MEDITECH’s Business and Clinical Analytics Specialty Services group is a comprehensive and integrated group of individuals ready to assist clients in achieving clinical and operational excellence. Our team of data engineers and dashboard developers are trained to “get the data out” and provide visualizations that measure performance and outcomes for any process improvement project. Whether you’re looking for new content or to maximize the content you have, trust the experts at MEDITECH.

### Dashboard Example Use Cases

<table>
<thead>
<tr>
<th>Departmental Productivity</th>
<th>Executive KPIs</th>
<th>ED Throughput</th>
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<tbody>
<tr>
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<td>Revenue Cycle Projections</td>
<td>Sepsis Management</td>
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<tr>
<td>Patient Census</td>
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<td>Laboratory</td>
</tr>
</tbody>
</table>

### Departmental Productivity

This dataset and dashboard combination produces a summary of all customer-defined productivity metrics for each department in the healthcare facility. The dataset first utilizes a customer-defined mapping table to upload all specific attribute values that contribute to a department's productivity metric. The visualizations on the dashboard identify trends in the productivity metrics over time and compare to a specific benchmark.

**Impact:** Make informed decisions faster regarding staffing and expenses when changes happen in your operational data. Visually identify trends with departmental data.

**Benefits:**
- One dashboard for all departments
  - Security can restrict visibility of data
- Measure data by pay period for alignment with FTE scheduling and budgeting
- Self service analytics

**Available Metrics:** *metrics not listed can be evaluated through a professional services engagement*

- Ambulatory Visit Count by Location
- Acute Visit Count
- ED Visit Count
- Surgery Case Count by Patient Type
- Inpatient Visit Count by Inpatient Service and/or Location with/without Observation Count
- Patient Days with/without Observation Count by Location
- Outpatient Visit Count by Location
- Combination of Patient Days with/without Observation Count and Outpatient Visit Count by Location
Revenue Cycle Transaction Count by Charge Procedure

Customer Success:
- Measuring departmental productivity has always been a challenge, now it can be done all in one place
- Hiring and resource allocation can be made with this dashboard

Executive Summary

This dataset and dashboard combination produces an Executive Dashboard of key performance indicators. The dataset first utilizes a customer-defined mapping table set to define the metrics of interest and the timeframes desired. The dashboard features a grid displaying all KPIs compared to the same timeframe of the prior year, prior day, or prior period for daily and period views. Each metric is also projected through the end of the current time period. Based on mapping, the sheet will display daily, period, quarterly, or yearly views. An interactive trailing trend graph is also featured for easy monitoring of metric values over time.

Impact: Analytics from a top down approach. Make this dashboard the first stop for your executive team. Quickly visualize all relevant metrics vs. comparison timeframes and projections. Identify areas of interest or concern to analyze and research further.

Benefits:
- One dashboard for Executive KPIs
- Customer-defined mapping displays executive chosen metrics and timeframes

Available Metrics: metrics not listed can be evaluated through a professional services engagement
- The table below provides a list of coded metrics; those not listed can be evaluated through a professional services engagement
- Operational Metrics
  - ED: ED Visits, ED Admits (Total or %), Average ED Wait Time, ED Admit Decision to Departure
  - Inpatient: Admissions, Average Length of Stay, Occupancy, Average Daily Inpatient Census
  - Surgical: Surgical Cases, Same Day Surgical Cases, Cost per Case, Surgery Duration, Surgical Observations, Surgery First Case Delays, Surgeries Cancelled or No Show
  - Outpatient: Outpatient Visits (by Location), Clinic Visits (Urgent Care/Pain Management), Same Day Clinic Visits
  - Observation: Observation Count, Observation Hours
  - Other: Laboratory Tests
- Revenue Cycle
  - Charges: Charges (by Financial Class, Procedure, Patient Type)
  - Receipts: Receipts (by Financial Class, Procedure)
  - Adjustments: Adjustments by Insurance, Adjustment %
  - Refunds: Refund Amount
  - Receivables: Receivables Amount, Receivables Greater than 90 Days, A/R Days, Days to Bill
  - Other: Bad Debt Transfers, RVUs (Provider), Surgical Case Contribution Margins
- Quality
  - Readmissions: 30 Day Readmission Count, Readmission Rate
  - Mortalities: Mortality Count, Mortality Rate
  - Sepsis: Total Sepsis Screenings, Sepsis Mortalities
  - Other: Hospital Acquired Condition Count, Opioid Rx %
- Payroll
  - Earning Types: Regular Hours/Dollars, Overtime Hours/Dollars, Vacation Hours/Dollars, Sick Hours/Dollars, Training Hours/Dollars
  - Other: Salary Expense, Total FTEs, Premium Pay

Customer Success:
- Having BCA as a source of truth versus multiple spreadsheets that are always outdated and missing components will save time and resources.
• An executive team that is always on the same page with the numbers allows us to move in the same direction.
• Knowing how the month is going to potentially end allows us to make changes to influence those numbers in one direction or another.
• When you need to add a metric, just call the BCA Professional Services Team and they will get right back to you.

**ED Throughput**

This flexible throughput dataset and dashboard accommodates multiple throughput measurements as well as various workflows to focus on any particular part of an ED patient’s stay. As workflows are changed or updated, see near real time updates to track improvements in the patient experience. Dashboard flexibility captures the amount of time that is spent on various statuses during a patient’s stay in the Emergency Room. Review specific patient populations such as admitted, psychiatric, transferred, or observation patients. Identify significant “returns” for patients that are returning to the Emergency Room after only a specified period of time. Calculate for a specific day, week, month or year to analyze trends and identify areas for process improvements.

**Impact:** Provide care as quickly as possible by better understanding the patients who enter the ED, their needs, and their experience.

**Benefits:**
- Daily Metrics delivered to Emergency Department decision makers to identify areas of need
- Identify and analyze patient flow for specific patient populations, e.g. psych population
- Incorporate RAD and LAB ED orders into your throughput metrics and analyze the effect on the patient LOS
- Comparison to industry standard benchmarks which lead to increased patient satisfaction

**Available Metrics:** *metrics not listed can be evaluated through a professional services engagement*

<table>
<thead>
<tr>
<th>LOS Median</th>
<th>LOS Average</th>
<th>% Significant Returns</th>
<th>Decision Time To Departure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER Holds Hours</td>
<td>Door To Provider</td>
<td>Arrivals Before 12 pm</td>
<td>LOS Average Psych Patients</td>
</tr>
</tbody>
</table>

**Customer Success:**
- Identify opportunities to improve ED throughput
- Hiring and resource allocation can be made with this dashboard
Provider RVU Validation and Monitoring

Eliminate the need to run multiple reports to then download and sift through the data in a spreadsheet. In this dataset and dashboard combination, you can easily identify that coding and charging has been completed before producing a RVU value for a particular provider. As the dashboard is updated daily, you can be proactive and identify issues early on, such as the presence of clinical documentation or a scheduled appointment, to validate all charges have been captured.

**Impact:** Single source of truth for RVU reporting that the entire EHR uses.

**Benefits:**
- Identify missing charges
- Pay providers accurately and provide RVU values in a dashboard that can be shared
- Self-service analytics
- Eliminate the manual compiling of data through reports and spreadsheets

**Available Metrics:** metrics not listed can be evaluated through a professional services engagement

<table>
<thead>
<tr>
<th>Charge Count</th>
<th>Charge Offset Count</th>
<th>Charge TXN Count Total</th>
<th>Charge TXN Offset Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVU Work Offset Total</td>
<td>RVU Work Total</td>
<td>Unbilled TXN Count</td>
<td>ICR Count</td>
</tr>
<tr>
<td>RPT Count</td>
<td>RPT ICR Incomplete Count</td>
<td>EMR Note Count</td>
<td>EMR Note Deleted Count</td>
</tr>
<tr>
<td>EMR Note Pending Count</td>
<td>EMR Note Signed Count</td>
<td>EMR Note Pending Percent</td>
<td></td>
</tr>
</tbody>
</table>

**Customer Success:**
- Save hundreds of hours each month from what is normally a manual process
- Minimal questions from providers regarding their RVU values
**Revenue Cycle Projections**

With this dataset and dashboard combination, executives and department directors are able to forecast the end of the month closing on several key metrics. Using actual amounts, then determining a daily average and applying to the days left in the month, allows a department head and/or executive to see where the month will close. Knowing this provides time to make adjustments to expenses and ensures the month closes in the positive.

**Impact:** Forecast month end closing at the executive level.

**Benefits:**
- Self-service analytics
- Compare data to same period prior month and prior year
- Ability to make informed decisions which impact bottom line before closing

**Available Metrics:** *metrics not listed can be evaluated through a professional services engagement*

<table>
<thead>
<tr>
<th></th>
<th>Average Daily Charges</th>
<th>Average Daily Receipts</th>
<th>Count of Days in Month</th>
<th>Days Left in Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year Charge Amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiscal Year Charge Count</td>
<td></td>
<td></td>
<td>Fiscal Year Receipt Amount</td>
<td>Fiscal Year Receipt Count</td>
</tr>
<tr>
<td>Inpatient Revenue</td>
<td></td>
<td>Outpatient Revenue</td>
<td>Patient Count</td>
<td>Patient Count Charges</td>
</tr>
<tr>
<td>Patient Count Receipts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Period Receipt Count</td>
<td></td>
<td></td>
<td>Period Charge Count</td>
<td>Period Receipt Amount</td>
</tr>
<tr>
<td>Prior Period Receipt Count</td>
<td></td>
<td></td>
<td>Prior Period Charge Count</td>
<td>Prior Period Receipt Amount</td>
</tr>
<tr>
<td>Prior Year Receipt Count</td>
<td></td>
<td></td>
<td>Prior Year Charge Count</td>
<td>Prior Year Receipt Amount</td>
</tr>
<tr>
<td>Prior Year Receipt Count</td>
<td></td>
<td></td>
<td>Prior Year Charge Count</td>
<td>Prior Year Receipt Amount</td>
</tr>
<tr>
<td>Same Period Prior Year Charge Count</td>
<td></td>
<td></td>
<td>Same Period Prior Year Patient Count Charges</td>
<td>Same Period Prior Year Patient Count Receipts</td>
</tr>
<tr>
<td>Same Period Prior Year Receipt Amount</td>
<td></td>
<td></td>
<td>Same Period Prior Year Receipt Count</td>
<td>Self-Pay Charges</td>
</tr>
</tbody>
</table>

**Customer Success:**
- When large dips in revenue are forecasted, expenses can be adjusted to offset
- No more "surprises" on how revenue is going to close for the month
Sepsis Management

Whether you have self-installed MEDITECH’s sepsis toolkit, installed as part of a professional services offering, or are just interested in monitoring your established workflows for the early detection of sepsis, this dataset and dashboard is a great tool for giving you an in-depth view into your data. Through our experience, a highly personalized dashboard can be created for the Director of Quality and Nursing to monitor workflows and trends in the data.

**Impact:** Able to see opportunities to improve from data, measure changes in data when workflows are adjusted.

**Benefits:**
- Monitor sepsis screening rates
- Monitor sepsis mortality rate
- See the impact sepsis has on patient and facility, clinically or financially

**Available Metrics:** metrics not listed can be evaluated through a professional services engagement

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Day Readmission Count</td>
<td>Action Taken Count</td>
</tr>
<tr>
<td>Inpatient LOS by Days</td>
<td>Inpatient LOS by Midnight</td>
</tr>
<tr>
<td>Positive Screening without Seps Diagnosis Count</td>
<td>Positive Screen Count</td>
</tr>
<tr>
<td>Sepsis Profile Qualifies Sepsis with Diagnosis Count</td>
<td>Sepsis Profile Qualifies Sepsis without Diagnosis Count</td>
</tr>
<tr>
<td>Sepsis Expired Count</td>
<td>Sepsis Inpatient Diagnosis Count</td>
</tr>
<tr>
<td>Sepsis Profile Qualified Count</td>
<td>Sepsis Readmission Count</td>
</tr>
<tr>
<td>Sepsis Manual Screening False Positive Percent</td>
<td>Sepsis Profile False Positives Percent</td>
</tr>
<tr>
<td>Sepsis Readmission Percent</td>
<td>Sepsis Screening Percent</td>
</tr>
</tbody>
</table>

**Customer Success:**
- The ability to report on patients who have been identified as at risk for sepsis; with vigilant monitoring we can report lives saved using this dashboard
- Insight into the coding of unspecified sepsis diagnosis and opportunities, and the financial impacts
**Patient Census**

This “Go-LIVE” dataset and dashboard combination can be used to introduce key stakeholders in the organization to BCA, to establish a single source of reporting truth very early on. Many of the metrics listed in this dashboard are reviewed in the daily huddles which occur in every healthcare organization.

**Impact:** Daily Dashboard used to review key metrics regarding operational data in the EHR.

**Benefits:**
- A dashboard that is pushed daily at 7am
- Everyone looking at the same numbers
- Able to make staffing adjustments by location
- See if census is trending up or down from the previous day and or month

**Available Metrics:** *metrics not listed can be evaluated through a professional services engagement*

<table>
<thead>
<tr>
<th>Bed Count</th>
<th>Admit Count</th>
<th>Closing Census</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge Count</td>
<td>Discharges Only</td>
<td>One Day Stay</td>
<td>Opening Census</td>
</tr>
<tr>
<td>Location Change</td>
<td>Current Period Admissions</td>
<td>Current Period Admissions Closing</td>
<td>Current Period Discharges</td>
</tr>
<tr>
<td>Prior Period Opening Census</td>
<td>Prior Period Discharges</td>
<td>Prior Period One Days Admissions</td>
<td></td>
</tr>
</tbody>
</table>

**Customer Success:**
- No longer is it a requirement for the departments or someone in registration to submit their daily census, it is now pushed automatically on one dashboard
## Ambulatory Denials

Denials and Denial Management is costly for the providers and the EHR as a whole. It disrupts cash flow, increases A/R, and often results in write offs due to untimely filing practices. Understanding and measuring what is being denied is the first step in creating a process improvement plan. Gain insights into how much denials are impacting the overall financial health of the organization.

**Impact:** Measure first claim denial rate, improve processes, and measure again

**Benefits:**
- Identify WHAT billed procedures (CPTs) are being denied by frequency
- Aggregate denial volumes/amounts by Denial reasons to learn WHY

**Available Metrics:** *metrics not listed can be evaluated through a professional services engagement*

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claim Amount Total</td>
<td>Claim sent total</td>
</tr>
<tr>
<td>Claim Sent Total</td>
<td>Claim was resubmitted count</td>
</tr>
<tr>
<td>Claim With Remit Count</td>
<td>Claim with remit count</td>
</tr>
<tr>
<td>Claim Without Remit Count</td>
<td>Charge transaction amount total</td>
</tr>
<tr>
<td>Charge Transaction Amount Total</td>
<td>Charge transaction count</td>
</tr>
<tr>
<td>Charge Transaction CPT None Amount Total</td>
<td>Charge transaction CPT Not Final Billed Amount total</td>
</tr>
<tr>
<td>Charge Transaction CPT Final Bill Amount Total</td>
<td>Charge transaction CPT Not Final Billed Count</td>
</tr>
<tr>
<td>Pay Transaction Amount Total</td>
<td>Claim denial payment amount</td>
</tr>
<tr>
<td>Pay Transaction Amount Zero Count</td>
<td>Denial amount by denial code/reason</td>
</tr>
<tr>
<td>Denial Transaction Amount Total</td>
<td>Denial transaction amount total</td>
</tr>
<tr>
<td>Denial Transaction Amount Zero Count</td>
<td>Claims versus charges</td>
</tr>
<tr>
<td>Claims Sent</td>
<td>Claim w/out remittance</td>
</tr>
<tr>
<td>Claims w/Denial</td>
<td>Claims w/Denial</td>
</tr>
<tr>
<td>Denial % by Denial Code/Reason</td>
<td>Denial %</td>
</tr>
<tr>
<td>Denial % by Denial Code/Reason</td>
<td>Claims w/out pay</td>
</tr>
<tr>
<td>Denial % by Denial Code/Reason</td>
<td>CPT (incl on claims sent) volume</td>
</tr>
<tr>
<td>CPT w/out Pay</td>
<td>CPT w/out Denial</td>
</tr>
<tr>
<td>Claim Payment Amount</td>
<td>Claim Cpt Amount</td>
</tr>
<tr>
<td>Denial Amount</td>
<td></td>
</tr>
</tbody>
</table>

**Customer Success:**
- Target CPTs with high frequency of denials by reason, and investigate opportunities to combat the denial reason with a process improvement initiative
- Measure the impact of process changes on the denial rates
Laboratory

The challenges of a hospital laboratory are well-suited to conventional approaches to process improvement. Limited processing slots, limited time, and limited staff support a broad range of assays for time-sensitive specimens. Our solution helps you analyze patterns in specimen submission and processing, so that you can easily identify bottlenecks that delay timely results.

Impact: Review specimen processing, compare turnaround time, and identify bottlenecks.

Benefits:
- Understand the baseline processing time set by your SOPs
- Easily identify sources of processing variation

Available Metrics: metrics not listed can be evaluated through a professional services engagement

<table>
<thead>
<tr>
<th>Specimen Test Order to Collection (min)</th>
<th>Specimen Collection to Received (min)</th>
<th>Specimen Received to Resulted (min)</th>
<th>Specimen Resulted to Verify (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specimen Order to Result (min)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Customer Success:
- Identify assays with consistently long turnaround time
- Modify batch sizes for more consistent and timely processing
<table>
<thead>
<tr>
<th>Content Area</th>
<th>Category</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>ED</td>
<td>ED Visits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ED Admits (Total or %)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average ED Wait Time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ED Admit Decision to Departure</td>
</tr>
<tr>
<td></td>
<td>Inpatient</td>
<td>Admissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average Length of Stay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Average Daily Inpatient Census</td>
</tr>
<tr>
<td>Surgical</td>
<td>Surgical Cases</td>
<td>Same Day Surgical Cases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost per Case</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surgery Duration</td>
</tr>
<tr>
<td></td>
<td>Surgical Observations</td>
<td>Surgery First Case Delays</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surgeries Cancelled or No Show</td>
</tr>
<tr>
<td>Outpatient</td>
<td>Outpatient Visits (by Location)</td>
<td>Clinic Visits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same Day Clinic Visits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory Tests</td>
</tr>
<tr>
<td>Observation</td>
<td>Observation Count</td>
<td>Observation Hours</td>
</tr>
<tr>
<td>Revenue Cycle</td>
<td>Charges</td>
<td>Charges by Financial Class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charges by Procedure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Charges by Patient Type</td>
</tr>
<tr>
<td></td>
<td>Receipts</td>
<td>Receipts by Financial Class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Receipts by Procedure</td>
</tr>
<tr>
<td></td>
<td>Adjustments</td>
<td>Adjustments by Insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adjustment %</td>
</tr>
<tr>
<td></td>
<td>Refunds</td>
<td>Refund Amount</td>
</tr>
<tr>
<td></td>
<td>Receivables</td>
<td>Receivables Amount</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A/R Days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Days to Bill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Receivables Greater than 90 Days</td>
</tr>
<tr>
<td>Other</td>
<td>Bad Debt Transfers</td>
<td>RVUs (Provider)</td>
</tr>
<tr>
<td>Quality</td>
<td>Readmissions</td>
<td>30 Day Readmissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Readmit Rate</td>
</tr>
<tr>
<td></td>
<td>Mortalities</td>
<td>Mortality Count</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mortality Rate</td>
</tr>
<tr>
<td></td>
<td>Sepsis</td>
<td>Total Sepsis Screenings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sepsis Mortalities</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Hospital Acquired Condition Count</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opioid Rx %</td>
</tr>
<tr>
<td>Payroll</td>
<td>Earning Types</td>
<td>Regular Hours/Dollars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sick Hours/Dollars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vacation Hours/Dollars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overtime Hours/Dollars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training Hours/Dollars</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Salary Expense</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total FTEs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Premium Pay</td>
</tr>
</tbody>
</table>