

Implementation Insights

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Much of the *Annals* online discussion during the past 2 months addresses how scientific information can be implemented in real-world practice, communities, and systems.

There is a larger context for this discussion. Recent research program announcements from the US National Institutes of Health distinguish between dissemination and implementation.¹ Dissemination is the targeted distribution of information and intervention materials to a specific public health or clinical practice audience. The intent is to spread knowledge and the associated evidence-based interventions. Implementation is the use of strategies to introduce or change evidence-based health interventions within specific settings.

In January, the oversubscribed 2nd Annual NIH Conference on the Science of Dissemination and Implementation: Building Research Capacity to Bridge the Gap From Science to Service (<http://conferences.thehillgroup.com/obsst/di2008/about.html>) provided a forum for researchers in this emerging and important field.

Importantly, the *Annals* discussion represents both the generators and users of implementation knowledge and provides frontline experience. Discussants raise the following observations and hypotheses about effective implementation:

- Asthma medication prescription² may be less likely among physicians with greater experience of the benign course of much of the bronchospastic disease seen among children in primary care.³
- A reductionist approach that emphasizes biologically observable events,⁴ while useful, is an impoverished framework for understanding spirituality.⁵
- The phenomenon of healing⁶ may have much in common with identity development.⁷
- Understanding of chronic fatigue⁸ is enhanced by clustering patients into patterns. Earlier recognition of chronic fatigue syndrome may be important because of the helpfulness of early treatment.⁹
- "The providers are not the only element in the implementation process¹⁰; the interaction of the practices' culture, leadership, prior change history, and any external influences need consideration."¹¹
- An alternative to trying to find "the needle in

a haystack" of the suicidal adolescent¹² is to help depressed adolescents develop protective factors to diminish the likelihood of suicide.¹³

- The utility of a screening tool for impaired glucose tolerance¹⁴ would be helped by validated thresholds for useful action.^{15,16}
- Colorectal cancer testing¹⁷⁻¹⁹ is enhanced by:
 - ▶ "[T]he interplay between health insurance and having a personal physician"²⁰
 - ▶ "Team care and tracking systems"²¹
 - ▶ Use of a simple, easy-to-perform noninvasive test with adequate training and explanation among motivated patients who were coming in anyway for flu shots.²²
 - ▶ "[A]n intervention that did not require a primary care clinic visit," plus electronic medical records that identified eligible patients in advance of a flu shot clinic visit, sufficient nonphysician personnel, and resources that assured patients with positive tests had access to follow-up diagnostic evaluations.²³
 - ▶ Multiple strategies, including "(1) promotion by clinicians in the context of an office visit; (2) promotion by non-physician staff who interact with patients before or after doctor visits, (3) routine mailing of kits to patients who are due; and (4) at other times when patients come into contact with the medical system, such as when they are coming in for an annual flu shot."²⁴
 - ▶ Treating colonoscopy as a skill-based²⁵⁻²⁷ or as a specialty-training-based^{28,29} procedure. Primary care endoscopists may be a solution to projected endoscopist shortages.³⁰
 - ▶ Delivery of colonoscopy services in light of multiple factors, including markers of technical proficiency, team approaches with diverse disciplines, local medical resources, and the supply of endoscopists compared with the needs of the population.²⁵⁻³²
- Direct-to-consumer (DTC) advertising of medications³³ requires time in the patient visit that "may lead to further displacement of medically important services."³⁴ Although it can be used to build teachable moments,^{35,36} it leads to prescription of the requested drug the majority of the time, even though physicians

deny feeling pressured to prescribe.³⁷ It is wrong and should be banned.³⁸

Regarding intimate partner violence involving male perpetrator/victims,³⁹ a short screening tool and a brief intervention may increase the likelihood of it being dealt with.⁴⁰ A new paradigm is emerging for a more integrated response than treating victims medically and perpetrators in the criminal justice setting by using the acute health care setting to identify and treat the many perpetrators who also are victims.⁴¹

Screening for postpartum depression⁴² is important, and requires both screening and follow-up,⁴³⁻⁴⁷ and it may be enhanced by a 2-step method in which the first step involves a 2-item screen, since this breaks down the time barrier.^{48,49}

Regarding postmyocardial (post-MI) infarction depression,⁵⁰ family physicians are ideally positioned to integrate care,^{51,52} and post-MI depression may be reduced by cardiac rehabilitation exercise.⁵³

Reducing racial disparities in hypertension control^{54,55} is complicated,⁵⁶ may affect blacks in different countries differently,⁵⁷ and needs to recognize that "rising waters for all may not necessarily lift all boats equally." That is, special efforts may be needed for certain groups, rather than assuming that quality improvement efforts will improve care for all.⁵⁸

Please join the discussion at <http://www.AnnFamMed.org>.

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CORRECTION

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The January/February 2009 article by Thad Wilkins and colleagues (Wilkins T, LeClair B, Smolkin M, et al. Screening colonoscopies by primary care physicians: a meta-analysis. *Ann Fam Med*. 2009;7(1):56-62), had an incorrect entry in Table 2, under Estimated Adenocarcinoma Detection Rate (95% CI) for Lloyd, 2006. This entry should read: 0.5 (0.46-0.54). The corrected table is shown below.

Table 2. Estimated Rates of Colonoscopy Quality Outcomes Using Random Effects Modeling

Study, Year	Estimated Adenoma Detection Rate (95% CI)	Estimated Adenocarcinoma Detection Rate (95% CI)	Estimated Reach-the-Cecum Rate (All Patients) (95% CI)	Perforations ^a	Bleeding Not Requiring Transfusion ^a
Godreau, ²⁴ 1992	51.7 (44.0- 59.3)	2.2 (0.9- 5.7)	83.2 (76.6- 88.2)	0	0
Rodney et al, ²⁵ 1993	8.8 (6.1- 12.5)	2.0 (0.9- 4.2)	48.7 (43.1- 54.4)	0	0
Hopper et al, ²⁶ 1996	43.7 (40.7- 46.7)	Not reported	74.8 (72.1- 77.3)	0	0
Harper et al ²⁷ , 1997	20.9 (16.8- 25.8)	3.5 (2.0- 6.1)	87.1 (82.9- 90.4)	0	0
Pierzchajio et al, ²⁸ 1997	24.7 (21.7- 27.9)	0.6 (0.3- 1.4)	91.4 (89.2- 93.2)	0	0
Carr et al, ²⁹ 1998	33.4 (27.9- 39.5)	1.9 (0.8- 4.2)	82.2 (77.0- 86.4)	0	1
Kirby, ³⁰ 2004	16.8 (14.0- 19.9)	2.3 (1.4- 3.8)	80.1 (76.8- 83.1)	0	0
Edwards and Norris, ³¹ 2004	22.8 (17.6- 29.0)	2.3 (1.0- 5.2)	96.1 (92.4- 98.0)	0	0
Newman et al, ³² 2005	32.5 (29.2- 36.0)	0.9 (0.5- 1.9)	92.7 (90.6- 94.4)	0	1
Strayer, ³³ 2005 ^b	51.3 (45.1- 57.3)	0.8 (0.3- 2.6)	94.6 (91.1- 96.7)	0	0
Cotterill et al, ³⁴ 2005	23.9 (19.6- 28.8)	0.7 (0.2- 2.2)	94.0 (90.9- 96.1)	0	0
Lloyd, ³⁵ 2006 ^b	38.0 (37.2- 38.8)	0.5 (0.46- 0.54)	98.4 (98.2- 98.6)	3	2
Total	28.9 (20.4- 39.3)	1.7 (0.9- 3.0)	89.2 (80.1- 94.4)	3	4

CI = confidence intervals.

Note: rates and 95% CIs calculated using random effect model.

^a Raw data shown.

^b Additional information about this study was provided by the author.