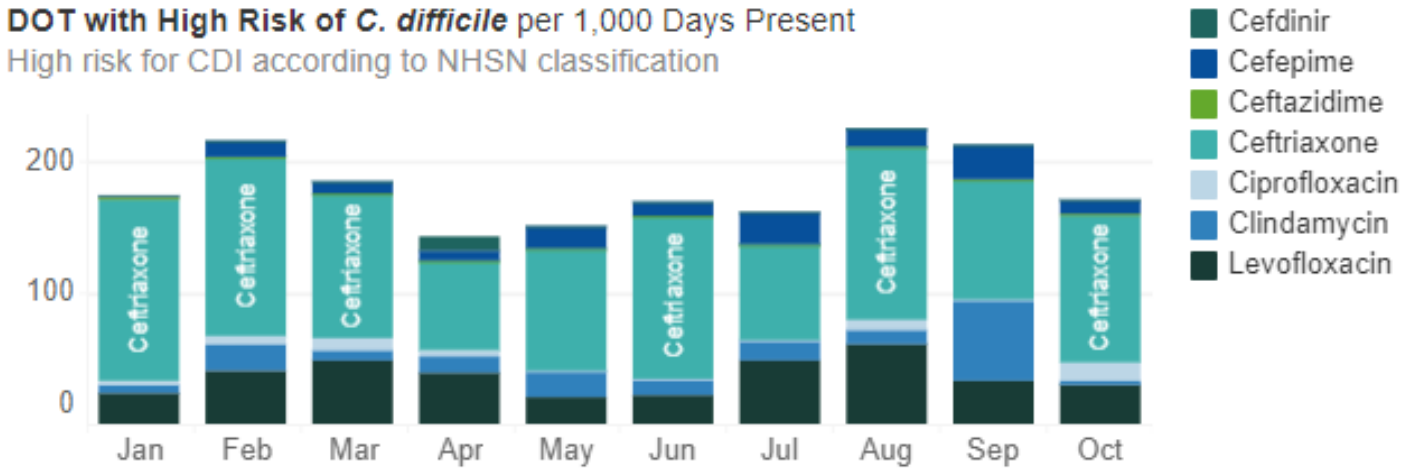
C. Difficile Tracking



Compare community vs hospital acquired C. diff and DOTs with a high risk of C. diff.



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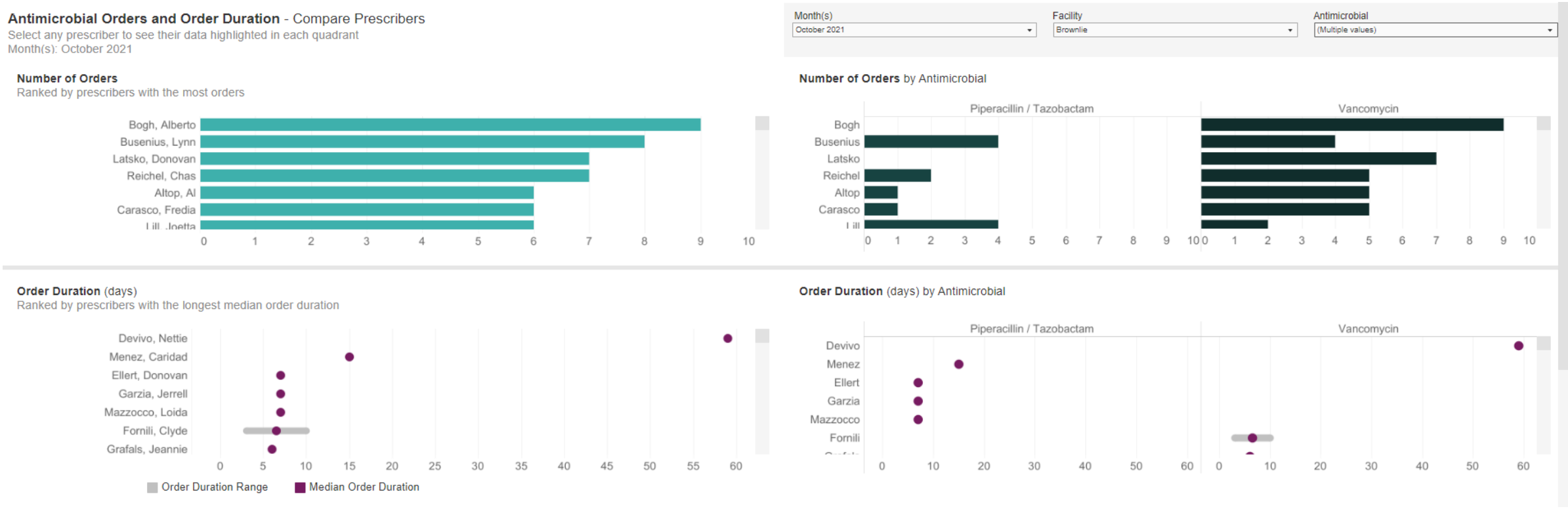
Orders and Durations by Prescriber



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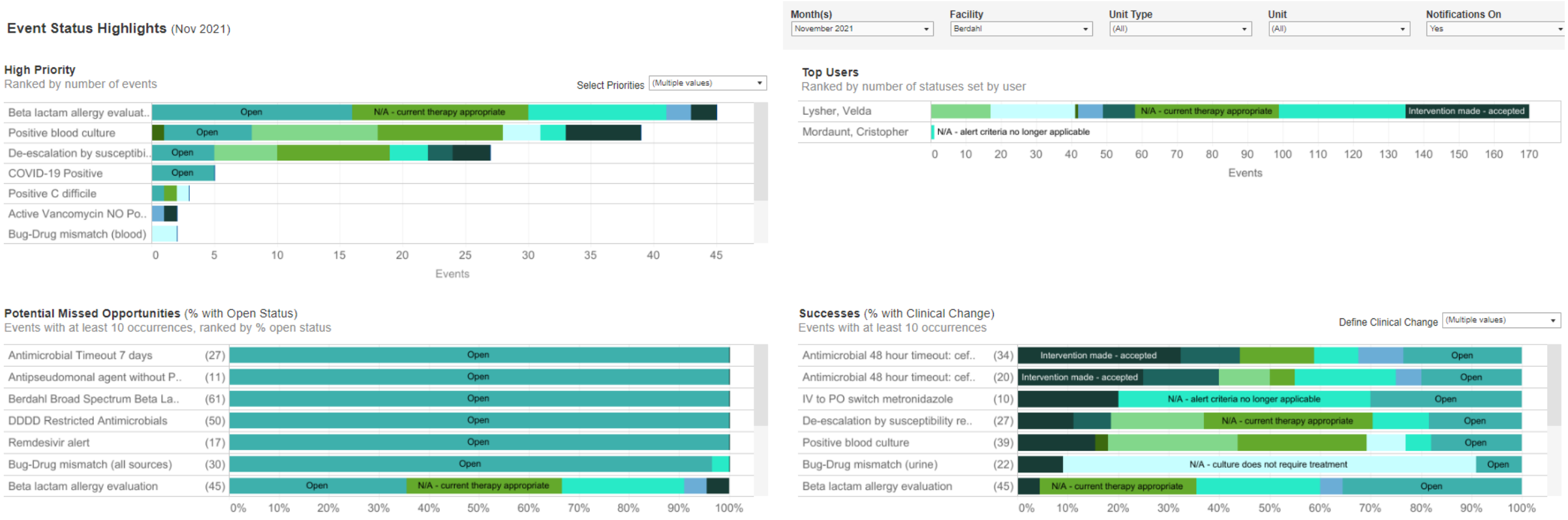
Intervention Reports



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