Top 10 Articles of 2016
Turning Evidence into Practice

Mel L. Anderson, MD, FACP
Interim Director
Internal Medicine Residency Program
Associate Professor of Medicine
University of Colorado School of Medicine
Roadmap

- Case based interactive format
- Multiple articles per case
- Quick hitters and Short takes
- Summary of suggested practice changes
Learning Objectives

1. *Describe* the primary conclusions
2. *Identify* changes to your practice
3. *Implement* these practice changes
Journals Reviewed...

Jan 2016 – Dec 2016

- N Engl J Med
- JAMA; JAMA Intern Med
- J Gen Intern Med
- J Hospit Med
- Lancet; Stroke; Ann Emerg Med; PLOS Med
- Am J Med; Am Heart J; Am J Cardiol
- Ann Intern Med + ACP J Club
- Crit Care Med; Am J Respir Crit Care Med
- Circulation, J Am Coll Cardiol, JACC HF
- ACP Plus, BMJ Online update, J Watch
Disclosures

- None relevant
Acknowledgements

- Jeffrey J. Glasheen, MD
  University of Colorado School of Medicine
- Joseph Li, MD
  Harvard Medical School
- Anneliesse Schleyer, MD
  University of Washington
- Brad Sharpe, MD
  UCSF School of Medicine
Notables in 2016
Zero to 50,000 — The 20th Anniversary of the Hospitalist

Robert M. Wachter, M.D., and Lee Goldman, M.D., M.P.H.
The Emerging Role of “Hospitalists” in the American Health Care System

The explosive growth of managed care has led to an increased role for general internists and other primary care physicians in the American health care system. This change is welcome in many respects, since generalists have perennially been undervalued by health care institutions, payers, and even patients.\(^1\)-\(^3\) The greater prominence of generalism has led to an increase in the number of medical students who choose careers in primary care,\(^4\) expanded job opportunities for generalists,\(^5\) and a modest increase in the incomes of primary care physicians.\(^6\)
Drugs or Ablation in Ventricular Tachycardia

Recurrent ventricular tachycardia is associated with high mortality and morbidity. An ICD can be effective, but the shocks are painful and upsetting. Antiarrhythmic drugs and catheter ablation can suppress tachycardia; which strategy is better? New research findings are summarized in a short video.
Introducing *Annals* for Hospitalists: New Knowledge, Novel Formats, and Unique Perspectives

If you practice hospital medicine, where do you go to find the latest evidence relevant to your practice? Odds are, you spend time wading through several journals, Web sites, or other publications looking for information pertinent to hospitalists—and feel guilty when you don’t have time to do this. With the introduction of *Annals* for Hospitalists, we hope to simplify your search for information that matters most to you.

This new feature is a collaboration between the University of Michigan Hospitalist Program and *Annals of Internal Medicine*. The feature editors (D.H.W. and V.C.) will comb through all *Annals of Internal Medicine* articles and ACP Journal Club summaries of articles in the broader literature to identify those most applicable to the practice of hospital medicine. They also will highlight important takeaway points and collate all this information in a monthly alert, which you can have delivered to your e-mail account by signing up at www.annals.org. Those alerts also will be archived in a new section called *Annals* for Hospitalists (http://go.annals.org/hospitalist). Because we know you may want even more information, *Annals* for Hospitalists also will link to other hospital medicine content from ACP, including the most-read ACP JournalWise alerts and *ACP Hospitalist*.

In addition, *Annals* for Hospitalists will include a special monthly commentary titled Inpatient Notes. Written by thought leaders in various fields, these articles will provide unique perspectives on contemporary or controversial topics in hospital medicine. We consider Inpatient Notes to be the crown jewel of *Annals* for Hospitalists and are delighted that Dr. Robert (Bob) Wachter, one of the founders of hospital medicine, has written the first commentary. In his inaugural commentary, Dr. Wachter discusses the proliferation, promise, and peril epitomized by health care’s digitalization. Focusing on the shortfalls of electronic health systems, as well as lessons learned from other fields, he explains why hospitalists will be crucial in bringing about the unrealized potential of this technology.

We believe that *Annals* for Hospitalists will provide a compelling new way for hospitalists to stay abreast of salient information from *Annals of Internal Medicine* and the ACP, and to keep pace with emerging ideas in the field. We hope you enjoy this debut edition, and we look forward to having you return each month.

David H. Wesorick, MD  
Vineet Chopra, MD, MSc  
University of Michigan  
Ann Arbor, Michigan

Christine Laine, MD, MPH  
Editor in Chief

**Disclosures:** Disclosures can be viewed at www.acponline.org/authors/icmje/ConflictsOfInterestForms.do?msNum=M16-1400.

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Current author addresses are available at www.annals.org.

If you practice hospital medicine, *Annals* for Hospitalists simplifies your search for information that matters most to you.

Developed with the University of Michigan Hospital Medicine Program and the VA Ann Arbor Health System, *Annals for Hospitalists* provides monthly highlights from *Annals of Internal Medicine* and ACP Journal Club and “Inpatient Notes”—unique perspectives on contemporary topics in hospital medicine.

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Antithrombotic Therapy for VTE Disease
CHEST Guideline and Expert Panel Report

Clive Kearon, MD, PhD; Elie A. Akl, MD, MPH, PhD; Joseph Ornelas, PhD; Allen Blaivas, DO, FCCP; David Jimenez, MD, PhD, FCCP; Henri Bounnameaux, MD; Menno Huisman, MD, PhD; Christopher S. King, MD, FCCP; Timothy A. Morris, MD, FCCP; Namita Sood, MD, FCCP; Scott M. Stevens, MD; Janine R. E. Vintch, MD, FCCP; Philip Wells, MD; Scott C. Woller, MD; and COL Lisa Moores, MD, FCCP

Sugar Industry and Coronary Heart Disease Research: A Historical Analysis of Internal Industry Documents

Cristin E. Kearns, DDS, MBA; Laura A. Schmidt, PhD, MSW, MPH; Stanton A. Glantz, PhD

Early warning signals of the coronary heart disease (CHD) risk of sugar (sucrose) emerged in the 1950s. We examined Sugar Research Foundation (SRF) internal documents, historical reports, and statements relevant to early debates about the dietary causes of CHD and assembled findings chronologically into a narrative case study. The SRF sponsored its first CHD research project in 1965, a literature review published in the New England Journal of Medicine, which singled out fat and cholesterol as the dietary causes of CHD and downplayed evidence that sucrose consumption was also a risk factor. The SRF set the review’s objective, contributed articles for inclusion, and received drafts. The SRF’s funding and role was not disclosed. Together with other recent analyses of sugar industry documents, our findings suggest the industry sponsored a research program in the 1960s and 1970s that successfully cast doubt about the hazards of sucrose while promoting fat as the dietary culprit in CHD. Policymaking committees should consider giving less weight to food industry-funded studies and include mechanistic and animal studies as well as studies appraising the effect of added sugars on multiple CHD biomarkers and disease development.

Published online September 12, 2016. Corrected on October 3, 2016.
ACC/AHA Task Force Statement

Further Evolution of the ACC/AHA Clinical Practice Guideline Recommendation Classification System
A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines

ACC/AHA TASK FORCE MEMBERS
Jonathan L. Halperin, MD, FACC, FAHA, Chair; Glenn N. Levine, MD, FACC, FAHA, Chair-Elect; Sana M. Al-Khatib, MD, MHS, FACC, FAHA; Kim K. Birtcher, PHARMD, AACC; Biykem Bozkurt, MD, PHD, FACC, FAHA; Ralph G. Brindis, MD, MPH, MACC; Joaquin E. Cigarroa, MD, FACC; Lesley H. Curtis, PHD, FAHA; Lee A. Fleisher, MD, FACC, FAHA; Federico Gentile, MD, FACC; Samuel Gidding, MD, FAHA; Mark A. Hlatky, MD, FACC; John Ikonomidis, MD, PHD, FAHA; José Joglar, MD, FACC, FAHA; Susan J. Pressler, PHD, RN, FAHA; Duminda N. Wijeysundera, MD, PHD

Circulation 2016;133:1426-1428.
<table>
<thead>
<tr>
<th>CLASS (STRENGTH) OF RECOMMENDATION</th>
<th>LEVEL (QUALITY) OF EVIDENCE†</th>
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<tbody>
<tr>
<td><strong>CLASS I (STRONG)</strong></td>
<td><strong>LEVEL A</strong></td>
</tr>
<tr>
<td>Benefit &gt;&gt; Risk</td>
<td>High-quality evidence† from more than 1 RCT</td>
</tr>
<tr>
<td>Suggested phrases for writing recommendations:</td>
<td>Meta-analyses of high-quality RCTs</td>
</tr>
<tr>
<td>– Is recommended</td>
<td>One or more RCTs corroborated by high-quality registry studies</td>
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<tr>
<td>– Is indicated/useful/effective/beneficial</td>
<td></td>
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<tr>
<td>– Should be performed/administered/other</td>
<td></td>
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<tr>
<td>– Comparative-Effectiveness Phrases†:</td>
<td></td>
</tr>
<tr>
<td>† Treatment/strategy A is recommended/indicated in preference to treatment B</td>
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<tr>
<td>† Treatment A should be chosen over treatment B</td>
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<tr>
<td><strong>CLASS IIa (MODERATE)</strong></td>
<td><strong>LEVEL B-R</strong> (Randomized)</td>
</tr>
<tr>
<td>Benefit &gt;&gt; Risk</td>
<td>Moderate-quality evidence† from 1 or more RCTs</td>
</tr>
<tr>
<td>Suggested phrases for writing recommendations:</td>
<td>Meta-analyses of moderate quality RCTs</td>
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<tr>
<td>– Is reasonable</td>
<td></td>
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<tr>
<td>– Can be useful/effective/beneficial</td>
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<tr>
<td>– Comparative-Effectiveness Phrases†:</td>
<td></td>
</tr>
<tr>
<td>† Treatment/strategy A is probably recommended/indicated in preference to treatment B</td>
<td></td>
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<tr>
<td>† It is reasonable to choose treatment A over treatment B</td>
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</tr>
<tr>
<td><strong>CLASS IIb (WEAK)</strong></td>
<td><strong>LEVEL B-NR</strong> (Nonrandomized)</td>
</tr>
<tr>
<td>Benefit &gt; Risk</td>
<td>Moderate-quality evidence† from 1 or more well-designed, well-executed nonrandomized studies, observational studies, or registry studies</td>
</tr>
<tr>
<td>Suggested phrases for writing recommendations:</td>
<td>Meta-analyses of such studies</td>
</tr>
<tr>
<td>– May/might be reasonable</td>
<td></td>
</tr>
<tr>
<td>– May/might be considered</td>
<td></td>
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<tr>
<td>– Usefulness/effectiveness is unknown/unclear/uncertain or not well established</td>
<td></td>
</tr>
<tr>
<td><strong>CLASS III: No Benefit (MODERATE)</strong></td>
<td><strong>LEVEL C-LD</strong> (Limited Data)</td>
</tr>
<tr>
<td>Benefit = Risk</td>
<td>Randomized or nonrandomized observational or registry studies with limitations of design or execution</td>
</tr>
<tr>
<td>(Generally, LOE A or B use only)</td>
<td>Meta-analyses of such studies</td>
</tr>
<tr>
<td>Suggested phrases for writing recommendations:</td>
<td>Physiological or mechanistic studies in human subjects</td>
</tr>
<tr>
<td>– Is not recommended</td>
<td></td>
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<tr>
<td>– Is not indicated/useful/effective/beneficial</td>
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<tr>
<td>– Should not be performed/administered/other</td>
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<tr>
<td><strong>CLASS III: Harm (STRONG)</strong></td>
<td><strong>LEVEL C-EO</strong> (Expert Opinion)</td>
</tr>
<tr>
<td>Risk &gt; Benefit</td>
<td>Consensus of expert opinion based on clinical experience</td>
</tr>
<tr>
<td>Suggested phrases for writing recommendations:</td>
<td></td>
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<tr>
<td>– Potentially harmful</td>
<td></td>
</tr>
<tr>
<td>– Causes harm</td>
<td></td>
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<tr>
<td>– Associated with excess morbidity/mortality</td>
<td></td>
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<tr>
<td>– Should not be performed/administered/other</td>
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</table>

COR and LOE are determined independently (any COR may be paired with any LOE).
A recommendation with LOE C does not imply that the recommendation is weak. Many important clinical questions addressed in guidelines do not lend themselves to clinical trials. Although RCTs are unavailable, there may be a very clear clinical consensus that a particular test or therapy is useful or effective.

* The outcome or result of the intervention should be specified (an improved clinical outcome or increased diagnostic accuracy or incremental prognostic information).
† For comparative-effectiveness recommendations (COR I and IIa; LOE A and B only), studies that support the use of comparator verbs should involve direct comparisons of the treatments or strategies being evaluated.
‡ The method of assessing quality is evolving, including the application of standardized, widely used, and preferably validated evidence grading tools; and for systematic reviews, the incorporation of an Evidence Review Committee.

COR indicates Class of Recommendation; EO, expert opinion; LD, limited data; LOE, Level of Evidence; NR, nonrandomized; R, randomized; and RCT, randomized controlled trial.
Improving Diagnosis in Health Care: Highlights of a Report From the National Academies of Sciences, Engineering, and Medicine

John R. Ball, MD, JD, and Erin Balogh, MPH

Figure. The committee’s visualization of the diagnostic process illustrates its complexity and the need for collaboration among clinicians, patients, and their families to achieve accurate, timely diagnosis.

Special Communication

CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016

Deborah Dowell, MD, MPH; Tamara M. Haegerich, PhD; Roger Chou, MD

JAMA 2016;315:1624-1645.
Case 1

A 67 y/o man presents with three days of productive cough, fevers, fatigue, and chest pain.

BP 96/64, HR 102, Temp 101.1, RR 24, SaO2 92% on RA. Ill appearing, rales R base
CXR no infiltrate, UA neg, blood cx drawn, WBC 15K, creat 1.5

ER begins empiric ceftriaxone + azithromycin and calls you re: pt with “septicemia.”
A. Not sure what 'septicemia is,' this is 'Severe Sepsis'

B. Should I ask what the qSOFA score is??

C. Yes. I dread learning why SIRS is so wrong

D. Hmm. It’s all about the prostaglandins...
The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)

Mervyn Singer, MD, FRCP; Clifford S. Deutschman, MD, MS; Christopher Warren Seymour, MD, MSc; Manu Shankar-Hari, MSc, MD, FFICM; Djillali Annane, MD, PhD; Michael Bauer, MD; Rinaldo Bellomo, MD; Gordon R. Bernard, MD; Jean-Daniel Chiche, MD, PhD; Craig M. Coopersmith, MD; Richard S. Hotchkiss, MD; Mitchell M. Levy, MD; John C. Marshall, MD; Greg S. Martin, MD, MSc; Steven M. Opal, MD; Gordon D. Rubenfeld, MD, MS; Tom van der Poll, MD, PhD; Jean-Louis Vincent, MD, PhD; Derek C. Angus, MD, MPH
Sepsis-3 Definitions

Objective: Evaluate and update definitions for sepsis
Design: Task force—meetings, Delphi, voting
Participants: 19 international experts
Goals: Limitations, definitions; clarity

*JAMA* 2016;315:801-810.
Sepsis-3: Limitations

Previous models focus too much on inflammation

*JAMA* 2016;315:801-810.
Sepsis-3: Limitations

| Previous models focus too much on inflammation |
| Misleading that sepsis proceeds through continuum |

*JAMA* 2016;315:801-810.
## Sepsis-3: Limitations

<table>
<thead>
<tr>
<th>Limitation</th>
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<tr>
<td>Previous models focus too much on inflammation</td>
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<tr>
<td>Misleading that sepsis proceeds through continuum</td>
</tr>
<tr>
<td>The term “severe sepsis” is redundant...</td>
</tr>
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*JAMA* 2016;315:801-810.
Sepsis-3: Definitions

“Life-threatening organ dysfunction caused by a dysregulated host response to infection...”

*JAMA* 2016;315:801-810.
“Life-threatening organ dysfunction caused by a dysregulated host response to infection...”

Sequential Organ Failure Assessment (SOFA) score of 2 or more:

Mortality $>10\%$

*JAMA* 2016;315:801-810.
**Sepsis-3: Definitions**

Quick SOFA (qSOFA)

<table>
<thead>
<tr>
<th>RR ≥ 22 / min, GCS &lt; 13, SBP ≤ 100 mm Hg</th>
</tr>
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<tbody>
<tr>
<td>qSOFA ≥ 2 = Mortality RR 3-14</td>
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</table>

*JAMA* 2016;315:801-810.
Assessment of Clinical Criteria for Sepsis
For the Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)

Christopher W. Seymour, MD, MSc; Vincent X. Liu, MD, MSc; Theodore J. Iwashyna, MD, PhD; Frank M. Brunkhorst, MD; Thomas D. Rea, MD, MPH; André Scherag, PhD; Gordon Rubenfeld, MD, MSc; Jeremy M. Kahn, MD, MSc; Manu Shankar-Hari, MD, MSc; Mervyn Singer, MD, FRCP; Clifford S. Deutschman, MD, MS; Gabriel J. Escobar, MD; Derek C. Angus, MD, MPH

JAMA 2016;315:762-774.
Sepsis-3 Clinical Criteria

Question: Evaluate validity of clinical criteria of sepsis
Design: Retrospective cohort
Participants: 148,907 encounters suspected infection
1° outcome: Area under receiver operating curves of SIRS, SOFA, qSOFA, and LODS, i.e. accuracy

*JAMA* 2016;315:762-774.
SIRS

Sepsis-Related Organ Failure Assessment (SOFA)

1. Partial pressure of oxygen
2. FiO2
3. Plt count
4. Glasgow coma scale
5. Bilirubin
6. Level of hypotension
7. Creatinine
Sequential Organ Failure Assessment (SOFA)

1. Partial pressure of oxygen
2. FiO2
3. Plt count
4. Glasgow coma scale
5. Bilirubin
6. Level of hypotension
7. Creatinine
Logistic Organ Dysfunction System (LODS)

1. Partial pressure of oxygen
2. HR and BP
3. Plt count, WBC
4. Glasgow coma scale
5. Bilirubin
6. PT
7. BUN
8. Creatinine
9. Urine output

*JAMA* 1996;276:802-810.
TAKE A DEEP BREATH
AUROC = 0.5
AUROC = 1.0
**Sepsis-3 Results ICU**

<table>
<thead>
<tr>
<th>AUROC</th>
<th>95% C.I.</th>
<th>p</th>
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<tbody>
<tr>
<td>SIRS</td>
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## Sepsis-3 Results ICU

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<tr>
<td>qSOFA</td>
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<tr>
<td>SOFA</td>
<td>0.74</td>
<td>0.73-0.76</td>
<td>&lt; 0.001</td>
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<tr>
<td><strong>SOFA</strong></td>
<td>0.74</td>
<td>0.73-0.76</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>LODS</td>
<td>0.75</td>
<td>0.73-0.76</td>
<td>&lt; 0.001</td>
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# Sepsis-3 Results non-ICU

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<td>SIRS</td>
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### Sepsis-3 Results non-ICU

<table>
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<td>SIRS</td>
<td>0.76</td>
<td>0.75-0.77</td>
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<td>SIRS</td>
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<td>0.75-0.77</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>SOFA</td>
<td>0.79</td>
<td>0.78-0.80</td>
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<tr>
<td>qSOFA</td>
<td>0.81</td>
<td>0.80-0.82</td>
<td>&lt; 0.001</td>
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</table>
Sepsis-3 Clinical Criteria

Question: Evaluate validity of clinical criteria of sepsis

Design: Retrospective cohort

Participants: 148,907 encounters suspected infection

1° outcome: Area under receiver operating curves of SIRS, SOFA, qSOFA, and LODS

Conclusions: In the ICU, SOFA and LODS better than SIRS and qSOFA; outside the ICU, qSOFA better than SOFA and SIRS

*JAMA* 2016;315:762-774.
Figure. Operationalization of Clinical Criteria Identifying Patients With Sepsis and Septic Shock

Patient with suspected infection

qSOFA ≥2? (see A)
- No -> Sepsis still suspected?
- Yes -> Assess for evidence of organ dysfunction

Sepsis still suspected?
- No -> Monitor clinical condition; reevaluate for possible sepsis if clinically indicated
- Yes -> SOFA ≥2? (see B)

SOFA ≥2?
- No -> Monitor clinical condition; reevaluate for possible sepsis if clinically indicated
- Yes -> Sepsis

Sepsis

Despite adequate fluid resuscitation,
1. vasopressors required to maintain MAP ≥65 mm Hg
   AND
2. serum lactate level >2 mmol/L?

- No ->
- Yes -> Septic shock

A qSOFA Variables
- Respiratory rate
- Mental status
- Systolic blood pressure

B SOFA Variables
- PaO₂/FiO₂ ratio
- Glasgow Coma Scale score
- Mean arterial pressure
- Administration of vasopressors with type and dose rate of infusion
- Serum creatinine or urine output
- Bilirubin
- Platelet count
New Sepsis Criteria
A Change We Should Not Make

Steven Q. Simpson, MD, FCCP
Kansas City, KS

Chest 2016;149:1117-1118.
1. SIRS wasn’t meant to define sepsis
2. Who uses SOFA?
3. “Surviving Sepsis” Campaign – do we start all over again?
4. Caution please

*Chest* 2016;149:1117-1118.
Inner monologue w/ ER...

A. Not sure what ‘septicemia is,’ this is ‘Severe Sepsis’

B. Should I ask what the qSOFA score is??

C. Yes. I dread learning why SIRS is so wrong

D. Hmm. It’s all about the prostaglandins...
CT chest showed an infiltrate in 33% of pts with suspected PNA and clear CXR. *Am J Respir Crit Care Med* 2016;192:974-982.

CONCLUSION
A large proportion of people have asparagus anosmia. Genetic variation near multiple olfactory receptor genes is associated with the ability of an individual to smell the metabolites of asparagus in urine. Future replication studies are necessary before considering targeted therapies to help anosmic people discover what they are missing.

*BMJ* 2016;355:i6071.
Case 2

82 y/o woman on an inpatient palliative care service is seen in consultation for distressing hallucinations.

Physical examination and thorough review of medications do not identify a culprit etiology. U/A negative, TSH and Chem normal.

The primary team is asking about pharmacologic options for treatment...
Which of the following are true?

A. Risperidone increases extrapyramidal sx
B. Risperidone decreases delirium severity
C. Degree of QTc prolongation predicts excess CV risk with antipsychotics.
D. All of the above are true.
E. Hello *Vitamin H*.

---

Vitamin H

means

Haldol; in the case of a drug addict, it means Heroin
Efficacy of Oral Risperidone, Haloperidol, or Placebo for Symptoms of Delirium Among Patients in Palliative Care: A Randomized Clinical Trial

Meera R. Agar, PhD; Peter G. Lawlor, MB; Stephen Quinn, PhD; Brian Draper, MD; Gideon A. Caplan, MBBS; Debra Rowett, BPharm; Christine Sanderson, MPH; Janet Hardy, MD; Brian Le, MBBS; Simon Eckermann, PhD; Nicola McCaffrey, PhD; Linda Devilee, MBus; Belinda Fazekas, BN; Mark Hill, PhD; David C Currow, PhD
Delirium Treatment

Question: Efficacy of risperidone and haloperidol in treating distressing delirium in palliative care

Design: Placebo controlled RCT

Patients: 247 adults with delirium + distress inpatient palliative care services in Australia

1° Outcome: Improvement in delirium symptom score

2° Outcome: Delirium severity, midazolam use, EPS, sedation, and survival

*JAMA Intern Med* 2017;177:34-42.
# Delirium Treatment

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Figure 2. Secondary Multivariable Mixed-Model Analysis of Delirium

- Placebo
- Risperidone
- Haloperidol

Delirium Symptom Score vs. Time, d

0 1 2 3
Delirium Treatment

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Design: Placebo controlled RCT

Patients: 247 adults with delirium + distress inpatient palliative care services in Australia

1° Outcome: Improvement in delirium symptom score

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Conclusion: Antipsychotics worsen delirium, increase EPS, and haloperidol increases mortality

*JAMA Intern Med* 2017;177:34-42.
Which of the following are true?

A. Risperidone increases extrapyramidal sx
B. Risperidone decreases delirium severity
C. Degree of QTc prolongation predicts excess CV risk with antipsychotics.
D. All of the above are true.
E. Hello Vitamin H.

_JAMA Intern Med_ 2017;177:34-42.
States Worse Than Death Among Hospitalized Patients With Serious Illnesses

n=180

- Much better than death
- Somewhat better than death
- Little bit better than death
- Neither better nor worse than death
- Worse than death

Figure. Ratings of States of Functional Debility Relative to Death by Hospitalized Patients With Serious Illnesses

- Bowel and Bladder Incontinence
- Rely on Breathing Machine to Live
- Cannot Get Out of Bed
- Confused All the Time
- Rely on Feeding Tube to Live
- Need Care All the Time
- Live in a Nursing Home
- At Home All Day
- Moderate Pain All the Time
- In a Wheelchair
Choose Wisely

Evaluation of Baseline Corrected QT Interval and Azithromycin Prescriptions in an Academic Medical Center

Rachael A. Lee, MD¹*, Allison Guyton, PharmD², Danielle Kunz, RPh², Gary R. Cutter, PhD³, Craig J. Hoesley, MD¹

¹Department of Medicine, Division of Infectious Diseases, University of Alabama at Birmingham, Birmingham, Alabama; ²Department of Pharmacology, University of Alabama at Birmingham, Birmingham, Alabama; ³Department of Biostatistics, University of Alabama at Birmingham, Birmingham, Alabama.

35% didn’t get a baseline EKG
Of those that did, 60% had QTc prolongation...

Indacaterol–Glycopyrronium versus Salmeterol–Fluticasone for COPD

Jadwiga A. Wedzicha, M.D., Donald Banerji, M.D., Kenneth R. Chapman, M.D., Jørgen Vestbo, M.D., D.M.Sc., Nicolas Roche, M.D., R. Timothy Ayers, M.Sc., Chau Thach, Ph.D., Robert Fogel, M.D., Francesco Patalano, M.D., and Claus F. Vogelmeier, M.D., for the FLAME Investigators*
Time to First Exacerbation

- **Any**: Hazard ratio, 0.84 (95% CI, 0.78–0.91), P<0.001
- **Moderate or Severe**: Hazard ratio, 0.78 (95% CI, 0.70–0.86), P<0.001
- **Severe**: Hazard ratio, 0.81 (95% CI, 0.66–1.00), P=0.046
However, does the FLAME trial provide sufficient data to support the use of a LABA–LAMA regimen over the use of a LABA–inhaled glucocorticoid regimen in patients in GOLD group C or D (i.e., high-risk patients) who have a history of exacerbations? The FLAME trial seems to indicate that the answer is yes.
CONCLUSION
The results of this study dispel the traditional belief that Santa Claus rewards children based on how nice or naughty they have been in the previous year. Santa Claus is less likely to visit children in hospitals in the most deprived areas. Potential solutions include a review of Santa’s contract or employment of local Santas in poorly represented regions.

BMJ 2016;355:i6355.

Lille score at 4 days as good as at 7 days to determine steroid responsiveness in severe alcoholic hepatitis. *Am J Gastroenterol* 2016; online 6 December 2016; doi:10.1038/ajg.2016.539.


Avoid cipro for uncomplicated UTI, acute sinusitis, and bronchitis unless other drugs have failed – disabling and potentially permanent tendon, muscle, and CNS. [FDA Report] *JAMA* 2016;315:2513.
Cardiac Short Takes


Practice Summary

Things to Do:

1. Check out Annals for Hospitalists, NEJM Quick Take videos, and “Improving Diagnosis in Healthcare.”

2. Use qSOFA / SOFA but not at the expense of early identification of sepsis.

3. Ask about preferences in serious illness re: ‘what might be worse than death.’

4. Lille score at 4 days for severe ETOH Hep
Practice Summary

Things to Do:

5. Invasive NSTEMI mgnt for patients over 80 – they benefit.
6. Anticoagulate if over 80 and high risk – we overestimate bleeding risk.
7. Obtain baseline 12-lead if rx azithromycin and analyze carefully.
Practice Summary

Things to Consider:

1. CT chest for suspected PNA if CXR neg and if it will impact management.
2. Continuous infusion B-lactam dosing in sepsis.
3. Continuing BB in advanced cirrhosis.
4. Olanzapine for chemo-associated N/V.
5. LABA+LAMA > LABA+inhaled steroid in COPD.
Practice Summary

Things Not to Do:

1. Antipsychotics in palliative care
2. Rx cipro for uncomplicated UTI, bronchitis, sinusitis
Thank you!

Melver.Anderson@ucdenver.edu