

# Integrated Analytics Solutions support Joint Commission Standards requirements

Integrated Analytics Solutions from CareFusion deliver actionable information to help you make decisions that can impact patient care, nursing satisfaction and survey readiness. We provide you with a consistent and trusted view of information linked to activities to help continually improve patient safety and demonstrate regulatory compliance.

Performance Analytics Services answer your critical questions without adding complexity or increasing your workload. Our dedicated team of analysts and experienced clinicians deliver concise, pre-formatted reports and recommendations on a monthly basis.

The Knowledge Portal is an intuitive, web-based application for hospitals seeking to maintain flexibility in their analytical processes.

In this compliance crosswalk, the capabilities within Integrated Analytics Solutions have been mapped to many of the Joint Commission Accreditation Standards. A short description follows each Element of Performance and details how these solutions help provide the insight your organization needs to maintain survey readiness and compliance.



**CareFusion**

# Performance Improvement

## PI.01.01.01 The hospital collects data to monitor its performance

Elements of performance		Med Dispensing Analytics	Infusion Analytics	Capabilities of Integrated Analytics Solutions
1	The leaders set priorities for data collection	✓	✓	Data collection is performed on a nightly basis with no additional in-house staff or technical hardware resources required. Data collection for Alaris® System analytics provides an overview of Guardrails® alerts, Guardrails® Suite usage metrics, Good Catches Overview report (common programming errors), the Harm Index Overview and details of Top Overrides. Data collection for Pyxis® MedStation® system supports Key Performance Indicators (KPIs) in four functional areas: Diversion and Inventory Loss, Inventory Management, Safety/Compliance and System Maintenance.
2	The hospital identifies the frequency for data collection	✓	✓	Data collection is automated and performed on a nightly basis, with no additional in-house staff or technical hardware resources required.
3(M)	Performance Improvement priorities identified by leaders	✓	✓	The Executive Summaries provide an overview-at-a-glance across the facility to help leaders easily identify potential problem areas. A set of KPI's is used to help identify potential performance improvement areas, and based on the facility's internal benchmarks, green, yellow and red color-coding helps leaders prioritize areas of focus. Comparison of the current month to the prior month helps to identify decreases in performance.

## PI.02.01.01 The hospital compiles and analyzes data

1(M)	The hospital compiles data in usable formats	✓	✓	<p>The Executive Summaries provide concise and easy-to-interpret information, and highlight potential areas that require focused attention. Drill-down to supporting details aid in further review and investigation. Comparison of the current month's data to the prior month allows hospital leaders to evaluate the impact of their action plans. Examples:</p> <p><b>Infusion analytics</b> identify profiled patient care areas with the highest percentage of Guardrails® Suite usage vs. basic infusion, presenting opportunities to educate and align clinicians' practices. The Harm Index Chronogram demonstrates the times of day with the highest number of overrides. This analysis allows management to evaluate the frequency of events occurring at the bedside. Events may include multiple Guardrails® Suite overrides to maintain drug effects during staff breaks, shift changes, or increases in patient census due to patient transfers or discharges.</p> <p><b>Med dispensing analytics</b> provide the Diversion Watch List and Stations to Act on List which delivers views of unusual user patterns and inventory management concerns respectively. Insights are based on a comprehensive analysis of multiple variables, resulting in a concise view of activity within a single metric.</p>
2	The hospital identifies the frequency for data analysis	✓	✓	Integrated Analytics Solutions provide KPIs which are updated daily and may be monitored to track performance over days, weeks, months or quarters.

# Performance Improvement

## PI.02.01.01 The hospital compiles and analyzes data (continued)

Elements of performance		Med Dispensing Analytics	Infusion Analytics	Capabilities of Integrated Analytics Solutions
3(M)	The hospital uses statistical tools and techniques to analyze and display data	✓	✓	Integrated analytics uses proprietary algorithms reflected in KPIs. These KPIs were developed by clinicians for clinicians. Pyxis® MedStation® system analytics are categorized into four functional sections: Diversion and Inventory Loss, Inventory Management, Safety/Compliance, System Maintenance. Alaris® System analytics are used to analyze Guardrails® alerts and Top Overrides. The current month and the prior month results are displayed to easily identify potential performance degradation or improvement. Hyperlinks allow seamless access to the details behind each KPI and aid in further review and investigation.
4	The hospital analyzes and compares internal data over time to identify levels of performance, patterns, trends, and variations	✓	✓	Monthly reports show current and prior month data to easily track performance improvement over time. Trending information identifies the most suspicious user activity via the Diversion Watch List.
5	The hospital compares data with external sources, when available	✓	✓	The aggregate database includes data from over 300 hospitals. This data is leveraged to help hospitals better understand how their practices compare to other hospitals in order to apply potential practice improvement initiatives.
8	The hospital uses the results of data analysis to identify improvement opportunities	✓	✓	The Pyxis® MedStation® system KPIs help to optimize inventory management, identify device training needs and demonstrate regulatory compliance. Alaris® System analytics help align clinical practice with Guardrails® Suite usage, identify device training needs, demonstrate regulatory compliance and improve workflow.

## PI.03.01.01 The hospital improves performance

1	Leaders prioritize the identified improvement opportunities	✓	✓	The Executive Summaries provide an overview-at-a-glance across the facility to help leaders easily identify problem areas. A set of KPIs is used to identify performance improvement areas, and based on the facility's internal benchmarks, the green, yellow, and red color-coding assists leaders to prioritize action items. Comparison of the current month to the prior month identifies decreases in performance.
2	The hospital takes action on improvement priorities	✓	✓	Executive Summaries provide the current and prior month's data that track performance and measure the impact of action plans.
3	The hospital evaluates actions to confirm they resulted in improvement	✓	✓	Executive Summaries provide the current and prior month's data to help measure the success of your action plan.

# Leadership

## LD.03.02.01 The hospital uses data and information to guide decisions and to understand variation in the performance of processes supporting safety and quality

Elements of performance		Med Dispensing Analytics	Infusion Analytics	Capabilities of Integrated Analytics Solutions
1	Leaders set expectations for using data and information to improve the safety and quality of care, treatment and services	✓	✓	Integrated Analytics Solutions provides leaders with actionable information. Its easy-to-interpret reports equip team members with insights that can be used to implement, track and measure performance initiatives. The Pyxis® MedStation® system utilizes green, yellow and red color-coding to reflect the hospital's internal benchmarking, indicative of an acceptable KPI result. The Alaris® System analytics compares the current month to the prior month to identify areas requiring focused improvement.
2	Leaders are able to describe how data and information are used to create a culture of safety and quality	✓	✓	Integrated Analytics Solutions can be used by leaders to provide insight into Guardrails® Suite usage, the number of common programming errors, the IV Medication Harm Index, and Top Overrides. The Pyxis® MedStation® system analytics allow leaders to use data to validate process improvement initiatives and identify potential diversion activity using the Diversion Watch List and optimize inventory management with the Stations to Act on Report.
3	The hospital uses processes to support systematic data and information use	✓	✓	Data is automatically downloaded from either the Alaris® Server or the MedConsole® to our remote environment. The information is analyzed monthly, then delivered in an easy-to-interpret report that includes valuable information that can be used to implement best practice and aid in risk prevention efforts.
4	Leaders provide the resources needed for data and information use, including staff, equipment, and information systems	✓	✓	Data collection is performed on a nightly basis, with no additional technical staff or hardware resources required. The end result is delivery of actionable and concise information which may be shared or accessed by any designated users in the facility.

## LD.03.02.01 The hospital uses data and information to guide decisions and to understand variation in the performance of processes supporting safety and quality

5	The hospital uses data and information in decision-making that supports the safety and quality of care, treatment, and services	✓	✓	Alaris® System analytics provides insight into areas where additional education may be needed to improve patient safety. These insights are supported by the Good Catch Overview (i.e., common programming errors), Top Overrides, and performing basic infusions without Guardrails® Suite protection. Similarly, the Pyxis® MedStation® system analytics provides information for profile overrides (medication removal prior to pharmacy review) and potential diversion activities to support improvements in safety and quality of care.
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# Leadership

## LD.03.02.01 The hospital uses data and information to guide decisions and to understand variation in the performance of processes supporting safety and quality (continued)

Elements of performance		Med Dispensing Analytics	Infusion Analytics	Capabilities of Integrated Analytics Solutions
6	The hospital uses data and information to identify and respond to internal and external changes in the environment	✓	✓	The Harm Index Chronogram in the Alaris® System highlights alert activity in a 24-hour timeframe. By analyzing alert spikes, processes affecting workflows such as shift change, patient transfers, and discharge activities may be improved. The Pyxis® MedStation® system KPIs track inventory levels so managers can modify par levels to help prevent stock-outs and improve efficiency and productivity.
7	Leaders evaluate how effectively data and information are used throughout the hospital	✓	✓	Executive Summaries provide current and prior month's data to assist in trending performance improvement initiatives.

## LD.04.04.01 Leaders establish priorities for performance improvement

1	Leaders set priorities for performance improvement activities and patient health outcomes	✓	✓	The Executive Summaries provide an overview-at-a-glance across the facility to help leaders prioritize areas of focus. KPIs help identify performance improvement areas based on the facility's internal benchmarks. Alaris® System analytics reveal programming activities that may require more in-depth education.
2	Leaders give priority to high-volume, high-risk or problem-prone processes for performance improvement activities	✓	✓	Improvement initiatives can be tracked monthly and modified for continued improvement. The Diversion and Inventory Loss, Inventory Management, Safety/Compliance and System Maintenance categories in the Pyxis® MedStation® system encompass Joint Commission standards for survey and reporting. Alaris® System analytics indicate areas requiring a focused review of process and workflow.
3	Leaders reprioritize performance improvement activities in response to changes in the internal or external environment	✓	✓	
4	Performance improvement occurs hospital-wide	✓	✓	Executive Summaries provide the current and prior month's data to track performance and measure the impact of action plans. The KPIs provide critical practice information to showcase high risk clinical behaviors and practice patterns.

# Medication Management

## MM.01.01.03 The hospital safely manages high-alert and hazardous medications

Elements of performance		Med Dispensing Analytics	Infusion Analytics	Capabilities of Integrated Analytics Solutions
3(M)	The hospital implements process for managing high-alert medications	✓	✓	Alaris® System analytics details Guardrails® software usage specific to patient care profiles. Optimization of Guardrails® Suite software can help lead to the best return on investment by helping prevent adverse drug events leading to increased patient safety, cost savings, and nurse retention. The Diversion Watch List, contained in the Pyxis® MedStation® system analytics, identifies anomalous activity which may indicate diversion or improper use of the Pyxis® MedStation® system.

## MM.03.01.01 The hospital safely stores medications

3	The hospital stores controlled (scheduled) medications to prevent diversion, in accordance with law and regulation	✓		The # of Active Users Without Activity > 90 days and Users Without Biometric (%) report provides Directors of Pharmacy the ability to monitor Pyxis® MedStation® system access. This information is useful to determine if individuals no longer employed in your facility have access to the Pyxis® MedStation® system.
6	The hospital prevents unauthorized individuals from obtaining medications in accordance with its policy and law and regulation	✓		Biometric fingerprint feature verifies users prior to granting access to medications and prevents password theft. The Users Without Pyxis® BioID Activity report identifies individuals not using the Pyxis® BioID feature.
8(M)	The hospital removes all expired, damaged, and/or contaminated medications and stores them separately from medications available for administration	✓		The Executive Summaries include Avg. Removed Outdates per Station report that identifies and trends the average number of medication doses removed monthly in the Pyxis® MedStation® system. The report includes med par levels to assist in evaluating whether min/max levels are appropriate.

## MM.05.01.01 A Pharmacist reviews the appropriateness of all medication orders for medications to be dispensed in the hospital

1	Before dispensing or removing medications from floor stock or from an automated storage and distribution device, a pharmacist reviews all medication orders or prescriptions unless a licensed independent practitioner controls the ordering, preparation, and administration of the medication or when a delay would harm the patient in an urgent situation (including sudden changes in a patient's clinical status), in accordance with law and regulation.	✓		Profile Overrides (%) is provided in the Pyxis® MedStation® system analytics and highlights medications accessed by users without a pharmacist's review.
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# Medication Management

## MM.05.01.11 The hospital safely dispenses medications

Elements of performance		Med Dispensing Analytics	Infusion Analytics	Capabilities of Integrated Analytics Solutions
2(M)	The hospital dispenses medications and maintains records in accordance with law and regulation, licensure, and professional standards of practice	✓		Information helps to minimize unauthorized access to medications and includes: Temporary Users, Repeat Temporary Users, # of Active Users Without Activity > 90 days and Users Without Biometric (%).

## MM.08.01.01 The hospital evaluates the effectiveness of its medication management system

1	The hospital collects data on the performance of its medication management system	✓		Data collection for the Pyxis® MedStation® system analytics supports KPIs in 4 functional sections: Diversion and Inventory Loss, Inventory Management, Safety/Compliance, System Maintenance.
2	The hospital analyzes data on its medication management system	✓		The Diversion Watch List and Cancelled Transactions (%) reports are examples of data analysis designed to assist DOP/Nurse Managers and maintain compliance by preventing or identifying potential diverters. Inventory Management reports provide detailed highlights of outdated medications and stock-outs to efficiently manage your labor and productivity.
3	The hospital compares data over time to identify risk points, levels of performance, patterns, trends and variations of its medication management system	✓		The Executive Summaries show trends from the prior month and provides targeted and accurate information to base performance improvement initiatives, maximize staff productivity and inventory management of your Pyxis® MedStation® system.
5	Based on analysis of its data, as well as review of the literature for new technologies and best practices, the hospital identifies opportunities for improvement in its medication management system	✓		Integrated Analytics Solutions provides best practice benchmarks in identifying Key Performance Indicators based on 300+ healthcare organizations. Our analysts leverage aggregated data to assist in maintaining current practice with other in-patient facilities.
6	The hospital takes action on improvement opportunities identified as priorities for its medication management system	✓		The Executive Summaries highlight potential compliance issues in Controlled Substances Discrepancies Unresolved Within 24 hours and Number of Controlled Substances Discrepancies, which present opportunities for improvement and change implementation. The Number of Pockets without Removals for >90 days and Average Removed Outdates per Station reports provide data to immediately initiate action plans to decrease medication costs impacting operating budget.
7	The hospital evaluates changes to confirm that they resulted in improvements for its medication management system	✓		The monthly comparison contained in the Executive Summaries indicates if the Plan-Do-Check-Act improvement interventions were successful and determine a need to re-check the process improvement plan.



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