

Tableau Reports Development

Customer Case Study – A medical center



Business Need

The company needed to move all its clinical data reports from SSRS to Tableau Dashboards.



Customer Challenges

- Data had to be fetched manually from different sources and then a screenshot of different SSRS reports would be mailed to different groups of doctors daily.
- More complex calculations were required to filter down the data to get specific results for different groups of doctors.
- No Live connection to data sources was available and SSRS reports were complex to handle for non-IT professionals like doctors.



Solution Provided

- Syntelli gathered and integrated the data necessary from SSRS reports for Tableau dashboard development.
- Provided prototypes of each report/dashboard to Flagler Hospital leadership.
- Provided guidance on Tableau standard visual guidelines, best practices and methodology.
- A live connection to different data sources was built to handle millions of rows of data with ease. Different types of visualizations were created with a large amount of data without impacting the performance of the dashboards.
- Row level security was implemented, and user groups were created for access control instead of directly providing access to users.
- Created SSRS reports in Tableau format reports/dashboards.
- Created documentation for knowledge transfer of each report, dashboard and visualizations.
- Hosted Data Strategy & Roadmap workshops, and shared recommendations based on discussions with IT and Data leadership on strategic goals for the organization.
- Some Reports which were built using Tableau included MedRec Daily, Pain Med Variance, Rx Document Completion, Incomplete OMR, Foley Daily, ED OMR and cDiff Daily.

Filter
Total Admission Med Rec..

MedRec Daily

Total Admission Med Recs Required 137	100.0%	<p>For physicians, if you are on this list, you have patients who are 24 hours or more from admission without Med Rec being done, or you have patients discharged or transferred with an incomplete Med Rec. This means it is likely, the patient was given an inaccurate medication list at discharge or transfer and can lead to increased readmission. This is also now an HQEP quality gate and can lead to a reduced reimbursement for all physicians.</p> <p>In addition, this is a government requirement that must be done within 24 hours of admission. The Institute for Healthcare Improvement recommends it be done within 4 hours, if the patient is on an antibiotic, a cardiac or seizure medication or insulin. We, as a hospital, must remain within compliance as well as insure patient safety.</p> <p>Additionally, we must report Med Rec delinquencies monthly to the government. Going forward, your delinquencies will be reported monthly to the Credential Committee for consideration for Reappointment as well as being included in the monthly report to the Hospital Board.</p> <p>Please address pending reconciliations immediately. Thank you!</p>
Admission Med Recs NOT Done 3	2.2%	
Incomplete Admission Med Recs 3	2.2%	
Total Admission Med Recs to Complete 6	4.4%	
Over 24 Hours 2	1.5%	
Over 48 Hours 0	0.0%	
Incomplete Transfer Med Rec 0	0.0%	
OMR Incomplete 9	6.6%	
OMR NOT Done 5	3.6%	

Patient	MRN	VisitIDCode	Unit	Bed	TypeCode	Admit Order DTM	Admitting MD	OPM Status
ARTHUR, DESTINY D	1355620	2001219990	OB/GYN2	2051-01	Inpatient	Apr 27 2020 12:35..	Kaplan, Rachel	Not Done
CONNERTON, JOHN D	2121262	2001219623	8West	8029-01	Observation	Apr 26 2020 10:02..	Aguilera, Claudine	Complete
MURRAY, JUDITH A	2104945	2001219620	1North	1206-01	Inpatient	Apr 26 2020 1:22P..	Griffin, Robert	Complete
SHOEMAKER, TINA M	1223577	2001219824	8East	8008-01	Inpatient	Apr 27 2020 12:08..	Soto, Jocelyn	Complete
SMITH, CHRISTINA	1405068	2001219871	5East	5010-01	Inpatient	Apr 27 2020 12:45..	Mateen, Samson	Complete
TISCHLER, ANGELA S	2128845	2001219703	8East	8019-01	Inpatient	Apr 26 2020 10:47..	Soto, Jocelyn	Complete

A Sample MedRecDaily Report



Impact of Solution

- By presenting reporting metrics using visual, interactive dashboards that pull directly from data sources, Syntelli provided the customer with a fresh, visually compelling report daily, weekly or monthly, with just the click of a button.
- Users had statistics at their fingertips, and could access their data anywhere, anytime using Tableau Server and a mobile/tablet app which supported full functionality that Desktop and Online versions had, and
- The customer gained credibility by communicating patient's data insights clearly.
- A user-friendly interface allowed non-technical users (doctors) to utilize the dashboard functionality to the fullest.



Technology Used

- SSRS
- SQL Server 2012
- Tableau
- MS excel