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### Creating a Culture of Scholarly Inquiry for RTT Faculty & Residents



# Learning Objectives

By the end of this presentation, participants will:

- 1. Be able to design an effective EBM curriculum utilizing the FPIN model
- 2. Learn how to maximize benefits of PURLs Journal Club
- 3. Ignite enthusiasm for a culture of inquiry by encouraging residents to ask and answer evidence-based clinical questions

## Self-assessment

Programs in development?

Concerns about scholarship for residents (or faculty)?

Feel confident in faculty ability to teach EBM?

Already FPIN member?





### Vision

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

### Mission

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



### **Core Values**

We value... Answering the most important questions in primary care with the best and most current evidence.

We value... Caring for our community members with the respect and contributing to their professional growth.

We value... Service that is so remarkable and rare that people can't help but talk about us.

### Who Does FPIN Serve?

Over 160 University & Community-based Residencies

### How Does FPIN Do It?

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





Direct quotes regarding residents' scholarship:

Scholarly activities may include discovery, integration, application, and teaching

The ACGME recognizes the diversity of residencies...It is expected that the program's scholarship will reflect its mission(s) and aims, and the needs of the community it serves.

The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care

Residents should complete 2 scholarly activities, at least one of which should be a quality improvement project

Residents should work in teams to complete scholarship, partnering with interdisciplinary colleagues, faculty members, and peers

Residents should **disseminate scholarly activity** through presentation or publication in local, regional, or national venues

ACGME weighs in on faculty scholarship, too:

...programs must demonstrate accomplishments in at least 3 of the following:

- Research in basic science, education, translational science, patient care, or population health
- Peer reviewed grants
- Quality improvement and/or patient safety initiatives
- Systematic reviews, meta-analyses, review articles, chapters in medical textbooks, or case reports
- Creation of curricula, evaluation tools, didactics, or electronic educational material
- Contribution to professional committees, educational organizations, or editorial boards
- Innovations in education

The program must demonstrate dissemination of scholarly activity within and **external to the program** by the following methods:

- Faculty participation in...non-peer-reviewed print/electronic resources, articles, or publications...
- Service on professional committees
- Serving as a journal reviewer, journal editorial board member, or editor
- Peer reviewed publication

The Review Committee will evaluate the dissemination of scholarship for the program as a whole, not for individual faculty members, for a 5-year interval...with the goal of assessing the effectiveness of creation of such an environment

## Barriers to effective scholarship

Time

Time

Time

Funding

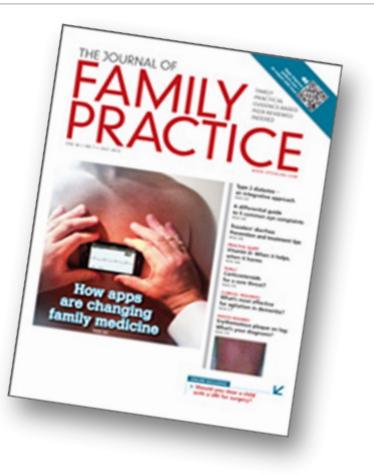
Mentorship and editorial support

**Publication venues** 

## Where is FPIN content Published?









### And, the GEMs of the Week newsletter...





### **Residents need**



 $(\cdot, \dot{i}, \cdot)$ 

Background knowledge

knowledge

Structure

Preparation, deadlines, identifiable goals

Time

Scholarship rotations Longitudinal progress



Energy/interest from faculty

### Build EBM knowledge and skills Use projects to build on existing



# Faculty First

Features associated with increased resident scholarly activity

- PD support
- Local mentoring (by faculty!)
- Forums to present/publish

Start your FPIN program with faculty first!

Needs assessment—what does your program already have in place?

- Faculty skills and experience?
- Comfort with EBM concepts?

# Faculty first

Determine the best level of FPIN participation for your program needs

- FPIN can help with this process. Decades of experience assessing program capacity and faculty needs
- Consider an onsite workshop

Allow a period of faculty training (see one and do one before you teach one!)

- GEMs are the most accessible project
- Identify a faculty FPIN Champion
- Identify a faculty Local Editor—FPIN provides mentorship and training

## Resident scholarship is sustainable when faculty are comfortable

Begin PURLs Journal Club right away

- Plug & Play
- High-impact, recently published primary literature relevant to Family Medicine practice
- Structured for use in formal journal club—resident or faculty-led
- Critical appraisal worksheet is provided; key teaching points spelled out
- Overcomes lack of faculty confidence with statistics and EBM
- Teaching EBM becomes less of a lift







### GEMS **GOOD EVIDENCE MATTERS**

**FPIN Scholarly Writing Opportunity** 

- Summary of a single research article, preferably a systematic review/metaanalysis, RCT, or cohort trial
  - Using GEM Table worksheet
- Ideal writing project for residents or less experienced faculty
- Building block for other scholarly projects
- Teaches residents how to evaluate and apply evidence
- Average publication timeline of 5-7 months
- Disseminated as a peer-reviewed "GEM of the Week"

### GEMS OF THE WEEK

### Automated vs Traditional Office Blood Pressure Readings: Which to Use in the Primary Care Office

Comparing Automated Office Blood Pressure Readings with Other Methods of Blood Pressure Measurement for Identifying Patients with Possible Hypertension Roerecke M, Kaczorowski J, Myers MG. Comparing Automated Office Blood Pressure Readings with Other Methods of Blood Pressure Measurement for Identifying Patients With Possible Hypertension: A Systematic Review and Meta-analysis. JAMA

Intern Med. 2019; 179(3):351–362. doi:10.1001/jamainternmed.2018.6551 Copyright © 2021 by Family Physicians Inquiries Network, Inc.

KEY TAKEAWAY: Automated office blood pressure (AOBP) measurements used in primary care settings nullify white coat hypertension and are equivalent to awake ambulatory blood pressure (BP) measurements, the current benchmark for predicting cardiovascular disease.

STUDY DESIGN: Systematic review and meta-analysis LEVEL OF EVIDENCE: STEP 1

BRIEF BACKGROUND INFORMATION: Hypertension

increases the risk of multiple diseases, including coronary artery disease, stroke, and kidney disease among others. Therefore, an accurate measurement of blood pressure is critical to providing optimal in-office preventative care. Previously, in-office blood pressure measurement was thought to be mildly affected by "white coat hypertension." Multiple recent studies have shown that the white coat effect was underestimated. Studies have found that AOBP is more accurate than routine office BP measurement. No systematic review has previously been completed on this topic.

PATIENTS: Multinational adults in physician's office and research settings

INTERVENTION: Automated office blood pressure measurements of systolic blood pressure (SBP) and diastolic blood pressure (DBP)

CONTROL: Awake ambulatory BP (ABP), routine office BP measurements, and research BP measurements OUTCOME: Systolic and diastolic blood pressure

### METHODS (BRIEF DESCRIPTION):

- Inclusion Criteria:
  - Unattended and fully automated AOBP assessments were performed.
  - o A sample of at least 30 patients

- Mean differences were reported between AOBP and other BP measurements, including awake ambulatory blood pressure, office blood pressure, and research blood pressure.
- Maximum time between BP readings of 1 month
- Studies that used an interval between AOBP measurements of 2 minutes or less and had 3 readings or more of AOBP.
- A total of 31 studies were included in the systematic review, the majority of which were cross-sectional.
- Sample sizes ranged from 50 to 2,145 adults with a mean age of 55.9 years.
- In half of included studies patients had a mean SBP on AOBP of greater than 130 mmHg.
- Most studies were from Canada, but other highincome countries were also included.

### INTERVENTION (# IN THE GROUP): 9,279 COMPARISON (# IN THE GROUP): N/A

FOLLOW UP PERIOD: Less than one month

### RESULTS:

- Routine office BP measurements were higher than AOBP (SBP mean difference 14.5 mmHg; 95% Cl, 11.8–17.2).
- AOBP was statistically equivalent to ABP (mean difference 0.3 mmHg; 95% Cl, -1.1 to 1.7).
- Research BP measurements were higher than AOBP (SBP mean difference 7.0 mmHg; 95% Cl, 4.9–9.1).

### LIMITATIONS:

• 2 of the 31 included studies declared partial support from a manufacturer.

*Casey Key, MD* LewisGale Medical Center FMR Salem, VA





## **GEM TABLE**



**<u>GEM – Good Evidence that Matters</u>** 

Title:	
Citation:	
Key Takeaway:	
Study Design:	
Level of Evidence:	
Background:	
Patients:	P:
Intervention:	l:
Control:	C:
Outcome:	O:
Methods brief	
description:	
Intervention (# in the	
group):	
Comparison (# in the	
group):	
Follow up period:	
Results:	(Clearly Identify the PRIMARY outcome)
Limitations:	





# **FPIN solution for RTT programs**

- Core faculty may lack experience with critical appraisal or writing for publication—FPIN editors ensure you are doing it right and will be successful.
- Smaller/cohesive groups of residents function well as author teams
- Build skills over time—faculty development
- "Plug & Play" means you can focus on other aspects of residency curriculum!
- Faculty can participate in peer review

# Back to the ACGME—how FPIN helps

Residents

- Scholarly activities may include discovery, integration, application, and teaching
- The program must advance residents' knowledge and practice of the scholarly approach to evidence-based patient care
- Residents should work in teams to complete scholarship, partnering with interdisciplinary colleagues, faculty members, and peers
- Residents should **disseminate scholarly activity** through presentation or **publication** in local, regional, or national venues

Faculty

- The program must demonstrate dissemination of scholarly activity within and external to the program. FPIN facilitates peer reviewed publications
- Can also include serving as a reviewer, editorial board member, or editor.

### Questions?



## References

ACGME Program Requirements for Graduate Medical Education in Family Medicine. Revised Sept 17, 2022. Effective July 1, 2023.

https://www.acgme.org/globalassets/pfassets/programrequirements/120\_familymedicine\_2023 .pdf

Seehusen DA, Asplund CA, Friedman M. A point system for resident scholarly activity. Fam Med 2009;41(7):467-9.