

The Best of Primary Care Research from NAPCRG 2016

**The five research studies that will impact
clinical practice for family physicians**

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Faculty/Presenter Disclosure

- **Faculty: Dr. David M. Kaplan**
- **Relationships with commercial interests:**
 - **Grants/Research Support: Nil**
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 - **Consulting Fees: Right Health**

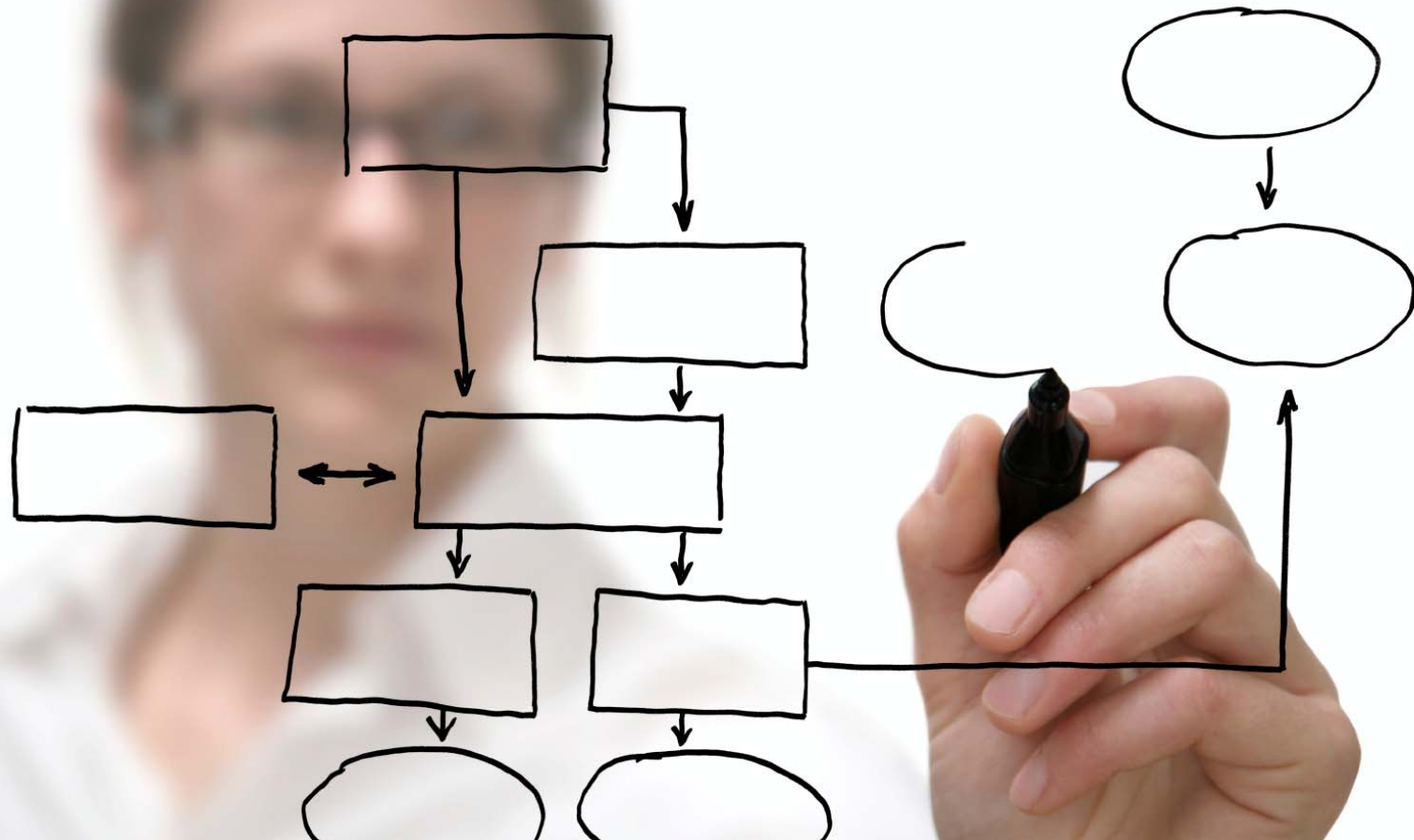
Disclosure of Commercial Support

- This program has not received financial support or in-kind support
- Potential for conflict(s) of interest:
 - None

Mitigating Potential Bias

- The information presented in this presentation was created by the authors of the studies

The 2016 NAPCRG Pearl Process



NAPCRG 2016 – Pearl 1

Did Introduction of Medical Homes With Mandatory After-Hours Provision Reduce Emergency Department Utilization

Tara Kiran, MD; Rahim Moineddin, PhD; Alex Kopp;
Eliot Frymire, MA, BEd; Richard H. Glazier, MD, MPH

The Research Question

- Did the introduction of medical homes with mandatory after-hours provision reduce emergency department use?

Why this is important?

- Addition of resources to primary care should increase patient access

What the Researchers Did

- A retrospective cohort study using linked administrative data between April 1, 2003 and March 31, 2014
- Included all Ontarians age 19+ who transitioned to a medical home anytime during the study period and had a minimum of 3 years data before and after transition
- Segmented linear regression using patient-level data. Age, income quintile, co-morbidity, and morbidity were time-varying co-variates

What the Researchers Found

- Among 4.4 million adults who enrolled in a medical home between 2003 and 2014, the emergency department visit rate was **decreasing by 2.8% per year prior to joining** the medical home but,
- **was increasing by 1.4% per year after joining** the medical home

What This Means for Clinical Practice

- Mandating primary care groups to provide after-hours care may not reduce emergency department visits
- Efforts to mandate after-hours care should be prospectively evaluated to ensure reforms meet stated objectives

NAPCRG 2016 – Pearl 2

Stakeholder Agreement Regarding Primary Care “Measures that Matter”

Rebecca S. Etz, PhD; Marshall Brooks, PhD; Martha Gonzalez, BA; Melissa S Hayes, BS; Anton J. Kuzel, MD, MHPE; Heather Librandi, BSC, EMT-P; Kurt C. Stange, MD, PhD

The Research Question

We need to ask the right questions, to the right people, about what quality means. Our research therefore asked:

- What guidance can we offer regarding the value of primary care?
- By what measure can we know if the care provided is good?
- By what measure can we learn, develop aspirations, and grow?

Why is this Important?

- Quality measurement in primary care is undermined by ambiguity

What the Researchers Did

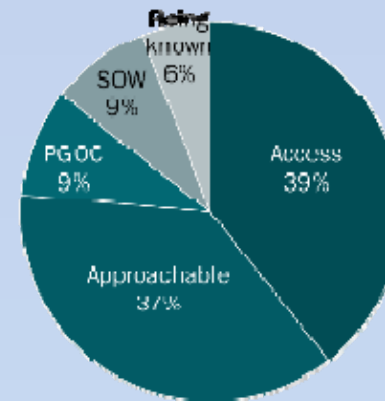
- **Web-based crowd-sourcing activity**
 - Using Survey Monkey, surveyed three national cohorts of key stakeholders: 500 clinicians (n=4000+ survey responses), 400 patients (n=3200 survey responses), and 100 employers (n=800 survey responses).
 - Contacted respondents through internet-based primary care networks, PBRNs, professional organization networks, patient advocacy groups, listservs, and social networks.
- **Asked two open-ended questions:**
 - “How do you know good care when you see it?”
 - “What questions would you ask members of a practice to know if they are helping to deliver health and wellness to their patients?”
- **Qualitative analysis**
 - Two rounds of analysis were conducted with each data set. The first template driven approach was informed by major models of primary care delivery and measurement, and the second emergent approach was based in grounded theory.
 - Through these analyses we identified stakeholder specific indicators associated with good care and gaps in current primary care assessment.

What the Researchers Found

- Only 38% overlap between common measures and clinician identified indicators associated with good care.
 - The 62% of clinician responses not coded with common measures included concepts such as patient-physician relationships, person-centered care, patient goal oriented care, and problem recognition.
- Emergent coding of same dataset identified 18 indicators associated with good care.
 - Member-checking (n=238) confirmed findings.
- 18 clinician identified quality indicator areas:

Alignment is key: quality indicator areas	
Learning organization	Care coordination
Resource stewardship	Data capacity
Teamness	Comprehensiveness
Population health	Professionalism
Personalized care	Physician self care
Scope of work	Approachable
Patient self care	Respect of persons
Being known	Meaningful access
Goal oriented care	Patient assessment

- 82% overlap b/w patient and clinician responses:



What This Means for Clinical Practice

- Less and more are needed to assess primary care
 - We need to reduce the number of measures used in order to reduce administrative burden on primary care practices and clinicians. But that's not all...
- Majority of current measures do not align with clinicians, patients, or employers
 - We need to ensure quality measures assess the value of primary care as identified by key stakeholders.
 - Significant gaps in quality measurement exist, leading to inadequate assessment and valuing of primary care. But there's hope...
- Among emergent quality indicator areas, overlap was high among stakeholders
 - Frontline clinicians and patients largely agree on what quality in primary care means.
 - We should follow the advice of the National Academy of Medicine's *Vital Signs* report suggesting that key stakeholders, rather than the usual content "experts", be central to any effort focused on generating meaningful health care measures.

NAPCRG 2016 – Pearl 3

"Give Me a Reasonable Alternative"; Antipsychotics, Dementia, and Virginia Primary Care Physicians

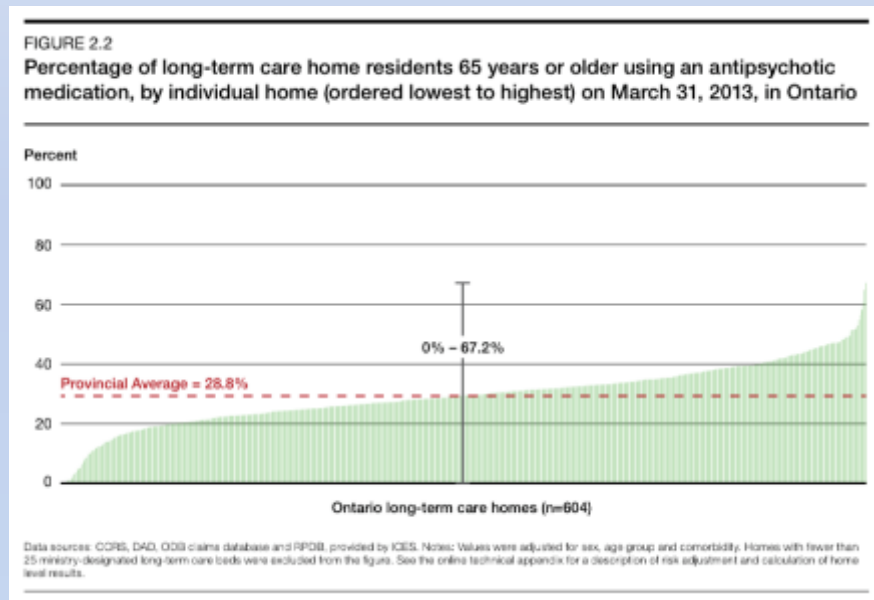
Anton J. Kuzel, MD, MHPE; Jonathan Winter, MD;
Rebecca S. Etz, PhD; Katherine Winter; Christine
Carlson Kerns, RN; John William Kerns, MD

The Research Question

How and why do primary care physicians (PCPs) use medications including antipsychotics, as well as non-pharmacologic strategies, for symptoms of dementia?

Why is this important?

Even in Canada, there is large clinical variability in antipsychotic use in dementia.



Looking for Balance, Health Quality Ontario, 2015

What the Researchers Did

Semi-structured interviews with 26 primary care physicians (PCPs):

16 family medicine, 10 general internal medicine

In practice >3years in Northwestern Virginia, USA.

Analysis: template, immersion/crystallization, thematic development.

What the Researchers Found

PCPs prescribe antipsychotics and other medications for dementia symptoms:

- To meet meet patient-oriented goals, and
- Because PCPs see medications as more effective and less dangerous than evidence supports.

PCPs need practical verified prescribing guidelines and dissemination of non-pharmacologic strategies which are as affordable, accessible, and efficacious as drugs.

What This Means for Clinical Practice

For Symptoms of Dementia:

- Drug use should have patient-oriented goals in the context of this terminal illness
- Non-drug treatments are first line and should be employed whenever feasible
- Discussions with caregivers of patients with dementia should include the benefits and risks of all medications

NAPCRG 2016 – Pearl 4

Prevalence of Atypical Pathogens in Patients With Sore Throat: A Meta-Analysis

Christian Marchello, MS; Mark H. Ebell, MD, MS

The Research Question

- What is the prevalence of Group C beta-hemolytic *streptococcus* (GSC) and *Fusobacterium necrophorum* (FN) among patients with sore throat in the outpatient setting?
- Prevalence of these two pathogens in outpatients has not been previously summarized.

What the Researchers Did

- Systematically review the literature (MEDLINE) for prospective studies that report the prevalence of GCS and FN where the majority of data was collected after January 1, 2000.
- Two authors independently reviewed each article for inclusion and abstracted the data
- Meta-analysis of pooled prevalence using random effects model of raw proportions

What the Researchers Found

- 795 reviewed articles; 16 included in final analysis
- Overall prevalence:
 - GCS was 6.1% (95% CI, 3.2%-9.0%)
 - FN was 18.9% (95% CI, 10.5%-27.2%)
- 8 of 13 studies of GCS reported a prevalence between 0.5% and 5.0%
- Prevalence of FN ranged widely, from 4.9% to 51.4%

What This Means for Clinical Practice

- Both Group C streptococcus and F necrophorum are relatively common in patients with acute pharyngitis
- Currently unclear if these are colonizing or pathogenic, therefore further studies are needed to determine if antibiotic treatment is beneficial for patients with GCS or FN.

NAPCRG 2014 – Pearl 5

Primary Care Physician Advice to Pursue Watchful Waiting is Associated With Less Low-Value Testing

Joshua J. Fenton, MD, MPH; Larissa May; Anthony F. Jerant, MD; Peter Franks, MB, BS

PCPs and Low-Value Testing

- Patients often request & usually receive requested diagnostic tests, even when “low-value”
- Visits with test requests are more difficult for PCPs
- “Watchful waiting” is a potential strategy to avert low-value testing without compromising patient satisfaction

Research Study

- Data from RCT of a PCP communication intervention to reduce low-value testing (e.g., spinal MRI for acute low-back pain)
 - Did not affect communication, test ordering
- Observational analyses assessed associations between low-value test ordering and following communication behaviors coded from audiorecorded encounters (n=155):
 - Specific “watchful waiting” advice
 - Four other strategies (e.g., normalization, reassurance)
 - Overall patient-centered communication

Findings

- Watchful waiting advised more commonly during visits with no low-value test ordered (88% vs 12%; $P < 0.001$)
- After adjusting for trial arm and use of other strategies, watchful waiting advice explained 53% of the variance in low-value test ordering
- Patient-centeredness explained no additional variance in test ordering

What This Means for Clinical Practice

- Training PCPs to recommend watchful waiting could reduce low-value testing yet maintain patient satisfaction
 - Supported by patient autonomy, locus of control theories
- Might also improve *PCP* experience by reducing the greater perceived difficulty of visits with testing requests
- Potential advantages over other strategies
 - Choosing Wisely, audit and feedback, decision support
- RCTs may be warranted

Questions?