

## **PRIORITY UPDATES FROM THE RESEARCH LITERATURE (PURLs)**

# The Priority Updates from the Research Literature (PURLs) Methodology

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### **PURLs**

Priority Updates from the Research Literature (PURLs) is a product of the Family Practice Inquiries Network (FPIN) designed to alert practicing primary care clinicians about new discoveries that could cause them to change their practice.<sup>1</sup> The purpose of PURLs is to leverage an organized surveillance system to rapidly scan a large amount of medical literature relevant to primary care, identify the small percentage of that literature that represents a potential change in practice, complete a thorough review process to determine if it should change practice, and succinctly summarize that evidence for busy clinicians.<sup>2</sup> The purpose of this article is to illuminate the rigorous process by which FPIN identifies, evaluates, and publishes a PURL.

### **The PURLs Surveillance Team**

The identification of a potential PURL starts with the PURLs Surveillance Team. This team is a group of highly motivated primary care clinicians interested in new research that could represent practice-changing findings. The team is led by an FPIN staff member and the PURLs Editor-in-Chief (EIC). Volunteers from this group agree to monitor over 20 medical journals that are likely to

publish findings relevant to practicing family physicians. With a relatively small number of volunteers, a large amount of new primary care literature can be monitored on a regular basis. When one of these volunteers, or any member of the Surveillance Team, identifies a new article that they believe may represent a potential change in practice, they can nominate the article by posting the abstract along with their reasoning behind nominating it. The nomination is then commented on by the individual members of the PURLs Surveillance Team where members share their opinion on whether the article is a potential PURL. Based on the robust discussion by the PURLs Surveillance Team, the PURLs EIC makes a final determination as to whether the nominated article should continue forward in the process. If it is determined that it should move forward, it is noted as a potential PURL and prepared for an in-depth review by a PURL Jam Site.

### **PURL Jam Sessions**

Potential PURLs are assigned to one of a handful of family medicine residencies (PURL Jam Sites) for systematic review at events called “PURL Jam Sessions.” PURL Jam Sites are members of FPIN who have gone through an application process with the PURLs EIC and have been approved based on their significant critical appraisal experience, faculty availability, and program buy-in. A PURL Jam Session is a highly structured and rigorous journal club. PURL Jams are led by a local expert in evidence-based medicine and include a small number of faculty and residents. In addition to a thorough evaluation of the article in question, PURL Jams represent a valuable learning experience for the participants as they practice critical appraisal of the literature. The PURL Jam Site utilizes a structured

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Potential PURL Review Form (PPRF) to evaluate each article. There are different PPRFs, with tailored questions to address the nuances of various study designs. The PPRF form provides a series of structured critical appraisal questions for the PURL Jam Site to consider, with the goal of determining whether or not the article is a “PURL.” An article can only be declared a PURL if it meets all 6 PURLs criteria, which are explained in Table 1. Once the PPRF is completed, the PURL Jam Site

prepares a Diving for PURL (DfP) manuscript that summarizes the article and includes an explanation for each PURL criteria. Both the PPRF and DfP manuscript are submitted to FFIN.

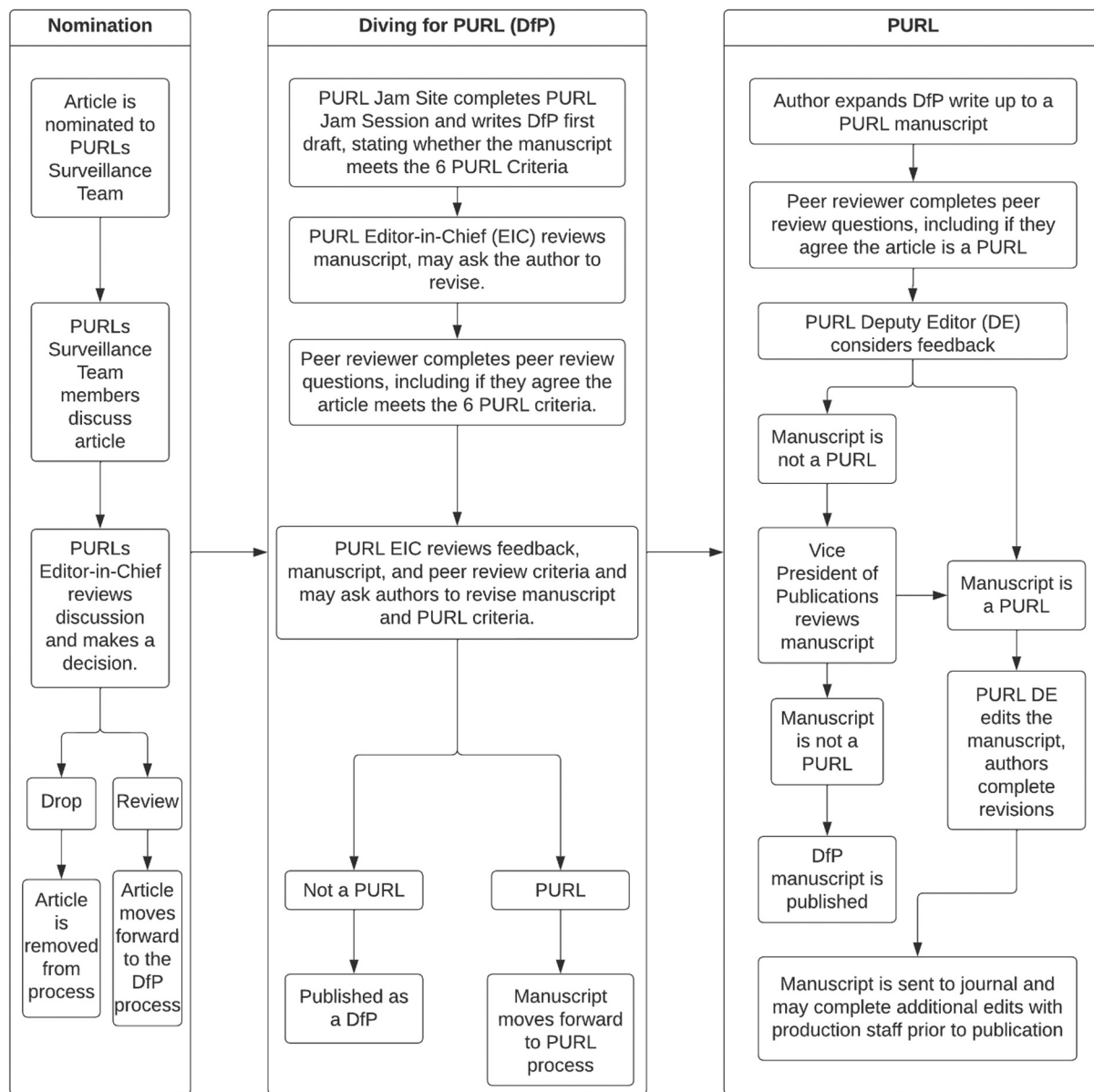
### First Round of Peer and Editorial Review

The PURLs EIC reviews the first draft and may request edits from the author team. Once the EIC is satisfied with the DfP manuscript, it is sent to the

**Table 1. PURLs Criteria**

Criteria	Question	What Fulfills This Criterion?	What Does Not Fulfill This Criterion?
<i>Relevance</i>	Are the results patient-oriented AND generalizable to patients cared for by family physicians?	The study addresses a condition commonly encountered by family physicians and suggests a change in practice that would lead to an improvement in their ability to care for patients.	Conditions that family physicians rarely encounter or are primarily taken care of by medical or surgical subspecialists are not relevant. Studies conducted on very narrow patient populations may not be relevant.
<i>Validity</i>	Are the methods and statistical analysis appropriate for the study being conducted with a minimal risk of bias?	The methods of the study were appropriate to answer the question being addressed and the statistical analysis was conducted in an appropriate manner with a large enough patient population. There is minimal risk of bias in the presented evidence.	Findings are not valid if the methods or statistical analysis were inappropriate for the study or if there were significant confounders present. Conflicts of interest or questionable funding sources can also limit the validity of the findings.
<i>Change in Practice</i>	Does the recommendation differ from a practice currently accepted by most family physicians?	A change in practice refers to findings that, if adopted, would be a change in practice for a significant percentage of family physicians. A recommendation that directly contradicts current, widely followed, clinical guidelines would be a practice changer. A study that sufficiently adds to existing knowledge to tip the scales definitively in one direction would be a practice changer.	If the proposed change is already wide-spread, it is not a practice changer. If the potential change would be on the part of specialists or midlevel providers only, then it is not a change in practice for family physicians.
<i>Medical Care Setting</i>	Would the recommended change occur in a setting where family physicians routinely work?	The recommended changes can be made in a practice setting where many family physicians routinely work and have sufficient control over policies and procedures.	If the proposed changes are in a setting where family physicians are unlikely to have sufficient control over, this criterion is not met.
<i>Implementable</i>	Are the recommendations easily implementable for the average family physician?	The proposed change could be easily implemented by a family physician without significant additional resources.	A change that requires unusual or expensive technology or large amounts of additional personnel would not be easily implementable. Changes that would not be covered by insurers are not implementable.
<i>Meaningful</i>	Should the average family physician incorporate this study’s findings into their practice based on this study?	The change should be meaningful to the patient. On occasion it is meaningful to the provider by increasing satisfaction or simplifying a process. It may be meaningful to the medical system if costs are reduced or processes are imported.	If the change would only result in disease-related, rather than patient-oriented, improvements with no clear improvement in outcomes would not be meaningful. Changes with negligible improvements with increased costs are not meaningful.

**Figure 1. PURL decision workflow.**



local expert at another PURL Jam Site for peer review. The PURLs EIC then reviews the peer reviewer’s feedback and asks the authors to incorporate pertinent feedback from the reviewer. If the author states the article met all 6 PURLs criteria, and the peer reviewer or PURLs EIC disagrees, the PURLs EIC makes the determination as to whether the manuscript will proceed as a PURL. If the PURLs EIC does not agree with the author that it is a PURL, the author will be asked to revise. If the manuscript does not meet all 6 PURLs criteria, it then proceeds to publication as a DfP in *Evidence-Based Practice* so readers can

understand why the particular article may not result in a change in practice.

### Second Round of Peer and Editorial Review

Once the PURLs EIC has approved the DfP manuscript and agrees the article is a PURL, the PURL Jam Site expands the DfP manuscript into a PURL manuscript and completes Speaker Notes. The PURL manuscript has additional components including the practice change, an illustrative case, clinical context, caveats, and potential challenges. Speaker Notes are a critical appraisal worksheet utilized in FPIN’s Journal

Club product. Once the PURL Jam Site submits the PURL manuscript, it goes through an additional peer review. A PURL Deputy Editor then edits the manuscript, incorporates peer review feedback into the manuscript, and requests that the authors revise. If the peer reviewer does not agree that the article meets all 6 PURLs criteria, the PURLs Deputy Editor reviews their reasoning and determines whether they believe it meets all 6 PURLs criteria. If the PURL Deputy Editor does not think the article is a PURL, it is sent to FPIN's Vice President of Publications to decide if the manuscript will continue as a PURL, or if the DfP will be published in *Evidence-Based Practice* instead. If the Vice President of Publications states it is a PURL, the manuscript will be revised by the authors and continue in the editorial review process. The PURL Deputy Editor reviews the authors' revision and either requests additional edits or approves the PURL manuscript for publication.

### Publication

Finalized PURL manuscripts are sent to a family medicine journal for publication. The PURLs format provides an easy-to-read synthesis of the

standardized review process. Published PURLs review the evidence and explain why the findings are compelling enough to warrant providers changing their practice. The finalized PURL has been reviewed by at least 4 experts in the PURL methodology before the manuscript completing an additional round of peer review with the journal before final publication, which is represented by Figure 1. The final product then has completed a rigorous evaluation process that includes the scrutiny of many PURL experts resulting in a brief, easy-to-read synopsis of the evidence for an immediate impact on patient care.

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To see this article online, please go to: <http://jabfm.org/content/37/4/799.full>.

### References

1. Ewigman B, Susman J. PURLS—translating research into reality. *J Fam Pract* 2007;56:981–3.
2. FPIN. What Are PURLS? Available at: <https://fpin.memberclicks.net/what-are-purls>.