Semi-Annual Report
June – December 2025*

California Medication Error Reporting Program (CAMER)

Prepared for
California Board of Pharmacy

Prepared by
Institute for Safe Medication Practices

January 2026

* Licensees were required to report medication errors that occurred on or after September 1, 2025

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Background

Business and Professions Code (BPC) section 4113.1 establishes requirements for a community pharmacy to report medication errors to an entity approved by the California Board of Pharmacy. The statute requiring medication error reporting can be viewed at BPC section 4113.1.

In September 2024, after a competitive bidding process, the Board approved the Institute for Safe Medication Practices (ISMP), an ECRI Company, as the entity to receive and review medication error reports under BPC section 4113.1.

The Board established that medication errors that occur on or after September 1, 2025, must be reported to the CAMER system in accordance with the established legal requirements.

On June 30, 2025, the California Medication Error Reporting (CAMER) system portal went live, allowing required pharmacies to report medication errors pursuant to BPC section 4113.1. This report provides analysis of data collected from June 30, 2025, through December 31, 2025. However, please note that licensees were required to report medication errors that occurred on or after September 1, 2025

Overall Reporting

Total Number of Reports

For the reporting period June – December 2025, a total of 9,653 reports were submitted by licensees, with the reporting volume increasing each month (**Figure 1**). The reports were submitted by 2,536 (47.3%) of the 5,361 pharmacies registered with the CAMER system. There was a notable rise in reporting volume beginning on the compliance date of September 1, 2025. No reports were submitted on June 30, 2025, the day the reporting system went live. The first report was received on July 16, 2025.

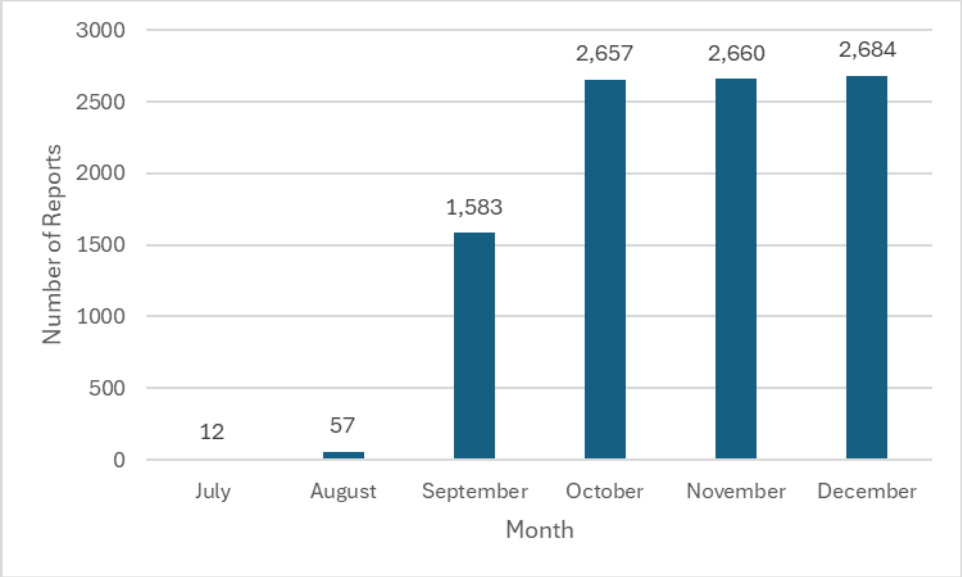

Figure 1. Reports submitted by month, July – December 2025 (N = 9,653). Note: The reports were submitted by 2,536 (47.3%) of the 5,361 pharmacies registered with the CAMER system.

Reports by Pharmacy Type

Reports were submitted by a total of 2,468 pharmacies. Most reports were submitted by community chain pharmacies (N = 6,352) (**Table 1**).

Table 1. Reports submitted by pharmacy type, July – December 2025 (N = 9,653).

Pharmacy type	Number of reports
Community chain pharmacy	6,352
Non-chain community pharmacy	1,449
Mail-order pharmacy	897
Closed-door pharmacy	568
Specialty pharmacy	266
Hospital outpatient pharmacy	121

Reports by Harm Score

Licensees are required to submit harm scores using the Agency for Healthcare Research and Quality's (AHRQ) harm scale. More than 90% (93.6%, n = 9,031) of events were reported as not resulting in patient harm (**Table 2**). Six (0.1%) reports were categorized as resulting in death; however, when reading the event narratives, none described patient deaths.

Prescription sold to wrong patient. Patient has not started medication. Patient would return it to prescription to pharmacy.

Patient was given a 10 mL size bottle instead of 4x1 mL bottle. Error occurred as pharmacist bypassed the computer scanning by manually typing in the NDC [National Drug Code] of the

medication. Pharmacist also failed to double check the medication during counselling when they picked up the medication. Called MD [physician] and patient. MD aware and is fine with it.

Also, it appears that two events were reported twice, inflating the number of reports with the harm score of death. The repeated events were the following:

Patient brought the prescription vial with mixed 2 strength amoxicillin 500 mg and 875 mg. Patient took some amoxicillin 875 mg and realized there was mix of 2 strengths (same color).

XXXXX XXXXX received Sublocade injection on XXXXX. I gave him the shot , not seeing the special needle that was supposed to be used with the injection. I then realized that the solution is very thick and that the injection requires a bigger needle. Saw the needle provided from the manufacturer, gave him the injection. Patient called the clinical service manager and stated that I used [more than one] needle.

Table 2. Agency for Healthcare Research and Quality (AHRQ) harm score associated with reported events, July – December 2025 (N = 9,653).

Agency for Healthcare Research and Quality (AHRQ) Harm Score	Number of Reports	Percentage of reports
No Harm	9,031	93.6%
Mild Harm	589	6.1%
Moderate Harm	224	0.2%
Severe Harm	3	0.0%
Death	6	0.1%

One of the reported events resulting in severe harm involved the failure to properly reconstitute a bottle of Firvanq (vancomycin for oral solution). An alert regarding this event was published by the Board in the **November 2025 issue of The Script**.

In another report, the omission of a patient's antiseizure medications resulted in the patient experiencing seizures and being admitted to the emergency department (ED).

A [controlled] medication was withheld from a patient since the doctor was from another state (XXXXX) and did not have a DEA license for the state which our pharmacy is located (XXXXX). The medications withheld are Lacosamide 100 mg tab (1 tab PO BID) and Peramphanel 2 mg tab (1 tab PO QHS). The pharmacist verifying prescriptions informed the pharmacy manager, and the pharmacy manager deferred to this pharmacist's judgement. Because of this incident, the patient developed seizures and had to be admitted to the ED. This event occurred due to confusion about the laws regarding [controlled substance] prescriptions from out of state. There was a confusion that [controlled substance] prescriptions from our of state prescribers could only be filled if they had an in-state DEA license.

Licensees also have the option to include a harm score using the scale published by the National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP) (**Figure 2**). Only 1,089 reports included answers to this optional question.

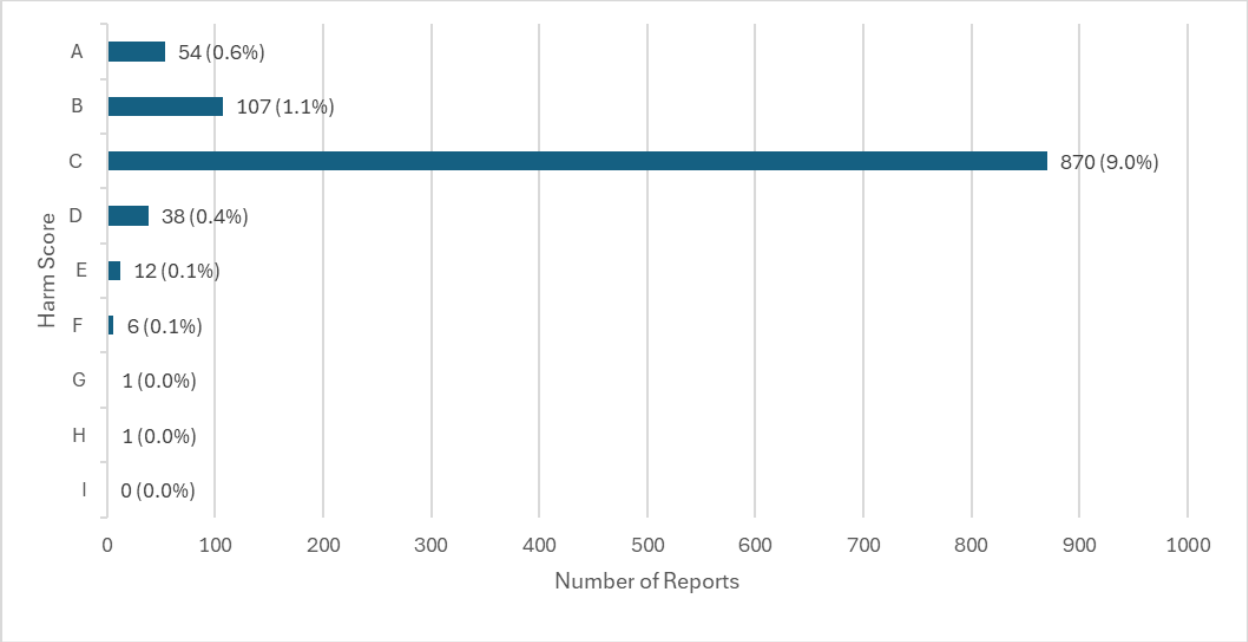

Figure 2. National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP) harm score associated with reported events, July – December 2025 (N = 9,653). Note: Licencees are not required to report a harm score using the NCCMERP scale. Only those reports that included a NCCMERP harm score are displayed (n = 1,098 of 9,653). See Appendix A for the full definitions of the NCCMERP harm scores.

Similar to the AHRQ harm score data, most reports that included a NCCMERP harm score indicated the events reached patients but did not result in harm (harm scores C and D). However, the NCCMERP harm score scale allows licensees to indicate that an event did not actually reach patients. This is different than the AHRQ harm score scale which only categorizes events that reach patients. Licensees used the NCCMERP harm score scale to indicate that 1.7% (n = 161 of 9653) did not reach patients (harm scores A and B). For example:

Prescription was filled under the wrong patient name. It was delivered to a facility but not dispensed to patient.

Medication Cefazolin was filled instead of Ceftriaxone but not given to patient.

Nurse from facility called. Januvia100 mg dose was delivered instead of 25 mg. The wrong strength medication was never administered to the patient.

Wrong strength of controlled substance was verified and dispensed to facility. Nurse discovered it before administration to pt. Therefore, patient was not given this medication.

When analyzing the event narratives, licensees incorrectly assigned the NCCMERP harm score A and B (events that did not reach patients) to events that reached patients, including omissions. For example:

We had missed sending supplies of alcohol pads, syringes, and needles for a patient on Procrit.

A prescription for Olmesartan 5 mg tablets was dispensed and given to the patient incomplete instructions. The original electronic prescription instructions were "Take 1 tablet by mouth." Pharmacist entered take 1 tablet by mouth as directed as directed.

HIPAA breach with a printed hard copy got bagged in the incorrect patient bag no drugs was delivered just prescription hard copy.

Also, discrepancies were noted in a limited number of reports that included both the AHRQ and NCCMERP harm scores. In two cases, licensees provided a more severe AHRQ harm score (i.e., moderate harm) than the NCCMERP harm score (i.e., D - an error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm). The two event narratives are below:

Dispensed dose#1 700mg instead of 350mg.

Patient's daughter/caregiver was picking up a group of medications for patient, including Xarelto 2.5 mg. Per the daughter it was a busy afternoon, and the pharmacy clerk/cashier seemed irritated and frustrated not being able to find everything. Daughter tried to suggest something and was rudely told "I know what I'm doing." Daughter waited for the Xarelto. The Xarelto given was not Xarelto 2.5 mg but Xarelto 20 mg. Discovered this on XX/XX/XX when patient via caregiver asked when they could refill Xarelto. Upon investigation, patient said bottle only had 30 tablets in it. PIC [pharmacist in charge] further inquired if it was a stock bottle or in a vial. Finally discovered when we asked caregiver to show us the bottle and turned out the label for Xarelto 2.5 mg was affixed to a stock bottle of Xarelto 20 mg. Caregiver was only giving patient one tablet per day, vs. the direction on the bottle of 2.5 mg twice daily. Patient had already taken 24 tablets of the 20 mg by date of discovery. PIC interviewed both patient and daughter/caregiver and was initially told that patient had no extra bruising but mentioned a fall but not really any bruising. However, upon discussing with the prescriber's representative, patient reported the fall (no date specified) and that there was bruising on the arm. XXXXXX pointed out that this is the 2nd blood thinner for the pt, confirmed by the pt's profile at pharmacy database.

In another event report, the licensee submitted an AHRQ harm score of "no harm" but also the NCCMERP harm score G (an error occurred that may have contributed to or resulted in permanent patient harm). The event description (see below) does not describe the patient's outcome, so it is not possible to determine which harm score is most appropriate. However, based on events submitted to ISMP's reporting programs, a mix-up between conventional and liposomal amphotericin B that reaches a patient can result in serious harm, including death, or subtherapeutic treatment as the dosing of the products are different.

An error occurred in which conventional Amphotericin B was dispensed instead of the intended liposomal Amphotericin B (Generic for AmBisome). Upon investigation, the following findings were documented: The pharmacist recognized that the initially selected medication was incorrect and proactively requested the typist to update the system to reflect the correct NDC for liposomal Amphotericin B. Although the system was updated to the correct NDC, the label used to fill the medication remained unchanged, and the product was dispensed using the previous label linked to the conventional formulation. The pharmacist was unaware of the visual and packaging differences between the conventional and liposomal formulations. The pharmacist assumed that the updated

NDC corresponded to a generic equivalent of AmBisome, leading to a misinterpretation of the product identity.

Reports by Stage of the Dispensing Process

More than two-thirds (36.2%, n = 2,399) events occurred during data entry/order entry/transcribing with another quarter (25.4%, n = 2,452) occurring during prescription filling/production. Very few (0.3%, n = 27) events were reported as occurring during the counseling stage (**Figure 3**).

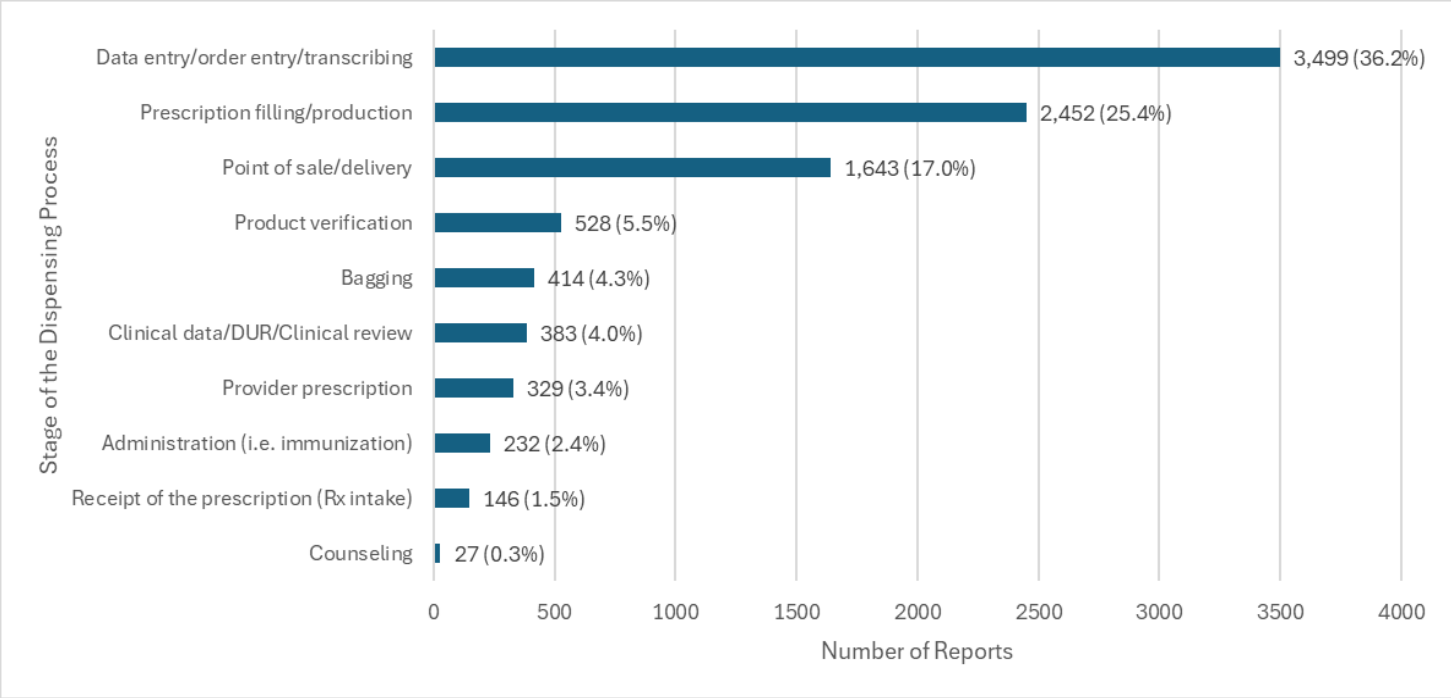

Figure 3. Stages of the dispensing error in which the error occurred, July – December 2025 (N = 9,653).

Reports by Patient Age

The majority of reported events involved adult (56.8%, n = 5,481) and older adult (33.9%, n = 3,274) patients. (**Table 3**).

Table 3. Age of patients involved in reported events, July – December 2025 (N = 9,653).

Patient Age	Number of Reports	Percentage of reports
Birth to 1 month	26	0.3%
Greater than 1 month to 1 year	53	0.5%
Greater than 1 year to 12 years	577	6.0%
Greater than 12 years to 17 years	242	2.5%
Greater than 17 years to 65 years	5,481	56.8%
Greater than 65 years	3,274	33.9%

When looking at patients between birth and 1 year of age, one event resulted in moderate harm:

The patient was prescribed enoxaparin 30 mg/0.3 mL, with instructions to inject 0.08 mL subcutaneously every 12 hours for nine days. The prescription was intended to be prepared as a compounded product in individually dosed syringes. However, the compounded NDC does not exist in the pharmacy system, and only the commercially available 30 mg/0.3 mL NDC is active in the system. During data verification, the pharmacist contacted the prescriber to confirm the prescription, quantity, and directions. There was a miscommunication amongst the prescriber, inpatient pharmacy, and outpatient pharmacy regarding which department would prepare the compounded syringes. The outpatient pharmacist understood that inpatient pharmacy would prepare the 0.08 mL syringes and deliver them for dispensing. The prescription was released for label generation and delivery to inpatient pharmacy. However, the prescription was filled using commercially available 30 mg/0.3 mL syringes, which were scanned, verified, and dispensed without compounding or volume adjustment. As a result, the patient received the full 30 mg dose instead of the intended 8 mg dose.

Reports by Pharmacy Staffing

The CAMER reporting portal includes an optional question regarding pharmacy staffing at the time of the event. Fewer than 13% (12.6%, n = 1,216 of 9,653) of reports included responses to this question (**Table 4**). Of those reports that included a response to this question, 83.3 % (n = 1,013 of 1,216) indicated the event occurred during a time when the pharmacy was operating with regular staffing. More than 15% (15.5%, n =188 of 1,216) of reports indicated the pharmacy was operating with less than usual staffing.

Table 4. Pharmacy staffing level at the time of the event, July – December 2025 (N = 1,216).

Staffing Level	Number of Reports	Percentage of reports
Regular staffing	1,013	83.3%
Less than usual staffing	188	15.5%
Other	8	0.7%
More than usual staffing	7	0.6%

Wrong strength (24.5%, n = 46 of 188), wrong quantity (15.4%, n = 29 of 188), and wrong patient (15.4%, n – 29 of 188) errors were the top three types of events that occurred during times of less than usual staffing. These same event types appear in the overall top 5 reported event types (**Figure 4** below), although in different order.

Reporting by Event Type

The breakdown of the data by event type is presented in **Figure 4**. Almost a quarter (24.4%, n = 2,357) of the events were wrong patient errors. ISMP also sees this as one of the most frequently reported events to ISMP from community pharmacies and consumers.

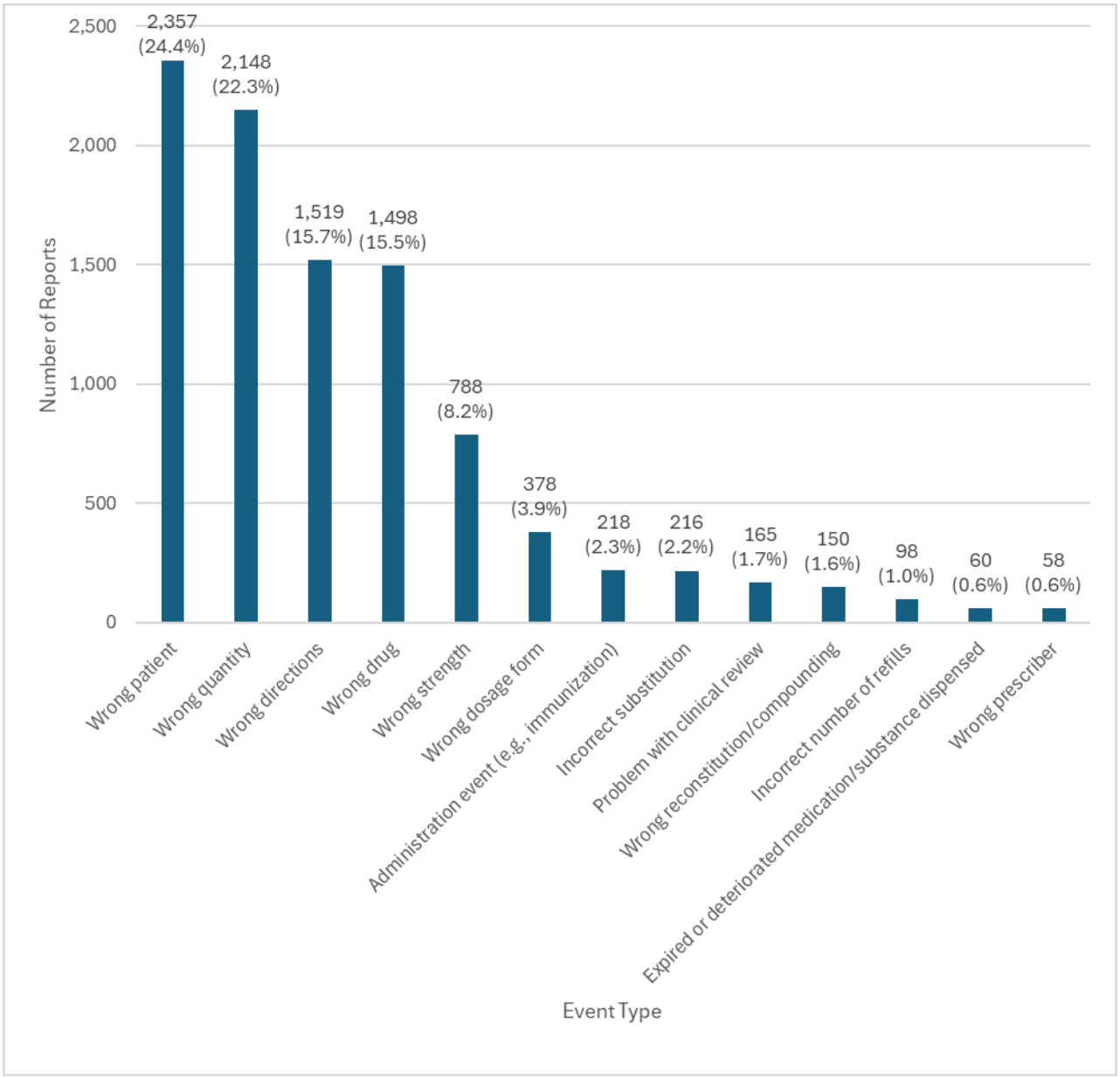

Figure 4. Reported events by event type, July – December 2025 (N = 9,653).

Wrong Patient Errors

Types of Wrong Patient Errors

Wrong patient errors can happen for various reasons and at different stages of the medication use process. The CAMER systems allows licensees the option (i.e., not a required question) to select a second level event type for wrong patient errors (**Table 5**). The most frequently reported type of wrong patient error was giving the customer the wrong patient's bag. This often happens when a pharmacy staff member selects the wrong patient's bag from the will call area. The process of identifying the patient can be flawed if two identifiers such as the patient's full name and date of birth are not asked and provided at the point-of-sale. Some pharmacy staff believe they know their

patients by sight and have not developed the safe habit of always asking patients to state their full name and date of birth. Or, caregivers, friends, and family members who pick up prescriptions for the patient may not know the patient's date of birth. Thus, the wrong patient's bag may be chosen if there are medications in the will call area for patients with a similar or the same last name.

Table 5 Second level event types associated with wrong patient error as selected by licensees, July – December 2025 (N = 2,357)

Type of wrong patient error	Number of Reports	Percentage of reports
Wrong patient bag given to customer	126	5.3%
Prescription placed into wrong customer's bag	68	2.9%
Wrong patient selected in the computer system	33	1.4%
Wrong patient label applied to medication container	8	0.3%

Licensees also reported placing a prescription in the wrong patient's bag. Analysis of events has identified that these errors often stem from working on more than one patient's prescription at a time, and then placing the patient's medication in a bag intended for another patient. Most people pick up their medication and leave the pharmacy without ever opening the bag.

Patient Harm Associated with Wrong Patient Errors

Wrong patient errors can have serious consequences. These include a patient taking a contraindicated medication, omission of the correct medication, misuse of the incorrect medication, which may result in the patient experiencing serious adverse effects, and a breach of protected health information. Most (90.75%; n = 2,139) reported wrong patient errors did not result in patient harm (**Table 6**). There was one report categorized as a patient death, but the event description (*Prescription sold to wrong patient. patient has not started medication. Patient would return it to prescription to pharmacy.*) did not indicate the patient died and provided insufficient detail to fully analyze.

Table 6. Agency for Healthcare Research and Quality (AHRQ) harm score associated with wrong patient errors, July – December 2025 (N = 2,357)

Agency for Healthcare Research and Quality (AHRQ) Harm Score	Number of Reports	Percentage of reports
No Harm	2,139	90.75%
Mild Harm	215	9.12%
Moderate Harm	2	0.08%
Severe Harm	0	0.0%
Death	1	0.04%

One event that resulted in moderate harm involved an adult patient (greater than 17 years to 65 years of age) who was given a different patient's prescription for Mounjaro (tirzepatide), a glucose-dependent insulinotropic polypeptide (GIP) receptor and glucagon-like peptide-1 (GLP-1) receptor agonist indicated as an adjunct to diet and exercise to improve glycemic control in adults

and pediatric patients 10 years of age and older with type 2 diabetes mellitus. The event narrative is below:

Patient's spouse XXXXX notified us that patient has received a wrong person's medication. [Patient 1] was supposed to receive Mounjaro 5 mg, but we dispensed [Patient 2's] Mounjaro 15 mg. He already injected one dose as soon as the medication was received. Pharmacist on duty advised to stop using the 15 mg immediately and counseled on possible side effects, including vomiting, diarrhea, and hypoglycemia. Caregiver will keep a close eye on the patient. We dispensed the correct medication for [Patient 1] and reprocessed the prescription for [Patient 2]. [Patient 1's] spouse informed the pharmacist that patient started throwing up. Will advise the patient to contact his PCP [primary care provider] if side effects such as palpitations, low sugar level occur. Advised to avoid any additional doses for at least two weeks.

The other event that resulted in moderate harm involved an older adult (greater than 65 years of age). The patient received a prescription for donepezil, which is used for the treatment of dementia of the Alzheimer's type, intended for a different patient. The event narrative is below:

Patients daughter came into the pharmacy on Thursday, XXXXX XX, 2025. She stated that her mother came to pick up a prescription on Tuesday, XXXXX X, 2025 [seven days earlier] but was handed a different patient's prescription. She took the medication and went to the hospital on Wednesday, XXXXX X, 2025 [the next day] because she felt unwell.

Contributing Factors

Licensees can select multiple contributing factors associated with an event (**Figure 5**). Human factors (50.3%, n = 1,186), the interaction between humans, the systems they use, and the environments in which they work, was the most frequently recorded contributing factor followed by procedure/policy non-compliance (41.2%, n = 971) competency and knowledge, cognitive burden, fatigue, emotional stress, lack of motivation, staffing, workload, physical environment, resource management, and poor communication play a key role in medication errors.

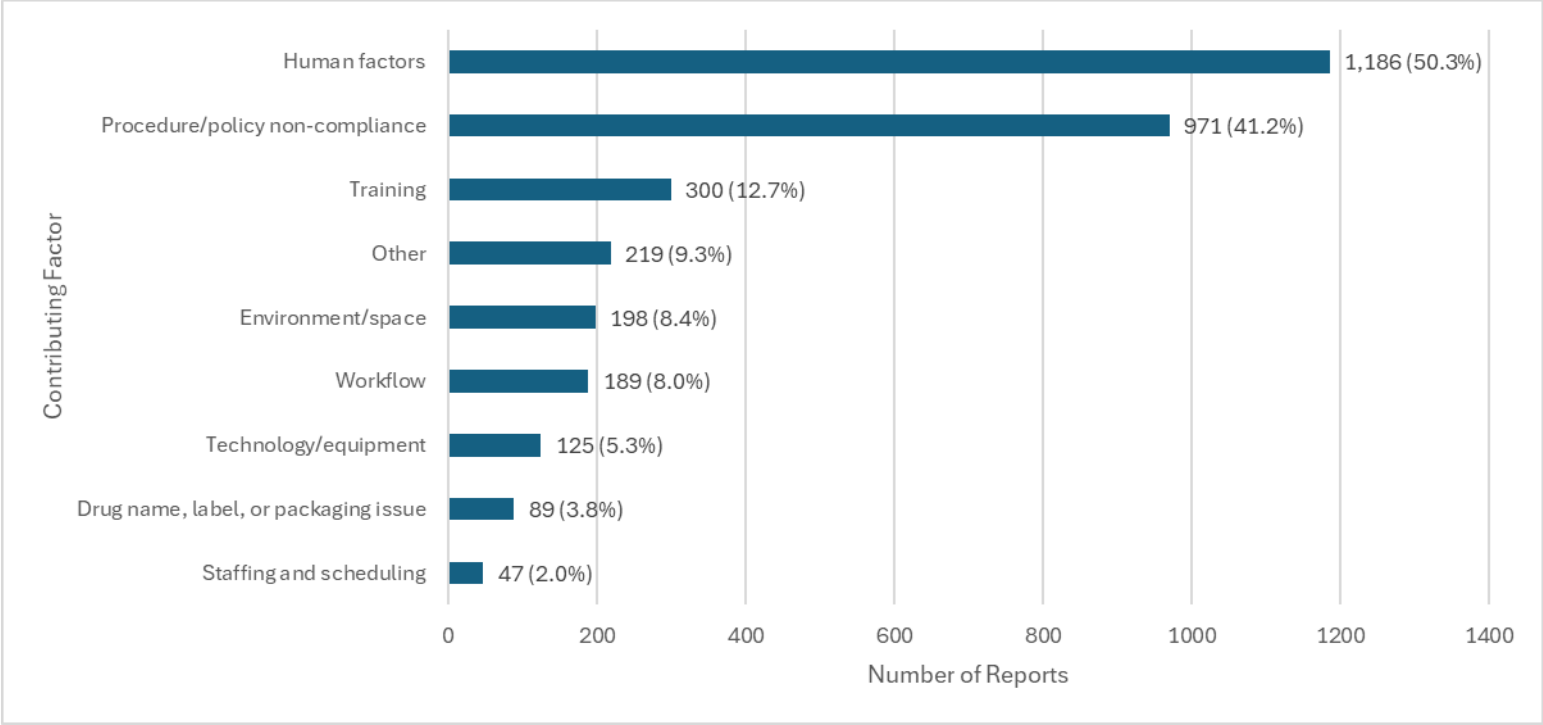

Figure 5. Factors reported as contributing to wrong patient errors, July – December 2025 (N = 2,357). Note: Licensees may select more than one contributing factor.

Licensees may also answer an optional question regarding pharmacy staffing at the time of the event. For wrong patient errors, only 9.7% (n = 229 of 2,357) of reports included an answer for this question. The majority indicated that the event occurred at a time with regular staffing (85.6%, n = 196 of 229) or more staffing than usual (0.9%, n = 2 of 229). Only 12.7% (n = 29 of 229) of the reports indicated the event occurred at a time with less than usual staffing. This appears to be consistent with only 47 (2.0%) of reports indicating that staffing and scheduling contributed to the reported event (**Figure 5**)

Stage of the Dispensing Process

Sixty percent (n = 1,420) of reports (**Figure 6**) indicate the wrong patient error occurred during the point of sale/delivery stage of the dispensing process. This is consistent with the finding that more licensees indicated that the type of wrong patient error was the wrong patient bag being given to the customer (**Table 5**).

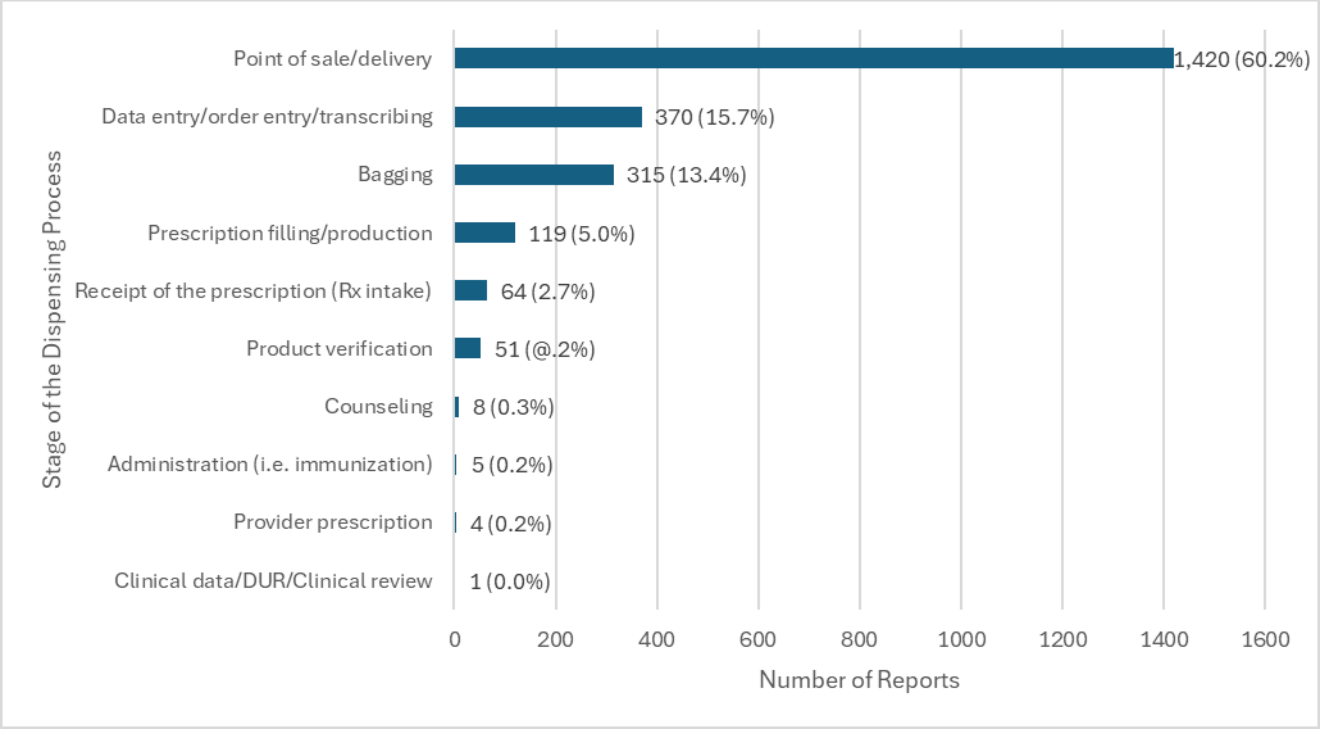

Figure 6. Stages of the dispensing error in which the in wrong patient error occurred, July – December 2025 (N = 2,357).

The next three most frequently reported stages of the reporting process were data/entry/order entry/transcribing (15.7%, n = 370), bagging (13.4%, n = 315), and prescription filling/production (5.0%, n = 119). These findings are also consistent with the types of wrong patient error reported (**Table 5**). For example, placing a prescription in the wrong customer's bag typically occurs during the bagging stage. Also, selecting the wrong patient in the computer system would most often occur during data/entry/order entry/transcribing or at the point of sale when looking a patient up to retrieve their completed prescriptions. And, finally, applying the wrong patient label to a medication container occurs during filling/production.

Patient Demographics Related to Wrong Patient Errors

Reported wrong patient events occurred across the spectrum of patient age (**Figure 7**), sex (**Figure 8**), and insurance status (**Figure 9**). When analyzing the insurance "other" data, 1.4% (n = 34) reports indicated the patient paid with cash.

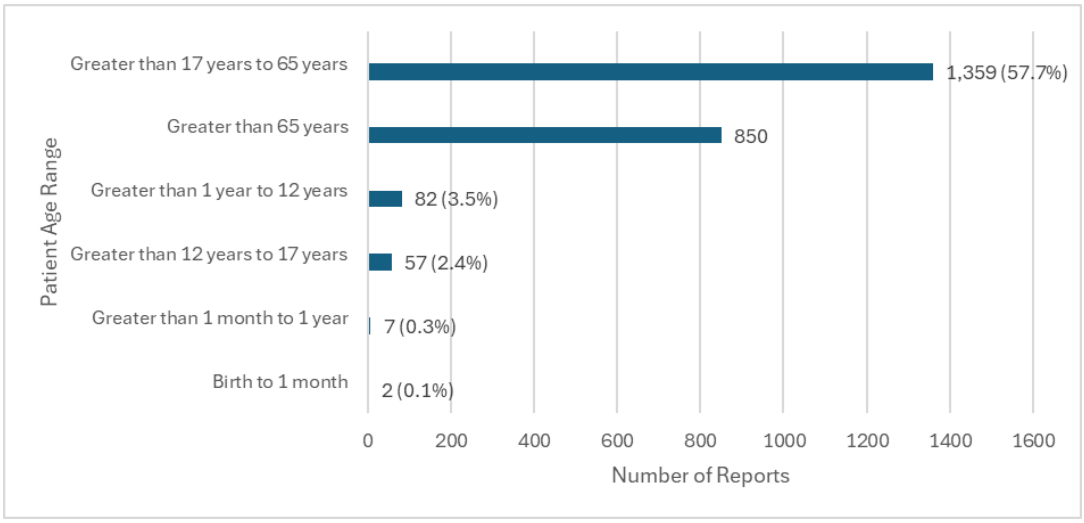

Figure 7. Patient age reported in wrong patient errors, July – December 2025 (N = 2,357).

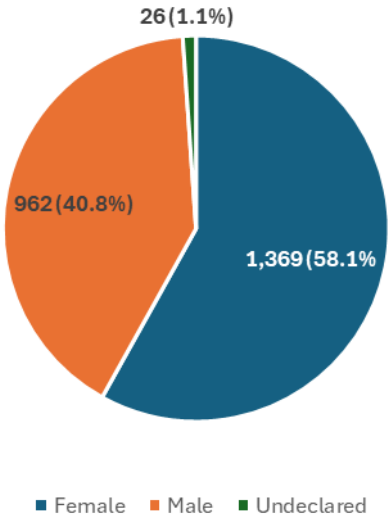

Figure 8. Patient sex reported in wrong patient errors, July – December 2025 (N = 2,357).

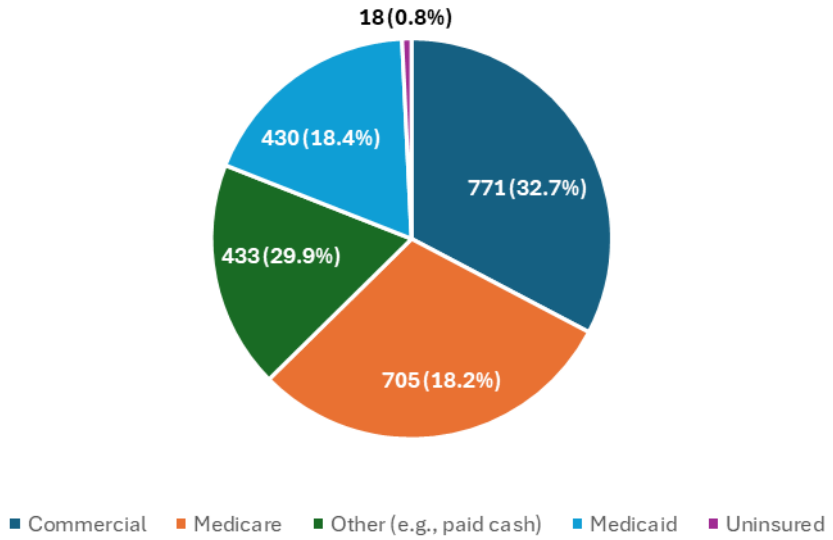

Figure 9. Patient insurance type reported in wrong patient errors, July – December 2025 (N = 2,357).

Medications Involved in Wrong Patient Errors

Figure 10 lists the 10 most commonly reported medications involved in wrong patient errors. The most common medication involved with wrong patient errors was atorvastatin (3.5%, n = 83), an HMG-CoA reductase inhibitor. No individual high-alert medication (a drug that bears a heightened risk of causing significant patient harm when they are used in error) appears in the 10 most commonly reported medications.

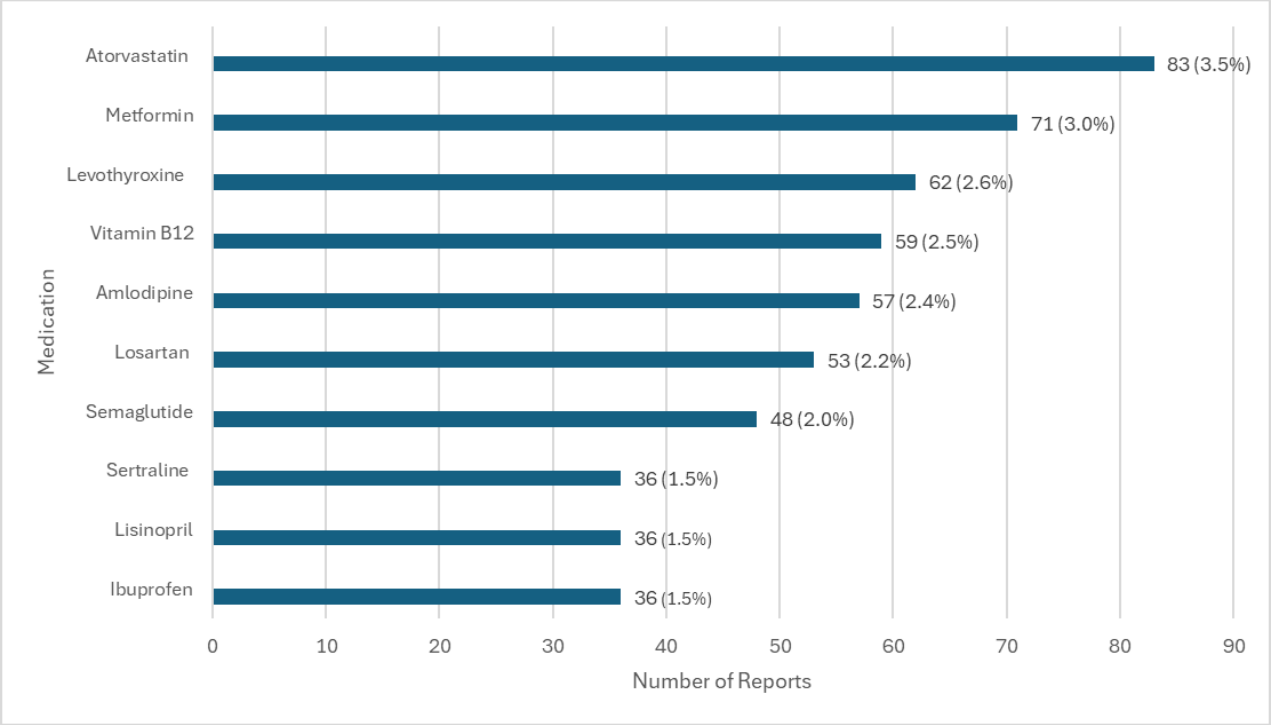

Figure 10. Most common medications involved in wrong patient error, July – December 2025 (N = 2,357).

Similarly, **Figure 11** displays the top five medication classes involved in wrong patient errors. HMG-CoA Reductase Inhibitor, a class of agents used to treat a variety of lipid disorders, was the most commonly (5.9%, n = 139) reported drug class in wrong-patient errors. Glucagon-like peptide-1 (GLP-1) receptor agonists, weight loss and antidiabetic agents which have been demand from patients, was the third (3.7%, n = 88) most reported class of drugs in wrong-patient errors. Opioids, a class of high-alert medications, also appears in the top five classes of drugs involved in wrong-patient errors.

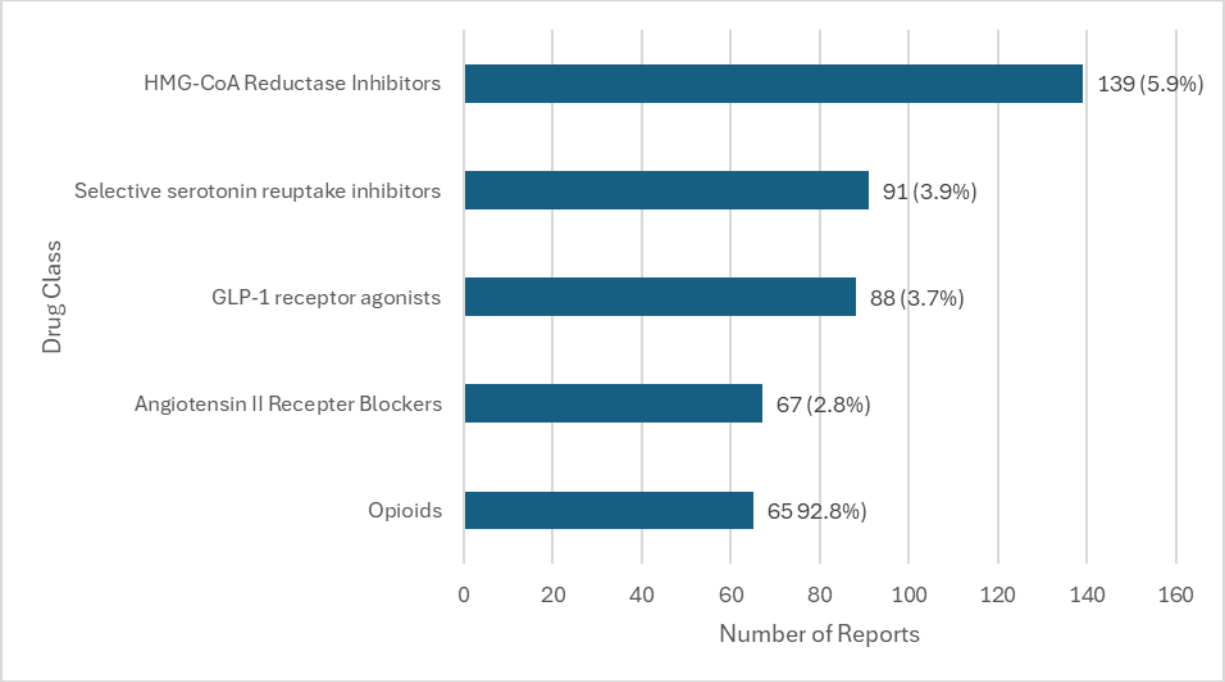

Figure 11. Most common drug classes in wrong patient error, July – December 2025 (N = 2,357).

CAMER Registration Information

Twice a month, the Board provides ISMP with updated data files for active, inactive, and cancelled pharmacy licenses. ISMP populates the CAMER systems with this information to enable registration and to track registration. Based on the information provided by the Board, there are 6,712 pharmacies that are "active." Of these, 5,361 (79.9%) pharmacies have registered for the CAMER system while 1,351 (20.1%) pharmacies have not yet registered. One potential issue may be a time lag between when a pharmacy closes and the pharmacy license is finally cancelled. For example, a pharmacy listed as active in the CAMER system may no longer be open, but cancelled pharmacy licensed data may not yet reflect that closure, falsely elevating the number of pharmacies that have not yet registered.

Appendix A – NCCMERP Harm Score Definitions

Definitions of the NCCMERP harm scores (Source: National Coordinating Council on Reporting and Prevention; Categorizing Medication Errors):

A. Circumstances or events that have the capacity to cause error
B. An error occurred but the error did not reach the patient
C. An error occurred that reached the patient but did not cause patient harm
D. An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm
E. An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention
F. An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization
G. An error occurred that may have contributed to or resulted in permanent patient harm
H. An error occurred that required intervention necessary to sustain life
I. An error occurred that may have contributed to or resulted in the patient's death