

## Introduction

- Surgical collaboration with antimicrobial stewardship programs (ASPs) is recommended to promote appropriate prescribing of surgical antimicrobial prophylaxis (SAP).
- Guideline development does not always confer compliance with changes.
- Individualized scorecards that include provider-level data and peer comparison can be an effective ASP tool.

## Methods

### Study Design & Setting:

- Our Freestanding Children's hospital in Central Texas participates in the American College of Surgeons National Surgical Quality Improvement Program, Pediatric (ACS NSQIP-P)
- NSQIP-P samples surgical cases for extensive review, including antimicrobial use.
- Each quarter, beginning January 2019, general surgical cases were selected for review using local NSQIP-P sampling (n=581).
- The data were audited for compliance with institutional guidelines; provider level data included SAP selection, duration, and timing of administration.
- After meeting with the general surgery provider group to present baseline data and allow for feedback, individualized scorecards were disseminated quarterly starting in January 2021

### Inclusion Criteria:

- Cases were included if they were selected for review by NSQIP-P, the surgery was performed by a member of the Pediatric General Surgery team, and the case was classified as "clean" or "clean-contaminated."

- **Time period:** January 2019-October 2021 (program remains ongoing)

## Results

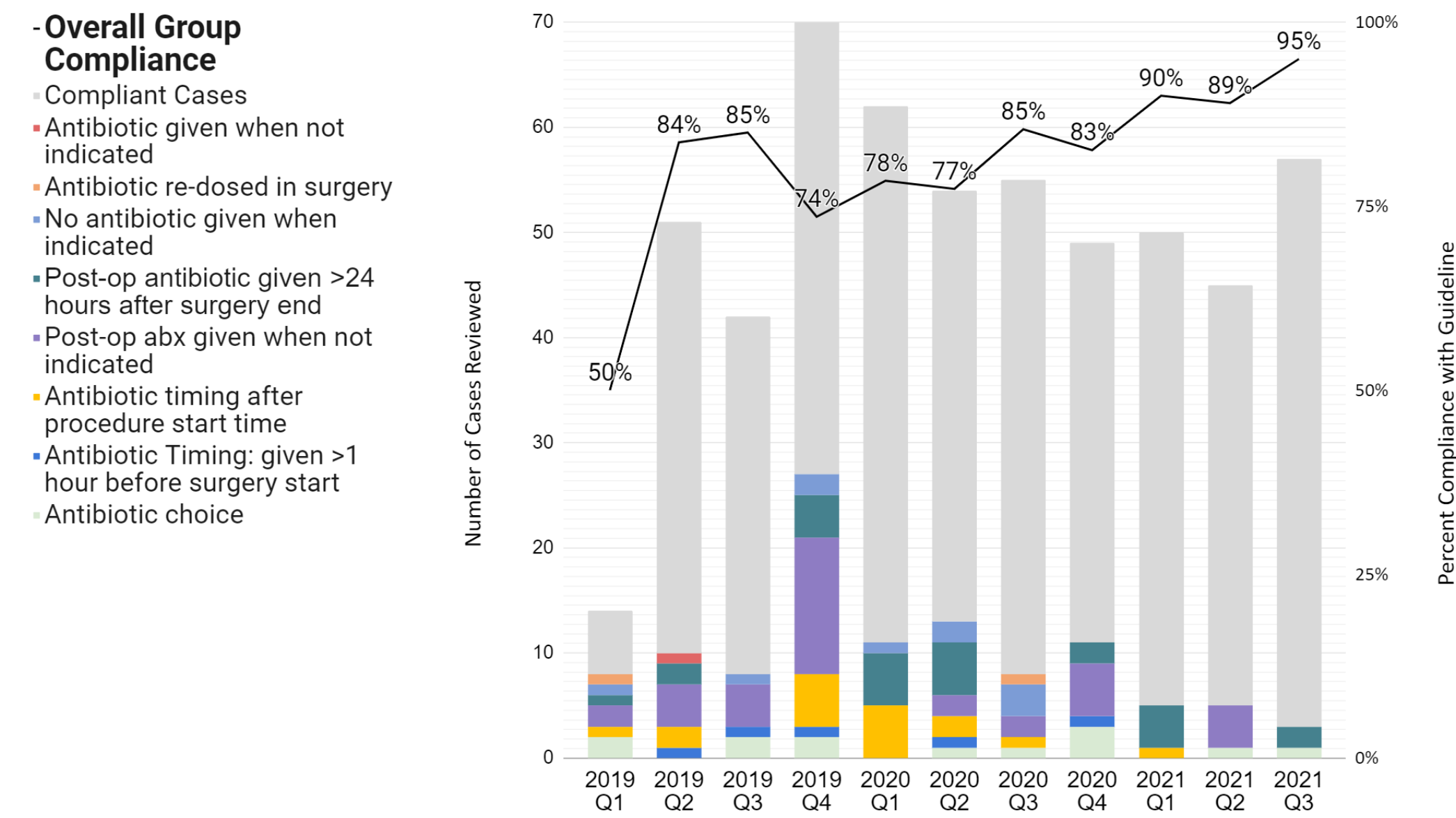


Figure 1. Antimicrobial stewardship report by quarter among the pediatric surgery team

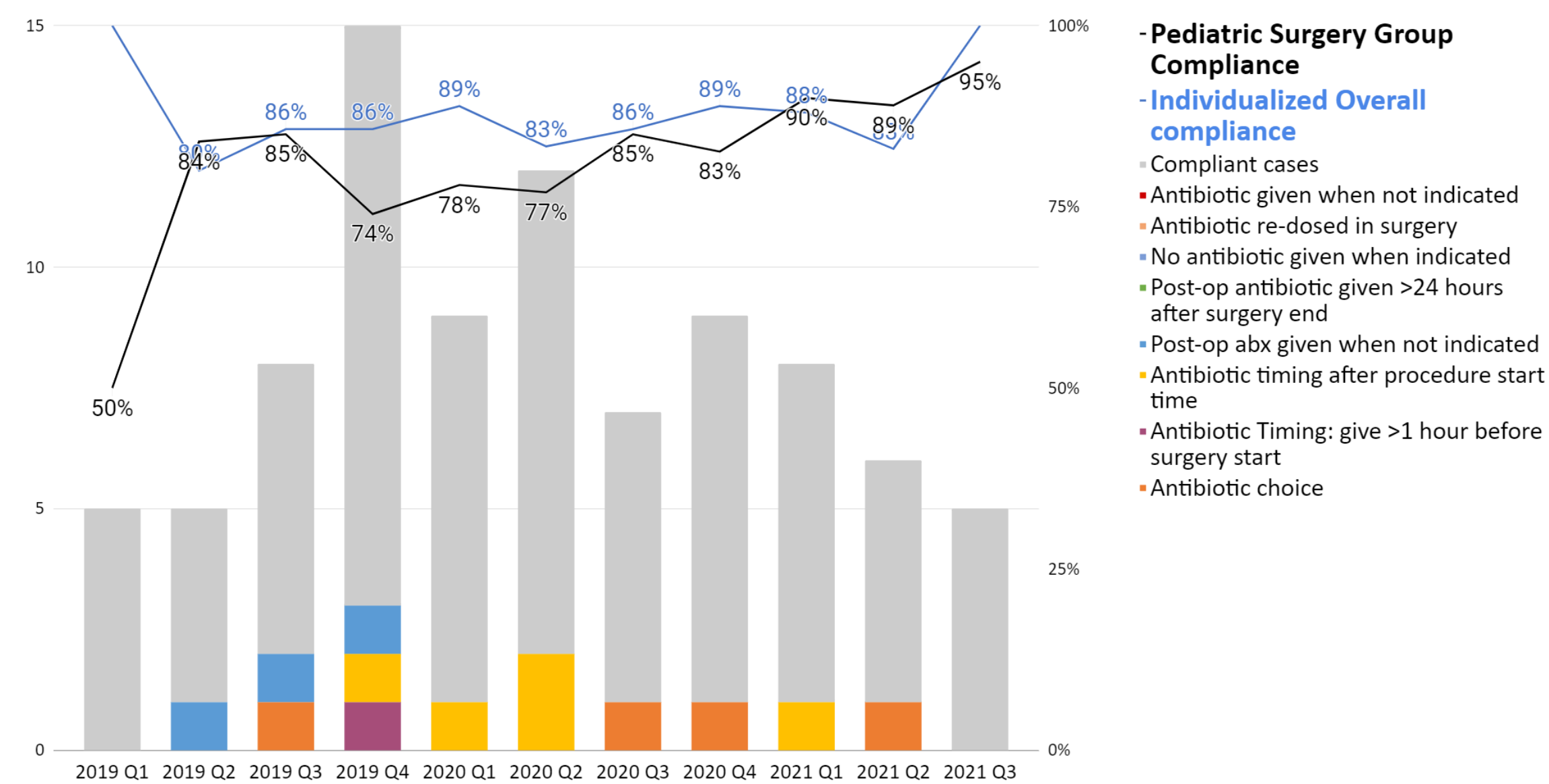


Figure 2. Example of individual audit and feedback

## Results

- 581 Surgical cases were included and reviewed for antibiotic prophylactic use
- Baseline adherence to SAP guidance was 50-85%.
- The data were audited for compliance with institutional guidelines; provider level data included SAP selection, duration, and timing of administration.
- After meeting with the general surgery provider group to present baseline data and allow for feedback, individualized scorecards were disseminated quarterly starting in January 2021.
- The goal of >90% adherence with SAP guidance was met or nearly met for the most recent 3 quarters analyzed.
  - In 2021, Q1-3, adherence to SAP guidance was 95%, 89%, and 95%, respectively.

## Conclusions

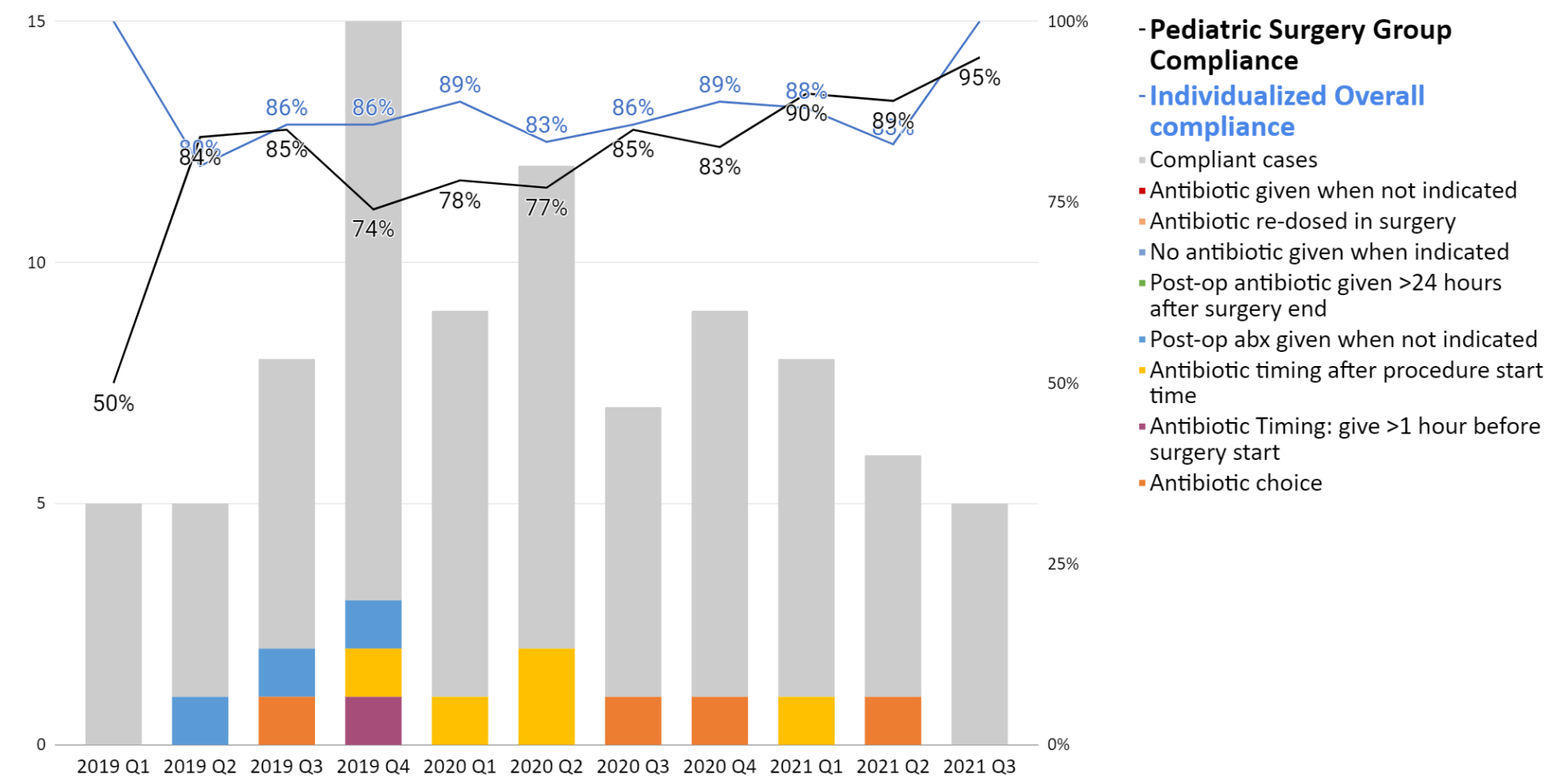
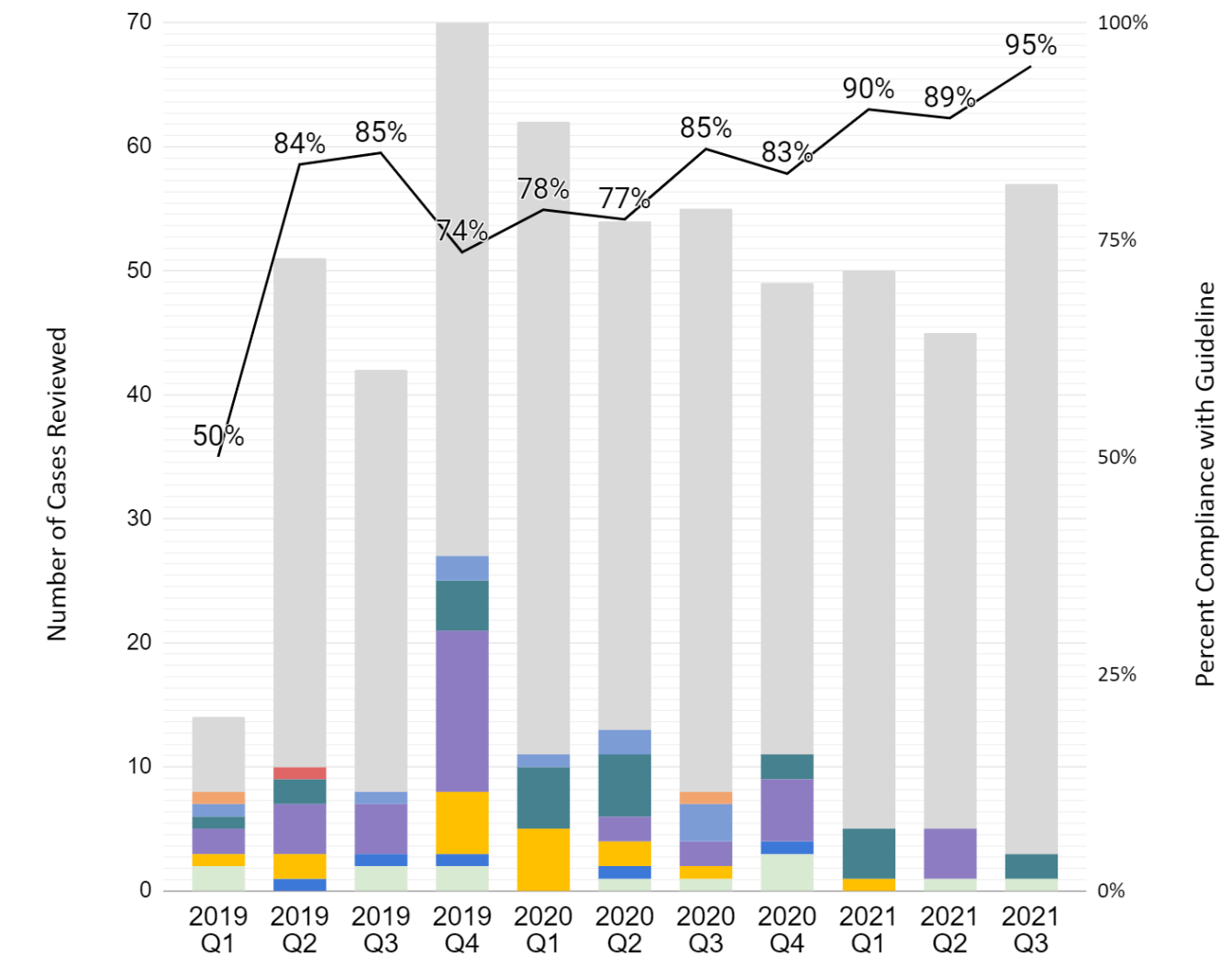
Ongoing and individualized audit and feedback regarding surgical antimicrobial prescribing:

- Improves adherence to antimicrobial stewardship guidance
- Leads to better communication regarding process changes and updates
- Help to standardize care using best prescribing practices

**• Quarterly personalized scorecards that allow general surgeons to benchmark individual practices against local peer prescribing practices can lead to improved surgical antimicrobial prescribing practices overall**

**-Overall Group Compliance**

- Compliant Cases
- Antibiotic given when not indicated
- Antibiotic re-dosed in surgery
- No antibiotic given when indicated
- Post-op antibiotic given >24 hours after surgery end
- Post-op abx given when not indicated
- Antibiotic timing after procedure start time
- Antibiotic Timing: given >1 hour before surgery start
- Antibiotic choice



**-Pediatric Surgery Group Compliance**

**-Individualized Overall compliance**

- Compliant cases
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