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## INTRODUCTION

The term "allergies" is an overarching term used for any reaction caused by a medication. Allergies are an important component to every patient's electronic medical record (EMR). It drives treatment options and can limit imaging modalities. It gives providers a history of allergens that a patient has been exposed to. It is a great starting point in the conversation regarding the care of our patients. It tells the patient that we care enough about them and their history to review medications that have caused an uncomfortable situation and are prepared to tailor their care according to their previous experiences<sup>1</sup>. Verifying the list of allergies is the most basic step in addressing allergies. It is oftentimes where providers fall short and neglect the need for careful review and updating of each medication, reaction, and severity. Review of allergies without discussion with the patient keeps patients at risk for receiving less than optimal care<sup>2</sup>, especially if the drug of choice is on the allergy list.

## OBJECTIVES

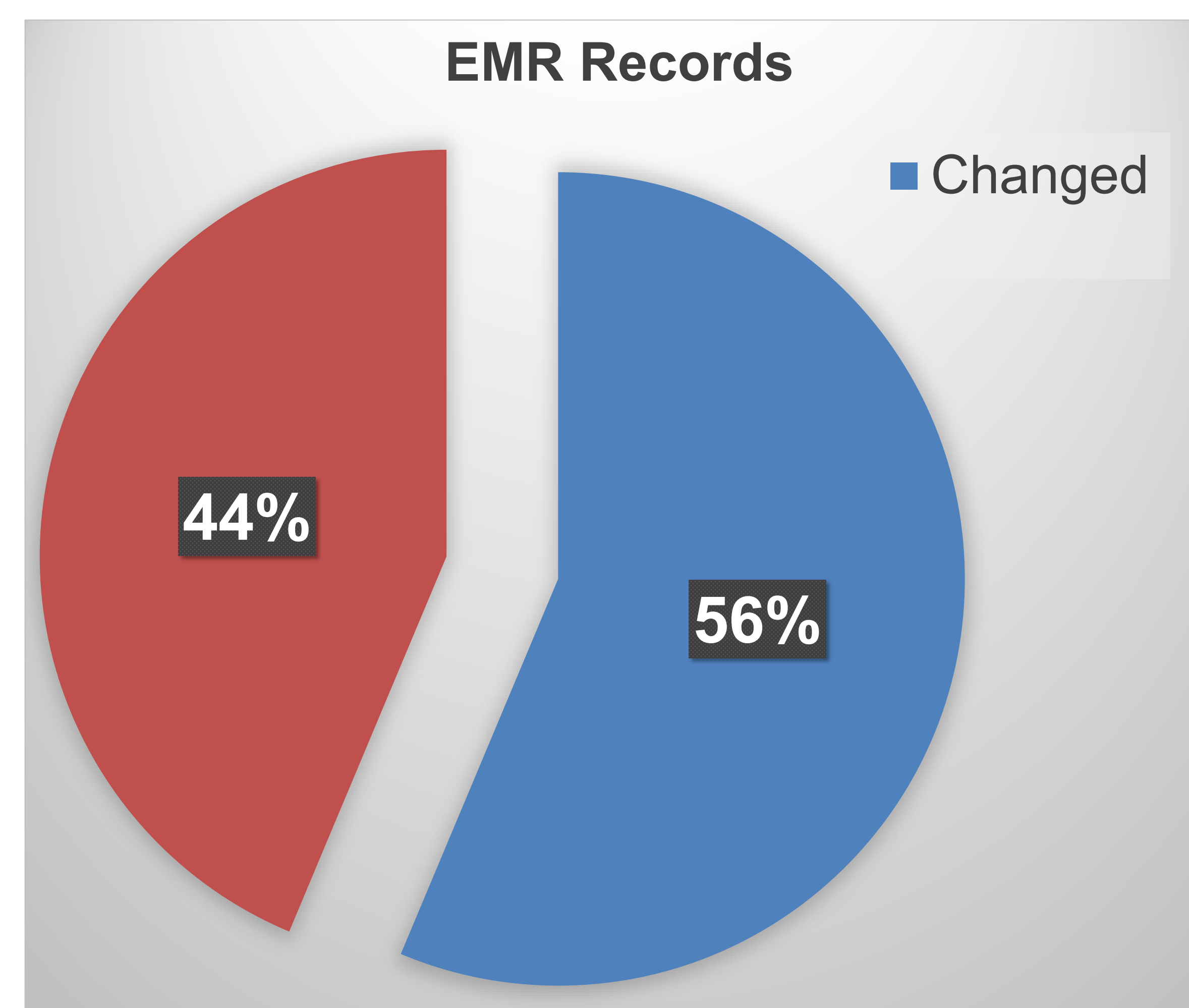
- Highlight the importance of updating the allergen, reaction type, and severity in the EMR
- Making allergy review, verification, and update a routine practice during every patient visit by nursing staff and physician
- Ensuring that non-anaphylactic reactions are properly labeled

## METHODS

- Patients present for routine visits at OSU Family Medicine Clinic were asked by the Resident Physician to verify allergies.
- Any changes to the medical record were documented and saved into the EMR by the Resident Physician.
- Allergy was either removed, added to the chart, or needed to be corrected.
- Data was reviewed, to examine how many changes were made to allergies section in the EMR, and to gain a better understanding if allergies were accurately documented from prior visits.

## RESULTS

### Change is key

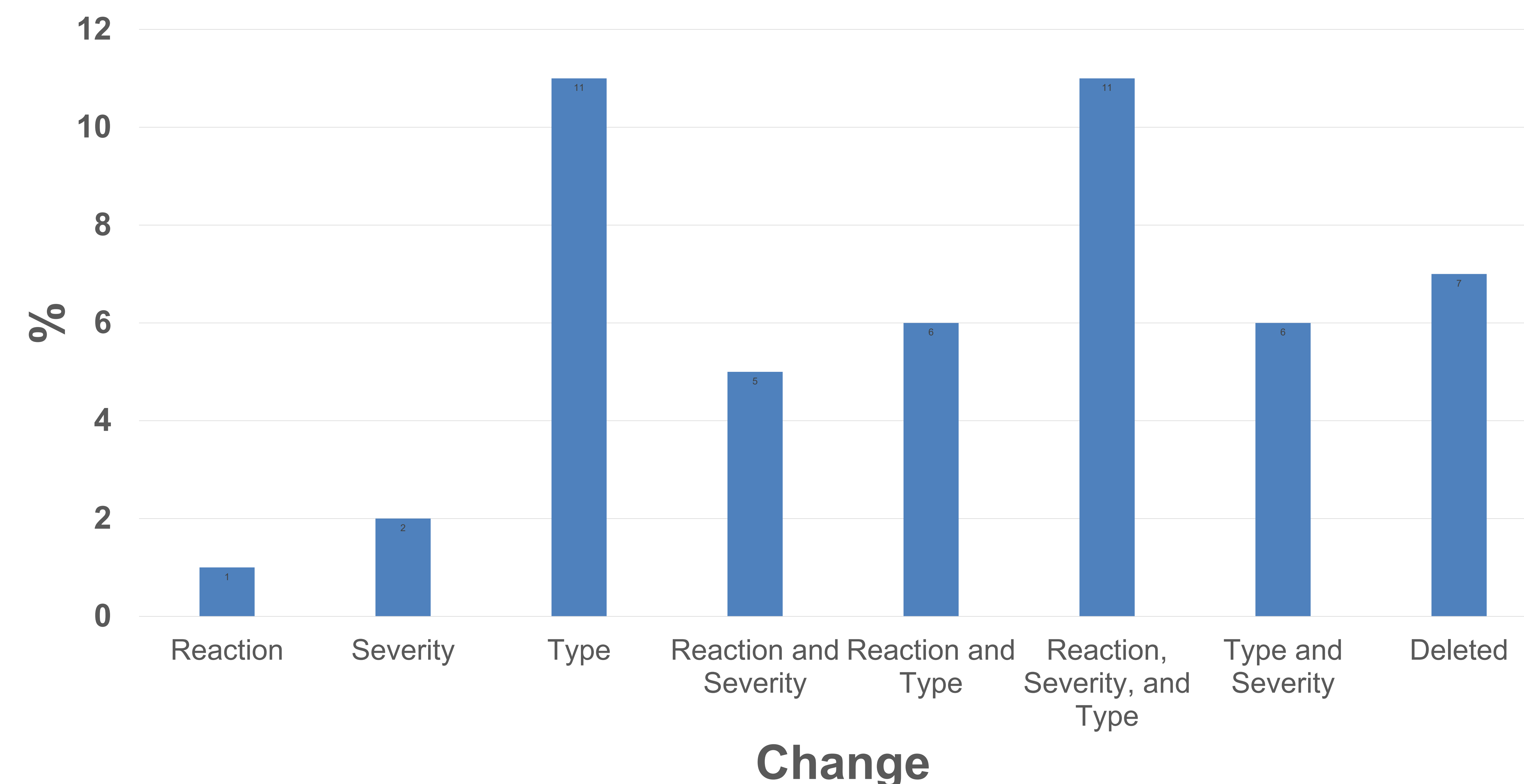


Of the 87 records reviewed and discussed with patients, more than half (56%) needed correction.

- The greatest change was made to the "type" and "reaction, severity, and type"
- 7% of all records were deleted due to erroneous entries
- "Reaction" was the least adjusted criteria

Overall, from the data which was collected, a majority of the allergies were incorrectly documented. The greatest changes included "type" which may be due to lack of clear definitions of "type" criteria.

### How the corrections were made:



**Reaction:** Anaphylaxis, Anxiety, Cough, Dermatitis, Diarrhea, Hives, Itching, Nausea and Vomiting, Nausea only, Other (see comments), Palpitations, Photosensitivity, Rash, Shortness of Breath, Swelling, Thrombocytopenia, Tinnitus, Not Specified, No Entry. **Severity;** low, Medium, High. **Type;** Allergy, Contraindication, Intolerance, Unspecified, No Entry.

## CONCLUSION

Electronic medical records are central in providing quality patient care. Taking care to address a patient's reaction to previous medications, whether allergy, contraindication, or intolerance builds rapport with patients and provides details to other providers who take allergies into account. Medical decision-making should be based on accurate and up-to-date information that every provider has an obligation to address<sup>3</sup>.

## WHAT'S NEXT?

From the data, over half of the patients' reported allergies were incorrect, which serves as a jumping off point for many future projects. Potential areas for improvement would include increasing sample size by reviewing allergy lists reported during ER visits or hospital admissions. This data could also be used to focus on which medication classes are reported the most, such as antibiotics. Without spending the additional time to confirm if these are true allergic reactions, we pose the risk of limiting which classes of antibiotics we can use. With this comes the potential of having to use an antibiotic that provides more broad coverage, is more robust than what is actually necessary, increased cost to the patient and hospital, side effects, and possible prolonged hospitalization. We hope this shows how educating staff and patients on the importance of confirming and understanding what is considered a medication allergy can have a monumental impact to patient safety.

## REFERENCES

1. Clinical reviews in allergy and immunology Series editors: Donald Y. M. Leung, MD, PhD, and Dennis K. Ledford, MD Food allergy: Epidemiology, pathogenesis, diagnosis, and treatment Scott H. Sicherer, MD, and Hugh A. Sampson, MD New York, NY
2. Demoly P, Adkinson NF, Brockow K, Castells M, Chiriac AM, Greenberger PA, Khan DA, Lang DM, Park H-S, Pichler W, Sanchez-Borges M, Shiohara T, Thong BY-H. International Consensus on drug allergy. Allergy 2014; 69: 420-437.
3. Pichler, Werner J. "An Approach to the Patient with Drug Allergy." *UpToDate*, 1 Dec. 2019, [https://www.uptodate.com/contents/an-approach-to-the-patient-with-drug-allergy?search=allergies&source=search\\_result&selectedTitle=1~150&usage\\_type=default&display\\_rank=1](https://www.uptodate.com/contents/an-approach-to-the-patient-with-drug-allergy?search=allergies&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1). Accessed 11 Mar. 2022.

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