

# Emerging Challenges for Ambulatory Records

## Integrating the Electronic Records of Hospitals and Affiliated Physicians is an Essential Step Toward Efficiency and Effectiveness, but it isn't Enough

**A**mbulatory care surpassed inpatient care as a revenue source several years ago, but conventional wisdom still seems to focus on the bed-based identity of a traditional hospital or health system. This unbalanced view is understandable because many outpatient services are still provided on a hospital campus; patients just aren't admitted to a bed. Ambulatory surgery, for example, cannot be readily distinguished from inpatient surgery while the patient is in the operating room. The difference begins once the patient leaves the surgical area and walks out of the hospital.

The resulting challenges for electronic medical records may seem like a tangential concern for two reasons. First, many outpatients still pass through a hospital. Second, more and more physicians have their offices on hospital property. This physical overlap could suggest that bridging the gap between inpatient and outpatient data is really not going to be all that difficult—especially as more physicians move from working *at* the hospital to working *for* the hospital. Barriers to convergence of clinical information ought to be falling in the process, or so it would seem.

The future is actually not so simple. The universe of ambulatory care is expanding rapidly, with a technological “big bang” starting to take it far beyond space controlled by hospitals and health systems. Health IT strategists need to build several new sites of ambulatory care into their thinking and planning. Integrating the electronic records of hospitals and affiliated physicians is still an absolutely essential step toward efficiency and effectiveness,

but it isn't enough to create the necessary foundations of 21<sup>st</sup> century healthcare.

### **EMERGING SITES OF CARE**

Community pharmacies will rapidly become key locations for the delivery of comprehensive medical services to ambulatory patients. Today's clinical pharma-

**The special focus on electronic records in ambulatory care settings is progressive, but actual progress will be built on policies and programs that favor delivery of top-quality outcomes in the least-expensive locations.**

cists are becoming integral members of the care delivery team, having moved from passively filling physicians' prescriptions to actively deciding which medications (if any) are appropriate and providing clinical counsel directly to patients.

Nurse practitioners are starting to work alongside the pharmacists, staffing walk-in clinics with extended hours and per-

forming diagnostic tests. Recent studies have shown that pharmacy-based health professionals are key members of care teams that produce the best outcomes for major health problems such as diabetes and hypertension. Electronic patient records will fall far short of their potential if they do not encompass care provided by the health professionals in pharmacies.

Factories, offices and other worksites are also becoming locations of ambulatory patient care that must be linked to the digital network of health data. Progressive employers are hiring physicians and advanced practice nurses to treat employees (and often their dependents) in clinics located at the worksite. The number of factory and office-based clinics is almost certain to grow because studies demonstrate favorable ROI in terms of health costs and employee satisfaction. Worksites also reduce employers' high

costs of absenteeism and presenteeism (i.e., being at work but working at reduced capacity due to illness or injury). Worksites collect important ambulatory care information that should obviously be in each patient's electronic record.

Physicians in concierge practice also represent an expanding branch of the ambulatory care universe, but they fall

outside the normal reach of electronic records when they do not participate in third-party reimbursement and other mechanisms at the core of health information exchanges. Further, patients who pay cash for their care present a special challenge for ambulatory electronic records. This growing number of patients and practitioners outside traditional reimbursement arrangements strengthens the case for personal health records (PHR) that are controlled by the patient, not the provider or financial intermediary.

## CARE IN UNCONVENTIONAL LOCATIONS

Medical tourism (more appropriately described as medical travel) raises similar issues and reinforces the case for expanding the scope of ambulatory records.

Health systems in several countries are competing aggressively to deliver a growing array of elective interventions to foreigners. However, American patients who go abroad for selected, non-urgent services are still likely to receive their ongoing care from American providers.

Clinical information from foreign encounters should ideally be included in patients' digital records maintained in the United States. (Ironically, most foreign health systems that seek to attract American patients are already advanced users of electronic medical records. Their relatively low prices are due, in part, to the efficiency of their data systems and production processes.) Parallel growth of virtual, Web-based care will present similar challenges for capturing clinical information on patients who purchase diagnostic and therapeutic services outside normal channels.

Last—and definitely not least—the patient's home is rapidly becoming a site for the delivery of top-quality ambulatory care. The tools of telemedicine allow a remote clinician to see his or her patients in their residences and to collect a considerable amount of diagnostic information that previously required an office visit. The clinician's observations must be entered in patient's record, thus requiring data capture and reporting methods coordinated with new clinician-patient interactions that transcend the traditional confines of time and place. The information system must also populate patient records

with real-time data collected by digital monitors in the home, such as cell phones that check blood glucose levels and digital stethoscopes that record chest sounds.

## A MOVING TARGET

Clinical leaders and policy analysts need to be sure that the expanding realm of ambulatory care is adequately reflected in programs to promote the adoption of electronic medical records. In particular, meaningful use must be defined in a way that accurately reflects and respects advances in the number of non-hospital locations where state-of-the-art medical services can be delivered. Opportunities for meaningful health reform will be lost if health IT incentives are limited to care delivered in hospitals and medical offices.

The special focus on electronic records in ambulatory care setting is progressive, but actual progress will be built on policies and programs that favor delivery of top-quality outcomes in the least-expensive locations—which will increasingly be sites where care has not been delivered in the past. Health IT is a key to this essential evolution of ambulatory care. **JHIM**

**Jeffrey C. Bauer, PhD**, a nationally recognized medical economist and health futurist, is a Chicago-based partner in the management consulting practice of Affiliated Computer Services (ACS Healthcare Solutions). Visit [www.jeffbauerphd.com](http://www.jeffbauerphd.com) or contact him at [jeff.bauer@acs-inc.com](mailto:jeff.bauer@acs-inc.com).

*Journal of Healthcare Information Management*<sup>®</sup> (ISSN 1943-734X) is published quarterly by the Healthcare Information and Management Systems Society (HIMSS). Subscription to this publication is a benefit of membership in HIMSS. Application to mail at Periodicals postage rate is pending in Chicago, IL, and additional mailing offices.

Statements and opinions appearing in articles and departments of the journal are those of the authors and do not necessarily reflect the position of HIMSS. Canadian Agreement #40648621.

Copyright © 2010 by the Healthcare Information and Management Systems Society.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission. Please contact: HIMSS Publications, 230 E. Ohio St. Suite 500, Chicago, IL 60611; (312) 915-9282; [mschlossberg@himss.org](mailto:mschlossberg@himss.org).

"HIMSS," "Healthcare Information and Management Systems Society," "Journal of Healthcare Information Management," and the HIMSS symbol are registered trademarks.

NOTE: Starting with volume 16, number 1, each volume of *Journal of Healthcare Information Management*<sup>®</sup> begins with the Winter issue.

**U.S. SUBSCRIPTIONS** cost \$69.00 for individuals and \$104.00 for institutions, agencies, and libraries. Standing orders are accepted. There is no sales tax on U.S. subscriptions. Canadian residents, add GST and any local taxes.

**INTERNATIONAL SUBSCRIPTIONS** cost \$109 for individuals and \$144 for institutions.

**SINGLE COPIES** cost \$26.00 plus shipping (see below). Please include appropriate sales tax for your state. Canadian residents, add GST and any local taxes. Prepayment is required.

**SHIPPING** (Single Copies only): \$30.00 and under, add \$5.50; to \$50.00, add \$6.50; to \$75.00, add \$8.00; to \$100.00, add \$10.00; to \$150.00, add \$12.00.

**TO ORDER** subscriptions or single issues, please contact *Journal of Healthcare Information Management*, P.O. Box 9369, Lowell, MA 01853, 978/256-6490, 978/256-1703 (fax), [cs-jhim@e-circ.net](mailto:cs-jhim@e-circ.net).

## EDITORIAL QUESTIONS AND PERMISSION

**REQUESTS** should be directed to Matt Schlossberg, Senior Editor, HIMSS, 230 East Ohio Street, Suite 500, Chicago, IL 60611, (312) 915-9282, (312) 915-9511 (fax), [mschlossberg@himss.org](mailto:mschlossberg@himss.org).

## ADVERTISING SALES AND ARTICLE REPRINTS

For advertising sales, contact Julia Caron, Advertising Sales Assistant, MedTech Publishing Company, at [julia.caron@medtechpublishing.com](mailto:julia.caron@medtechpublishing.com). For article reprints, contact Bethany Black, Assistant to the Publisher, MedTech Publishing, at [bethany.black@medtechpublishing.com](mailto:bethany.black@medtechpublishing.com).

**ADDRESS CHANGES** should be sent to Healthcare Information and Management Systems Society, 230 E. Ohio St., Suite 500, Chicago, IL 60611.

Printed in the United States of America.