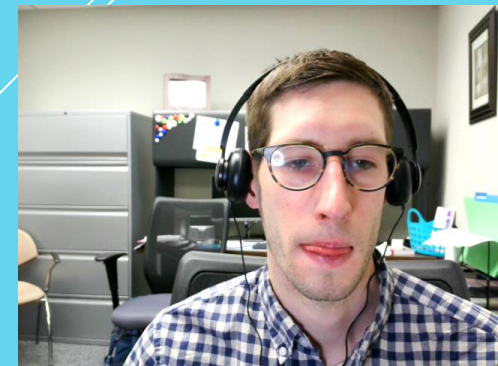


# RESPIRATORY FAILURE AND COMPASSIONATE EXTUBATION IN THE ED



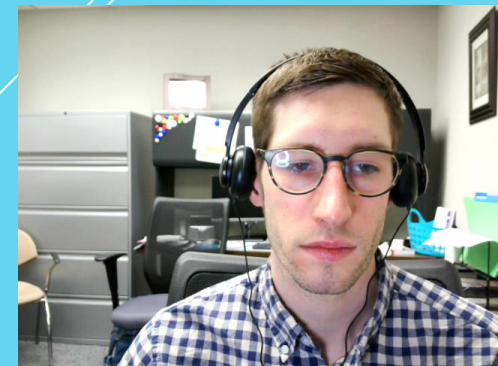
# OBJECTIVES

- ▶ Understand prognosis after ED intubation
- ▶ Understand steps involved in compassionate extubation



# INTUBATING IN THE ED

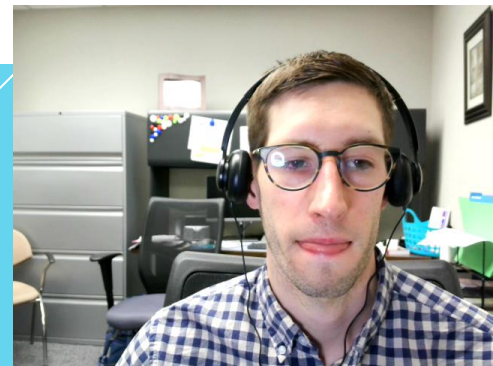
- ▶ We need to make quick decisions in the ED
- ▶ This oftentimes involves whether we should intubate or not
- ▶ It is important to talk about intubation in the context of what is the likely outcome



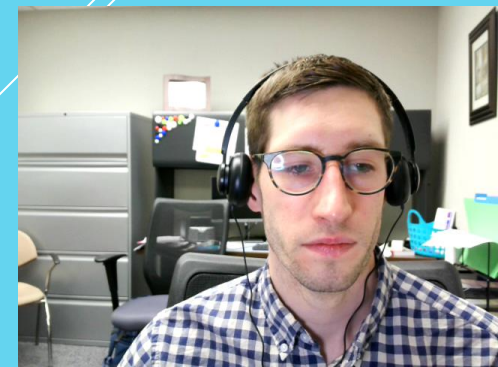
## BRIEF REPORT

# Prognosis After Emergency Department Intubation to Inform Shared Decision-Making

*Kei Ouchi, MD, MPH,<sup>\*†‡</sup> Guruprasad D. Jambaulikar, MBBS, MPH,<sup>\*</sup> Samuel Hohmann, PhD,<sup>§</sup> Naomi R. George, MD,<sup>\*†</sup> Emily L. Aaronson, MD,<sup>†||</sup> Rebecca Sudore, MD,<sup>\*\*</sup> Mara A. Schonberg, MD, MPH,<sup>††</sup> James A. Tulsky, MD,<sup>††§§</sup> Jeremiah D. Schuur, MD, MHS,<sup>\*†</sup> and Daniel J. Pallin, MD, MPH<sup>\*†</sup>*



- ▶ Retrospective cohort study
- ▶ Multicenter. Adults aged 65 and older that were intubated in the ED from 2008 to 2015 from 262 hospitals across the United States
- ▶ Primary Outcome was **age-specific in hospital mortality**



# RESULTS

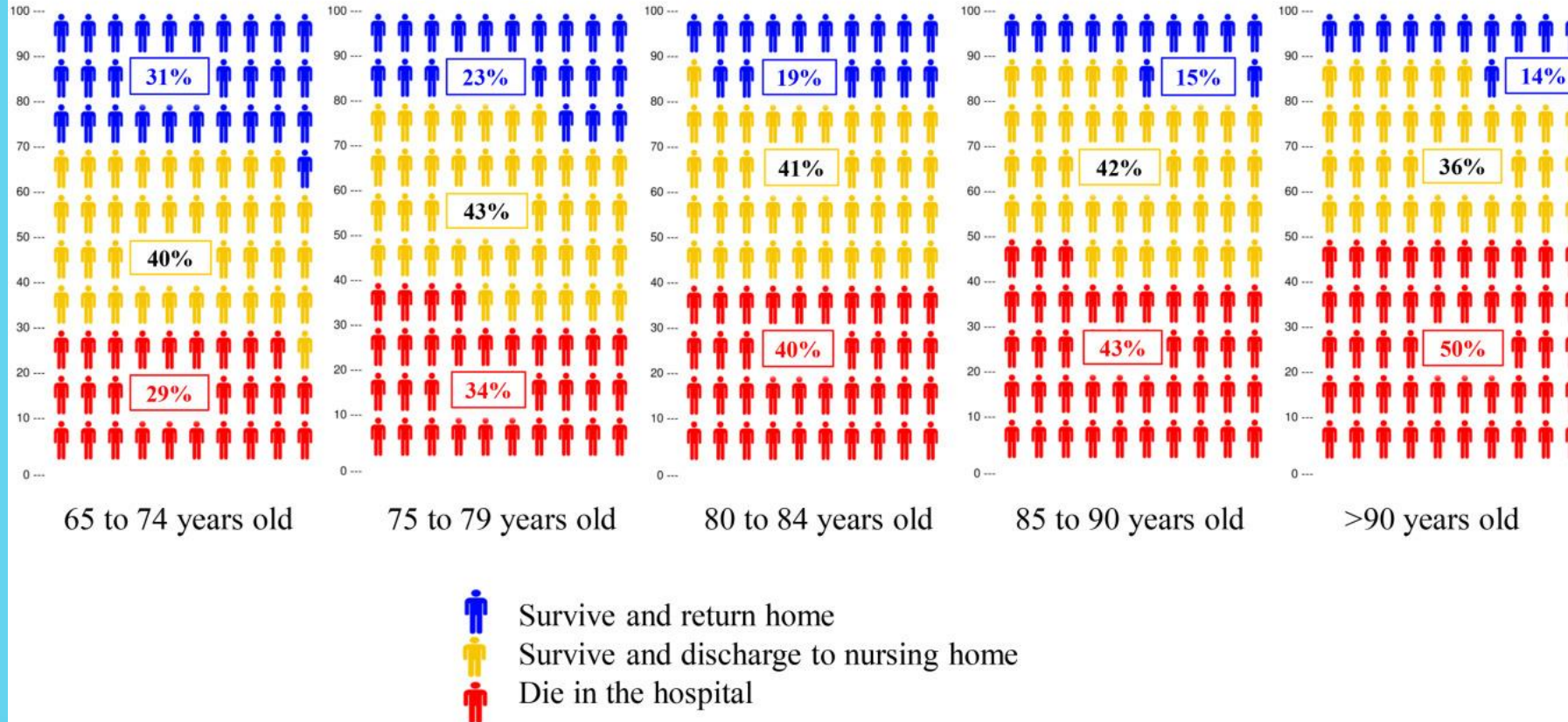
- ▶ 35,036 patients included in the final analysis
- ▶ In hospital mortality = **33%**
- ▶ Discharged to home = **24%**
- ▶ Discharged to a location other than home (nursing home) = **41%**





# RESULTS

Older adults can expect the following after an emergency department intubation:



# RESULTS – DEEP DIVE

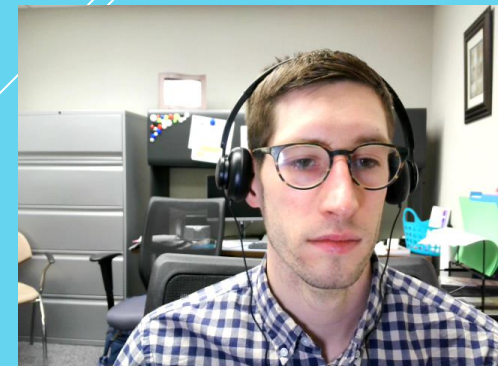
- ▶ Admitting diagnoses, with associated percentage that died in the hospital:
  - ▶ Cerebrovascular Accident – **53%**
  - ▶ Sepsis – **43%**
  - ▶ GI Bleeding – **38%**
  - ▶ CHF – **23%**
  - ▶ Pneumonia – **33%**
  - ▶ Respiratory Failure – **26%**
  - ▶ Altered Mental Status or Seizure – **29%**





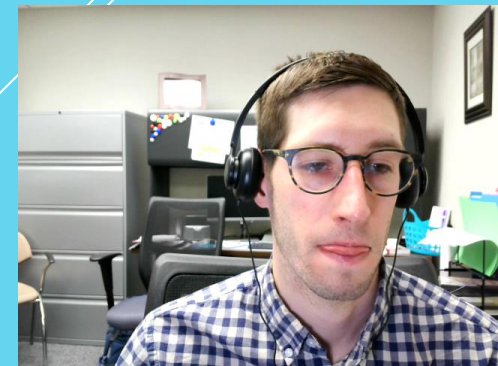


# COMPASSIONATE EXTUBATION IN THE ED



# PRIOR TO EXTUBATION

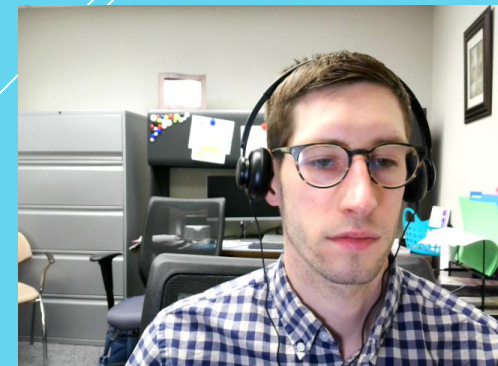
- ▶ Counsel families on potential outcomes following withdrawal
- ▶ Ensure that all alarms and monitors are turned off
- ▶ Remove restraints, and unnecessary medical equipment
- ▶ Maintain IV access
- ▶ Allow any family that wants to be present, to be present





# PRIOR TO EXTUBATION - MEDICATIONS

1. Continue sedation medication infusion, if already on
2. Discontinue paralytic meds
3. Glycopyrrolate 0.4 mg, IV opioid bolus (morphine 2-10 mg), and IV benzodiazepine (lorazepam 1 mg) about 25 minutes prior to extubation
4. Repeat the dose of opioid and benzo to a RASS of -4 to -5
5. Extubate
6. Stop pressors
7. Be prepared to redose comfort meds





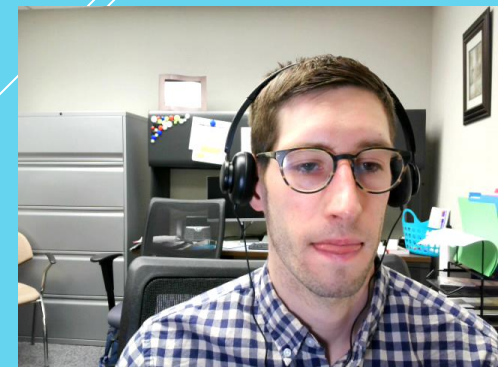
# DURING/AFTER EXTUBATION

- ▶ Suction secretions immediately following removal of the tube
- ▶ Have opioids and benzos drawn up, ready to administer
- ▶ Titrate medications to a RR of less than 30, and eliminate grimacing, moaning, and labored respirations
- ▶ **Provide support for the family**
- ▶ Provide variable timeframe to death



# TAKEAWAYS

- ▶ ED intubation in adults aged older than 65:
  - ▶ **33%** die in hospital
  - ▶ **24%** discharged to home
  - ▶ **41%** discharged to nursing home
- ▶ Compassionately extubate in a step-by-step fashion
- ▶ Support the family



# REFERENCES

- ▶ Ouchi, K., et. al. Prognosis After Emergency Department Intubation to Inform Shared Decision Making. Journal of the American Geriatrics Society. 15 March 2018.
- ▶ Baek, H. and Lee, D. Fatal Intracranial Hemorrhage in Patient with Disseminated Intravascular Coagulation Associated with Sepsis
- ▶ Von Gunten, C, and Weissman, D. Symptom Control for Ventilator Withdrawal in the Dying Patient. Palliative Care Network of Wisconsin Fast Facts. 34.
- ▶ Von Gunten, C, and Weissman, D. Ventilator Withdrawal Protocol. Palliative Care Network of Wisconsin Fast Facts. 33.

