EDITORIAL

In This Issue: Technology and Primary Care

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Ann Fam Med 2011;290-291. doi:10.1370/afm.1288.

I recently ran across a publication called *Low-tech Magazine*, which "refuses to assume that every problem has a high-tech solution."[1] A number of articles in this issue of the *Annals* stake out a niche on the high-tech–low-tech spectrum and, in the process, raise intriguing questions about the place of technology in relationship-centered primary care.

HIGH TECH, LOW TECH

A pilot study by Berke et al offers a striking glimpse into the future of patient care and health research.[2] The study, which validates the use of a wireless mobile sensing device to measure physical activity and social interactions, suggests a potentially important role for such devices in strengthening both access to and quality of care. Given the widespread acceptance of mobile devices within and outside medicine, the question is not whether mobile technology will have a role in primary care, but rather what that role will look like and how far it will extend. And yet, despite (or perhaps because of) the omnipresence of mobile devices, it is incumbent upon us to think critically about what it means to incorporate this technology into the clinician's toolbox. Now is the time—as mobile sensing devices are being developed and researched in health care settings—to consider their social and political ramifications as data collection tools. An editorial by Stanley and Osgood[3] helps in this endeavor by providing insights into the state of the art and the potential effects of mobile sensing, both positive and negative, on individuals and institutions.

If mobile devices are a likely part of the future of primary care practice, electronic health records (EHRs) are becoming firmly entrenched in the present. Yet despite their ubiquitous nature, we are still learning how to best make use of their power and potential. DeVoe et al have found that, in a network of Community Health Centers, EHR data provide a more comprehensive picture of preventive services delivery than Medicaid claims data.[4] These findings add to the argument that EHRs can be important tools for research, policy, and reimbursement, particularly when pertaining to the under- and uninsured.

Schermer and colleagues[5] explore the appropriate use of technology in education and quality improvement. They find that, in Dutch family practices, a combined intervention of e-learning and performance feedback have a small and late effect on the quality of spirometry tests.

Is technology always a benefit to medicine? This question is part of the debate over what constitutes personalized medicine.[6] The term implies a caring relationship but has, according to some, "been hijacked… to mean something entirely different."[7] In a thought-provoking essay, Carlsten and colleagues make the case that personalized medicine is best viewed as primary health care that considers an individual's circumstances and surroundings, rather than her or his genotype.[8] They apply this argument to smoking cessation, arguing that using existing tools, tailored to the needs of vulnerable groups, is more effective than genetics in reducing smoking-related health disparities.

Gieteling et al report on another low-tech approach.[9] They investigate nonspecific abdominal pain in children and find that this common complaint is usually resolved in 1 to 2 visits without diagnostic tests, referral to a specialist, or prescription medicines.

ALTERNATIVE PREVENTION AND TREATMENT

Nasal carriage of MRSA (methicillin-resistant *Staphylococcus aureus*) may increase the risk of systemic MRSA infection, a condition usually treated with antibiotics. Matheson and colleagues report an association between consuming hot tea or coffee and a decreased likelihood of MRSA nasal carriage.[10] If future research confirms that drinking coffee or tea can decrease the risk of MRSA carriage, these findings may offer

a safe, inexpensive approach to a widespread and intractable problem.

A randomized controlled trial by Barrett et al investigates the placebo effect in common cold treatment.[11] This 4-armed trial (no pill, placebo, echinacea blinded, and echinacea unblinded) found a limited placebo effect related to receiving pills, regardless of the pills' content.

DEPRESSION AND PRODUCTIVITY

The burden of depression affects patients, families, and communities. In a study of the effect of depression on work productivity, Beck et al find that even minor levels of depression are associated with loss of work function.[12] A study by Azevedo-Marques and colleagues validates that the COOP/WONCA Charts, a brief pictorial functional assessment that has long been used to screen for depression, is an important tool for routine screening of mental disorders in primary care.[13]

COORDINATING CARE

A study by Liss et al distinguishes between two often conflated terms—continuity and coordination—and explores the relationship between them.[14] Interestingly, the authors find that there is a positive association between continuity and coordination for Medicare patients with selected chronic conditions who receive low levels of specialty care, but not for patients utilizing specialty care at high levels. These findings provide evidence that coordinating care for an aging population with high levels of specialty care use entails additional work for primary care practices.

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