Addressing Multimorbidity in Clinical Practice Guidelines: Learnings Relevant to Deprescribing

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Disclosure: Co-Author Chapter on Multimorbidity in UptoDate

Lesson #1

- Tell story in ways that speak to the broadest audience possible, including older adults and their families, generalists, specialists, policy makers
- We all take care of these patients

“Treating an Illness Is One Thing. What About a Patient With Many?”

New York Times, March 31, 2009

Image: Brendan Smialowski for the New York Times

It's Not Easy Living with Multiple Chronic Conditions

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Time	Medications	Non-pharmacologic Therapy	All Day	Periodic
7 AM	Ipratropium MDI Alendronate 70mg weekly	Check feet Sit upright 30 min. Check blood sugar	Joint protection Energy conservation Exercise (non-weight bearing if severe foot disease, weight bearing for osteoporosis) Muscle strengthening exercises, Aerobic Exercise ROM exercises Avoid environmental exposures that might exacerbate COPD Wear appropriate footwear Albuterol MDI prn Limit Alcohol Maintain normal body weight	Pneumonia vaccine, Yearly influenza vaccine All provider visits:Evaluate Self-monitoring blood glucose, foot exam and BP Quarterly HbA1c, biannual LFTs Yearly creatinine, electrolytes, microalbuminuria, cholesterol Referrals: Pulmonary rehabilitation Physical Therapy DEXA scan every 2 years Yearly eye exam Medical nutrition therapy Patient Education: High-risk foot conditions, foot care, foot wear Osteoarthritis COPD medication and delivery system training Diabetes Mellitus
8 AM	Eat Breakfast HCTZ 12.5 mg Lisinopril 40mg Glyburide 10 mg ECASA 81 mg Metformin 850mg Naproxen 250mg Omeprazole 20mg Calcium + Vit D 500mg	2.4gm Na, 90mm K, Adequate Mg, ↓ cholesterol & saturated fat, medical nutrition therapy for diabetes, DASH		
12 PM	Eat Lunch Ipratropium MDI Calcium+ Vit D 500 mg	Diet as above		
5 PM	Eat Dinner	Diet as above		
7 PM	Ipratropium MDI Metformin 850mg Naproxen 250mg Calcium 500mg Lovastatin 40mg			
11 PM	Ipratropium MDI			

Boyd et al. JAMA 2005;294:716-724

How Applicable are Clinical Practice Guidelines (CPGs) for People with Multiple Chronic Conditions?

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- Reviewed 9 CPGs for chronic conditions
- Most single disease CPGs fail to give adequate guidance for older patients with multiple chronic conditions

Issue	Is Criteria Addressed?
Attention	Limited
Quality of Evidence	Limited
Specific recommendations	Most address treatment of index disease in presence of single other conditions
Time needed to treat	Limited
Quality of life	Limited
Trade-offs in goals of therapy	Not at all
Patient preferences	Limited
Burden	Limited

Boyd et al. JAMA 2005;294:716-724

Multiple Chronic Conditions is Common

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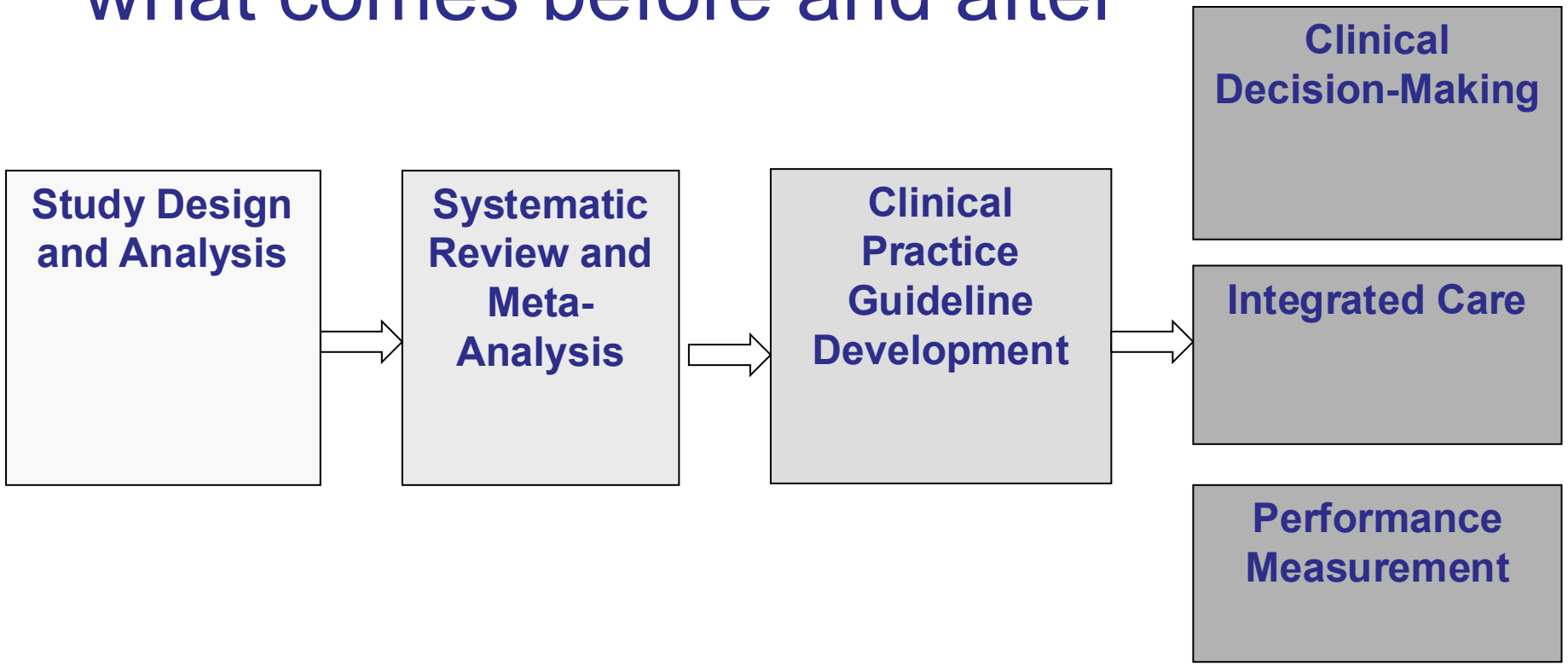
Percentage of Major Chronic Disease in Isolation Among Women Aged 65 or Older: NHANES, 1999-2004

	Arthritis	Coronary Heart Disease	Chronic Lower Respiratory Tract Disease	Diabetes	Stroke
% with only 1 disease of 5 possible diseases	47%	17%	19%	17%	15%

Weiss CO et al. JAMA 2007;298:1160-1162

Lesson #2: Guidelines can't be isolated from what comes before and after



How can we better address people with multiple chronic conditions across translational path?

AHRQ, EPC Methods, NIH CTSA, NQF via HHS, NIA

EDITORIAL AND COMMENT

Evidence-Based Medicine and the Hard Problem of Multimorbidity

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Special Symposium: Multimorbidity

Multimorbidity and Evidence Generation

Carlos O. Weiss, MD[1,2], Ravi Varadhan, PhD[2,3,4], Milo A. Puhan, MD, PhD[5], Andrew Vickers, PhD[6], Karen Bandeen-Roche, PhD, MS[3,4], Cynthia M. Boyd, MD, MPH[2], and David M. Kent, MD, CM, MSc[7]

Addressing Multimorbidity in Evidence Integration and Synthesis

Thomas A. Trikalinos, MD[1], Jodi B. Segal, MD, MPH[2], and Cynthia M. Boyd, MD, MPH[2]

[1]Center for Evidence-based Medicine, and Department of Health Services, Policy & Practice, School of Public Health, Brown University, Providence, RI, USA; [2]Department of Medicine, School of Medicine, Johns Hopkins University, Providence, RI, USA.

A Framework for Crafting Clinical Practice Guidelines that are Relevant to the Care and Management of People with Multimorbidity

Katrin Uhlig, MS, MD[1], Bruce Leff, MD[2,4], David Kent, MD, Cm, MSc[3], Sydney Dy, MD, MSc[4], Klara Brunnhuber, MD[5], Jako S. Burgers, MD, PhD[6], Sheldon Greenfield, MD[7], Gordon Guyatt, MD, MSc[8], Kevin High, MD[9], Rosanne Leipzig, MD, PhD[10], Cynthia Mulrow, MD, MSc[11], Kenneth Schmader, MD[12], Holger Schunemann, MD, MSc, PhD[8], Louise C. Walter, MD[13], James Woodcock, PhD, MSc, BA(Hons)[14], and Cynthia M. Boyd, MD, MPH[2,4]

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Steps of Guideline Development

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1 and 2: Choosing Topics

3: Commissioning Work Group and Process

4 and 5: Refining Questions, Choosing and Ranking Important Outcomes

6: Systematic Reviews

7 and 8: Grading quality of evidence and applicability

9. Summarizing benefits and harms

10. Formulating recommendations and Grading Strength

11. Implementation/evaluation

(GRADE, NICE, USPSTF, IOM)

Lesson #3

- Details matter.
- Keeping patients, and their experiences and outcomes, at the center is the energizing force.

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(GRADE, NICE, USPSTF, IOM)

Commissioning Work Group

- Inclusion of generalists and expertise in specific patient groups
- Inclusion of views or values of patients and care partner representatives

Steps of Guideline Development

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Addressing Comorbidities in Guideline Questions

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Population: Define conditions of interest

Intervention and Comparators:

effect modification

Outcomes:

choice & ranking of relevant outcomes

harms, burdens, benefits

non-disease specific and disease specific

linkage btw surrogate & clinical outcomes

Timeframe for considering outcomes:

risk prediction

tradeoffs

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Deprescribing

De-implementation

Groups

Individual patients

How to judge evidence for need for and rate of tapering

Adverse Drug Events
Adverse Drug Withdrawal Events

Patient Reported and Important Outcomes

Support clinicians in moving from a once indicated drug to a no longer recommended drug for them. (e.g. when and how to try to deprescribe antidepressants)

Evidence for not starting may not be same as evidence for stopping something you are already on.

References

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