

Guideline-based intervention improves quality of antibiotic allergy registration in a hospital-setting

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Introduction

- Approximately 90% of the antibiotic allergy registrations are incorrect
- Incorrect antibiotic allergy registrations obstruct optimal antimicrobial treatment, adversely impacting patient outcome and healthcare associated costs

Objective

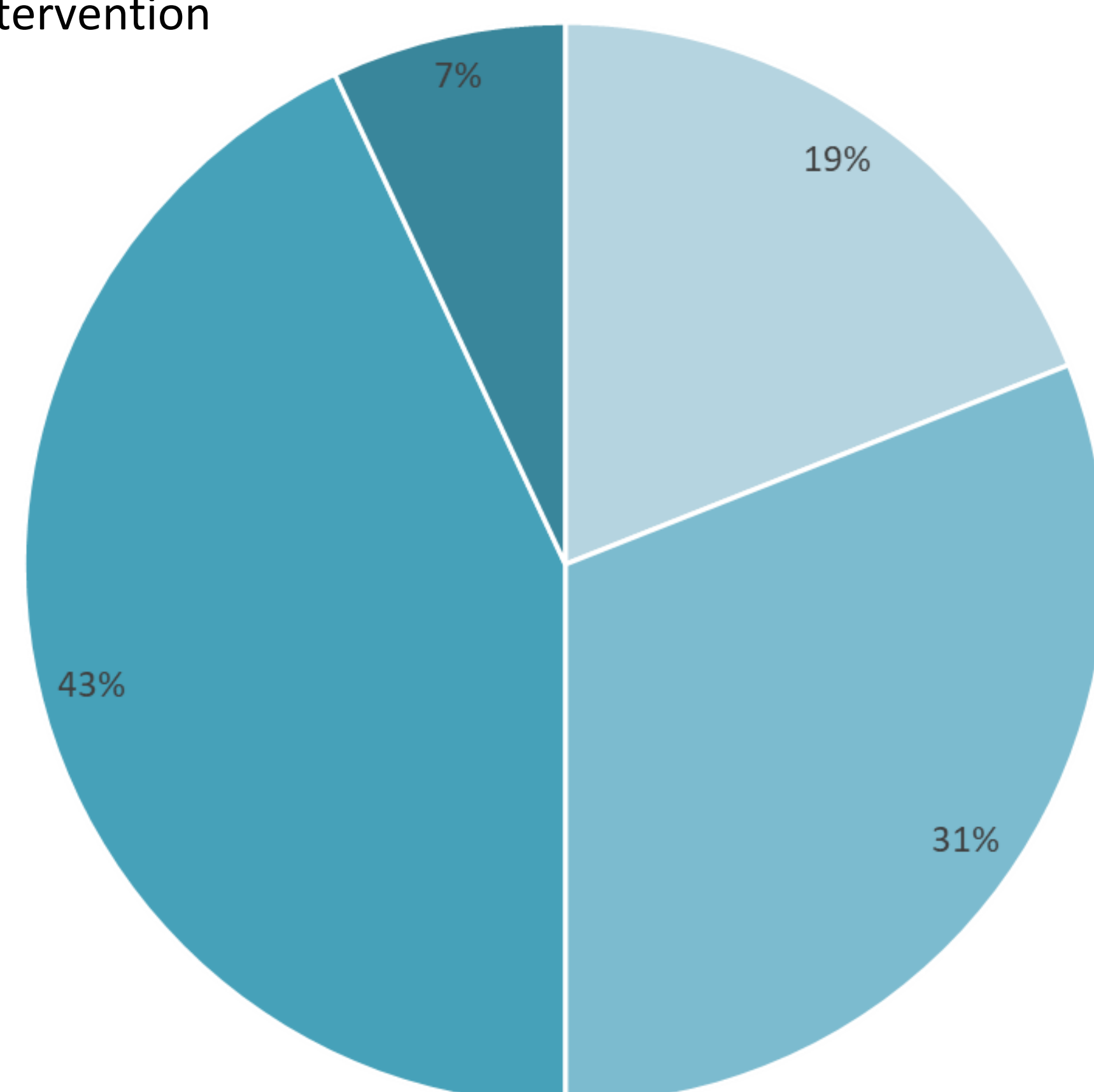
To determine the effect of a guideline-based intervention to improve the quality of antibiotic allergy registrations in patients admitted to the hospital

Methods

- We included adult patients admitted to the LUMC with an antibiotic allergy registration in the electronic health records (EHRs)
- A structured allergy history was taken and EHRs were searched for information on the index reaction
- The recommendation for future use was based on the Dutch guideline "Approach to suspected antibiotic allergy"

Results

Pie chart: Conclusion on type of reaction after the intervention



■ Immediate type hypersensitivity reaction ■ Delayed type hypersensitivity reaction

■ No allergy ■ No conclusion possible



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- 238 patients included, accounting for 311 allergy registrations
- 50% (155/311) concluded to be a potential hypersensitivity reaction
- 80% can be re-exposed to the antibiotic

Recommendation	N	%
Antibiotic can be used without medical supervision	200	(64.3%)
Antibiotic can be used with medical supervision	48	(15.4%)
Contra-indication for future use	61	(19.7%)
Other	2	(0.6%)

Legend: Recommendations for future use after the intervention. Data are presented as no. (%).

Conclusion

This intervention proves an **effective method** to improve antibiotic allergy registrations

Use of second choice antibiotic may be avoided making this a promising tool for antibiotic stewardship

References

The Dutch Working Party on Antibiotic Policy (SWAB) guideline for the approach to suspected Antibiotic Allergy. April 2022 ©SWAB; www.swab.nl