

# Year in Review 2018-2019



**UCSF Health**  
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# Year in Review 2019

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- Updated literature
- September 2018 – September 2019

## Process:

- CME collaborative review of journals
  - Including ACP J. Club, J. Watch, etc.
- Independent analysis of article quality

# Year in Review 2019

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Chose articles based on 3 criteria:

- 1) Change your practice
  - 2) Modify your practice
  - 3) Confirm your practice
- Hope to not use the words:
    - Student's t-test, meta-regression, Mantel-Haenszel statistical method, etc.
    - Focus on breadth, not depth

# Year in Review 2019

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- Major reviews/short takes
- Case-based format
- Multiple choice questions
- Promote retention

# Syllabus/Bookkeeping

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- No conflicts of interest
- Final presentation available by email:

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# De-Escalation in Pneumonia

- A total of 279 patients
- Most in the ICU (87%), 56% VAP

- A total of 92 (33.0%) had de-escalation
- No clinical difference between the two groups

| Outcome               | De-escalation | No    | p     |
|-----------------------|---------------|-------|-------|
| Length of Stay (days) | 15            | 20    | <0.05 |
| Acute Kidney Injury   | 36.2%         | 50.0% | <0.05 |
| Mortality (28-day)    | 22.8%         | 28.3% | NS    |

# De-Escalation in Pneumonia

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Question: In HAP, is it safe to “de-escalate” MRSA coverage if cultures are negative?

Design: Single-center, retrospective; nosocomial pneumonia & negative cultures

Conclusion: No harm to de-escalating MRSA coverage; Shorter LOS, less AKI, no change in mortality

Comments: Retrospective study, confounder?  
Appears no harm, potential benefit to de-escalation;  
Not much data otherwise;  
Seems reasonable to stop in most patients

# Short take: Nutrition in the Hospital

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- In a randomized controlled trial of patients at nutritional risk (high NRS scores), 2088 patients were randomized to:
  - Individualized nutrition support
    - $\geq 75\%$  of caloric and protein needs
    - Micronutrients
    - Use enteral or parenteral nutrition if needed
  - No dietary consultation



# Short take: Nutrition in the Hospital

| Outcome               | Nutrition | No  | p    |
|-----------------------|-----------|-----|------|
| Adverse Outcome (30d) | 23%       | 27% | 0.02 |
| Mortality (30d)       | 7%        | 10% | 0.01 |

- Improve quality of life at 30 days
- No impact on length of stay
- No adverse side effects

# Short take: Overdiagnosis of COPD

- Large global database of adults (16,177 pts.)
- A total of 919 self-reported a diagnosis of COPD
- All patients got spirometry
- Overdiagnosis rate = **61.9%**
  - No obstruction on post-bronchodilator spirometry
- Predictors of overdiagnosis: women, higher education, respiratory symptoms
- Nearly 50% of overdiagnosed patients were on medications

# Increasing Blood Pressure Medications

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- Question:** What is the impact of “intensifying” antihypertensive regimens at discharge?
- Design:** Retrospective cohort study; VA database  
Intensification vs. none, propensity matched
- Conclusion:** Intensification leads to readmissions & serious adverse events; no change in CV outcomes at 1 year
- Comments:** Retrospective study, confounder?  
Intensification likely leads to harm, no clear benefit; acute hypertension common in the hospital – treatment can cause harm;  
Generally avoid adjusting HTN regimens

# Short take: Afib and Stable CAD

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## Methods:

- Multi-center, open-label RCT
- Diagnosis of afib and stable CAD (PCI or MI > 1 year prior)
- Randomized to:
  - Rivaroxaban
  - Rivaroxaban + aspirin (or P2Y<sub>12</sub> inhibitor)

# Short take: Afib and Stable CAD

## Results:

| Outcome           | Rivaroxaban | Rivaroxaban + ASA | p     |
|-------------------|-------------|-------------------|-------|
| CV Event or Death | 4.14%       | 5.75%             | <0.01 |
| Major Bleeding    | 1.62%       | 2.76%             | 0.01  |

- For most patients with afib and **stable** CAD, go with monotherapy with a DOAC

# Case Summary

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## Consider

1. De-escalating MRSA covering in patients with HAP and negative cultures at 48 hours.
2. Consulting nutrition in patients at nutritional risk.
3. COPD may be overdiagnosed (~ 60%).
4. Avoiding increasing BP meds in the hospital.
5. In patients with afib and stable CAD on a DOAC, stop the aspirin.

# Short Take: ED Crowding, D/C & Mortality

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- Registry study of patients  $\geq 18$ y assigned as low triage acuity who were discharged from ED
- Divided into surviving (n=705,076) or dying (n=623) within 10 days
- Multivariable logistic regression analyses

Patients discharged during high ED occupancy had increased 10-day mortality (OR  $\sim 1.5$ )

# Antipsychotics for Delirium

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## Key Findings:

- **No difference vs. placebo:** (*low-mod evidence*)
  - Sedation status
  - Length of stay
  - Delirium duration\*
  - Mortality\*\*

\*Meta-analysis of 4 RCTs (non-ICU) with 0.2d increase

\*\*1 RCT haloperidol in pall care with increased mortality



# Antipsychotics for Delirium

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## Key Findings:

### Insufficient/inconsistent evidence:

- Cognitive function
- Delirium severity
- Inappropriate continuation

Increased QTc for several agents

No difference in neuro AEs

# Antipsychotics for Delirium

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**Question:** What are the benefits and harms of using antipsychotics to treat inpatient delirium?

**Design:** Systematic review, 26 trials (16 RCTs, 10 obs)  
5607 hospitalized patients with delirium

**Conclusion:** Current evidence does not support routine use of antipsychotics to treat delirium.

**Comments:** Heterogeneity (i.e., dose, frequency, route)  
Variable outcomes, delirium type, instruments  
Inclusion of ICU patients -> generalize?  
Exclusion of pts with neuro + CV issues

# Short Take: 7 vs 14 days in GNR bacteremia

| Outcome                   | 7d         | 14d        | <i>P</i>  |
|---------------------------|------------|------------|-----------|
| <b>Composite</b>          | <b>46%</b> | <b>48%</b> | <b>NS</b> |
| Mortality (90d)           | 12%        | 11%        | NS        |
| Readmissions              | 39%        | 43%        | NS        |
| Long stay >14d            | 5%         | 6%         | NS        |
| Distant complications     | 3%         | 3%         | NS        |
| Bacteremia relapse        | 5%         | 3%         | NS        |
| Suppurative complications | 5%         | 3%         | NS        |

\*Shorter course: Quicker return to baseline function

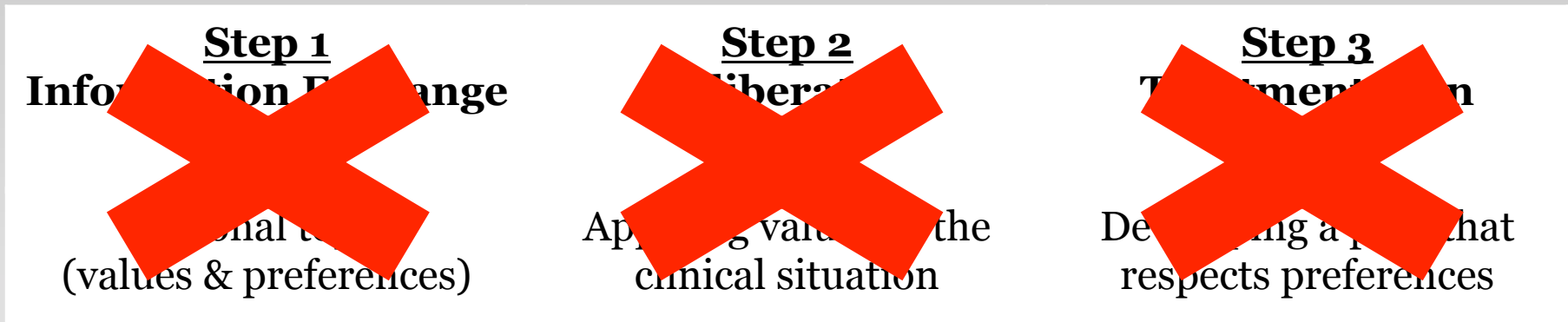
# Short Take: 7 vs 14 days in GNR bacteremia

## Practice Changing

- A 7 day course of antibiotics is sufficient for:
- Patients with Enterobacteriaceae bacteremia
  - Urinary source
  - Have source control
  - Clinically stable by day 5

- Unanswered questions:
  - What about non-urinary source? (probably)
  - What about ESBL? (possibly but MERINO trial used 14d)
  - When can you switch to orals?
  - Can you use an oral beta-lactam?

# Patients' Values & Preferences



- **26%** contained no information exchange or deliberation about pt values and preferences.
- **56%** contained no discussion about applying pts' values and preferences in the current situation

# Patients' Values & Preferences

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## On the flipside:

- Only 5-7% addressed patient response to living with prolonged physical or cognitive/emotional impairment
- Only 8% included clinician recommendations based on patient values and preferences

# Patients' Values & Preferences

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**Question:** How often do clinicians ask about patients' expressed values and preferences in the ICU?

**Design:** Prospective cohort study, 244 recorded GOC discussions in 13 ICUs.

**Conclusion:** Most GOC discussions with surrogates for critically-ill patients do not incorporate patients' values and preferences.

**Comments:** Only 1 conference recorded per patient  
Hawthorne effect may lead to overestimation  
English-speaking surrogates only  
Generalizability?

# Case Summary

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## Consider

1. High ED occupancy may increase mortality risk.
2. Avoiding routine use of antipsychotics to manage inpatient delirium
3. In stable patients with GNR bacteremia, de-escalating antibiotics by 48 hours
4. Treating patients with GNR bacteremia who are improving with 7 days of antibiotics.
5. Inquiring about patient values and beliefs and using them.



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