



---

Dr. Laura Morris, MD, MSPH  
Associate Program Director  
University of Missouri Family Medicine Residency Program  
VP of Membership, FPIN



Forming faculty-learner teams by partnering with  
Family Physicians Inquiries Network  
for research & scholarship projects

# Learning Objectives

---

This presentation will explain how FPIN membership provides faculty and learner partnership opportunities in the realm of research & scholarship:

1. Plug n' play "PURLs Journal Club" – a FREE resource for ALL family medicine residency programs beginning in 2022
2. Scholarly writing projects that are published in *American Family Physician*, *The Journal of Family Practice*, and *Evidence-Based Medicine*



***FPIN***

What is  
FPIN?



## 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
- Journal Clubs
- Promoting mentoring programs among faculty and trainees
- Developing a culture of scholarly leadership



# Who is FPIN?

---



## 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.”*

# Who is FPIN?

---



## 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.*



# Why Should You Join?



RRC requires scholarship for Residents and Faculty



Strengthen the adaptive learning process and critical appraisal skills



Create partnering mentorship & joint publication opportunities between faculty and residents



The first level of membership is now free so all it takes is a commitment to learn!

# Fulfilling RRC Requirements for 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.”

## Residents need



Background  
knowledge

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

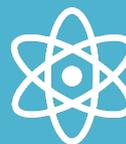


Structure

Preparation, deadlines,  
identifiable goals



Time



Energy/interest from faculty

# Fulfilling RRC Requirements for Faculty

---

Faculty must...

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

# 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

Provides:

Article selection

Speaker Notes/Structure

EBM Guide

Overcomes:

Faculty Prep Time

Lack of EBM Skills

Confidence with Stats



# Journal Club Goals

---

1

Learn about new evidence that may change our practice

2

Learn about new evidence that influence clinical decisions

3

Provide a healthy, group learning environment

4

Continue to refine information mastery skills

- Repeat exposure of EBM concepts over 3 years

# FPIN's PURLs JC provides structure to Critical Appraisal

---

PICO

Relevance

Validity

LoE

Synthesis

Application

Strengths &  
Weaknesses

# PURLs Journal Club

---

Plug & 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 & primary literature
- Adapted from our PURLS writing project which will be discussed later

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

- *“BASIC” Journal Club is **FREE** to **all** residency programs and includes a monthly toolkit*



# EBM Skills in Motion

---

## FPIN Scholarly Writing Opportunities

- GEMs
- HelpDesk Answers
- Clinical Inquiries
- PURLs

*\*FPIN membership packages include writing privileges based on program size*

*\*Fees range between \$2000-12,000/year*

*\*“PREMIERE” Journal Club is \$750/year and includes a complimentary subscription to FPIN’s journal, **Evidence-Based Practice**, an archive of every PURLs Journal Club tool-kit, and a database of teaching points.*

# 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!

# Bothwell-University of Missouri Rural FM Residency Program

---

## Our Scholarship Plan:

- Urban program is an FPIN member—in fact, FPIN was founded at Mizzou! Bothwell will add their own membership.
- Residents and Academic Medicine Fellows write HDAs and PURLs at Mizzou
- RTT Associate PD will be the FPIN Champion at the new program
  - Already written 2 HDAs
  - FPIN Institute Physician Numeracy program to refresh EBM skills
  - Plug & Play PURLs Journal Clubs
  - GEMs program at the rural site with possible progression to HDAs over time



# GEMS

## GOOD EVIDENCE MATTERS

---

### FPIN Scholarly Writing Opportunities

- Summary of a single research article, preferably a systematic review/meta-analysis, 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 “GEM of the Week”

# GEM TABLE

**GEM – Good Evidence that Matters**

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

# 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.
  - 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 high-income 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% CI, 11.8–17.2).
- AOBP was statistically equivalent to ABP (mean difference 0.3 mmHg; 95% CI, –1.1 to 1.7).
- Research BP measurements were higher than AOBP (SBP mean difference 7.0 mmHg; 95% CI, 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



# Questions?

---





# HDA's

## Help Desk Answers

---

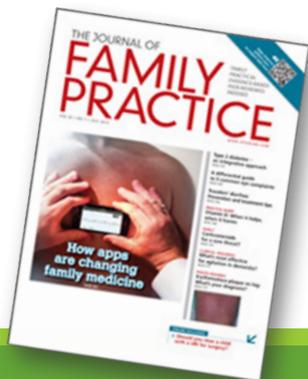
- Brief, structured evidence-based answers to clinical questions
- Best for faculty or faculty/resident teams
- Succinct, structured summary of 2-5 high quality studies
- Guidance provided by an assigned Deputy Editor
- Published in *Evidence-Based Practice* and *American Family Medicine*
- Can be finalized within an academic year

# CLINICAL INQUIRIES



## Summary of the best evidence from a formal systematic literature search

- CI's are peer-reviewed, **MEDLINE indexed** and published in *The Journal of Family Practice* or *American Family Physician*.
- Utilizes evidence from 8-10 studies
- CI's require an approved Corresponding Author & FPIN Librarian
- Average publication time is currently within an academic year
- Published in *Family Practice* & *American Family Physician*



Evidence-based answers from the Family Physicians Inquiries Network

### CLINICAL INQUIRIES

**Q** Do dietary choices alone alter the risk of developing metabolic syndrome?

**ASSTANT EDITOR**  
Gary Kolberg, MD  
Valley Family Residency Program, Renton, Wash

**EVIDENCE-BASED ANSWER**

**A** YES, but not in the short term. In studies of patient populations controlled for differences in dietary content alone, independent of weight loss or exercise changes, diets with high glycemic index foods, low whole grain and fiber content, and low fruit and vegetable content are associated with an increased incidence of metabolic syndrome (strength of recommendation [SOR]: R, multiple large cohort studies).

In the short term, however, switching patients at high risk for metabolic syndrome from a high- to low-glycemic index diet doesn't improve serum markers of metabolic syndrome (SOR: C, a small randomized controlled trial).

**Evidence summary**

Six studies (5 cohort studies and one randomized crossover study) attempted to isolate specific dietary components as risk factors for metabolic syndrome, by performing multivariate analyses to control for weight and exercise habits. The cohort studies all used the National Cholesterol Education Program Adult Treatment Panel III definition of metabolic syndrome. Overall, consumption of foods with a high glycemic index was associated with an increased risk of metabolic syndrome.

A cohort study that evaluated the diet, body habitus, and serum metabolic parameters of 2834 US adults using a validated, interviewer-administered food frequency questionnaire found that the rate of metabolic syndrome was significantly higher in patients with the highest glycemic index diets (highest vs lowest quintile adjusted odds ratio [aOR]=1.4; 95% confidence interval [CI], 1.04-1.9).<sup>1</sup> Conversely, metabolic syndrome was less common in subjects who ate diets rich in whole grains (aOR=0.67; 95% CI, 0.48-0.91) and cereal fiber (aOR=0.62; 95% CI, 0.45-0.86).

A second cohort study evaluated the diet, body habitus, and metabolic parameters in 2043 Asian women using the same food frequency questionnaire to obtain dietary history.<sup>2</sup> Metabolic syndrome was significantly more common among the women with a high refined carbohydrate intake (highest vs lowest quartile aOR=7.8; 95% CI, 4.7-13).

**"Western" diet, lack of diversity associated with metabolic syndrome**

Two studies from Iran evaluated the rates of metabolic syndrome according to different dietary patterns. The first evaluated a cohort of 486 female teachers 40 to 60 years of age.<sup>3</sup> Investigators characterized dietary patterns as "healthy" (rich in fruits, vegetables, and whole grains) or "Western" (more meat and refined grains). The more "Western" the dietary pattern became, the more often metabolic syndrome was diagnosed (highest vs lowest quintile aOR=1.7; 95% CI, 1.1-3.0).

In the second study, 581 healthy adults received dietary surveys and were tested for metabolic syndrome.<sup>4</sup> Diets were assessed and scored for their diversity. High

**ASSTANT EDITOR**  
Joel Carey, MD  
Jon Nefus, MD  
Valley Family Residency Program, Renton, Wash

**LEAD STAFF**  
MUS, AAFP  
University of Washington Health Sciences Library, Seattle

CONTINUED ON PAGE 118

FPINLINE.COM VOL 41, NO 9 | SEPTEMBER 2013 | THE JOURNAL OF FAMILY PRACTICE 507

# PURLS

## Priority Updates from the Research Literature

- Potentially practice-changing articles nominated by faculty team
- Critical appraisal of a single study (a “PURL Jam”) conducted at a residency program
- Lead authors are faculty or fellows
- Published in **MEDLINE & Evidence Based Practice**
- Timeline for publication is within 6 months
- Must meet criteria in guidelines set for outstanding, practice-changing research

Amanda Kay Lewton, MD, MSPH; Laura Elizabeth Morris, MD, MSPH  
University of Missouri  
Department of Family & Community Medicine, Columbia

DEPUTY EDITOR  
Katherine Hale, PharmD, BCPS, MFA  
Department of Nursing, Heritage University, Toppenish, WA

doi: 10.12788/1p.0309

## Validated scoring system identifies low-risk syncope patients

This study validated the Canadian Syncope Risk Score for predicting 30-day serious outcomes in patients presenting to the ED within 24 hours of syncope.

### PRACTICE CHANGER

Physicians should use the Canadian Syncope Risk Score (CSRS) to identify and send home very low- and low-risk patients from the emergency department (ED) after a syncopal episode.

### STRENGTH OF RECOMMENDATION

**A:** Validated clinical decision rule based on a prospective cohort study<sup>1</sup>

Thiruganasambandamoorthy V, Sivlotti MLA, Le Sage N, et al. Multicenter emergency department validation of the Canadian Syncope Risk Score. *JAMA Intern Med.* 2020;180:737-744. doi:10.1001/jamainternmed.2020.0288

### ILLUSTRATIVE CASE

A 30-year-old woman presented to the ED after she “passed out” while standing at a concert. She lost consciousness for 10 seconds. After she revived, her friends drove her to the ED. She is healthy, with no chronic medical conditions, no medication use, and no drug or alcohol use. Should she be admitted to the hospital for observation?

Syncope, a transient loss of consciousness followed by spontaneous complete recovery, accounts for 1% of ED visits.<sup>2</sup> Approximately 10% of patients presenting to the ED will have a serious underlying condition identified and among 3% to 5% of these patients with syncope, the serious condition will be identified only after they leave the ED.<sup>1</sup> Most patients have a benign course, but more than half of all patients

presenting to the ED with syncope will be hospitalized, costing \$2.4 billion annually.<sup>2</sup>

Because of the high hospitalization rate of patients with syncope, a practical and accurate tool to risk-stratify patients is vital. Other tools, such as the San Francisco Syncope Rule, Short-Term Prognosis of Syncope, and Risk Stratification of Syncope in the Emergency Department, lack validation or are excessively complex, with extensive lab work or testing.<sup>3</sup>

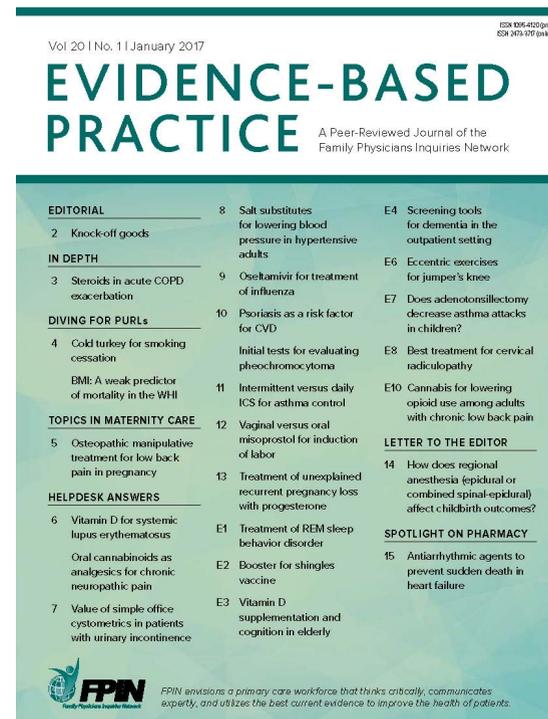
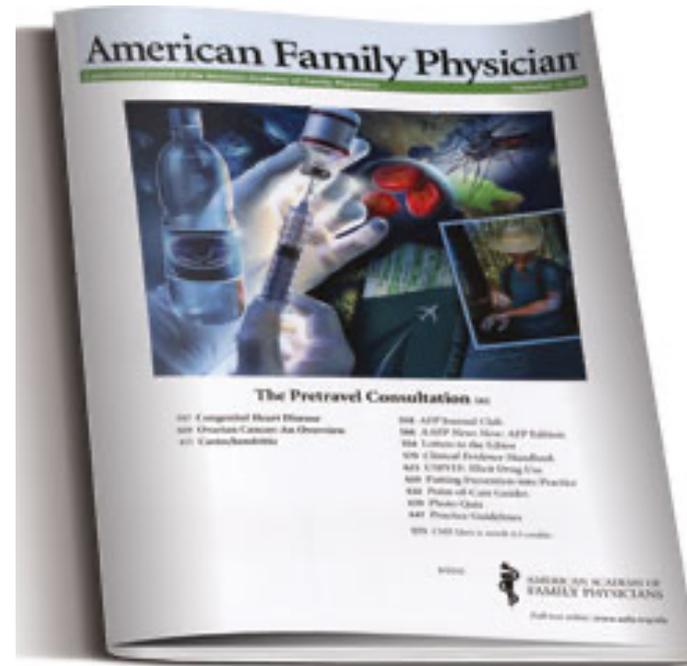
The CSRS was previously derived from a large, multisite consecutive cohort, and was internally validated and reported according to the Transparent Reporting of a Multivariable Prediction Model for Individual Prognosis or Diagnosis guideline statement.<sup>4</sup> Patients are assigned points based on clinical findings, test results, and the diagnosis given in the ED (TABLE<sup>1</sup>). The scoring system is used to stratify patients as very low (-3, -2), low (-1, 0), medium (1, 2, 3), high (4, 5), or very high (≥ 6) risk.<sup>4</sup>

### STUDY SUMMARY

**Less than 1% of very low- and low-risk patients had serious 30-day outcomes**  
This multisite Canadian prospective validation cohort study enrolled patients age ≥ 16 years who presented to the ED within 24 hours of syncope. Both discharged and hospitalized patients were included.<sup>1</sup>

Patients were excluded if they had loss of consciousness for > 5 minutes, mental status

# Where is FPIN content Published?



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

# To Learn More...

---

Email us at: [membership@fpin.org](mailto:membership@fpin.org) to schedule a time to chat by phone or meet in-person at the annual STFM conference in Indianapolis

Visit us at [www.fpin.org](http://www.fpin.org)

