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EDITORIAL

Annals of Family Medicine Is 1 Year Old: So What and Who Cares?

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I must confess that I am one of those people who love the feel and smell of books, magazines, and, yes, journals. I appreciate being able to point, click, and read on release a latest issue on the Web wherever I am, but where at any given moment an electronic journal actually *is* remains a slightly disconcerting mystery to me. The print version of *Annals*, however, is something I can hold and pretend to possess, readily identifiable and distinguished by the gentle green cover with the leaf. In hard copy, it can even be measured using old-fashioned tools, like a ruler. Indeed, if you stack and firmly press together printed copies of all 6 issues of *Annals* during its first year of publication and add the first supplemental issue, *Annals of Family Medicine* measures at 1 year of age approximately 26.6 cm × 19.8 cm × 1.4 cm and thus occupies about 737.4 cc of space—slightly more space than a couple of cans of soda pop. Together, the first year's issues include 480 pages, 283.5 (59.1%) of them filled with original research, yielding an attainable if silly metric of 1 original research manuscript occupying on average 10.4 cc of space—an astonishingly small amount of space for all the work that goes into them. To my knowledge, there is no standardized growth curve for a journal, but unencumbered by my ignorance, I choose to conclude that this is consistent with normal growth and development.

As shown in Table 1, 8.5% of pages were devoted to news and notions from the organizations sponsoring *Annals*, 6.7% to the supplement presenting the Future of Family Medicine report, 6.5% to systematic reviews, 5.1% to editorials, and the remaining features comprising lesser percentages. Another distinguishing feature of *Annals* is the very limited amount of pages devoted to (only noncommercial) advertising, only 8.5 pages for the year, made possible by financing from national family medicine organizations that relieves *Annals* of the requirements of satisfying advertisers. This leaves a reader like me particularly happy that this journal is all stuff, no fluff.

Despite my best effort, I cannot decide which of the sections of *Annals* I like best, not to mention my inability to select favorite papers thus far. I have relished them all, though not all in the same way. Yes,

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despite best guidance about how to read medical literature, I read all of all of them at least once, sometimes almost involuntarily captured by the new issue, reliably finding some things in each that made me think and want to know more from my perspective as a generalist, a family physician.

But, I'm a sucker for ideas and primary care. Maybe this 1-year-old journal now leaping about planet earth at the speed of electronic transfer, indexed by the National Library of Medicine as soon as it was eligible, is only beautiful in the eyes of its parents and just adding to an already overpopulated world of medical literature designed to promote faculty. Or maybe, maybe it really is a splendid, necessary addition to the tools needed to discover and develop family medicine and primary care.

Table 1. Distribution of Articles in *Annals of Family Medicine*, Year 1, 2003–2004

Articles	Articles No.	Pages No.	Pages % (rounded)
Original research	42	283.5	59.1
Editorials	11	24.5	5.1
Systematic reviews	5	31	6.5
Methods	1	8	1.7
Reflections	4	11.5	2.4
On Track	5	11.5	2.4
News from organizations		41	8.5
Employment opportunities		17	3.5
Noncommercial advertisements		8.5	1.8
Title pages		7	1.5
Address change forms		2	0.4
Corrections		1.5	0.3
Reviewer acknowledgment		1	0.2
Supplement report		32	6.7

SO WHAT?

If decades of relentless commitment to the development and financing of fragmented, subspecialized medicine could solve the health problems that beset our people and the health care problems that flourish in our nation, one would expect the United States to revel now in both splendid health and fabulous health care. To the contrary, it is almost certain that never before has a nation spent so much to accomplish so little for so few. If systems are perfectly designed to get the results they produce, we can deduce that the US system of care is designed to discover biological mechanisms and provide a powerhouse economic engine for the economy. If, however, the purpose of US health care were revised to be the relief of suffering and the production of health, a prudent person would conclude that something needs to change to achieve it. Many, maybe even most people who think about health and health care, are convinced that the road to a high-octane, high-performance US health care system must be laid on a foundation of high-performance primary care.[1] This is where *Annals of Family Medicine* fits in and why it is probably not just another interloper into the world of medical publishing.

For the United States to shed its current, embarrassing position as a low-performance, expensive system of health care, a transformation must occur.[2,3] Compass headings for the part of this transformation that primary care must accomplish can be found in the first supplement to *Annals*,[4] and ideas and strategies that may move the nation forward in this essential, if painful, transformation are already deposited in this young journal for concerned individuals of any persuasion to consider and possibly use. Among them, provided by authors from myriad disciplines and clinical specialties and a few patients, are the following: evidence and arguments for starting with patients' problems as they experience them, organizing care to provide both a chosen usual source of care and a means of financing payment for health care for everyone, counting and measuring and improving things that matter to those the health system is supposed to serve, working with (not on) communities, using all sorts of scientific knowledge to solve patients' problems at the level of primary care, and making care as personal as possible. Not a bad buffet of ideas for a fledgling journal, and this is just a partial list from year 1.

WHO CARES?

Who should care about another medical journal, especially one focused on family medicine and primary care? Just about everyone who has had enough of the disgrace that passes for a health care system in the United States. Just about everyone who has been a patient or witnessed the care of a friend or family member lately. Why? Because alternative ideas not always welcomed in other important journals have been welcomed at *Annals of Family Medicine*, rigorously reviewed and revised, and provided with a forum for active discussion and further development. Some of these ideas already stand on substantial evidence, some are ripe for fuller exploration, and some are plausibly part of the solutions to our country's intractable health and health care problems.

What was a dream for family medicine researchers a few months ago, a further, uncompromised repository for research from and for family physicians and other primary care clinicians and their patients, is now reality. Another infrastructure needed to help family medicine and primary care make seminal contributions to better health for all is launched, established, and available for

routine use. Now it is time to let the volumes come, filled with important questions, answers and interactive online discussion among researchers, clinicians, patients, educators and policy makers—and to turn the volume up so decision makers in both clinical and policy settings hear the messages.

To read or post commentaries in response to this article, see it online at http://www.annfammed.org/cgi/content/full/2/3/197.

Key words: Medical writing; medical publishing; primary care; family medicine; health policy

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EDITORIAL

On the Nature and Analysis of Clustered Data

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Studies in which data from multiple patients are collected per clinician or per practice are becoming common in primary care research, particularly with the increase of studies conducted in practice-based research networks. These studies generate data that are clustered. A special case of clustered data is an intervention study where clinicians or practices are randomized into an intervention or control group. In such cluster-randomized designs, all patients of a clinician or practice are assigned to the same treatment, and this design is often used when logistics of implementation or the need to avoid contamination of treatment arms is a priority.

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A major issue in the analysis of clustered data is that observations within a cluster are not independent, and the degree of similarity is typically measured by the intracluster correlation coefficient (ICC).[1] Ignoring the intracluster correlation in the analysis could lead to incorrect *P* values, confidence intervals that are too small, and biased estimates and effect sizes, all of which can lead to incorrect interpretation of associations between variables.[2] Failure to take into account the clustered structure of the study design during the planning phase of the study also can lead to underpowered study designs in which the effective sample size and statistical power to detect differences are smaller than planned.

In most situations, the numeric value of the intracluster correlation tends to be small and positive. Several authors have provided guidelines for interpreting the magnitude of the intraclass correlation[3] with small, medium, and large values of the intraclass correlation coefficients reported as .05, .10, and .15. Small values of the intracluster correlation can be deceiving, however. Investigators need to be aware that the cluster effect is a combination of both the intracluster correlation and the cluster size. Small intracluster correlations