
POSTOPERATIVE RESPIRATORY FAILURE: *SAFER SURGERY* IMPROVES OUTCOMES

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INTRODUCTION

Postoperative respiratory failure:

- Uncommon: Incidence 1-2%
- 30% mortality rate
- Excess cost of \$50,000/ patient
- Causes include:
 - Anesthesia mismanagement
 - Narcotic dosing
 - Fluid overload
 - Excessive secretions
 - Cardiopulmonary complications
 - Sepsis and aspiration



INTRODUCTION

- Measurement of post-operative respiratory Failure:
 - PSI-11
 - ACS NSQIP: Unplanned intubation and On ventilator for ≥ 48 hours

AIM

- Document that the multidisciplinary *Safer Surgery* approach has the ability to reduce postoperative respiratory failure



METHODS

Safer Surgery Initiation at Temple University Hospital

- **Multidisciplinary intervention**
- **Goal: optimize preop, intraop and postop care**
- **Key components:**
 - **Patient education and preparation**
 - **Provider education and standardization**



MY GUIDE TO TEMPLE SURGERY

Thank you for choosing TEMPLE HEALTH for your surgery! This guide has information & instructions to help prepare you for surgery. Our team will be here to support you every step of the way.

Your surgeon's information is below. Please call the office if there are any changes in your insurance or personal information before your surgery.

Patient's Name _____

Date of Pre-Admission Testing _____

Date of Surgery _____

Date of Post-op Visit _____

Surgeon Office Business Card Here

Please bring this guide with you to PAT appointment.

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METHODS: PREOPERATIVE

- Risk assessment
- Preadmission counseling
- Incentive spirometry teaching
- Clear Liquids up to 3 hours pre induction



METHODS: INTRAOPERATIVE

- **Intraoperative crystalloid/colloid volumes**
- **Antiemetic prophylaxis**
- **Multimodal pain management**
- **Thoracic epidural usage**
- **Normothermia upon arrival to PACU**



METHODS: POSTOPERATIVE

- **Within first 24 hours**
 - Mobilization once
 - Clear liquids
 - IV fluids discontinued
- **Out of bed twice on POD 1 and POD 2**
- **Foley removed within 48 hours postop**
- **RECOVER**

Review

Expand

Cough

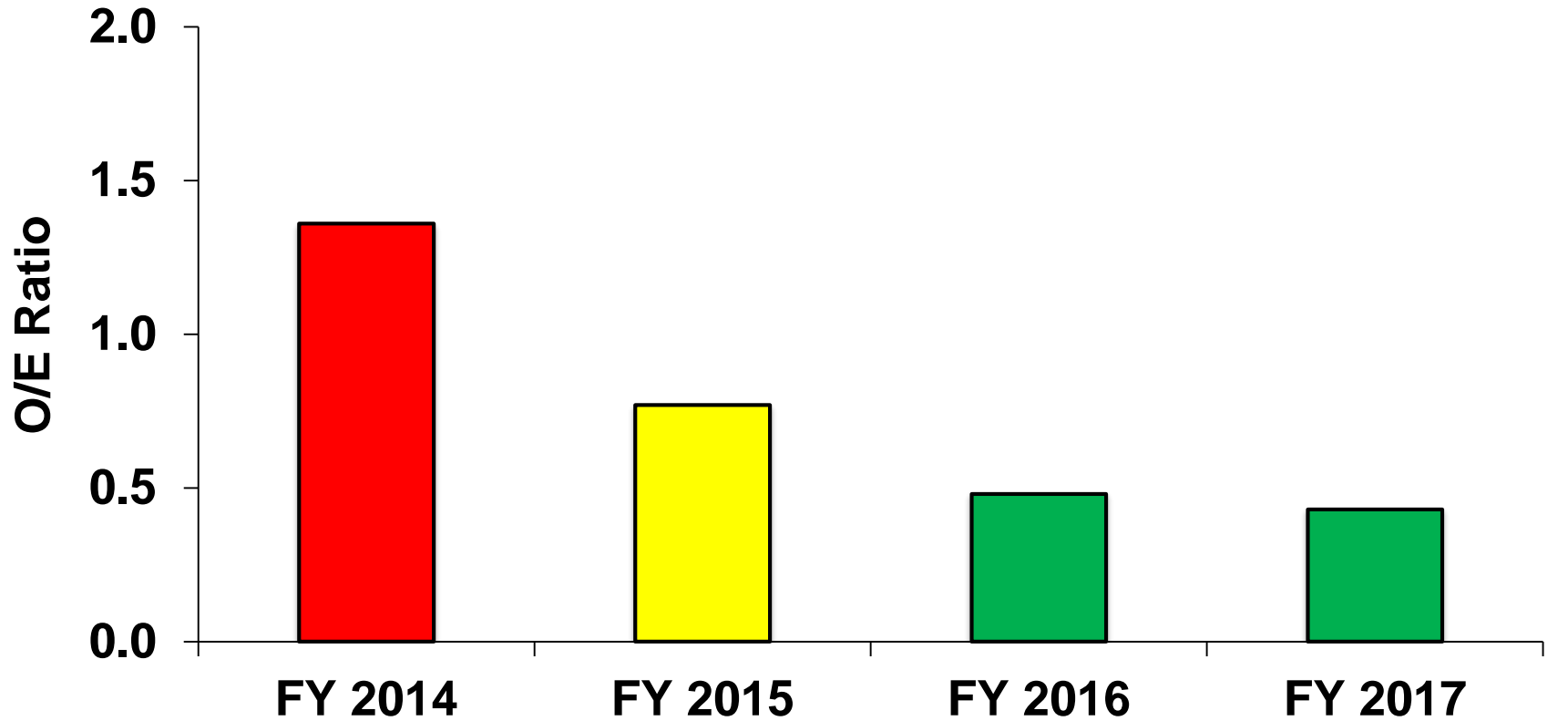
Oral Care

Vary Activity

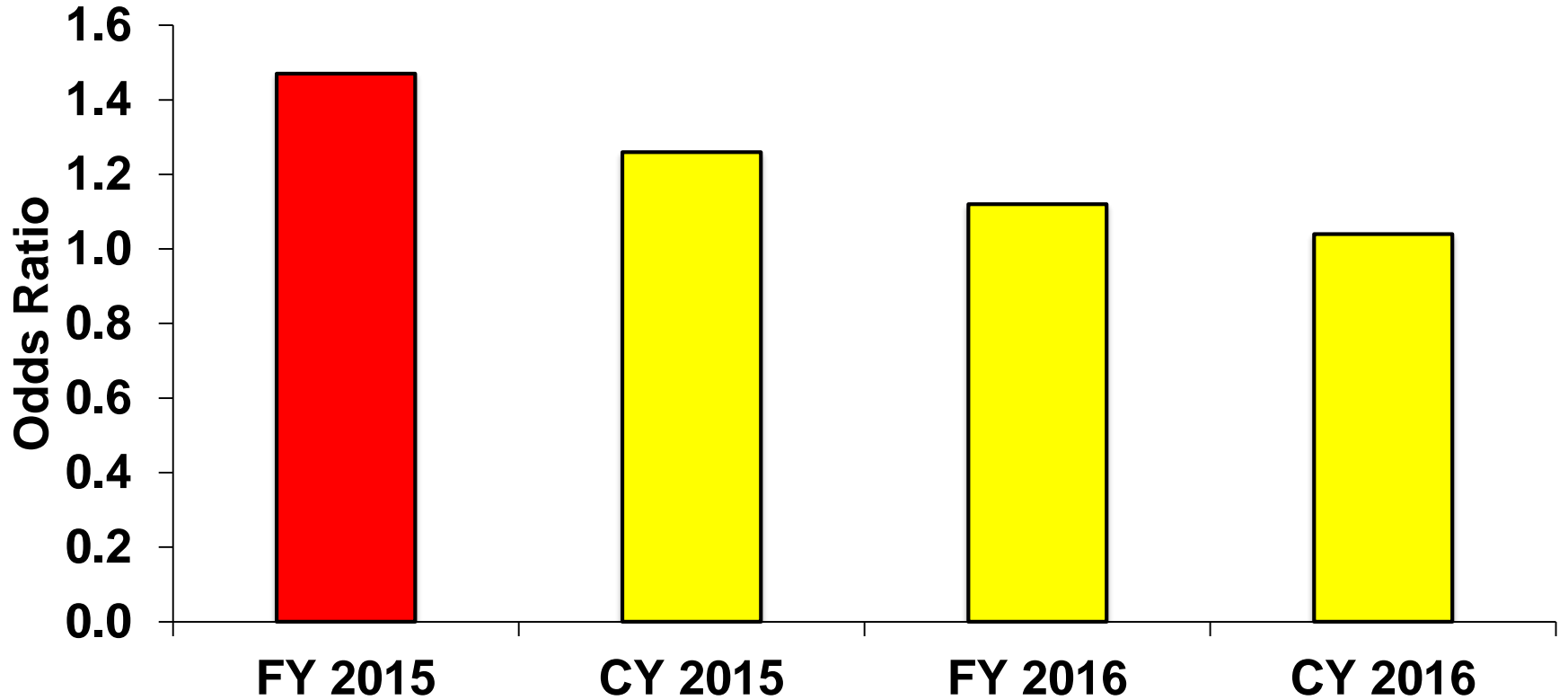
Eat and Drink Safely

Rest

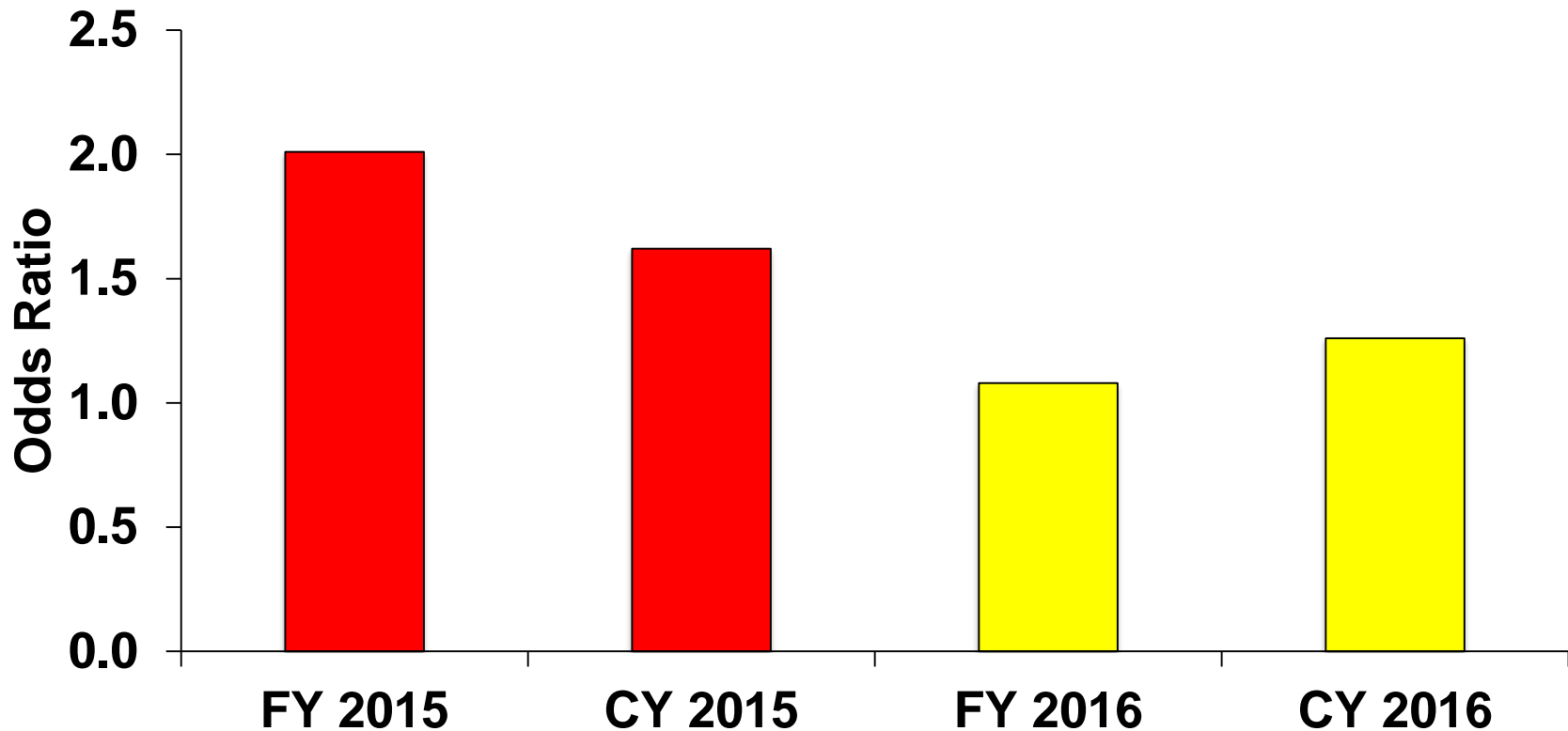
RESULTS – PS-11



RESULTS- NSQIP UNPLANNED INTUBATION



RESULTS: NSQIP VENT > 48 HOURS



CONCLUSION

- ***Safer Surgery*, a multidisciplinary program, was able to improve postoperative respiratory failure outcomes at an urban academic medical center**
- **Key components included patient education, risk stratification, standardized operative management, incentive spirometry and early mobilization**
- **Emphasis should be placed on bundling best practices in the preoperative, intraoperative and postoperative arenas to improve outcomes**