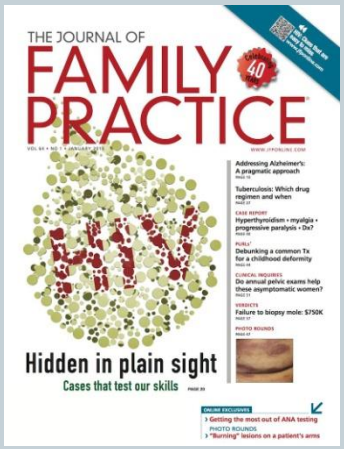
Key Articles & Clinical Developments of 2017 in Family Medicine

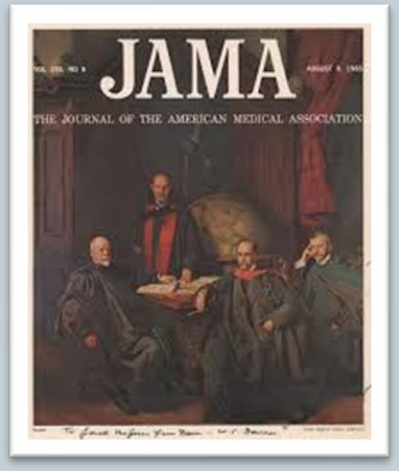
WHAT WAS IMPORTANT…

…AT LEAST TO SOME OF US

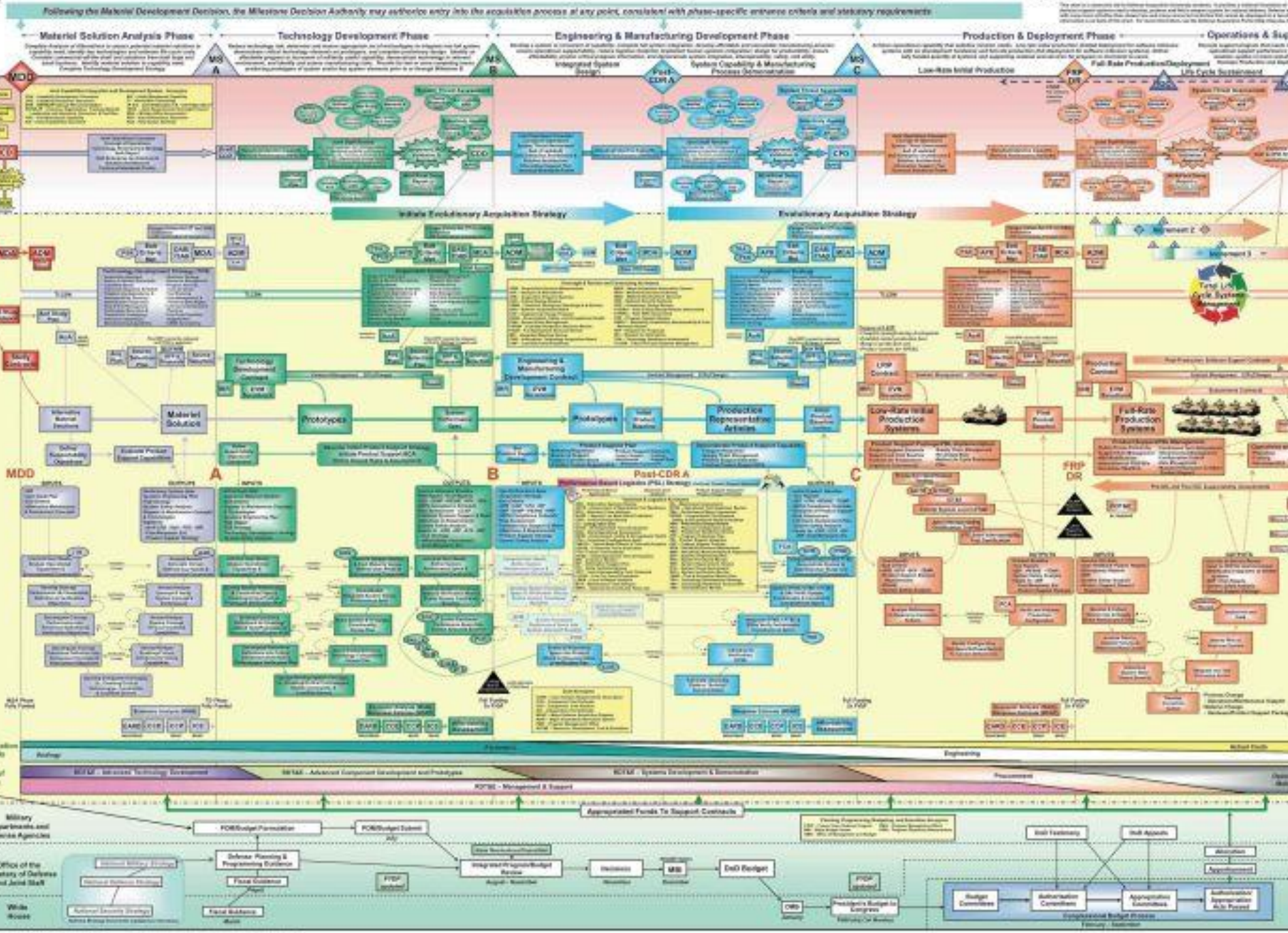
DAN WALDMAN, MD
UNM FAMILY AND COMMUNITY MEDICINE

A Survey of The Year's Stories





Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System



How Did I Choose Things?

- Essential Evidence
- Journal Watch
- Practice Update
- Our Faculty
- “Top of 2017” Lists

- Prioritized:
  - key areas of FM practice
  - might directly change clinical practice
  - might be leading to paradigm changes
  - Fun

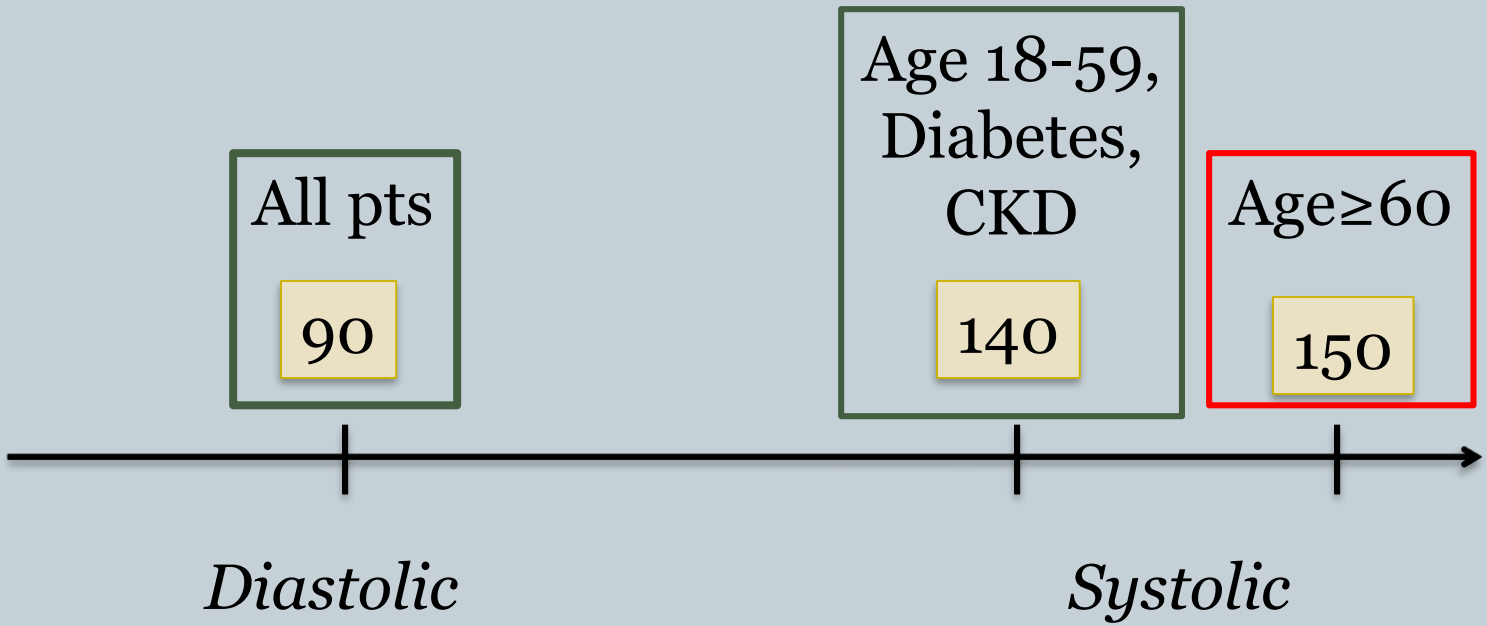
The Blood Pressure Saga Continues

Under New Guidelines, Millions More Americans Will Need to Lower Blood Pressure

By GINA KOLATA NOV. 13, 2017

The New York Times

Reminder: JNC8 BP Goals (2014)



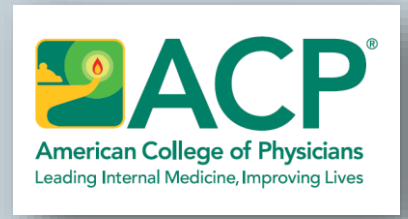
(*JNC8 was based largely on RCT data*)

Early 2017: BP Goals for patients >60

Combined ACP/AAFP work group systematic review

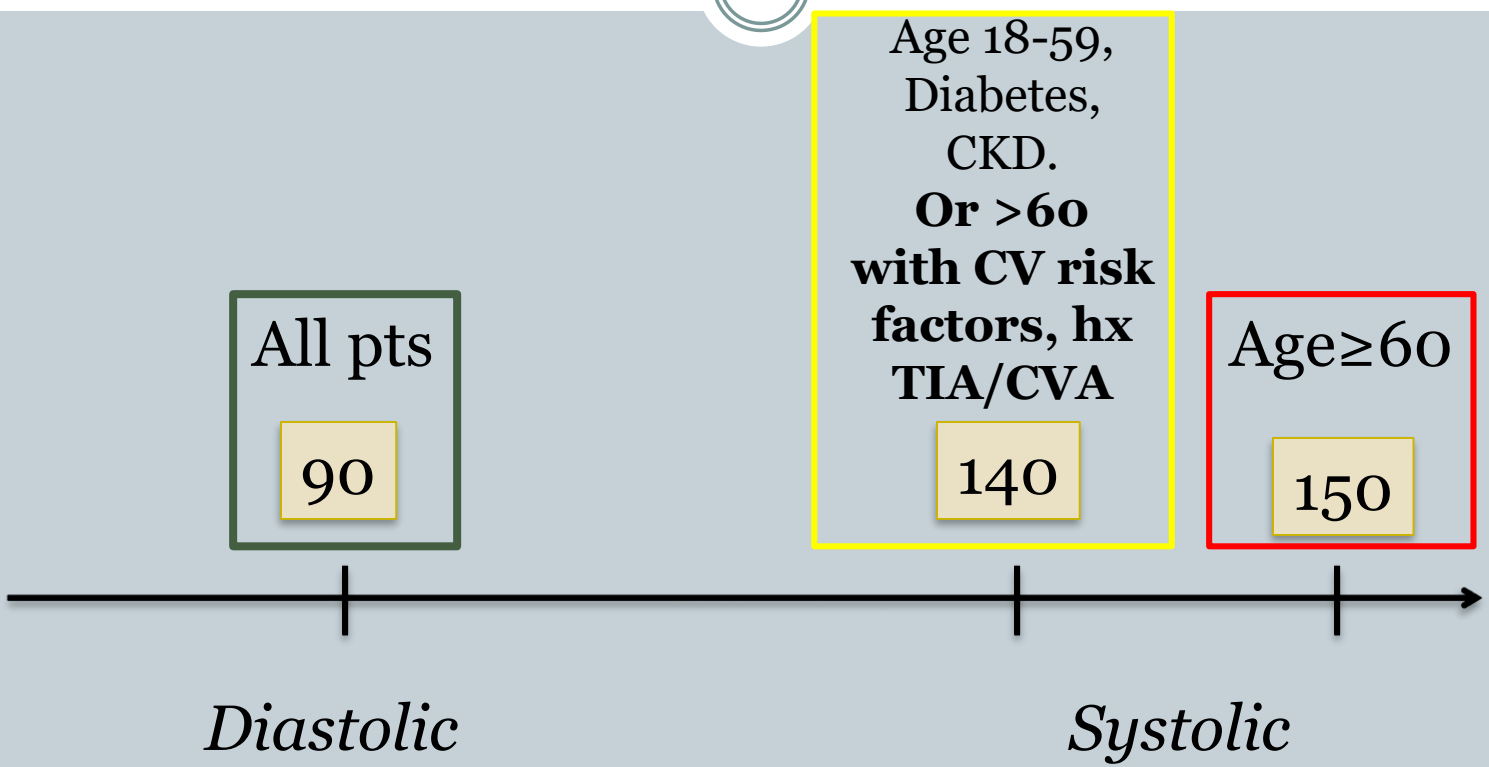
<u>Recs</u>

- Most pts: goal of 150 mm Hg
- CVA or TIA history: 140
- high CV risk: 140
- Not high quality evidence



Qaseem A, Wilt TJ, Rich R, et al, for the Clinical Guidelines Committee of the American College of Physicians and the Commission on Health of the Public and Science of the American Academy of Family Physicians. Pharmacologic treatment of hypertension in adults aged 60 years or older to higher versus lower blood pressure targets: a clinical practice guideline from the American College of Physicians and the American Academy of Family Physicians. Ann Intern Med 2017;166:430-437.

JNC8+ AAFP/ACP Guidline



2017 Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure

<u>covers</u>

prevention

detection

assessment

management

- expert panel reviewed >900 studies
- 481 pages, 106 recommendations, 23 tables, 11 figures

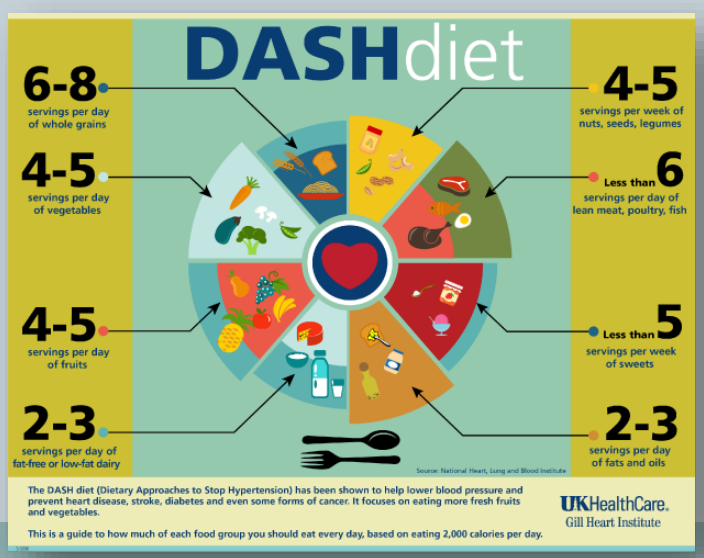
American Heart Association.

AMERICAN COLLEGE of CARDIOLOGY

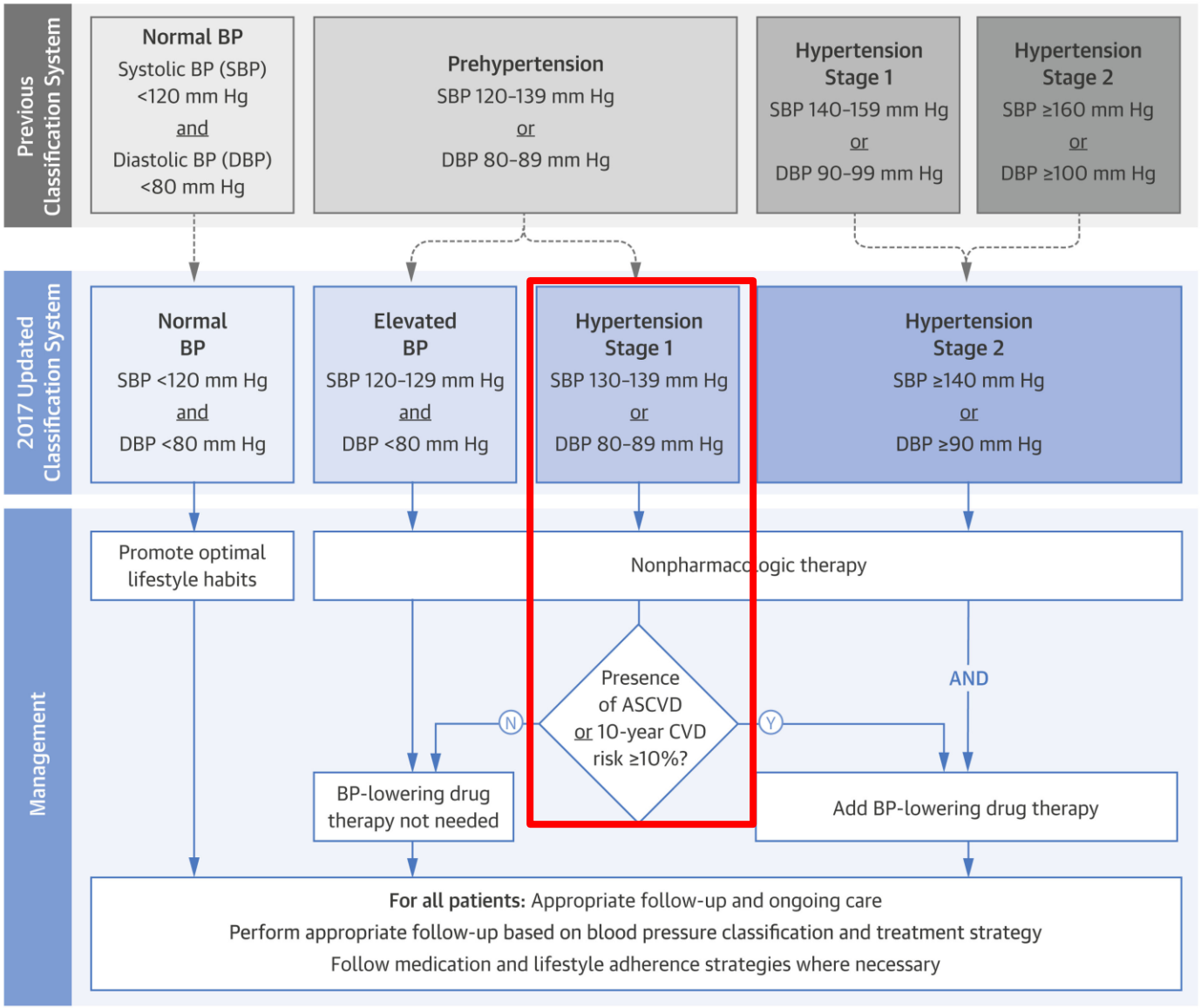
2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. J Am Coll Cardiol. 2017 Nov 7. pii: S0735-1097(17)41519-1.

Non pharmacologic interventions highlighted

- Weight loss
- Healthy diet (Mediterranean diet, DASH, low sodium, enhancing potassium intake)
- Increasing physical activity
- Moderation/abstinence of ETOH



CENTRAL ILLUSTRATION: 2017 Updated Classification and Management of High Blood Pressure in Adults



Whelton, P.K., et al. J Am Coll Cardiol. 10.1016/j.jacc.2017.11.006.

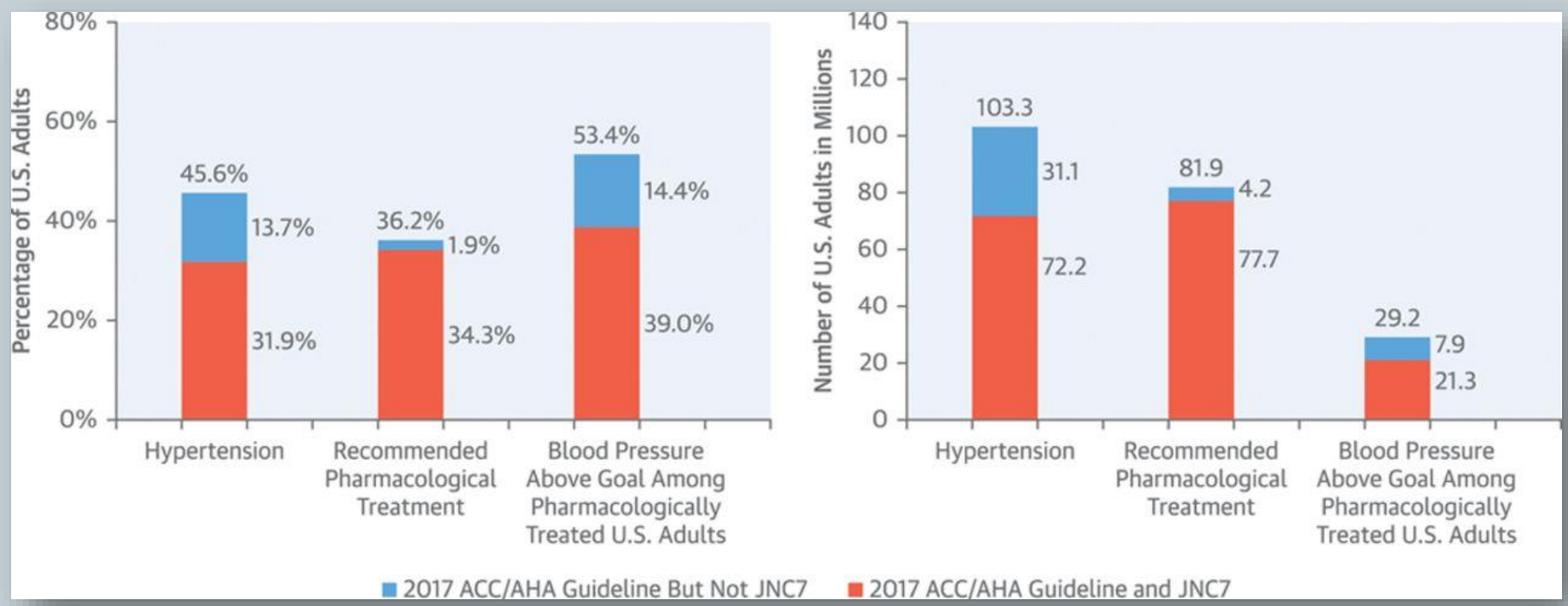
2017 Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults

BP Classification (JNC 7 and ACC/AHA Guidelines)

SBP		DBP	JNC 7	2017 ACC/AHA
<120	and	<80	Normal BP	Normal BP
120–129	and	<80	Prehypertension	Elevated BP
130–139	or	80–89	Prehypertension	Stage 1 hypertension
140–159	or	90-99	Stage 1 hypertension	Stage 2 hypertension
≥160	or	≥100	Stage 2 hypertension	Stage 2 hypertension

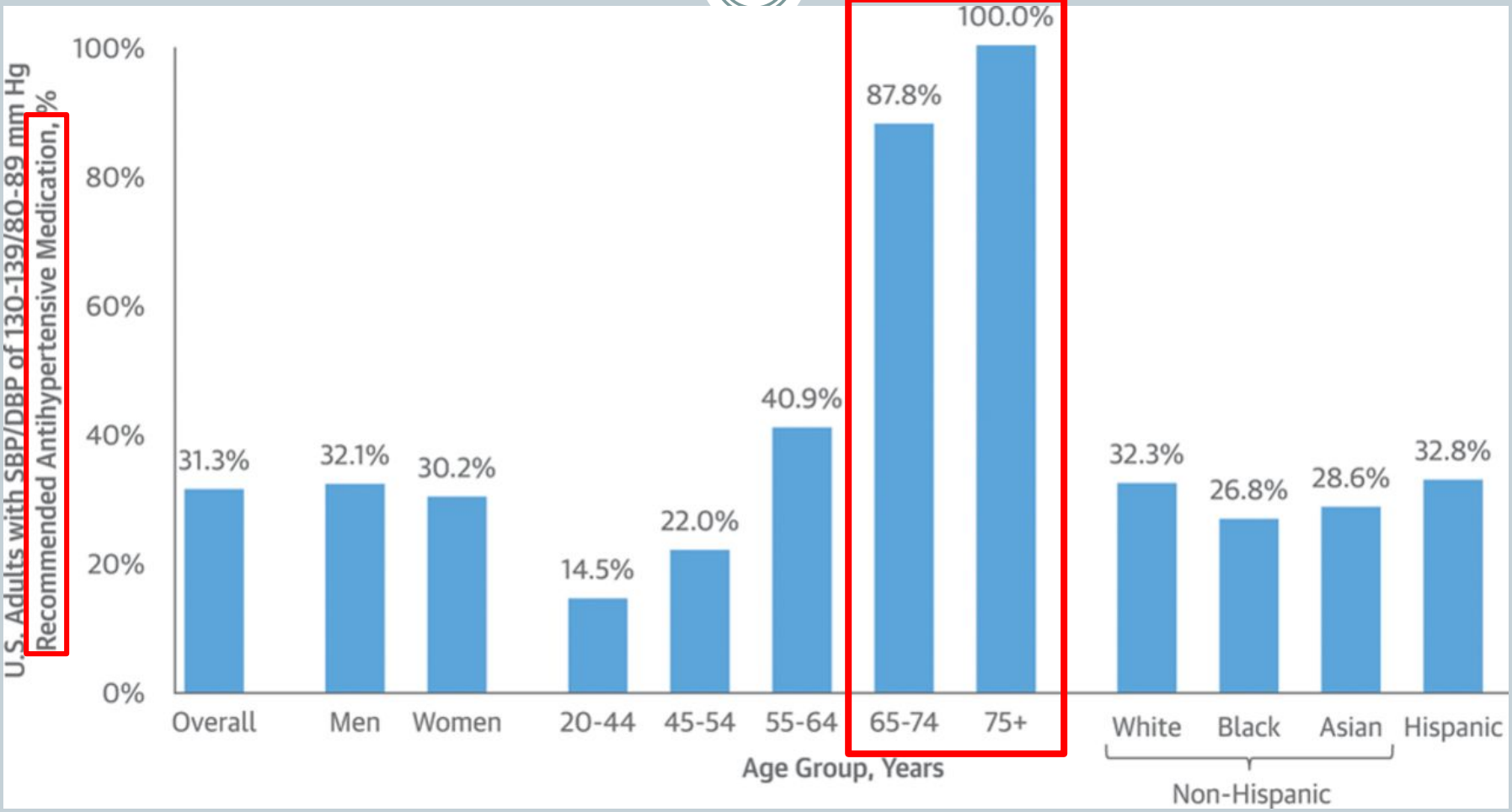
- Blood Pressure should be based on an average of ≥2 careful readings on ≥2 occasions
- Adults being treated with antihypertensive medication designated as having hypertension

Population Effects



Potential US Population Impact of the 2017 ACC/AHA High Blood Pressure Guideline. Paul Muntner, Robert M. Carey, Samuel Gidding, Daniel W. Jones, Sandra J. Taler, Jackson T. Wright and Paul K. Whelton. Circulation. 2018;137:109-118, originally published November 13, 2017

Percentage of US adults with SBP 130-139 mm Hg or DBP 80-89 mm Hg recommended for BP meds according to the 2017 ACC/AHA guideline



Potential US Population Impact of the 2017 ACC/AHA High Blood Pressure Guideline. Paul Muntner, Robert M. Carey, Samuel Gidding, Daniel W. Jones, Sandra J. Taler, Jackson T. Wright and Paul K. Whelton. Circulation. 2018;137:109-118, originally published November 13, 2017

AAFP NEWS

- AAFP Leader Voices Blog
- Fresh Perspectives Blog
- Spotlight on Student Specialty Choice
- Member Resources and Tools for 2018
- Focus on Physician Well-being
- MACRA Ready
- Health of the Public
- Practice & Professional Issues
- Government & Medicine
- Physician Education & Development
- As We See It: Voices From the AAFP
- News From 2017 COD and FMX
- Family Medicine for America's Health
- Inside the Academy
- About AAFP News
- In Memoriam
- News Archives

AAFP Decides to Not Endorse AHA/ACC Hypertension Guideline

Academy Continues to Endorse JNC8 Guideline

December 12, 2017 03:44 pm Chris Crawford – The AAFP has decided to not endorse the recent hypertension guideline from the American Heart Association (AHA), the American College of Cardiology (ACC) and nine other health professional organizations.

The AAFP wasn't involved in the development of the new guideline (hyper.ahajournals.org) and continues to endorse the 2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults. (jamanetwork.com) developed by panel members appointed to the Eighth Joint National Committee (JNC8).

David O'Gurek, M.D., chair of the AAFP's Commission on Health of the Public and Science (CHPS), which recommended non-endorsement of the AHA/ACC guideline, told *AAFP News* the commission used the same process and criteria to review both the AHA/ACC and JNC8 guidelines.

"Based on the methodology, applicability and consistency within the JNC8 guideline, the AAFP felt strongly that the JNC8 upheld the scientific rigor that provided strong recommendations to family physicians and patients on appropriate treatment of hypertension," O'Gurek said.

STORY HIGHLIGHTS

- The AAFP has decided to not endorse the recent hypertension guideline from the American Heart Association (AHA), the American College of

Published online Nov. 13 in the AHA's *Hypertension* journal, the new AHA/ACC guideline covers detection, prevention, management and treatment of high blood pressure (HBP). Specifically, it calls for HBP to be treated with lifestyle changes and with medication as needed beginning at 130/80 mm Hg rather than the previous commonly accepted threshold of 140/90 mm Hg.

According to the AHA, the new threshold would lead to 46 percent of the U.S.

AAFP

They like	They don't like
• highlighting importance of accurate BP assessment • emphasizing importance of home BP monitoring (with proper technique & validated devices)	• mostly **not** based on systematic review • harms not adequately considered • "intellectual conflicts of interest" • overly valued SPRINT • In systematic review: apparent small CV benefit, but not all-cause/CV mortality, MI

SPRINT Trial (2015)

- SPRINT: <140 vs <120 systolic comparison in non diabetics
  - 9361 **"high risk"** non diabetic patients
  - Nonfatal + fatal adverse CV events lower in <120 group
  - Some adverse events higher in <120 group
  - Mean # of BP meds: 1.8 in <140 systolic group, 2.8 in <120
  - BP measurements were done carefully…they let people sit and equilibrate, 3 readings averaged

Sprint Outcomes

- Reduction in all cause mortality
  - 3.3% vs 4.5%, NNT 83 over 3 years
- Reduction in CV mortality
  - 0.8% vs 1.4%, NNT 167 over 3.3 years
- Reduction in heart failure development
  - 1.3% vs 2.1%, NNT 125 over 3.3 years

The Sprint Research Group: N Engl J Med 2015; 373:2103-2116

The NEW ENGLAND JOURNAL of MEDICINE

Guideline Process: Broken Down?

- JNC8 process/controversies
- Perhaps focus on taking care of current population of hypertensives?
- How "evidence-based" is good enough? (e.g. RCTs)
- risks of GFR reduction?
- SPRINT: overvalued? correctly valued?

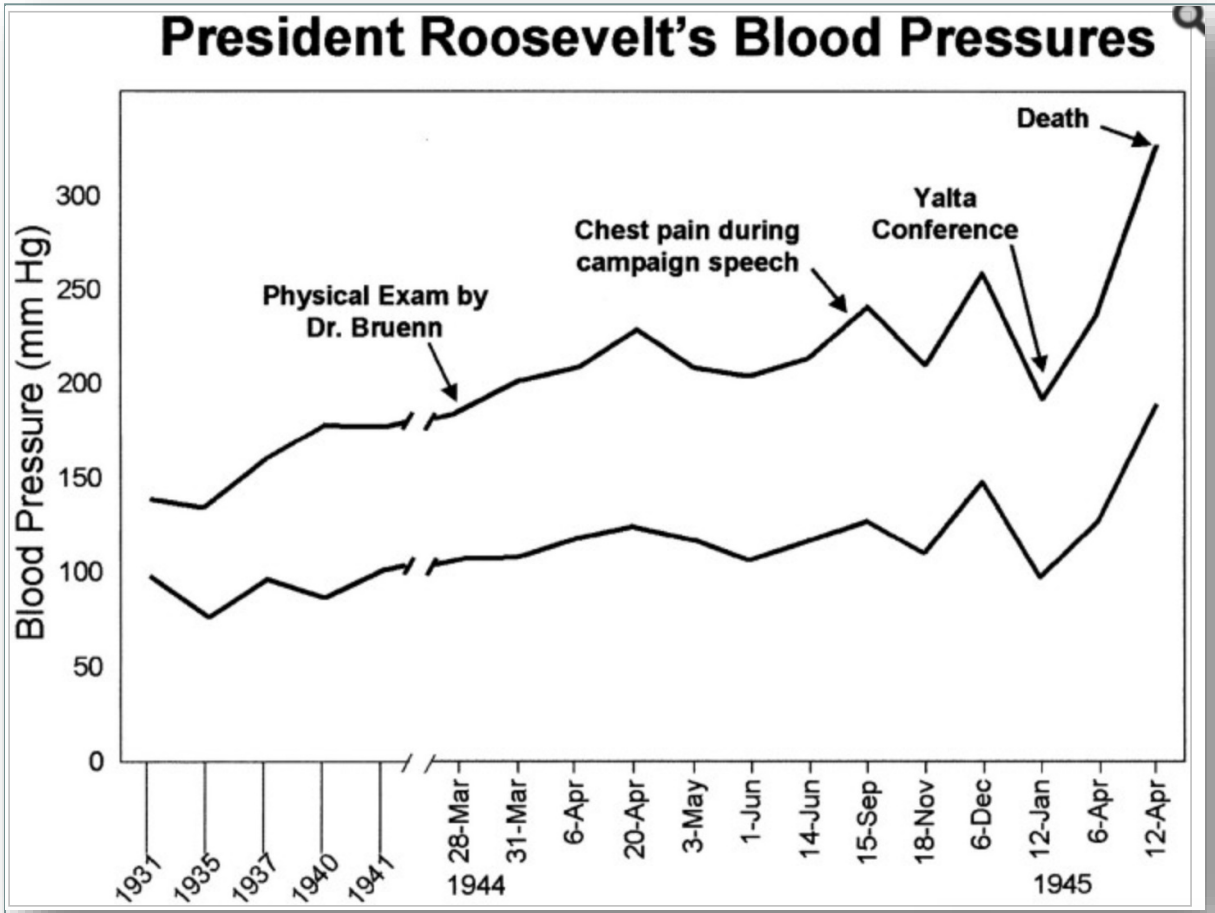
- *"… a worldwide shift from the treatment of individual patients to the treatment of patient populations. Such guidance for treating large groups is of great interest to governments and insurance companies but is less useful for making treatment decisions for individual patients with individual problems."*

What's a PCP to do?

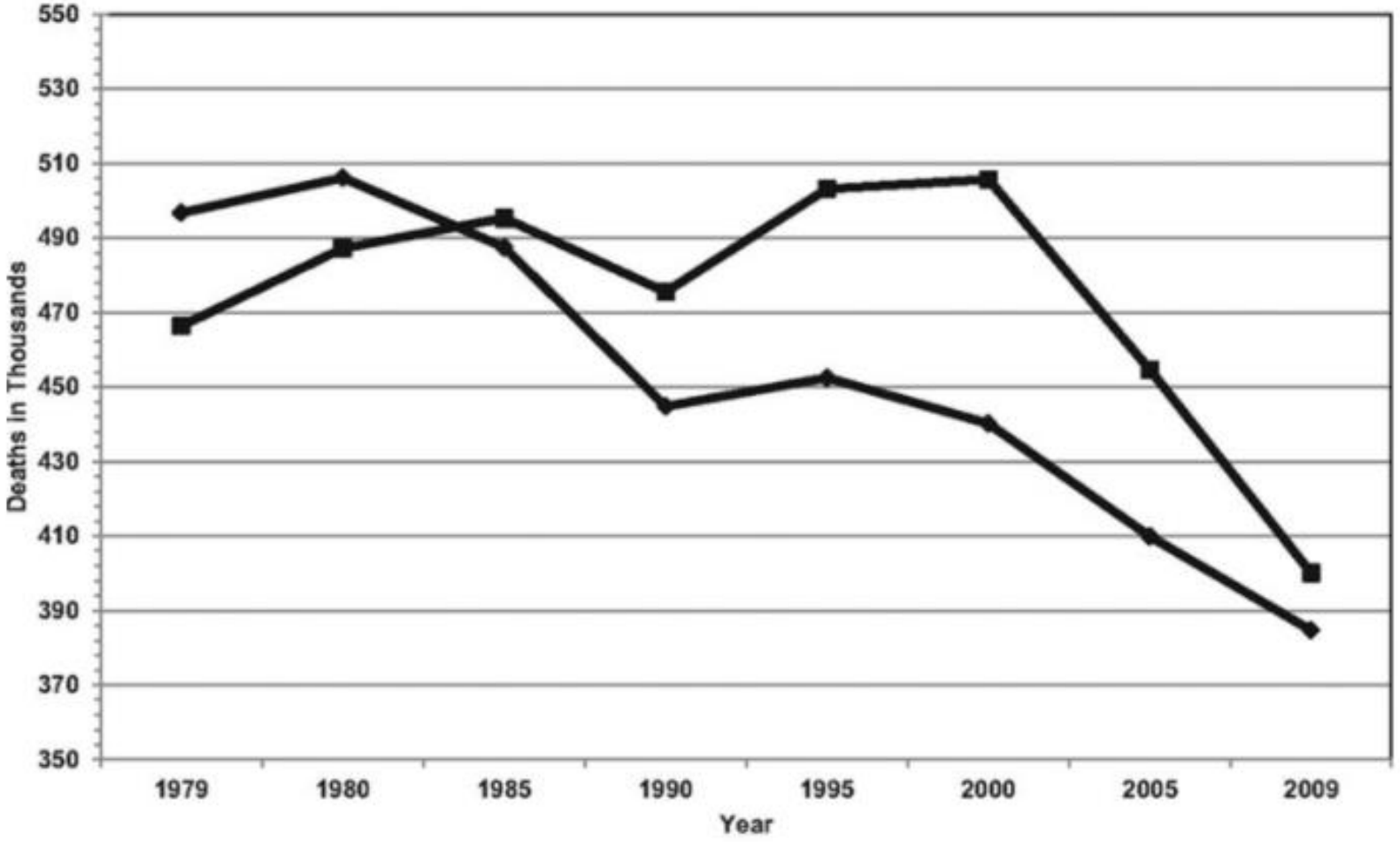
- AAFP: shared decision-making
- *"With competing guidelines and recommendations, family physicians, as bold champions of science, have an opportunity to be a guiding light in the darkness of confusion to deliver quality care that's grounded in science and is patient-centered."*

-David O'Gurek, M.D.

Chair of the AAFP's Commission on Health of the Public and Science


President Roosevelt's Blood Pressures
Blood Pressure (mm Hg)
300
250
200
150
100
50
0
Death
Yalta Conference
Chest pain during campaign speech
Physical Exam by Dr. Bruenn
1931
1935
1937
1940
1941
28-Mar
31-Mar
6-Apr
20-Apr
3-May
1-Jun
14-Jun
15-Sep
18-Nov
6-Dec
12-Jan
6-Apr
12-Apr
1944
1945

Cardiovascular disease mortality trends for males and females (United States: 1979–2009).



Go A S et al. Circulation 2013;127:e6-e245

Department of Food Science

American Heart Association
Learn and Live

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PPI's and Death

Association between proton pump inhibitor (PPI) use and risk of death

- longitudinal cohort study
  - N = 349,312
  - veterans
- risk of death when using PPIs vs: no medication or H2 receptor antagonists alone or in combo
- Results: PPI use associated with increased risk of death
- longer duration of PPI use: associated with progressive increase in risk of death

Xie Y, Bowe B, Li T, et al Risk of death among users of Proton Pump Inhibitors: a longitudinal observational cohort study of United States veterans BMJ Open 2017;7:e015735. doi: 10.1136/bmjopen-2016-015735

Association between proton pump inhibitor (PPI) use and risk of death

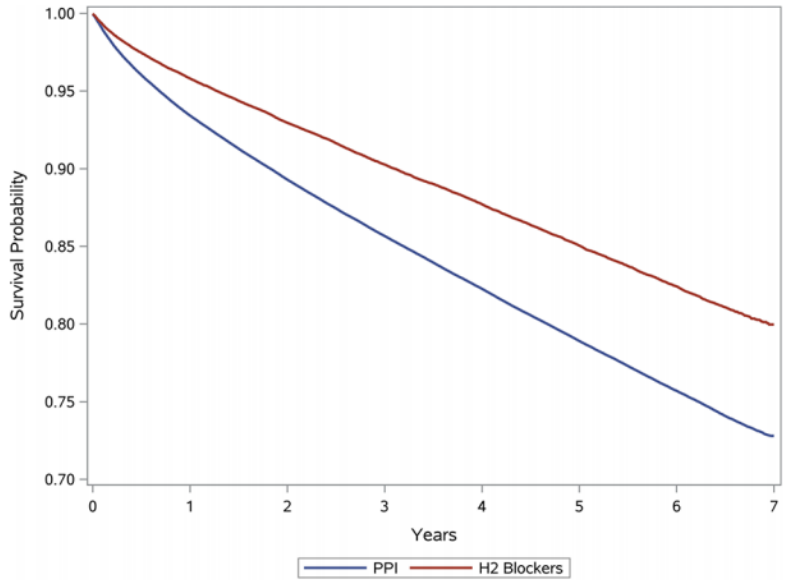


Figure 1 Survival curves for PPI and H2 blockers. PPI, proton pump inhibitor.

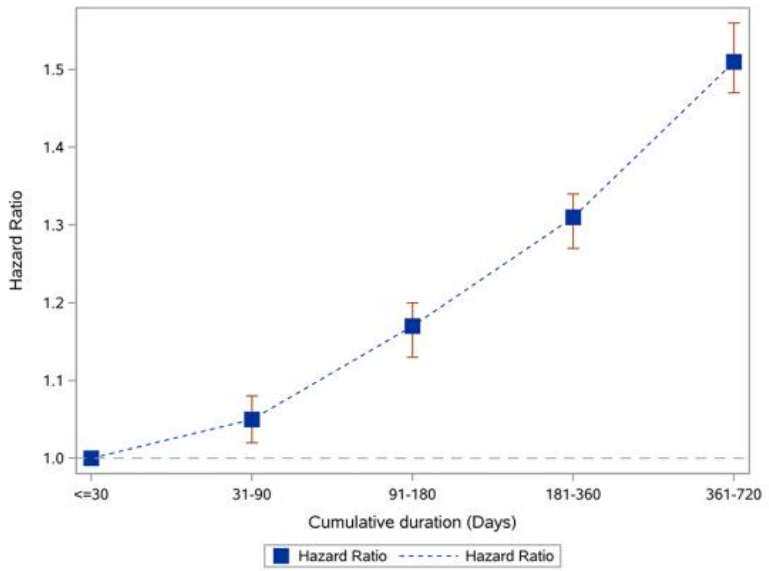
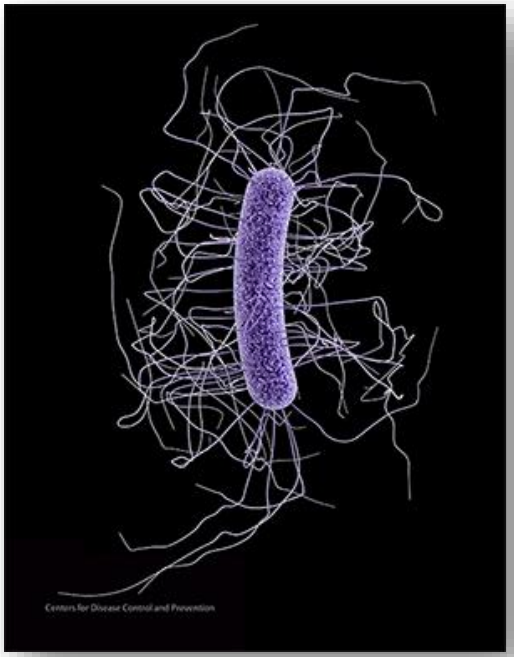


Figure 2 Duration of PPI exposure and risk of death among new PPI users (n=166 098). PPI, proton pump inhibitor.

BMJ

Xie Y, Bowe B, Li T, et al Risk of death among users of Proton Pump Inhibitors: a longitudinal observational cohort study of United States veterans BMJ Open 2017;7:e015735. doi: 10.1136/bmjopen-2016-015735

Probiotic Timing and C.Difficile Prevention



So far in probiotics and Cdiff: conflicting evidence

Favoring using probiotics to prevent C. difficile

- 2012 Annals of Internal Medicine meta-analysis
- 2013 Cochrane Review

Not Favoring

- 2013 Lancet: largest multi-centered RCT, patients >65 taking antibiotics. Results did not reach statistical significance
- Underpowered? (UK C.diff rates much lower…)

New study: **timing** makes a difference

Meta-analysis of 19 RCTs

- Hospitalized adult patients on abx given probiotics

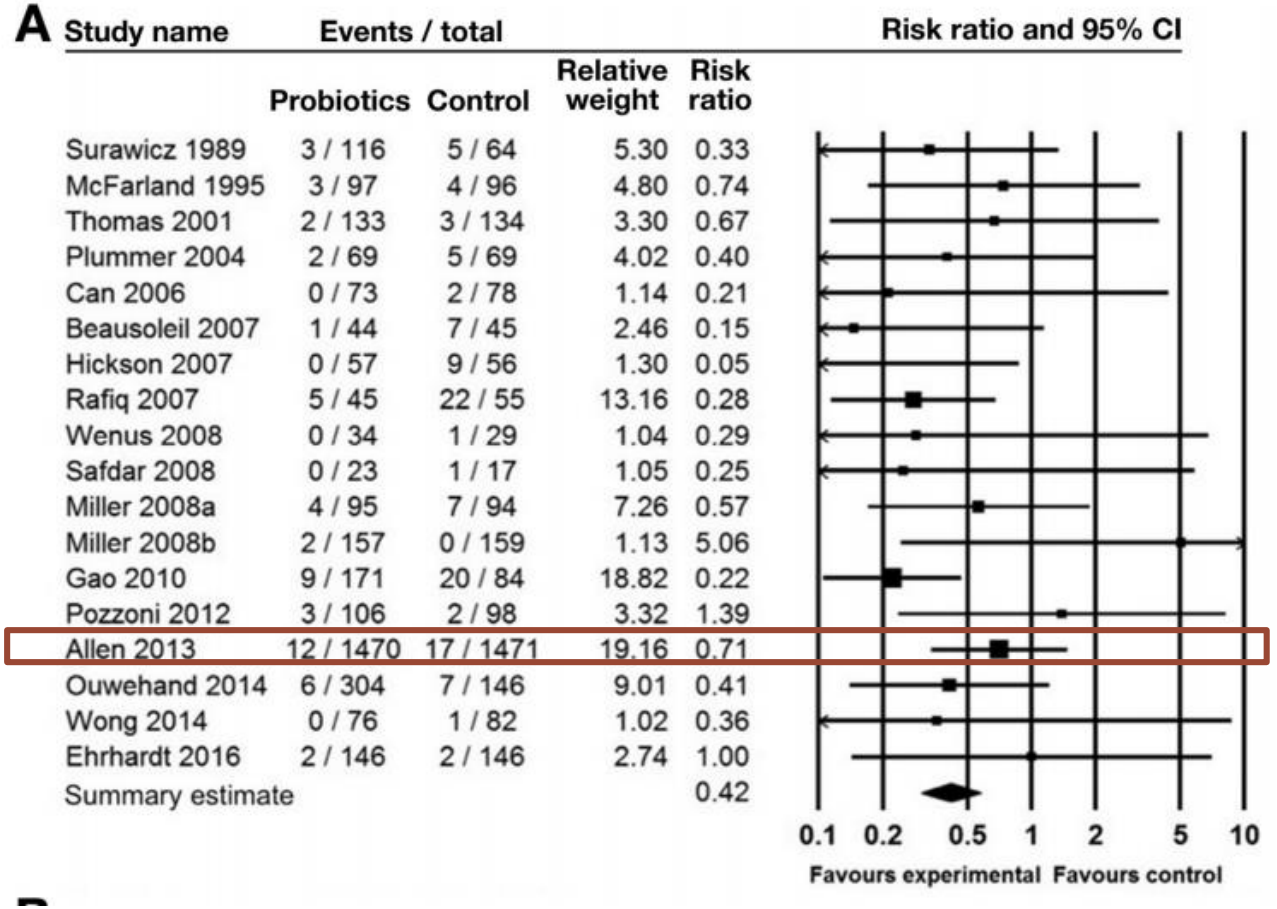
Results

- Rx: lower incidence of C. diff infection than controls (1.6% vs. 3.9%)
- Timing is key: more protective if started ≤2 days after patients' 1st abx dose. 18% decline in benefit for each day of delay after day 2
- **NNT: 43 hospitalized pts to prevent one case of C. diff**

Gastroenterology

Timely Use of Probiotics in Hospitalized Adults Prevents Clostridium difficile Infection: A Systematic Review With Meta-Regression Analysis. Gastroenterology. 2017 Jun;152(8):1889-1900.e9. doi: 10.1053/j.gastro.2017.02.003. Epub 2017 Feb 10.

Figure 2. (*A*) Meta-analysis of the RR of CDI in hospitalized adults taking antibiotics and probiotics (experimental) vs no probiotics (control). Cumulative meta-analysis (*B*) suggests evidence of probiotic efficacy in 2007 with greater precision gained by the additional 8 years and 10 trials. The study by Selinger et al[46] is not shown because no events occurred in either the probiotic or control cohort, so the risk ratio was not estimable.



C. Diff infection in controls: 3.9%
C. Diff infection in probiotic group: 1.6%

More on probiotics

- Type of probiotics? 12 different types used. Some better? Still ironing out (non significant differences)
- Authors rec: higher doses of Lactobacillus or Lactobacillus + another species, as drink or capsule (50 billion CFU)
- No increased risk of adverse events seen (zero cases of probiotic bacteremia or fungemia)
- Recs: use probiotics for high risk hospital pts getting abx
  - Older
  - longer courses of antibiotics
  - multiple antibiotics

Gastroenterology

Timely Use of Probiotics in Hospitalized Adults Prevents Clostridium difficile Infection: A Systematic Review With Meta-Regression Analysis. Gastroenterology. 2017 Jun;152(8):1889-1900.e9. doi: 10.1053/j.gastro.2017.02.003. Epub 2017 Feb 10.

Quicker Summaries

Rudeness and Team Performance

<u>39 NICU teams in a training/simulation workshop</u>

- Control (neutral comments)
- rudeness had negative consequences on diagnostic and intervention parameters as well as collaborative team processes
- *"Rudeness has robust, deleterious effects on the performance of medical teams"*

PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Rudeness and Medical Team Performance
Arieh Riskin, Amir Erez, Trevor A. Foulk, Kinneret S. Riskin-Geuz, Amitai Ziv, Rina Sela, Liat Pessach-Gelblum, Peter A. Bamberger Pediatrics Jan 2017, e20162305; DOI: 10.1542/peds.2016-230

COPD and O2

Supplemental O2: doesn't help pts with COPD and **moderate** resting desaturations

- resting 89-92%
- or 80-89% during walking test

Outcomes looked at: rates of death, hospitalization, quality of life assessments, lung function, distance walked in 6 mins

The NEW ENGLAND JOURNAL of MEDICINE

The Long-Term Oxygen Treatment Trial Research Group.A randomized trial of long-term oxygen for COPD with moderate desaturation. N Engl J Med 2016 Oct 27; 375:1617. (http://dx.doi.org/10.1056/NEJMoa1604344)

Chronic Cough

Q: When evaluating chronic cough- can a therapeutic trial of PPI help if the patient has GERD?

A: Probably not. The main trigger of the cough in GERD isn't the pH

Take home: address other causes of GERD if suspicious of GERD in pt with chronic cough

Gut

Herregods TV, et al. Determinants of reflux-induced chronic cough. Gut. March 15th, 2017

Treating sore throats?

<u>Meta-analysis</u>

Single dose dexamethasone (.6mk/kg for kids >5, 10mg for adults)

- Onset of pain relief 7.4hrs vs 12.3 hrs
- >2x as many patients reporting complete resolution at 24 hours

<u>no difference in</u>:

- days missed from school or work
- adverse effect rates between groups

Decreased abx use trend?

BMJ

Sadeghirad B, Siemieniuk RAC, Brignardello-Petersen R, et al. Corticosteroids for treatment of sore throat: systematic review and meta-analysis of randomised trials. BMJ 2017;Sep 20;358:j3887.

E-cigs

Adolescents who used e-cigarettes had ~2x risk of chronic bronchitis vs nonusers.

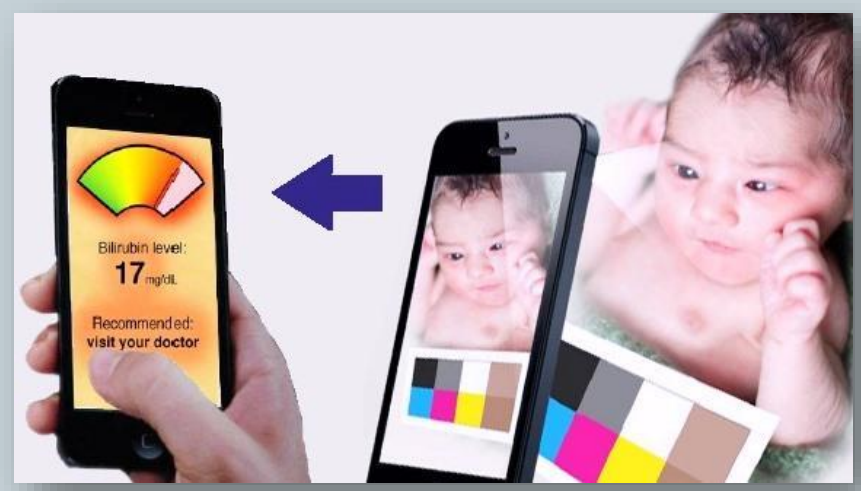
No association between e-cigarette use and wheezing

McConnell R, Barrington-Trimis JL, Wang K, et al. Electronic cigarette use and respiratory symptoms in adolescents. Am J Respir Crit Care Med 2017;195(8):1043-1049.

Newborn jaundice game changer?

BiliCam App (prelim study). 530 infants with variety of skin tones.

- Sensitivity 84.6% for identifying infants with a TSB in “high-risk zone”
- 100% sensitivity for identifying TSB > 17 mg/dL



Taylor JA, Stout JW, de Greef L, et al. Use of a smartphone app to assess neonatal jaundice. Pediatrics 2017;140(3):e20170312.

Type 2 DM: home testing

RCT of 450 pts, average age 61

Home glucose monitoring **if not on insulin** does not improve:

- A1c scores
- Hospitalization rates
- "quality of life" over 1 year
- Sense of pt satisfaction/empowerment
- Amount of hypoglycemic episodes
- Physician perception of benefit

Young LA, Buse JB, Weaver MA, et al, for the Monitor Trial Group. Glucose self-monitoring in non-insulin-treated patients with type 2 diabetes in primary care settings. A randomized trial. JAMA Intern Med 2017;177(7):920-929.

Prediabetes (A1C 5.7-6.4) and metformin use

Consensus recs: consider metformin in pts with prediabetes <60 years old and/or BMI>35, hx gestational DM or persistent elevated HbA1c despite lifestyle changes

Only 0.7% of people with prediabetes are treated with metformin

<u>estimated cumulative incidence of diabetes at 3 years</u>
(p < 0.001 for each comparison)
28.9% with placebo
21.7% with metformin (NNT 14, 95% CI 9-34)
14.4% with intensive lifestyle modification (NNT 7, 95% CI 6-10)

Metformin Use in Prediabetes Among U.S. Adults, 2005–2012. Eva Tseng, Hsin-Chieh Yeh, Nisa M. Maruthur. Diabetes Care Jul 2017, 40 (7) 887-893; DOI: 10.2337/dc16-1509

Vanc/Zosyn & AKI

11,650 hospitalized pts (AKI rates)

- Vanc alone: 8.3%
- Zosyn 7.8%
- Vanc/zosyn combo: 21%

Duration of abx, LOS, increased severity of illness, baseline renal function also independently associated with AKI rates

Rutter WC et al. Acute kidney injury in patients treated with vancomycin and piperacillin-tazobactam: A retrospective cohort analysis. J Hosp Med 2017 Feb; 12:77.

Hospital Outcomes and PCPs

Retrospective study of Medicare pts
(560k admissions in 2013) PCPs/hospitalists/"other generalists"

Table 2. Unadjusted and Adjusted Care Patterns and Patient Outcomes by Physician Type[a]

	Summary Statistics by Physician Type[b]			Regression Result by Physician Type (95% CI)		
Pattern or Outcome	Hospitalists	Patients' PCPs	Other Generalists	Hospitalists	Patients' PCPs	Other Generalists
No. of inpatient consultations per admission, median (IQR)	1 (1-2)	1 (1-2)	1 (1-2)	1 [Reference]	RR, 1.03 (1.02-1.05)	RR, 1.06 (1.05-1.07)
P value	NA	NA	NA	NA	<.001	<.001
Length of stay, median (IQR), d	5 (3-7)	5 (4-7)	5 (3-7)	1 [Reference]	IRR, 1.12 (1.11-1.13)	IRR, 1.06 (1.05-1.07)
P value	NA	NA	NA	NA	<.001	<.001
Discharge home vs to nursing home or other long-term care facility, %	64.0	68.5	62.1	1 [Reference]	AOR, 1.14 (1.11-1.17)	AOR, 0.94 (0.92-0.96)
P value	NA	NA	NA	NA	<.001	<.001
Readmission at 7 d, %	11.6	11.1	12.0	1 [Reference]	AOR, 0.98 (0.96-1.01)	AOR, 1.05 (1.02-1.07)
P value	NA	NA	NA	NA	.31	<.001
Readmission at 30 d, %	23.0	23.0	24.3	1 [Reference]	AOR, 1.02 (0.99-1.04)	AOR, 1.04 (1.03-1.06)
P value	NA	NA	NA	NA	.17	<.001
Mortality at 30 d, %	10.8	8.6	11.0	1 [Reference]	AOR, 0.94 (0.91-0.97)	AOR, 1.09 (1.07-1.12)
P value	NA	NA	NA	NA	<.001	<.001

Abbreviations: AOR, adjusted odds ratio; IQR, interquartile range; IRR, incidence rate ratio; NA, not applicable; PCPs, primary care physicians; RR, relative risk.

[a] Full models for adjusted analyses are available in eTables 2 to 7 in the

[b] For test of differences, $P < .001$ for all comparisons.

Stevens JP, Nyweide DJ, Maresh S, Hatfield LA, Howell MD, Landon BE. Comparison of Hospital Resource Use and Outcomes Among Hospitalists, Primary Care Physicians, and Other Generalists. JAMA Intern Med. 2017;177(12):1781–1787. doi:10.1001/jamainternmed.2017.5824

Intra-articular corticosteroids and knee OA

<u>Govt funded RCT (140 adults)</u>

40mg triamcinolone vs saline injection (US guided) **q3 months for 2 years**

- Pain & function scores didn't differ significantly
- Cartilage loss and damage on MRI: worse in steroid group (potential harm)
- No adverse events
- Should we reconsider these injections?

JAMA®
The Journal of the American Medical Association

McAlindon TE, LaValley MP, Harvey WF, et al. Effect of intra-articular triamcinolone vs saline on knee cartilage volume and pain in patients with knee osteoarthritis: a randomized clinical trial. JAMA. 2017;317(19):1967–1975.

2 more years for Nexplanon and Mirena?

Most effective reversible contraceptives: etonogestrel subdermal implant (Nexplanon) and 52-mg levonorgestrel intrauterine device (Mirena). FDA approved 3/5 years

Manufacturer-supported observational study

291 women at 3/5 years of use, studied for 2 more years

- no pregnancies in the Nexplanon group
- two pregnancies in the Mirena group.
  - calculated failure rate in year 6: 0.25 per 100 women-years (95% CI, 0.04–1.42)
  - Calculated failure rate year 7: 0.43 per 100 women-years (95% CI, 0.08–2.39)

McNicholas C et al. Prolonged use of the etonogestrel implant and levonorgestrel intrauterine device — two years beyond FDA-approved duration. Am J Obstet Gynecol 2017 Jan 29

High false-positive rate with lung CA screening

8 academic medical centers, 93k primary care patients
4246 identified for study, 2016 screened (96% men)

- 59.7% had a positive finding (1257)
- 56.2% had 1 or more nodule that needed to be followed (1184)
- 3.5% had findings suspicious for cancer (73)
- 1.5% had cancer diagnosis confirmed within the year (31)

Adults Aged 55-80, with a History of Smoking	The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.	B

Kinsinger LS, Anderson C, Kim J, et al. Implementation of lung cancer screening in the Veterans Health Administration. JAMA Intern Med 2017;177(3):399-406.

And finally…

HEALTH INSURANCE & HEALTH OUTCOMES

Does Health Insurance Save Lives? /June 26, 2017

by F. Perry Wilson

No, Obamacare Has Not Saved American Lives

208,500 additional deaths could occur by 2026 under the Senate health plan

Analysts who say health insurance doesn't affect mortality are wrong.

Trumpcare Will Kill People. Why Is That So Hard to Accept?

Is having Medicaid better than being uninsured?

- Large studies in early 2000's: decrease in mortality over 5 years with Medicaid expansion in states (observational)
- Oregon Health Study ("gold standard")
  - quasi RCT (Medicaid Lottery)
  - 10k people over 1 year
  - Some surprising findings, including 25% increased utilization
  - Some areas without clear statistical differences: BP, HbA1C, cholesterol
  - Mortality: 16% reduction (trend but **not significant**. Underpowered?)

More Oregon data

- 35% more likely to go to a clinic or see a doctor
- 15% more likely to use prescription drugs
- 30% more likely to be admitted to a hospital (8.8% vs 6.7%)
- unable to detect a change in ER use
- Women with insurance:
  - 60% more likely to have mammograms (49% vs 30%)
  - more likely to have their cholesterol checked
  - More likely to go to the same clinic/provider

NEJM summary of recent evidence

Atul Gawande, Benjamin Sommers, Katherine Baicker

- Mortality estimates of Medicaid expansion coming more into view. Estimates one life saved for ~every 239 to 316 adults gaining coverage

The NEW ENGLAND JOURNAL of MEDICINE

Health Insurance Coverage and Health — What the Recent Evidence Tells Us. Benjamin D. Sommers, M.D., Ph.D., Atul A. Gawande, M.D., M.P.H., and Katherine Baicker, Ph.D. N Engl J Med 2017; 377:586-593August 10, 2017DOI: 10.1056/NEJMsb1706645

Table 1. Evidence on the Effects of Health Insurance on Health Care and Health Outcomes, 2007–2017.

Domain and Findings	Insurance or Policy Examined*	Studies
Financial security		
Reduction in medical bills sent to collection and in catastrophic medical spending	Medicaid	Baicker et al. 2013[4]; Hu et al. 2016[5]
Reduced out-of-pocket medical spending	DCP, Medicaid	Chua and Sommers 2014[6]; Baicker et al. 2013[4]
Reduced personal bankruptcies and improved credit scores	MA	Mazumder and Miller 2016[7]
Access to care and utilization		
Increased outpatient utilization and rates of having a usual source of care/personal physician	Medicaid, MA	Finkelstein et al. 2012[8]; Sommers et al. 2014[9]; Simon et al. 2017[10]
Increased preventive visits and some preventive services including cancer screening and lab tests	Medicaid, MA	Baicker et al. 2013[4]; Sommers et al. 2014 and 2016[9,11]; Simon et al. 2017[10]
Increased prescription drug utilization and adherence	Medicaid	Ghosh et al. 2017[12]; Sommers et al. 2016[11]
Mixed evidence on emergency department use, with some studies showing an increase and others a decrease	Medicaid, DCP, MA	Taubman et al. 2014[13]; Akosa Antwi et al. 2015[14]; Miller 2012[15]; Sommers et al. 2016[11]
Improved access to surgical care	DCP, MA	Scott et al. 2016[16]; Loehrer et al. 2016[17]
Chronic disease care and outcomes		
Increased rates of diagnosing chronic conditions	Medicaid	Baicker et al. 2013[4]; Wherry and Miller 2016[18]
Increased treatment for chronic conditions	Medicaid	Baicker et al. 2013[4]; Sommers et al. 2017[19]
Improved depression outcomes	Medicaid	Baicker et al. 2013[4]
No significant change in blood pressure, cholesterol, or glycated hemoglobin	Medicaid	Baicker et al. 2013[4]
Mixed evidence on cancer stage at time of diagnosis	MA, DCP	Keating et al. 2013[20]; Robbins et al. 2015[21]; Loehrer et al. 2016[17]

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Well-being and self-reported health		
Improved self-reported health in most studies	Medicaid, MA, DCP, ACA	Baicker et al. 2013[4]; Sommers et al. 2012[22]; Van Der Wees et al. 2013[23]; Chua and Sommers 2014[6]; Sommers et al. 2015[24]; Simon et al. 2017[10]; Sommers et al. 2017[19]
Some ACA-specific studies have shown limited or nonsignificant changes	Medicaid, ACA	Courtemanche et al. 2017[25]; Miller and Wherry 2017[26]
Mortality		
Conflicting observational studies on whether lack of insurance is an independent predictor of mortality	Private insurance	Kronick 2009[27]; Wilper et al. 2009[28]
Highly imprecise estimates in randomized trial, unable to rule out large mortality increases or decreases	Medicaid	Finkelstein et al. 2012[8]
Significant reductions in mortality in quasi-experimental analyses, particularly for health care–amenable causes of death	Medicaid, MA	Sommers et al. 2012[22]; Sommers et al. 2014[9]; Sommers 2017[29]

* "Medicaid" includes pre-ACA expansions of Medicaid in selected states and the ACA's 2014 Medicaid expansion. ACA denotes Affordable Care Act (specifically applies here to the 2014 coverage expansions including Medicaid and subsidized marketplace coverage), DCP dependent-coverage provision (the ACA policy enacted in 2010 that allows young adults to remain on their parents' plan until the age of 26 years), and MA Massachusetts statewide health care reform (enacted 2006).

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"The body of evidence summarized here indicates that coverage expansions significantly increase patients' access to care and use of preventive care, primary care, chronic illness treatment, medications, and surgery."

"There remain many unanswered questions about U.S. health insurance policy, including how to best structure coverage to maximize health and value and how much public spending we want to devote to subsidizing coverage for people who cannot afford it. But whether enrollees benefit from that coverage is not one of the unanswered questions."

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How to Stay Current?

Some ideas

- Journal Watch
- Numerous high quality free podcasts and websites
- Essential Evidence (free podcast “POEM of the Week”)
- wikijournalclub.org
- Numerous high quality free podcasts
- Run your own clinic “journal club”

THANKS!