Bluebird

eICU

in the Cloud

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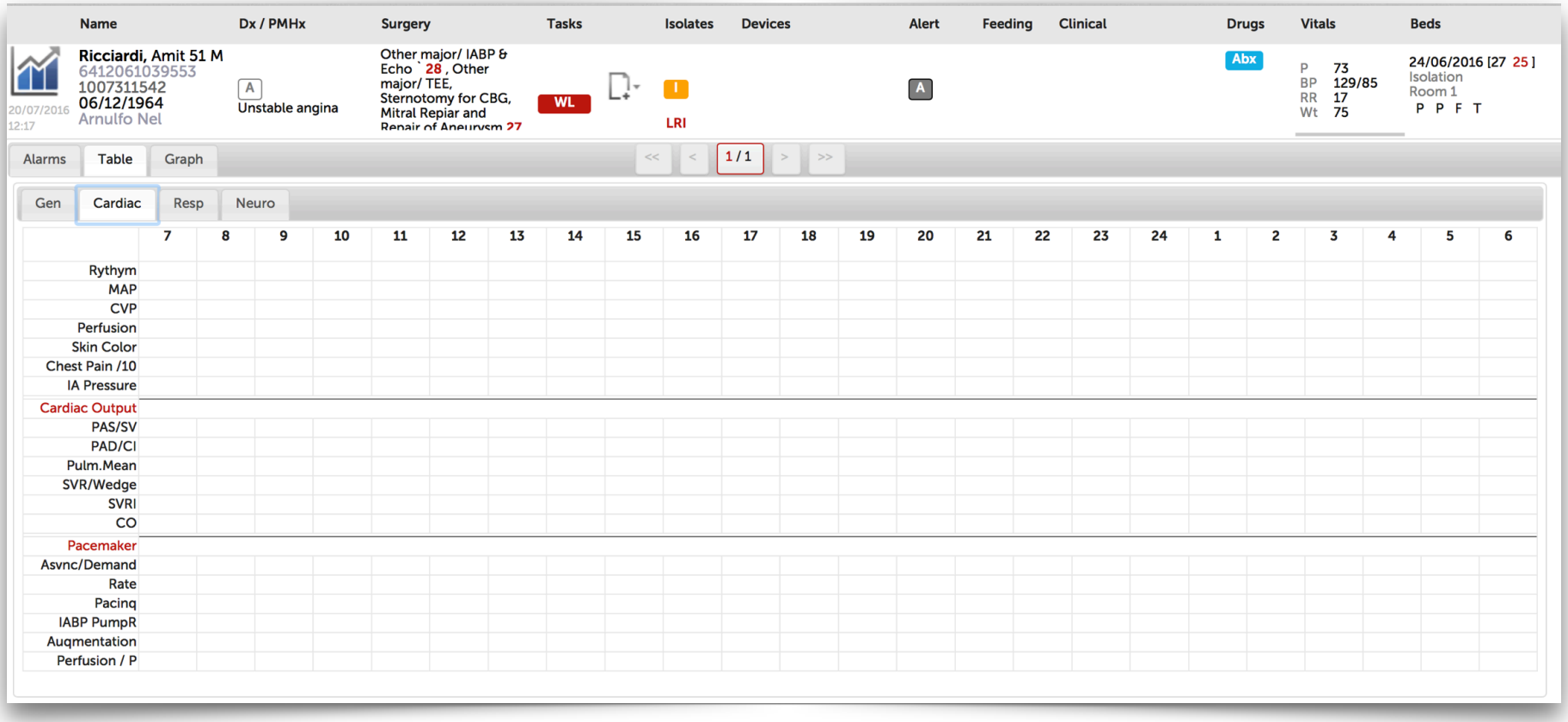
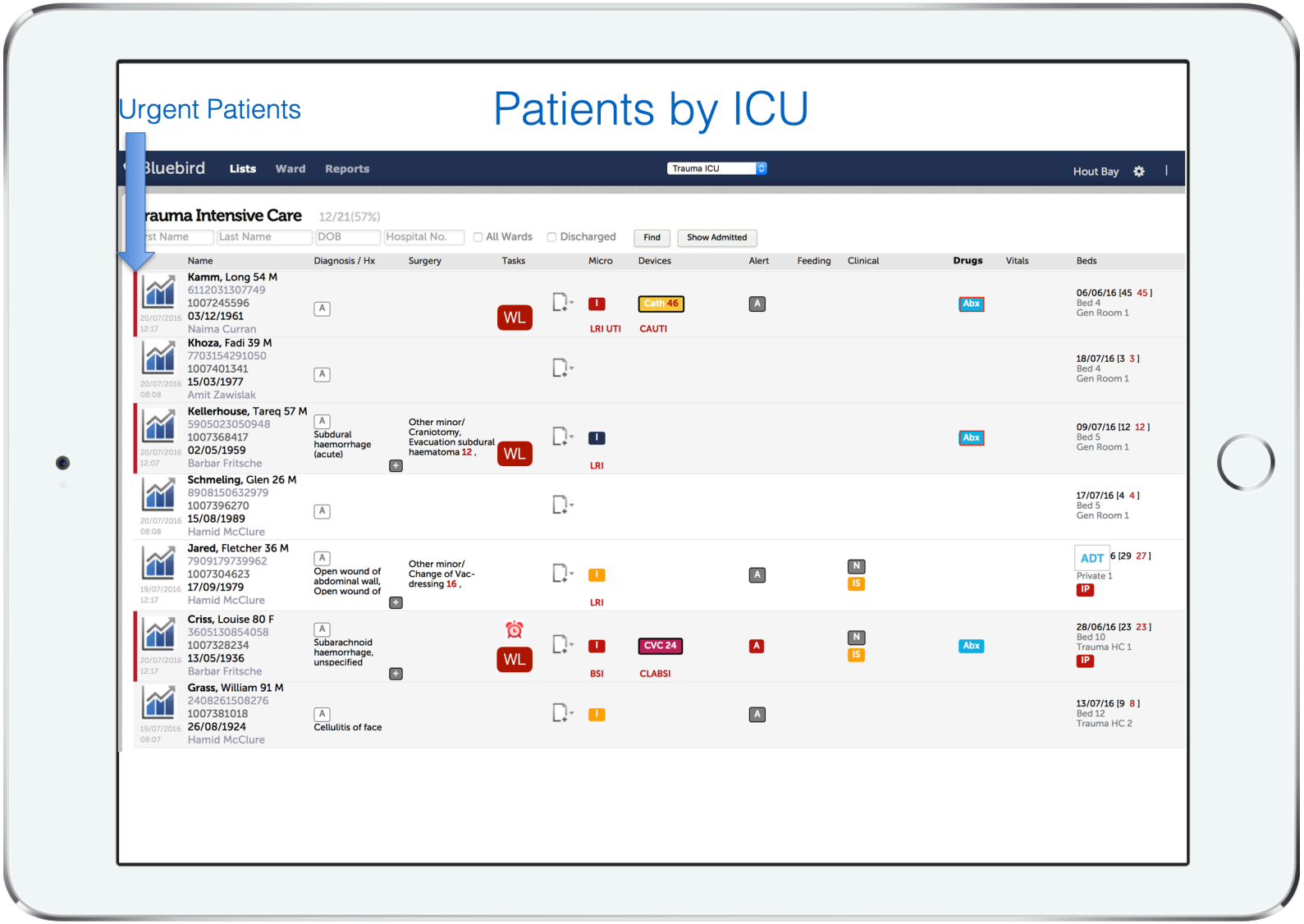
Introduction

Bluebird's eICU not only allows traditional ICU flow charts to be digitalized, but once in digital format ICU patients can be monitored remotely. Imagine being able to monitor all the ICUs in a hospital group from one central location and receive real time alerts that **improve patient safety**. Bluebird is your cockpit for critical care. Bluebird draws real-time data from monitoring devices, labs and hospital information systems and presents that data as actionable information to empower fast, informed decision making.



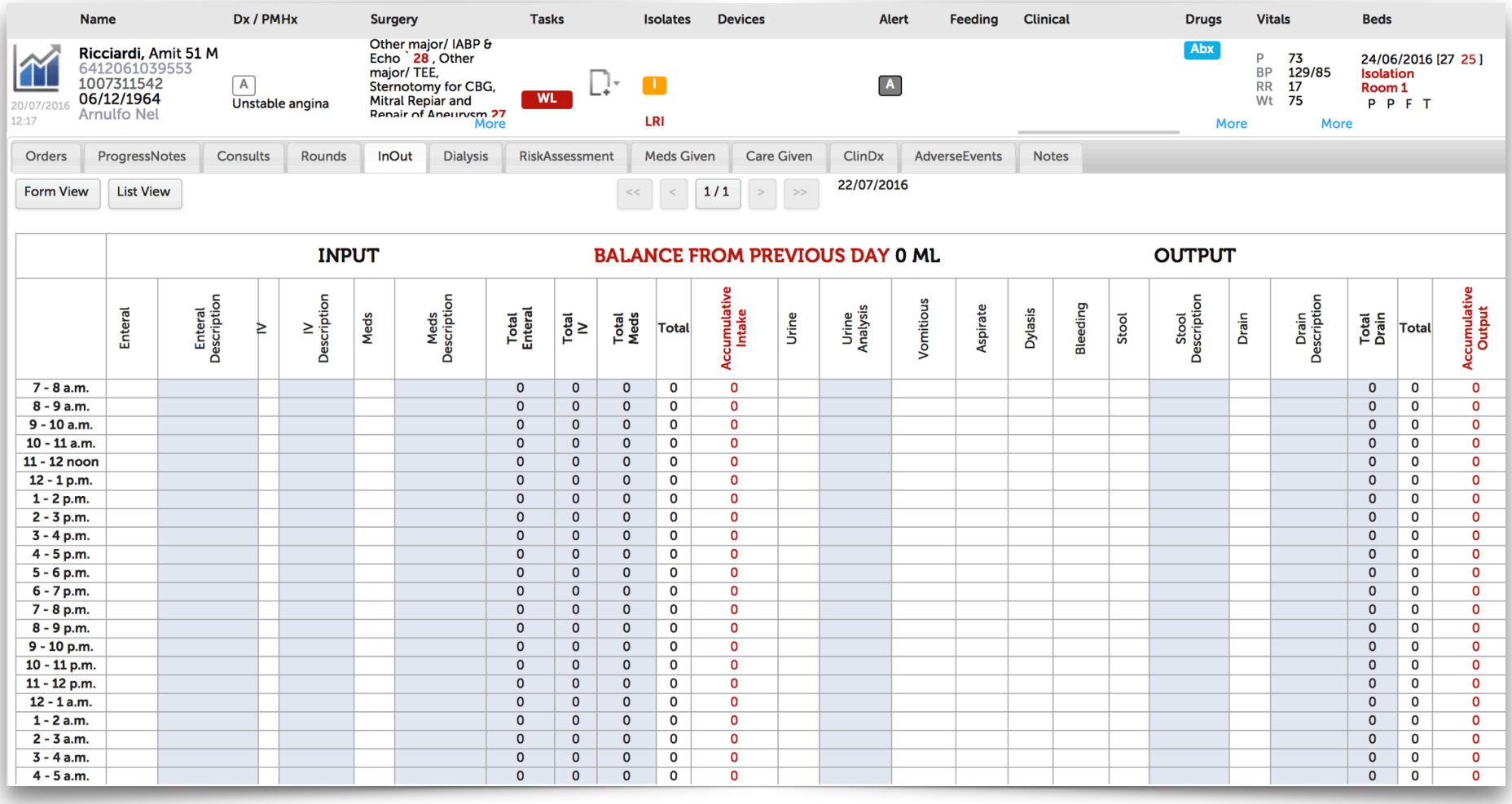
When Bluebird eICU is paired with the full Bluebird Hospital EMR, there is a single patient record throughout the hospital stay.

Team members having all critical information instantly available in a single comprehensive screen showing all ICU patients. Those ICU patients that need to be seen first have a red left margin marker. One can drill down on each line for more detail about that patient.



Fluid Balance Chart

Bluebird automates the arithmetic making fluid balance management easy and accurate.



Name	Dx / PMHx	Surgery	Tasks	Isolates	Devices	Alert	Feeding	Clinical	Drugs	Vitals	Beds
Ricciardi, Amit 51 M 6412061039553 1007311542 06/12/1964 Arnulfo Nel 20/07/2016 12:17	A Unstable angina	Other major/ IABP & Echo ` 28 , Other major/ TEE, Sternotomy for CBG, Mitral Repiar and Repair of Aneurysm 27 More	WL	I LRI		A			Abx More	P 73 BP 129/85 RR 17 Wt 75 More	24/06/2016 [27 25] Isolation Room 1 P P F T

Orders | ProgressNotes | Consults | Rounds | InOut | Dialysis | RiskAssessment | Meds Given | Care Given | ClinDx | AdverseEvents | Notes

Form View | List View

<< < 1 / 1 > >>

22/07/2016

	INPUT										BALANCE FROM PREVIOUS DAY 0 ML														OUTPUT		
	Enteral	Enteral Description	IV	IV Description	Meds	Meds Description	Total Enteral	Total IV	Total Meds	Total	Accumulative Intake	Urine	Urine Analysis	Vomitious	Aspirate	Dylasis	Bleeding	Stool	Stool Description	Drain	Drain Description	Total Drain	Total	Accumulative Output
7 - 8 a.m.							0	0	0	0	0											0	0	0
8 - 9 a.m.							0	0	0	0	0											0	0	0
9 - 10 a.m.							0	0	0	0	0											0	0	0
10 - 11 a.m.							0	0	0	0	0											0	0	0
11 - 12 noon							0	0	0	0	0											0	0	0
12 - 1 p.m.							0	0	0	0	0											0	0	0
1 - 2 p.m.							0	0	0	0	0											0	0	0
2 - 3 p.m.							0	0	0	0	0											0	0	0
3 - 4 p.m.							0	0	0	0	0											0	0	0
4 - 5 p.m.							0	0	0	0	0											0	0	0
5 - 6 p.m.							0	0	0	0	0											0	0	0
6 - 7 p.m.							0	0	0	0	0											0	0	0
7 - 8 p.m.							0	0	0	0	0											0	0	0
8 - 9 p.m.							0	0	0	0	0											0	0	0
9 - 10 p.m.							0	0	0	0	0											0	0	0
10 - 11 p.m.							0	0	0	0	0											0	0	0
11 - 12 p.m.							0	0	0	0	0											0	0	0
12 - 1 a.m.							0	0	0	0	0											0	0	0
1 - 2 a.m.							0	0	0	0	0											0	0	0
2 - 3 a.m.							0	0	0	0	0											0	0	0
3 - 4 a.m.							0	0	0	0	0											0	0	0
4 - 5 a.m.							0	0	0	0	0											0	0	0

Risk Assessment

Bluebird is designed to **manage risk** by collecting data and then, depending on the data collected prompt ongoing appropriate risk assessment.

BLUEBIRD
SAFE HOSPITALS

Early Warning System

Bluebird promotes integrated, **system-level improvements,** within your hospital to help ensure patient safety. Bluebird's EWS uses the proven British Royal College of Physicians NEWS (National Early Warning) scoring system to save lives.

Fewer Falls

Bluebird screens patients at risk and then proactively manages that risk to help reduce the incidence of falls in Bluebird enabled hospitals.

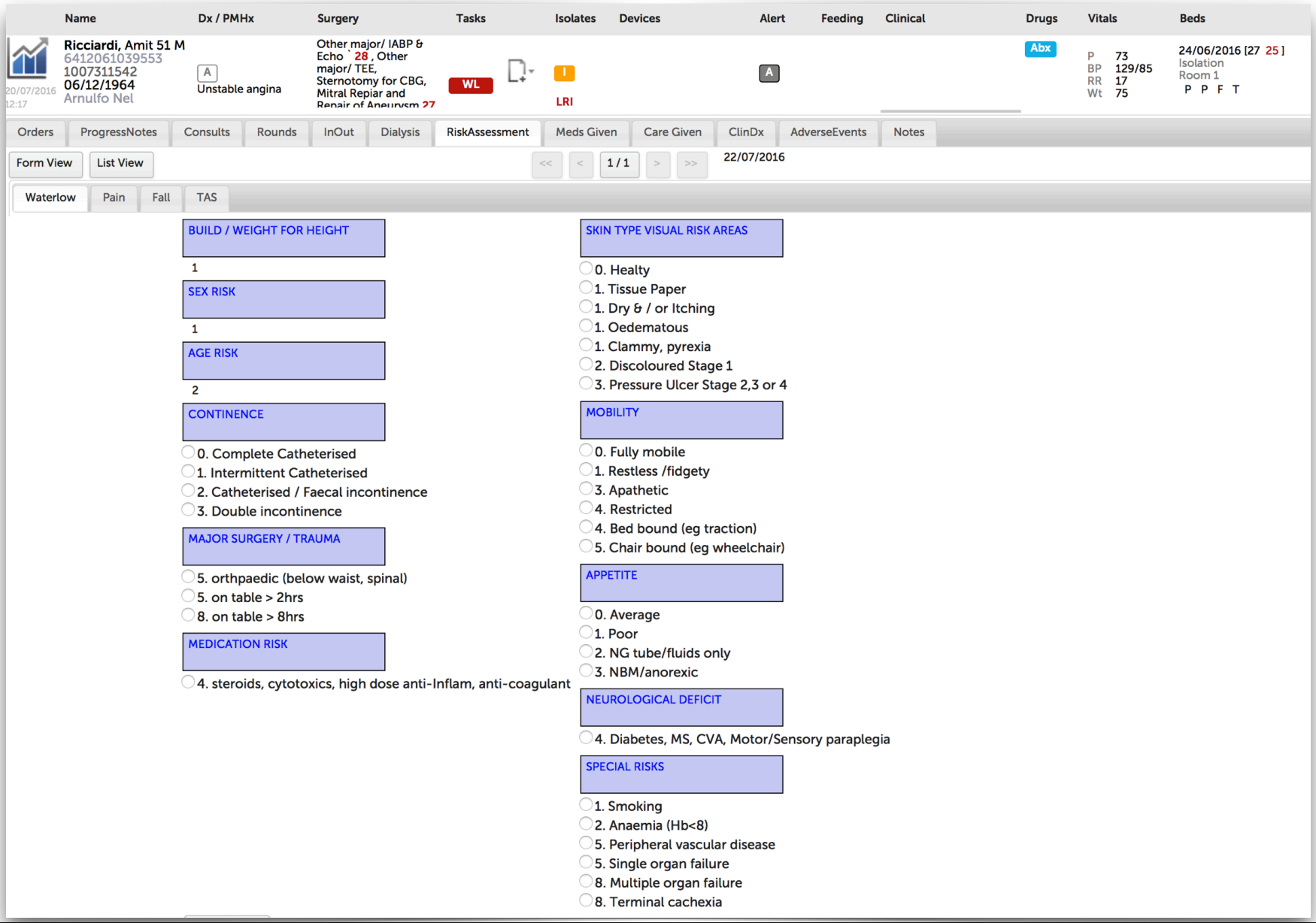
Fewer Pressure Sores

Bluebird screens patients at risk and then proactively manages that risk to help reduce the incidence of bed sores in Bluebird enabled hospitals.

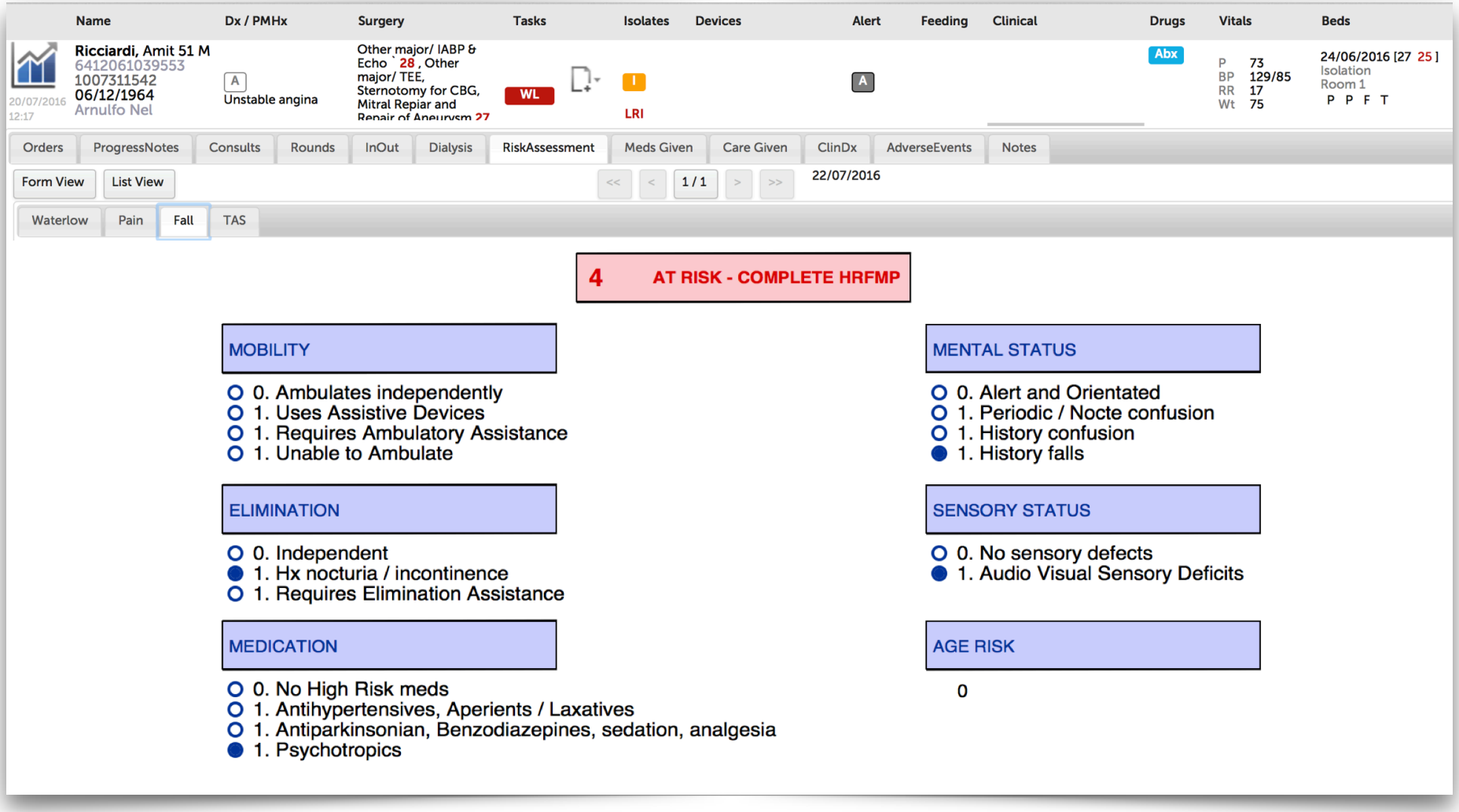
Fewer Infections

The combination of **advanced antibiotic stewardship** (rather than simple ADE avoidance) and **proactive infection prevention**, *within the same system* is key to Bluebird's success in measuring, and then driving down HAIs and MDROs. More detail can be found on Bluebird's separate antimicrobial stewardship site at www.intelms.com

Pressure Sore Risk Assessment



Fall Risk Assessment



BIRC

The Bluebird ICU Rounding Checklist (BIRC) is a quick and simple patient safety tool that helps focus ICU rounding, minimize errors and emphasize individual patient goals. It is a communication tool that alerts the team to issues requiring attention. BIRC facilitates a comprehensive approach to critically ill patients significantly reducing risk.

Background:

Intensive care depends on a team of clinicians working collaboratively. It has been shown that, on average, of the 180 tasks done by an ICU nurse each day, typically, 2 errors are made.

Michigan's Keystone Project is the landmark study showing that ICU checklists dramatically improve patient safety. This study was done on the back of Peter Pronovost's initial work on paper based checklists at Johns Hopkins which showed that a nurse's understanding of a patients' individual daily ICU goal increased from 10% to 95%!

BIRC is an iPad based checklist which enables all relevant patient information to be reviewed at the bedside and includes tools like renal function flow sheets and unit specific antibiograms. BIRC incorporate facility specific clinical decision support guidelines.

By providing a systematic and comprehensive approach to the innumerable decisions made each day, BIRC enhances interdisciplinary clinical communication, individual patient safety and professional education. Moreover it helps overcome the inertia often found in the care of the more stable ICU patients.

BIRC answers the question "where do we go from here" while serving as a core data repository for clinicians who may have missed morning rounds.

BIRC helps minimize errors of omission (e.g., omitting thromboprophylaxis) as well as errors of commission (e.g., continuing high-dose sedation). By encoding prophylaxis bundles and patient safety variables BIRC helps ensure best practices are followed. BIRC focusses on both short and long-term individual patient goals, thereby encouraging step-wise, progressive recovery from critical illness.

BIRC facilitates a structured, thorough, and individualized approach to patient care. New issues are quickly identified and discussion especially regarding sedation, weaning, and medication is prompted.

How does BIRC work in practice

The over-night nurse is responsible for completion of the *preround* section, which is then reviewed and finalized by the daytime nurse before rounds. BIRC's "*preround*" section itemizes interventions, goals, and nursing concerns. The "*round*" section of BIRC is completed during morning rounds by the physician who addresses the preround concerns and solidifies the care plan.

By providing a well organized approach, BIRC reminds clinicians to discuss all systems, regardless of patient complexity or acuity and highlights interventions shown to decrease morbidity and mortality including prophylaxis, nutrition, central venous catheter and mechanical ventilation management. Without BIRC is is easier to miss things. BIRC forces one to be meticulous, for example, to ensure that a central venous line or urinary catheter is not left in situ too long (with an increased risk of serious infection). BIRC also facilitates clarity regarding individual drug and device plans.

BIRC helps get patients off their sedation earlier and wean them off the ventilator earlier, both shown to be critically important in improving outcomes.

BIRC prompts clinicians to ensure the path out of iCU is made a priority.

Summary

Bluebird's eICU not only allows traditional ICU flow charts to be digitalized, but once in digital format ICU patients can be monitored remotely. Imagine being able to monitor all the ICUs in a hospital group from one central location and receive real time alerts that improve patient safety.

Having ICU data available in a smart, user friendly, electronic interface improves workflow and decision making and at the same time, decreases workload. For example Bluebird's ICU specific antibiogram shows the most common isolates and antibiotic sensitivities in that ICU as well as a patient specific antibiogram which shows any bacteria (with sensitivities) that are isolated during the current admission.

The Bluebird vitals API cuts down ICU data entry by 50%, and productivity tools such as Bluebird's automated fluid balance chart save time while minimizing errors!

Bluebird's eICU will help your clinicians be more efficient, decrease hospital expenditure, length of ICU stay and at the same time improve patient morbidity and mortality.