

# Seeking a Culture of Inquiry

The  **FPIN** Approach to Scholarly Activity

**Corey Lyon, DO**

Friday, March 24<sup>th</sup> 4:30 pm

Tuesday, March 28<sup>th</sup> 10:00 am



AMERICAN ACADEMY OF  
FAMILY PHYSICIANS

# Primary Learning Objectives

**This presentation will explain how you can:**

1. Develop a structured plan for meeting scholarly activity requirements for both faculty and residents
2. Build stronger critical appraisal skills through the use of the PURLs Journal Club
3. Expand the culture of inquiry at your program by learning to answer clinical questions and potentially get them published through the FPIN network

# Developing our Faculty as Scholarly Leaders

## Why Should You Care?

- To fulfill RRC requirements for Residents
- To fulfill RRC requirements for Faculty
- Because it's the right thing to do....😊

# Leading the Residents

*RRC Requirements; Someone must lead the following:*

1. Every resident must complete two scholarly projects
2. “The program must provide a regularly scheduled forum for residents to explore and analyze evidence pertinent to the practice of family medicine.”

# Faculty Must Also . . .

1. Encourage and support residents in scholarly activities
2. Some should also demonstrate scholarship through peer-reviewed funding, publications, presentations, and participation in national committees or organizations
3. Participate in faculty development programs designed to enhance the effectiveness of their teaching, administration, leadership, scholarship

# Common Barriers for Scholarship

## ➤ **Faculty**

- Protected time
- Shortage of faculty, resources
- Leaders don't have enough experience to mentor

## ➤ **Residents**

- Lack of structured expectations, experiences
- Enthusiasm towards evidence-based medicine

## ➤ **Faculty & Residents**

- Fear of statistics
- Difficulty with evidence synthesis
- Procrastination

# Start at the Beginning

- Once you know where you're going (scholarly project)
  - Build your plan at the beginning - curriculum

# EBM curriculum

- Need to start with an EBM curriculum
  - Scholarly projects build on that curriculum
    - Journal club, didactics
  - Study out of Univ of Toronto
    - 60% of FM graduates report not being well trained in critical appraisal, despite an EBM curriculum
- Scholarly projects reinforce that curriculum

Smith M. Research in residency: do research curricula impact post-residency practice? Fam Med2005;37(5):322-7



# Resident needs

- Background knowledge
  - Need to build EBM knowledge and skills
  - Use project to build on existing knowledge
- Structure
  - Timeline, deadlines, time, identifiable goals
- Time
- Energy/interest from faculty

# Objectives; EBM curriculum

- Objectives for an EBM curriculum
  - How to convert information needed into an answerable question
  - To become better consumers of the medical literature
    - Learn what to read
    - Learn critical appraisal skills
    - Synthesis the evidence – understand what it means
  - Grade the evidence
  - Know where to go and how to search for evidence
  - Put these EBM skills in motion

# Identify Goals of EBM Curriculum

- Learn components of EBM
  - Ask answerable questions
  - Determine relevance/validity of the research
  - Synthesizing the evidence – convert to user friendly statistics, easy to understand
  - Assigning a level of evidence grade
  - Determine how apply the evidence

# Build your EBM curriculum

- Journal Clubs can play a big role in your EBM curriculum
  - Critical appraisal skills
  - Evidence synthesis skills
  - Apply the evidence skills

# Journal Club Goals

- Learn about new evidence that may change our practice
- Learn about new evidence that influence clinical decisions
- Provide a healthy, group learning environment
- Continue to refine information mastery skills
  - Repeat exposure of EBM concepts over 3 years

# Challenges with Journal Club

- Faculty experience
  - Leading critical appraisal discussion
  - Teaching statistical synthesis
  - Time to prepare
- Article selection
- Structure of the session
  - Meaningful, entertaining

# FPIN as a Resource

- Provide support in creating structured curriculum
- Tools for faculty
- Tools for residents

What is  ***FPIN***?





FPIN is a membership organization offering medical scholarship education to students, residents, faculty, and fellows in family medicine.

### **Our Vision**

*“FPIN envisions a primary care workforce that thinks critically, communicates expertly, and utilizes the best current evidence to improve the health of patients.”*

### **Our Mission**

*“FPIN provides quality education and professional development for primary care clinicians to practice evidence-based medicine and produce scholarship.”*

# **FPIN** is a Membership Organization





➤ **Who Does FPIN Serve?**

- Over 150+ University & Community-based Residencies

➤ **How Does FPIN Do It?**

- Supporting Publication Projects
- Providing workshops onsite at our member residency programs
- On-line learning modules
- Journal Clubs
- Promoting mentoring programs among faculty and trainees
- Developing a culture of scholarly leadership

# Back to Common Barriers for Scholarship



## ➤ Faculty

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# PURLs Journal Club



- Utilizes published PURL articles in a toolkit format for use in a formal Journal Club setting
- Is a teaching tool that provides a structured method for helping faculty (even those who may not be comfortable with bio-statistics or evidence-based medicine concepts) prepare for the journal club



# Provide structure to Journal Club

- PICO
  - Patient/population, Intervention, Comparison, Outcome
- Relevance
- Validity
- LoE
- Synthesis
- How to apply?
- Strength/weakness
  - Challenges (not bashing)



# Critical appraisal worksheets

RANDOMIZED CONTROLLED TRIAL	
<b>1. What question did the study attempt to answer?</b> Patients - Intervention - Comparison - Outcome -	
<b>Did the study address an appropriate and clearly focused question</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>2. Determining Relevance:</b>	
a. Did the authors study a clinically meaningful and/or a patient oriented outcome?	<input type="checkbox"/> Yes <input type="checkbox"/> No
b. The patients covered by the review similar to your population	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>3. Determining Validity:</b>	
Study design;	
a. Was it a controlled trial?	<input type="checkbox"/> Yes <input type="checkbox"/> No
b. Were patients randomly allocated to comparison groups?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
c. Were groups similar at the start of a trial?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
d. Were patients and study personnel "blind" to treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
e. Aside from allocated treatment, were groups treated equally?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
f. Were all patients who entered the trial properly accounted for at it's conclusion	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear



# FPIN PURLs Journal Club



Plug and play comprehensive monthly toolkit available through FPIN Institute including:

- Journal Club Instructions
- **Speaker Notes including teaching points**
- Journal Club participant worksheet
- Completed review form for reference
- Published PURL

Ideal for programs looking for a structured approach to journal clubs with little faculty skill or time.

*Here's a peek: [CLICK HERE](#)*





# Plug 'n Play – Speaker Notes

- FPIN JC authors
  - Complete the critical appraisal worksheet
    - With explanation to questions
  - Provide at least one “Teaching Point”
    - On statistic synthesis, or
    - Study design/methods, or
    - Definition of terms and use in critical appraisal
    - others



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# PURL Journal Club- worksheets

- Consist of multiple article types; all with their own critical appraisal worksheets
  - RCT
  - Systematic Reviews
  - Cohort Trials
  - Diagnosis Trials
  - Guidelines



# Teaching Points

- Using a 2x2 table to calculate NNT
- Hazard ratios, relative risk, CI (to include NNT)
- P value vs OR/RR for determining statistical significance
- Primary outcomes vs secondary outcomes
- Diagnostic accuracy measures
  - sensitivity/spec; calculating LR's
- USPSTF grades
- Forest Plots (x2)
- Heterogeneity in Meta-analysis
- Determining relevance to one's own patients by examining the inclusion criteria
- Non-inferiority trial
- Clinical significance vs statistical significance
- Mean difference



# Teaching Points

- Teaching points geared toward current article
- Repeated during the year
  - Repeated exposure; build on existing knowledge



# PURLs Journal Club



- Subscription to the PURLs Journal Club for non-FPIN members is available for \$750 per year
- Current FPIN members can access the PURLs Journal Club toolkit through our website, [www.fpin.org](http://www.fpin.org)



# **FPIN** Putting EBM skills in Motion

- AKA - Scholarly projects
- FPIN writing opportunities
  - Help Desk Answers
  - Evidence Based Practice Special Features
  - Clinical Inquiries
  - PURLs



# **FPIN** HelpDesk Answers



- 450-600 word manuscript
- Brief, structured evidence-based answers to clinical questions
- Peer reviewed
- Guidance provided by an assigned Deputy Editor
- Published in *Evidence-Based Practice*
- Can be finalized within an academic year



# FPIN Where are HDAs Published?

ISSN 1068-4009 (print)  
ISSN 2475-2757 (online)

Vol 20 | No. 1 | January 2017

# EVIDENCE-BASED PRACTICE

A Peer-Reviewed Journal of the  
Family Physicians Inquiries Network

## EDITORIAL

2 Knockoff goods

## IN DEPTH

3 Steroids in acute COPD exacerbation

## DIVING FOR PURLs

4 Cold turkey for smoking cessation

BMI: A weak predictor of mortality in the WHI

## TOPICS IN MATERNITY CARE

5 Osteopathic manipulative treatment for low back pain in pregnancy

## HELPSIDE ANSWERS

6 Vitamin D for systemic lupus erythematosus  
Oral cannabinoids as analgesics for chronic neuropathic pain  
7 Value of simple office cystometries in patients with urinary incontinence

8 Salt substitutes for lowering blood pressure in hypertensive adults

9 Oseltamivir for treatment of influenza

10 Psoriasis as a risk factor for CVD

Initial tests for evaluating pheochromocytoma

11 Intermittent versus daily ICS for asthma control

12 Vaginal versus oral misoprostol for induction of labor

13 Treatment of unexplained recurrent pregnancy loss with progesterone

E1 Treatment of REM sleep behavior disorder

E2 Booster for shingles vaccine

E3 Vitamin D supplementation and cognition in elderly

E4 Screening tools for dementia in the outpatient setting

E6 Eccentric exercises for jumper's knee

E7 Does adenotonsillectomy decrease asthma attacks in children?

E8 Best treatment for cervical radiculopathy


E10 Cannabis for lowering opioid use among adults with chronic low back pain

## LETTER TO THE EDITOR

14 How does regional anesthesia (epidural or combined spinal-epidural) affect childbirth outcomes?

## SPOTLIGHT ON PHARMACY

15 Antiarrhythmic agents to prevent sudden death in heart failure



**FPIN**  
Family Physicians Inquiries Network

FPIN envisions a primary care workforce that thinks critically, communicates expertly, and utilizes the best current evidence to improve the health of patients.

American Family Physician®

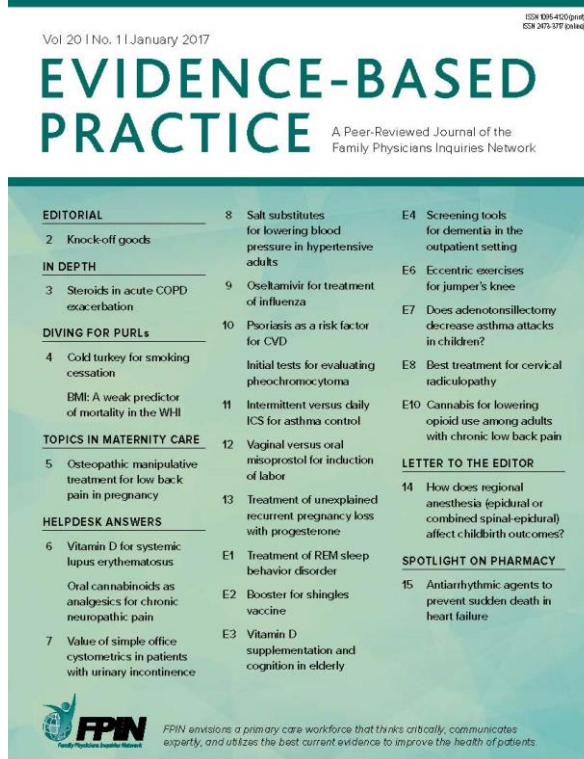
THE JOURNAL OF  
**FAMILY  
PRACTICE**

*Please see your copy of  
Evidence-Based Practice*





# FPIN Evidence-Based Practice



Only 3 patients (2 in the IR group and 1 in the SR group) experienced a disease flare, with SLEDAI scores increasing to 6 to 8. Excluding these patients, no significant change in SLEDAI was noted in either group, but actual results were not reported. Limitations included selection bias for patients with inactive disease.<sup>7</sup>

ELISE BURKOWICZ, MD  
JOSEPH TRIBUNA, MD  
OVERLOOK FMPP  
ATLANTIC HEALTH SYSTEM  
SUMMIT, NJ

1. Alotaiba A, Alotaiba S, Hameed M. The effect of vitamin D supplementation on inflammatory and disease activity in patients with systemic lupus erythematosus: a randomized placebo-controlled trial. *J Rheumatol*. 2013;40(3):361-372. [JGIM 2](#).  
2. Gakkar SS, Bhatti S, Uthairao MS. Systemic lupus erythematosus disease activity index 2000. *J Rheumatol*. 2002;29(2):281-287. [JGIM 2](#).

3. Andriak S, Galka S, Farkas S, et al. A 24-month prospective study on the efficacy and safety of low-dose vitamin D supplementation in postmenopausal women with systemic lupus erythematosus. *Lupus*. 2015;24(4):405-416. [JGIM 2](#).

Are cannabinoids taken orally an effective treatment for adults with chronic neuropathic pain?

#### EVIDENCE-BASED ANSWER

The answer is unclear. Nabiximol, as adjuncts to any stable analgesic regimen including opioids, tricyclics, and anti-inflammatory medications, reduce neuropathic pain by 1 to 2 points more than placebo on 11-point pain scales. However, nabiximol is not as effective as hydrocodone when the 2 are compared directly (SOR: B, small RCT).

In 2012, a flexible-dose, double-blind RCT compared the efficacy of nabiximol as an adjunct to the treatment of diabetic peripheral neuropathic pain versus placebo.<sup>1</sup> During the 4-week single-blind run-in phase, 37 patients on a stable pain medication regimen including NSAIDs, gabapentin, tricyclic antidepressants, serotonin-norepinephrine reuptake inhibitors, opioids, or acetaminophen with pain rated more than 4 on a 0 to 10 numerical pain scale, received nabiximol 0.5 to 2 mg BID.

Twenty-six patients achieved at least 30% pain relief and were advanced to the second double-blind phase, during which they were randomly assigned to nabiximol or placebo. The nabiximol group continued their stable dose of nabiximol

- Newly re-designed in preparation for our **MEDLINE® application**
  - FPIN's peer-reviewed journal
- Articles are written by FPIN Members (faculty and residents)
- Provides answers to questions you experience on a daily basis



# **FPIN EBP Features**

- Musculoskeletal Health
- EBM on the Wards
- Maternity Care
- Behavioral Health Matters
- EBPediatrics
- Geriatrics
- Spotlight on Pharmacy
- Integrated Medicine

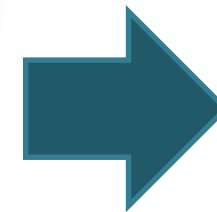


# **FPIN Clinical Inquiries**



**Based on the best evidence resulting from a formal systematic literature search**

- Cl's are peer-reviewed, **MEDLINE indexed** and published in *The Journal of Family Practice* or *American Family Physician*.
- Cl's require an approved Corresponding Author
- Average publication time is currently within an academic year



JAPR ONLINE.COM VOL 42, NO 9 | SEPTEMBER 2012 | THE JOURNAL OF FAMILY PRACTICE 507

# Priority Updates from the Research Literature (PURLs)



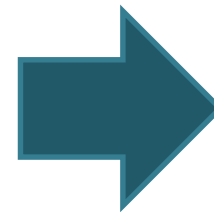
**Relevant, valid, practice-changing, applicable to medical care, clinically meaningful and immediately-applicable recommendations**

- Drawn from literature surveillance system
- Work with team to review literature or author manuscript
- Ideal for programs looking for a high level team activity
- Published in *The Journal of Family Practice*





# FPIN Where are PURLs Published?



**PURLs\***  
Priority Updates from the Research Literature from the Family Physicians Inquiries Network

**Tanner Hixley, DO; Shalendra Prasad, MBBS, MPH**  
Department of Family Medicine and Community Health, University of Minnesota, Minneapolis

**PUBLI EDITOR**  
James Stavermer, MD, MSPH  
Department of Family Medicine, University of Missouri at Columbia

## This asthma treatment has a lasting side effect in children

A new study finds that when children with asthma use inhaled corticosteroids, the effect on growth may not be temporary, as once thought.

**PRACTICE CHANGER**  
Before prescribing inhaled corticosteroids (ICS) for a child with asthma, tell the patient—and parents—that their use could lead to a small but permanent effect on adult height.<sup>1</sup>

**STRENGTH OF RECOMMENDATIONS**  
**B:** Based on one prospective study.  
Kelly HW, Sternberg AL, Leach R, et al: CAMP Research Group. Effect of inhaled glucocorticoids in childhood on adult height. *N Engl J Med*. 2012;367:804-812.

**ILLUSTRATIVE CASE**  
A 10-year-old boy is brought in by his father for asthma follow-up. The child uses an albuterol inhaler, but has had increased coughing and wheezing recently. You are ready to step up his asthma therapy to include ICS. But the patient's father questions this, noting that he recently read that steroids may reduce a child's growth. How should you respond?

**STUDY SUMMARY**  
**The effect on growth is small, but long-lasting**  
Kelly et al conducted a prospective observational cohort study that followed 943 (90.7%) participants in the Childhood Asthma Management Program (CAMP) in the years after the randomized controlled trial (RCT) ended.  
A double-blind, placebo-controlled RCT: CAMP studied the linear growth of 1041 children with mild-to-moderate persistent asthma who were divided into 3 treatment groups: One group received 200 mcg inhaled budesonide twice daily; a second group received 8 mg inhaled nedocromil twice daily; and a third group received placebo. Albuterol was used symptomatically by all 3 groups.<sup>7</sup> The children ranged in age from 5 to 13 years at the start of the study;

awakenings and improving quality of life—with few side effects.<sup>3</sup>

**What we know about ICS and children's growth**  
One adverse effect of ICS, however, is that of "decreased linear growth velocity"—ie, slowing the rate at which children grow. Until recently, children were thought to "catch up" later in life, either by growing for a longer period of time than they would had they not taken ICS or by growing at an increased velocity after ICS medications are discontinued.<sup>4-6</sup>

500 THE JOURNAL OF FAMILY PRACTICE | SEPTEMBER 2013 | VOL 62, NO 9



- Included with your FPIN Membership
- On-line self-study courses to support your EBM curriculum and Help Desk Answer writing project
  - Accompanying handouts
  - Comprehension quizzes to assess learning





**FPIN**

# Example of how to build your curriculum through FPIN membership

- 1<sup>st</sup> Year of Membership
  - Build Critical Appraisal
    - PURL Journal Club tool kit
    - Training modules in the FPIN Institute
  - Develop your Faculty
    - Start authoring a Help Desk Answer
  - Teach Residents to be Better Consumers of Medical Literature
    - Subscription to *Evidence Based Practice*



# Train the Trainer Model



One of the most successful tools to implementing an effective clinical scholarship program using FPIN is through hands-on workshops

FPIN will work with member programs to develop a home-grown workshop or travel to a program to present an onsite workshop  
*(additional charge for the latter)*



## Onsite writing workshops bring FPIN to your program for a 4.5-hour guided session

- Capacity for 5 writing groups (20 participants)
  - Ideal for faculty or faculty/resident pairs
- Includes completed literature searches for groups
- Most participants will be at least **40% complete with their first draft by the end of the workshop!**
  - Optimal solution for expedited implementation
    - Costs start at \$5500



# for 2017-2018

## **FPIN will be awarding 7 Workshop Scholarships**

- A full-ride scholarship for an all-expense paid workshop (valued at \$5500) will be granted to ONE residency program. Applications for this scholarship must be received by July 15, 2017. The scholarship recipient will be notified no later than August 15, 2017.
- In addition, 6 residency programs will be awarded a \$1000 scholarship that can be used towards the purchase of any workshop package of their choosing.

*Stop by the FPIN booth to learn more about  
selection criteria*



## Results

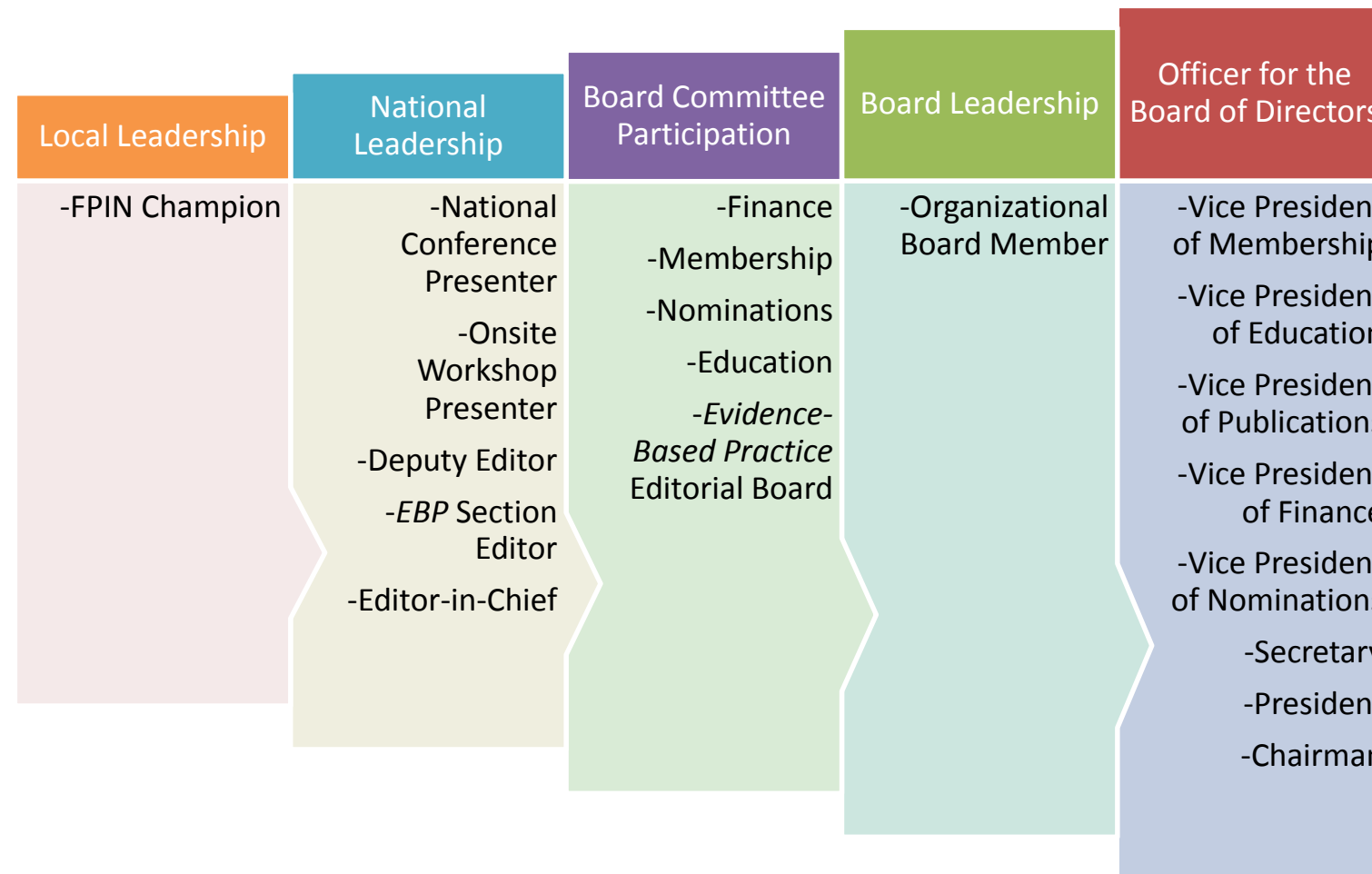
- Programs that publish manuscripts following the FPIN writing workshop model publish **56% faster** than programs that implement FPIN scholarly projects without hands-on training workshops for faculty.
- FPIN published authors report a higher degree of satisfaction having had learned the foundational EBM concepts in our model of writing workshops.



# Leadership & Editor Network

## *Faculty Development Opportunities*

### Roadmap to Leadership with FPIN





# **FPIN Local Leadership**

- **FPIN Champion:** Responsible for communication between FPIN and the program and administrative processes (Example - manuscript tracking, timeline management, and structure.)
- **Local Editor:** Responsible for reviewing all manuscripts locally before they are sent to FPIN. Will work towards becoming an expert on the HDA style and methodology.
- **Corresponding Author:** Each individual manuscript will require a faculty [Corresponding Author](#) who will be responsible for selecting clinical questions to answer, manuscript submission, and communication throughout the editorial process.



# **FPIN National Leadership**

- National Conference Presenter  
(PDW/RPS, STFM, NAPCRG, ACOFP)
- Onsite Workshop Presenter
- Deputy Editor
- Feature Editor for *EBP*
- Editor-in-Chief



# **FPIN Board Committee Participation**

- Finance Committee
- Membership Committee
- Nominations Committee
- *Evidence-Based Practice* Editorial Board





# **FPIN Board Leadership**

- Organizational Board Member (4 spots – each with a 4-year term)
- Committee Chair
  - Vice-President of Membership
  - Vice-President of Finance
  - Vice-President of Education
  - Vice-President of Nominations
- BOD (Board of Directors) Officer
  - Incoming President
  - President
  - Chairman
  - Vice-President of Publications



**FPIN**

# Key Takeaways

1. FPIN has proven tools and resources to build a strong scholarly activity program
2. Provide leadership opportunities for your faculty to improve their skills sets and develop them professionally

# To Learn More About **FPIN** :

- Speak with an FPIN faculty/staff member in the back of the room
- Email us at: [membership@fpin.org](mailto:membership@fpin.org) to schedule another time to chat by phone or meet in-person at the annual STFM conference in San Diego at the end of this month
- Visit us at [www.fpin.org](http://www.fpin.org)

# Follow **FPIN** on Social Media



[facebook.com/fpinpage](https://facebook.com/fpinpage)



[@FPINtweets](https://twitter.com/FPINtweets)

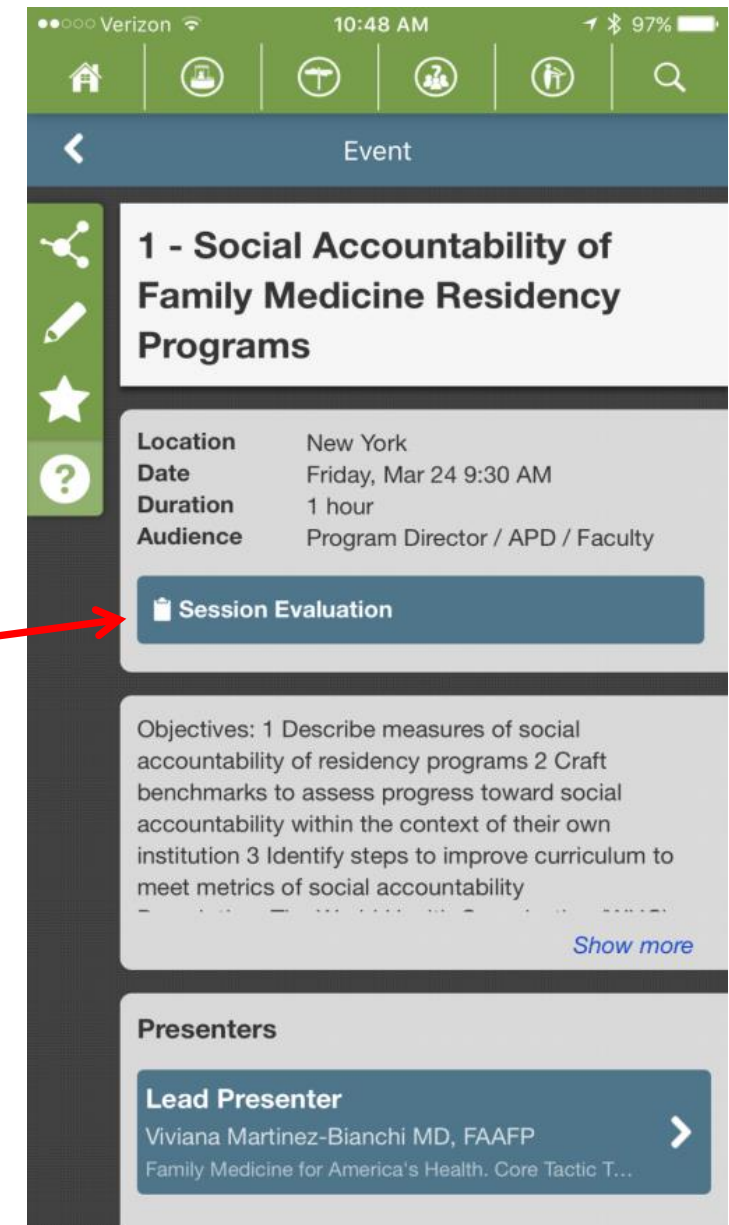
# Questions?



Please...

Complete the  
session evaluation.

Thank you.





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**STRONG MEDICINE FOR AMERICA**