

Date

To: [Insert MFG Rep]
[Insert Address]

Dear [Insert IV Bag Manufacturer(s) – B. Braun or Baxter],

Summary

With the rise in barcode medication administration (“BCMA”) in hospitals nationwide, it is crucial that medication barcodes be legible and easily scanned. Barcodes printed on intravenous (“IV”) medication bags are often difficult to scan thereby compromising the efficacy of the BCMA system and posing a significant patient safety concern. We are reaching out to [Insert MFG here] to revise barcode labels on IV bags in order to reduce potential medication administration errors.

Background and Relevance

Despite considerable error reduction efforts by health systems, medication administration errors remain a serious safety problem. In a review of 91 direct observation studies, investigators estimated median error rates of 8%–25%.¹ IV administration of medications was even more error-prone, with an estimated median rate (including timing errors) ranging from 48%–53%.¹ Another study estimated a 73% probability of at least one error occurring during a single intravenous medication administration.² These statistics highlight the need to implement an effective BCMA system at health systems nationwide.

The BCMA system was developed to reduce medication errors and corresponding adverse events. BCMA system implementation has proven to be effective in reducing medication administration errors. One study has demonstrated a reduction of 41% in non-timing errors in medication administration.³ Similar results have been reported by other investigators.⁴⁻⁵ According to the Leapfrog Group, nearly 2,000 hospitals have a BCMA system integrated in at least one of their inpatient units.⁶ However, the BCMA system is not foolproof and workarounds have been reported leading to staff bypassing the use of the BCMA system.⁷ Such workarounds have been linked with a three-fold increase in medication administration errors.⁸ In a study by Raman et al., it was established that one challenge faced by nurses leading to BCMA workarounds was the inability or poor ability to scan barcodes on IV infusion bags.⁹

The National Drug Code (“NDC”) barcode on the IV bags manufactured by [insert MFG name] is difficult to scan using BCMA technology. This is due to the white color of the barcode hindering the scanner’s ability to differentiate the code on a light-colored background of the bag. In fact, this very issue was recently identified as a contributing root cause in a medication error at Keck Medical Center of USC. The issue was brought up as a concern to the Medical Affairs division at

[Insert MFG Name] (reference number ###) but to date there has been no remedial action. A subsequent survey of Pharmacy Departments at other Academic Medical Centers across the United States has identified that many other institutions have experienced similar BCMA challenges. Given the inherent risk involved during IV medication administration, and the fact that BCMA difficult scanning can be easily corrected, the failure to make such corrections poses an unnecessary risk to patient safety.

Petition

We, the undersigned, hereby petition [Insert MFG name] to revise the barcode labels used on all IV bag products in order to ensure accurate and easy scanning in order to minimize patient harm arising from IV medication administration errors.

We believe:

1. Barcodes currently used on all IV bag products are not easily scanned during medication administration.
2. Because of the difficulty in scanning, workarounds to the BCMA system are utilized with overrides possibly bringing the greatest risk to medication administration.
3. This risk can be eliminated by revising or changing the currently used barcodes.
4. A possible solution is to print the barcode in black print on a white colored background.

Thank you for considering implementing this important change in order to improve patient safety in medical institutions across the United States. For any questions, please reach out to Dr. Krist Azizian, signed below.

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