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References

1. Koh HK, Piotrowski JJ, Kumanyika S, Fielding JE. Healthy people: a 2020 vision for the social determinants approach. *Health Educ Behav.* 2011;38(6):551–557.
2. Patient Protection and Affordable Care Act. Public Law 111-148, 42 USC 298d, x 5313, March 31, 2010.
3. Koh HK, Sebelius KG. Promoting prevention through the Affordable Care

Act. *N Engl J Med.* 2010;363(14):1296–1299 Epub 2010 Aug 25.

4. Scutchfield FD, Michener L, Thacker SB. Are we there yet? Seizing the moment to integrate medicine and public health. *Am J Public Health.* 2012;102(suppl 3):S312–S316.
5. Dresser MG, Short L, Wedemeyer L, et al. Public health detailing of primary care providers: New York City's experience, 2003–2010. *Am J Public Health.* 2012;102(suppl 3):S342–S352.
6. Maeshiro R, Koo D, Keck CW. Integration of public health into medical education: an introduction to the supplement. *Am J Prev Med.* 2011;41(4, suppl 3):S145–S148.
7. Shortell SM, Swartzberg J. The Physician as Public Health Professional in the 21st Century. *JAMA.* 2008;300(24):2916–2918.

8. Sweeney SA, Bazemore A, Phillips RL Jr, Etz RS, Stange KC. A reemerging political space for linking person and community through primary health care. *Am J Public Health.* 2012;102(suppl 3):S336–S341.
9. Koh HK, Graham G, Glied SA. Reducing racial and ethnic disparities: the action plan from the department of health and human services. *Health Aff (Millwood).* 2011;30(10):1822–1829.
10. Taliaferro LA, Borowsky IW. Beyond prevention: promoting healthy youth development in primary care. *Am J Public Health.* 2012;102(suppl 3):S317–S321.
11. Task Force on Community Preventive Services. Using evidence for public health decision making: overview of the Guide to Community Preventive Services. CDC. 2010. Available at: <http://www.thecommunityguide.org/about/CGBriefOverview04-19-10.pdf>. Accessed March 26, 2012.

12. Honoré PA, Wright D, Koh HK. Bridging the quality chasm between health care and public health. *J Public Health Manag Pract.* 2012;18(1):1–3.
13. Riley W, Bender K, Lownik E. Public health department accreditation implementation: transforming public health department performance. *Am J Public Health.* 2012;102(2):237–242.
14. Gourevitch MN, Cannell T, Boufford JI, Summers C. The challenge of attribution: responsibility for population health in the context of accountable care. *Am J Public Health.* 2012;102(suppl 3):S322–S324.

A Call for Action on Primary Care and Public Health Integration

The fields of primary care and public health in the United States have for the last century generally functioned independently of each other. This is not optimal; our current health challenges require improved efforts to work together in an integrated fashion to address the root causes of illness and prevent additional cases of disease, and to make the default choice a healthy one.¹ Effective support of healthy behaviors will require coordination of the work of clinicians, particularly primary care clinicians, with public health agencies, schools, businesses, and community groups to better utilize community resources. In such an integrated system, primary care and public health work together to support individuals, families, patients and their caregivers, and to improve the health of individuals and populations (i.e., a true health system).²

How will health care in the United States evolve to become part of such a health system? On March 28, 2012, the Institute of Medicine (IOM) released the report, "Primary Care and Public Health: Exploring Integration to Improve Population Health,"³

in which the Committee on Integrating Primary Care and Public Health review promising models of primary care and public health integration, often with shared accountability for improved community and population health outcomes. From their review of numerous examples, the IOM committee developed a set of principles that they deem essential for successful integration of primary care and public health:

1. a shared goal of population health improvement;
2. community engagement in defining and addressing population health needs;
3. aligned leadership;
4. sustainability, including shared infrastructure; and
5. sharing and collaborative use of data and analysis.

The IOM report notes that integration can start with any of these principles and that starting is more important than waiting until all are in place.

This special issue complements the recent IOM study. Four agencies of the US Department of Health and Human Services

(DHHS)—the Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), and the National Institute on Minority Health and Health Disparities (NIMHD) of the National Institutes of Health (NIH)—sponsored this special issue to showcase and support additional efforts in this critical area. A guest editor from each agency worked with editors and reviewers from the *American Journal of Public Health*® (AJPH) and the *American Journal of Preventive Medicine* (AJPM) to select papers from among more than 125 submitted manuscripts. The articles included in this issue—a first-time joint publication by AJPH and AJPM—highlight how these two sectors intersect and the work ahead to achieve true integration.

The time is ripe for such integration. As mentioned in the IOM report and cited in the accompanying editorial in this issue by HHS Assistant Secretary for Health Howard Koh and Acting Centers for Medicare and Medicaid Services Administrator

Marilyn Tavenner,⁴ new developments in the reform of health care (e.g., the passage of the Patient Protection and Affordable Care Act and the emergence of Accountable Care Organizations [ACOs] and the Patient-Centered Medical Home model) offer new and potentially powerful opportunities for achieving the vision of a health system in the United States.

Results of the semistructured interviews of 13 national leaders in health care reform, reported by Sweeney et al.,⁵ reinforce an overarching theme of this issue—as the foundation for an improved health care system, primary care will need to transform into having increased engagement with the community and use an expanded primary care team, including partnerships with public health.

Echoing the theme of primary care as foundational are the case studies of Lebrun et al. featuring nine community health centers recognized as leaders in integrating public health into delivery of primary care services.⁶ Development by one such health center and a public health department of a joint referral system for services exclusively provided by each party furnishes a striking example of movement from duplication and competition to coordination and synergy.

Other examples of direct interaction of public health departments and primary care clinics include the New York City Health Department program that sends trained health department representatives to primary care offices in medically underserved areas as “detailers” to promote clinical preventive services and chronic disease management targeted by the health department.⁷ Kay et al. report that efforts by the

Seattle-King County, Washington, health department to promote influenza vaccination by targeting all providers of primary prenatal care—obstetricians and midwives as well as family practitioners—contributed to higher vaccination rates among pregnant and postpartum women after the health department’s outreach effort.⁸ Klompas et al. describe automated sharing of electronic medical record data with the Massachusetts health department for public health surveillance.⁹

Multiple articles address the call for increased community engagement by primary care practitioners, as also cited in the interviews by Sweeney et al.⁵ The article by Taliaferro and Borowsky, for example, focuses on primary care as the link to myriad community resources that can support “strength-based” youth development.¹⁰ The literature review and environmental scan by Porterfield et al., identifying 49 specific interventions that linked primary care and community organizations for delivery of preventive services in such areas as tobacco cessation and obesity prevention, revealed that evidence of the effectiveness of these linkages remains limited, and methods to evaluate these linkages should be standardized.¹¹

Although the articles in this issue highlight many opportunities for integration within the current environment, they also highlight the challenges. A fundamental challenge to realizing the vision of integration is that primary care and public health have evolved—particularly since the beginning of the 20th century as outlined by Scutchfield et al.¹²—as distinct disciplines with different perspectives, goals, and skills. For example, Gourevitch et al. point out that

public health and primary care do not share a common definition of “population,” which can undermine the potential of ACOs to improve “population health.”¹³

Primary care and public health have also tended to operate in relative isolation. For example, the survey by Parton et al. revealed that, although the New York City Department of Health and Mental Hygiene successfully reaches many physicians—particularly primary care providers—and that the providers were receptive to engagement with the health department, physicians often remain unaware of important health department resources (e.g., the universal reporting form).¹⁴ E-learning (e.g., the module on correct death certificate completion delivered to medical residents by New York City’s health department described by Hemans-Henry et al.¹⁵) is but one tool available to improve interaction between the two sectors. Wells et al. also provide a useful mapping of competencies integrating clinical and public health skills for preventive medicine residents doing rotations in community health centers.¹⁶ Efforts toward integration will also benefit from lessons of past opportunities in the United States that largely failed, as noted by Scutchfield et al.,¹² and from work to define both the unique and shared roles of public health practitioners and primary care clinicians.

Finally, integration is hampered by the fact that both public health and primary care have limited resources (e.g., funding and time), which can make integration an additional burden rather than an opportunity. Many authors recommend changes in financing to provide incentives and adequate infrastructure for integration.

Current work within our own agencies is targeted toward some of these challenges and to addressing the principles laid out in the recent IOM report.³ HRSA, as with the three other collaborating agencies, aims to improve the integration of primary care and public health. One such visible effort, as described in the editorial by Linde-Feucht and Coulouris,¹⁷ is the Healthy Weight Collaborative, a quality-improvement project to prevent and treat obesity among children and families. This effort draws on the assets of multiple sectors and highlights the importance of bringing together primary care and public health to effect meaningful change.

CDC continues to work at the intersection of public health and health care, through its work with the Internal Revenue Service to develop guidance for charitable hospitals in their implementing and reporting on the new community health needs assessment and ongoing community benefit requirements, through pilot projects linking electronic laboratory and medical records with public health, through identification of winnable battles (e.g., decreasing health care–associated infections),¹⁸ and through its engagement in the Million Hearts initiative, a DHHS effort to prevent one million heart attacks and strokes during the next five years.¹⁹ CDC also has long-standing relationships to support integration of public health into health professional education, particularly in medical education, through cooperative agreements with such academic organizations as the Association of American Medical Colleges,²⁰ the Association for Prevention Teaching and Research, and the Association of Schools of Public Health. The

editorial by Koh and Tavenner also describes the integrative efforts embodied by the CDC Community Transformation Grants.⁴

As part of NIH's mission to apply knowledge in reducing the burdens of illness and disability, several of their institutes continue to engage in collaborative approaches to promoting translational science into public health and primary care settings. Efforts include supporting community-based participatory research that enhances primary prevention care management in cancer, diabetes, cardiovascular disease, and obesity prevention. In addition, NIMHD continues to engage in coordination of primary care and prevention research efforts that target health disparities and support the health reform implementation efforts.

AHRQ has a long-standing interest in documenting whether fostering linkages between primary care practices, public health organizations, and community services is an effective, efficient, and feasible method of improving clinical preventive service delivery. AHRQ is funding practice-based research networks to demonstrate how primary care practices can work with public health and community-based organizations to improve obesity management. AHRQ also is conducting foundational measure development activities and developing an evaluation plan to stimulate research regarding better understanding clinical-community linkages processes and outcomes to improve delivery of clinical preventive services.

Now is the time to heal the schism between medicine and public health.²¹ Only by working together to create an integrated health system that leverages the complementary strengths of public health and health care will we truly be able to do our best job of caring for our communities and the US population. ■

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References

- Frieden TR. A framework for public health action: the health impact pyramid. *Am J Public Health.* 2010;100(4):590–595.
- Fineberg HV. Shattuck Lecture. A successful and sustainable health system—how to get there from here. *N Engl J Med.* 2012;366(11):1020–1027.
- Institute of Medicine. *Primary Care and Public Health: Exploring Integration to Improve Population Health.* Washington, DC: The National Academies Press; 2012.
- Koh HK, Tavenner M. Connecting care through the clinic and community for a healthier America. *Am J Public Health.* 2012;102(suppl 3):S305–S307.
- Sweeney SA, Bazemore A, Phillips RL Jr, Etz RS, Stange KC. A reemerging political space for linking person and community through primary health care. *Am J Public Health.* 2012;102(suppl 3):S336–S341.
- Lebrun LA, Shi L, Chowdury J, et al. Primary care and public health activities in select US health centers: documenting successes, barriers, and lessons learned. *Am J Public Health.* 2012;102(suppl 3):S383–S391.
- Dresser MG, Short L, Wedemeyer L, et al. Public health detailing of primary care providers: New York City's experience, 2003–2010. *Am J Public Health.* 2012;102(suppl 3):S342–S352.
- Kay MK, Koelemay KG, Kwan-Gett TS, Cadwell BL, Duchin JS. 2009 pandemic influenza A vaccination of pregnant women—King County, Washington State, 2009–2010. *Am J Public Health.* 2012;102(suppl 3):S368–S374.
- Klompas M, McVetta J, Lazarus R, et al. Integrating clinical practice and public health surveillance using electronic medical record systems. *Am J Public Health.* 2012;102(suppl 3):S325–S332.
- Taliaferro LA, Borowsky IW. Beyond prevention: promoting healthy youth development in primary care. *Am J Public Health.* 2012;102(suppl 3):S317–S321.
- Porterfield DS, Hinnant LW, Kane H, Home J, McAleer K, Roussel A. Linkages between clinical practices and community organizations for prevention: a literature review and environmental scan. *Am J Public Health.* 2012;102(suppl 3):S375–S382.
- Scutchfield FD, Michener JL, Thacker SB. Are we there yet? Seizing the moment to integrate medicine and public health. *Am J Public Health.* 2012;102(suppl 3):S312–S316.
- Gourevitch MN, Cannell T, Boufford JI, Summers C. The challenge of attribution: responsibility for population health in the context of accountable care. *Am J Public Health.* 2012;102(suppl 3):S322–S324.
- Parton HB, Perlman SE, Koppaka R, Greene CM. Putting public health into practice: a model for assessing the relationship between local health departments and practicing physicians. *Am J Public Health.* 2012;102(suppl 3):S333–S335.
- Hemans-Henry C, Greene CM, Koppaka R. Integrating public health-oriented e-learning into graduate medical education. *Am J Public Health.* 2012;102(suppl 3):S353–S356.
- Wells EV, Sarigiannis AN, Boulton ML. Assessing integration of clinical and public health skills in preventive medicine residencies: the effect of competency mapping. *Am J Public Health.* 2012;102(suppl 3):S357–S367.
- Linde-Feucht S, Coulouris N. Integrating Primary Care and Public Health: A Strategic Priority. *Am J Public Health.* 2012;102(suppl 3):S310–S311.
- Centers for Disease Control and Prevention (CDC). *Winnable Battles.* Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at: <http://www.cdc.gov/WinnableBattles>. Accessed March 28, 2012.
- US Department of Health and Human Services (DHHS). *Million Hearts.* Available at: <http://millionhearts.hhs.gov/index.html>. Accessed March 28, 2012.
- Maeshiro R, Koo D, Keck W. Patients and populations: public health in medical education. *Am J Prev Med.* 2011;41(4S3):S145–S171.
- White KL. *Healing the Schism: Epidemiology, Medicine, and the Public's Health.* New York, NY: Springer-Verlag; 1991.