

Medication Safety In The Hospital

Local hospitals are taking steps with technology to avoid medication errors.

Medication errors in hospitals across the U.S. are common and medication discrepancies can occur in up to 70% of patients at the time of hospital admission or discharge [Ref 1]. Medication errors have serious consequences, resulting in an estimated 7,000 deaths annually [Ref 2]. There is also a tremendous financial burden associated with these errors costing healthcare consumers billions in hospital costs nationwide every year [Ref 3]. However, there is evidence that validates the effectiveness of technology in hospitals and the reduction of medication errors. A study on bar code technology in medication administration showed a 50% reduction in potential adverse drug events as a result of implementing the technology [Ref 4]. Although technology will not eliminate all medication errors, it is important for hospitals to continue to adopt these lifesaving technologies to improve patient safety.

This brief shows aggregate and individual hospital data on medication safety measures for Computerized Physician Order Entry (CPOE), Bar Code Medication Administration (BCMA), and Medication Reconciliation (Med Rec) for hospitals in Southeastern Pennsylvania (SEPA), Delaware (DE), and Southern New Jersey (SNJ) that participated in the 2023 Leapfrog Hospital Survey, which was completed by nearly 3,000 hospitals across the United States (U.S.). Page 2 of this brief shows results for each reporting hospital in this region, and identifies hospitals with an “x” that did not participate in the 2023 Leapfrog Survey. Most recent Leapfrog Hospital Safety Grade is shown.

MEDICATION RECONCILIATION (Med Rec) is the process of identifying and maintaining an accurate list of all medications a patient is taking at home and ensuring the list matches the patient's admission and discharge orders. Accurate medication reconciliation can help prevent medication errors that could seriously harm a patient.

Leapfrog 2023 Med Rec Standard: Hospitals achieving the medication reconciliation standard use a nationally endorsed protocol; collect data on the accuracy of its medication reconciliation process for at least 30 patients; and has a rate of unintentional medication discrepancies that is lower than or equal to the 50th percentile (where lower performance is better).

COMPUTERIZED PHYSICIAN ORDER ENTRY (CPOE) systems are electronic prescribing systems that intercept errors when they most commonly occur — at the time medications are ordered. With CPOE, physicians enter orders into a computer rather than on paper. Orders are integrated with patient information, including laboratory and prescription data. The order is then automatically checked for potential errors or problems.

Leapfrog 2023 CPOE Standard: Assure that physicians enter at least 85% of inpatient medication orders via a computer system that includes prescribing-error prevention software and demonstrate, via a test, that the inpatient CPOE system can alert physicians to at least 60% of common, serious prescribing errors (applies to adult hospitals only).

BAR CODE MEDICATION ADMINISTRATION (BCMA) is an electronic scanning system that intercepts medication errors at the point of administration. By scanning bar codes on a patient's wristband and on prescribed medications, nurses/clinicians can confirm that they have the right patient, right medication, and right dose, given at the right time.

Leapfrog 2023 BCMA Standard: Implement a BCMA system linked to an electronic medication administration record in 100% of the hospital's intensive care units (adult, pediatric and neonatal), medical and/or surgical units (adult and pediatric), and labor and delivery units. Scan both patient and medication bar codes in at least 95% of bedside medication administrations in BCMA-equipped units. Use a BCMA system that includes all seven decision-support elements identified as best practices by the Leapfrog BCMA Expert Panel. Have at least six of eight best-practice processes and structures in place to monitor and reduce workarounds.



BAR CODE MEDICATION ADMINISTRATION
(BCMA)



COMPUTERIZED PHYSICIAN ORDER ENTRY
(CPOE)

Hospitals Reporting on Med Rec in 2023 Leapfrog Survey Medication Reconciliation (Med Rec) as of 11/30/23

		SEPA	DE	SNJ	U.S.
4	Achieved Standard	64%	43%	50%	47%
3	Considerable Achievement	18%	14%	28%	17%
2	Some Achievement	11%	29%	22%	17%
1	Limited Achievement	7%	14%	0%	19%

Hospitals Reporting on CPOE in 2023 Leapfrog Survey Computerized Physician Order Entry (CPOE) as of 11/30/23

		SEPA	DE	SNJ	U.S.
4	Achieved Standard	97%	86%	100%	83%
3	Considerable Achievement	3%	14%	0%	13%
2	Some Achievement	0%	0%	0%	2%
1	Limited Achievement	0%	0%	0%	2%

Hospitals Reporting on BCMA in 2023 Leapfrog Survey Bar Code Medication Administration (BCMA) as of 11/30/23

		SEPA	DE	SNJ	U.S.
4	Achieved Standard	97%	86%	94%	87%
3	Considerable Achievement	3%	14%	6%	12%
2	Some Achievement	0%	0%	0%	1%
1	Limited Achievement	0%	0%	0%	0%

Observations: Hospitals in SEPA and SNJ out performed the national (U.S.) aggregate for “Achieved Standard” in CPOE, BCMA and Med Rec. Delaware hospitals out performed the national aggregate for “Achieved Standard” in CPOE.

CALL TO ACTION FOR EMPLOYERS:

- Inform employees about the Leapfrog Survey and Hospital Safety Grades by visiting <http://www.leapfroggroup.org/> and <http://www.hospitalsafetygrade.org/>
- Share this document with employees to educate them on Medication Safety in the hospital.
- Discuss these findings (particularly C and D grades) with health plans and hospitals and ask what they are doing to drive improvement and patient safety.
- Urge hospitals that do not participate in the Leapfrog Survey to report.

Hospitals	Hospital Safety Grade	Hospital Survey Results as of 11/30/2023		
	Fall 2023 Safety Grade	CPOE	BCMA	Med Rec
Southeastern Pennsylvania (SEPA)				
Chester County Hospital (Penn Medicine)	B	x	x	x
Chestnut Hill Hospital	C	4	4	1
Children's Hospital of Philadelphia	NA	x	x	x
Crozer Chester Medical Center	D	x	x	x
Doylestown Hospital	A	4	4	4
Einstein Medical Center Montgomery	A	4	4	4
Einstein Medical Center Philadelphia	B	4	4	3
Grand View Health	C	3	4	1
Holy Redeemer Hospital and Medical Center	A	4	4	4
Hospital of the University of Pennsylvania	B	x	x	x
Hospital of the University of Pennsylvania – Cedar Avenue	B	x	x	x
Jefferson Abington Hospital	A	4	4	4
Jefferson Bucks Hospital	B	4	4	4
Jefferson Frankford Hospital	B	4	4	3
Jefferson Lansdale Hospital	B	4	4	4
Jefferson Torresdale	B	4	4	4
Lower Bucks Hospital	B	4	4	4
Mainline Health Bryn Mawr Hospital	A	4	4	4
Mainline Health Lankenau Medical Center	A	4	4	3
Mainline Health Paoli Hospital	A	4	4	4
Mainline Health Riddle Hospital	A	4	4	4
Mercy Fitzgerald Hospital	C	4	3	4
Nazareth Hospital	C	4	4	4
Penn Presbyterian Medical Center	A	x	x	x
Pennsylvania Hospital	C	x	x	x
Phoenixville Hospital	C	4	4	2
Pottstown Hospital	B	4	4	3
Roxborough Memorial Hospital	A	4	4	4
St. Christopher's Hospital for Children	NA	4	4	x
St. Luke's Upper Bucks Hospital	A	4	4	4
St. Mary Medical Center	C	4	4	4
Suburban Community Hospital	A	4	4	4
Taylor Hospital	D	x	x	x
Temple University Hospital - Main Campus	B	4	4	2
Temple University Hospital - Jeanes Campus	B	4	4	2
Thomas Jefferson University Hospital	B	4	4	4
Thomas Jefferson University Hospital - Methodist Campus	B	4	4	3

Hospitals	Hospital Safety Grade	Hospital Survey Results as of 11/30/2023		
	Fall 2023 Safety Grade	CPOE	BCMA	Med Rec
Delaware (DE)				
Bayhealth Hospital Sussex Campus	B	4	4	4
Bayhealth Hospital Kent Campus	C	4	4	2
Beebe Healthcare	C	4	4	1
ChristianaCare Christiana Hospital	C	4	4	3
ChristianaCare Wilmington Hospital	C	4	4	2
Nemours Alfred I duPont Hospital for Children	NA	x	x	x
Saint Francis Hospital	C	4	3	4
TidalHealth Nanticoke	C	3	4	4

Hospitals	Hospital Safety Grade	Hospital Survey Results as of 11/30/2023		
	Fall 2023 Safety Grade	CPOE	BCMA	Med Rec
Southern New Jersey (SNJ)				
Atlanticare Regional Medical Center - City Campus	B	4	4	4
Atlanticare Regional Medical Center - Mainland Campus	A	4	4	4
Cape Regional Medical Center	B	4	4	3
Cooper University Hospital	B	4	4	2
Deborah Heart and Lung Center	NA	4	3	2
Hackensack Meridian Southern Ocean Medical Center	B	4	4	4
Inspira Medical Center Elmer	A	4	4	4
Inspira Medical Center Mullica Hill	A	4	4	4
Inspira Medical Center Vineland	A	4	4	3
Jefferson Cherry Hill Hospital	A	4	4	4
Jefferson Stratford Hospital	A	4	4	4
Jefferson Washington Township Hospital	A	4	4	4
Salem Medical Center	NG	x	x	x
Shore Medical Center	B	4	4	4
Virtua Marlton Hospital	A	4	4	2
Virtua Mount Holly Hospital	B	4	4	2
Virtua Our Lady of Lourdes Hospital	C	4	4	3
Virtua Voorhees Hospital	A	4	4	3
Virtua Willingboro Hospital	B	4	4	3

GPBCH LEAPFROG BRIEF

2023 Hospital Safety Grades & Survey Outcomes

The [Leapfrog Hospital Safety Grades](#) are assigned to nearly 3,000 general acute-care hospitals across the U.S. twice annually. The Hospital Safety Grade scores hospitals on how safe they keep their patients from errors, injuries, accidents, and infections. The Safety Grade uses up to 30 national performance measures from the Centers for Medicare & Medicaid Services (CMS), the Leapfrog Hospital Survey and information from other data sources.

Leapfrog Hospital Safety Grades Legend:

NA: Not applicable for rating.
NG: Not graded. Not enough data available to be graded.



The [Leapfrog Hospital Survey](#) assesses hospital safety, quality, and efficiency based on national performance measures that are of specific interest to health care purchasers and consumers. Survey Results are publicly reported and provide hospitals with information to benchmark their progress in improving care.

Leapfrog Hospital Survey Legend:

4 Achieved Standard 2 Some Achievement
3 Considerable Achievement 1 Limited Achievement

Hospitals that did not participate in the 2023 Leapfrog Survey are shown with "x" on charts.



THANK YOU to hospitals that participate in the annual Leapfrog Hospital Survey and congratulations to those that fully meet Leapfrog standards for CPOE, BCMA and Med Rec. We applaud hospitals willing to report and making progress on these measures. Medication Safety and transparency are very important to employer and consumer purchasers.

The [Greater Philadelphia Business Coalition on Health \(GPBCH\)](#) serves as Regional Leader for The Leapfrog Group for southeastern Pennsylvania and Delaware. The [New Jersey Health Care Quality Institute](#) is the Leapfrog Regional Leader for New Jersey. The [Leapfrog Group](#) is an independent national nonprofit organization that serves as a voice for health care purchasers, using their collective influence to foster positive change in U.S. health care. Leapfrog is the nation's premier advocate of hospital transparency - collecting, analyzing and disseminating hospital data to inform value-based purchasing. For more information, contact Tanika Smith at tsmith@gpbch.org or 215-800-1066.

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