



Creating Efficiencies Through Patient Engagement

Addressing the High Cost of Non-engaged Patients

The escalating cost of providing quality healthcare cannot be sustained. The price of everything from latex gloves to reinsurance is rising while government reimbursements are shrinking and harder to earn. In 2009, CMS will double the number of pay-for-performance measures hospitals must meet in order to earn their full reimbursement.

Maintaining quality while cutting costs and increasing efficiency is a top priority. To address this, many hospitals now look beyond healthcare for models of efficiency. The lean production model, based on lessons learned at Toyota Motor Company, takes a systemic approach to reducing waste and delay.⁵ Hospitals using this model approach processes like admission, discharge or surgical scheduling to identify trouble spots and success areas. The goal is to make all hospital processes faster, safer and less costly.

Patients too have a role to play. Most hospitals focus entirely on the provider side of the patient-provider relationship when seeking to increase efficiency. Nevertheless, patients who are unprepared and do not take an active roll in their care are a constant source of delay and wasted cost. Unprepared and uninvolved patients cause a myriad of problems including procedure cancellations, high call volume and repetitive patient education efforts. This lack of patient engagement threatens to mitigate the benefits reaped by process improvements or other efficiency measures. Ultimately, these problems lead to financial losses, poor clinical outcomes^{6,7}, lower patient satisfaction⁸ and a higher incidence of lawsuits.⁹

Hospitals must engage patients in their own health in order to meet the increasing fiscal challenges of healthcare today.

Non-engaged Patients are:

- More likely to suffer poor clinical outcomes¹
- Less satisfied with their provider²
- More likely to file malpractice lawsuits³
- Contributing to lower operating margins for hospitals⁴

“Patients are the most under-utilized resource [in healthcare] and they have the most at stake. They want to be involved and they can be involved. Their participation will lead to better medical outcomes at lower costs with dramatically higher patient satisfaction.”

*Charles Safran, MD, President
American Medical Informatics Association*

The Financial Impact of an Idle Operating Room

Medical procedures cancelled by patients drain millions of dollars in wasted material and labor. More than 28% of all surgical and procedure cancellations are the result of patient action¹², and the average procedure cancellation costs a hospital more than \$2,100 in lost staff time and set-up expenses.¹³ Current steps to streamline operating room efficiency like improving accountability and scheduling, can shrink turnover times, but these efforts do not reduce the impact of patient cancellations.

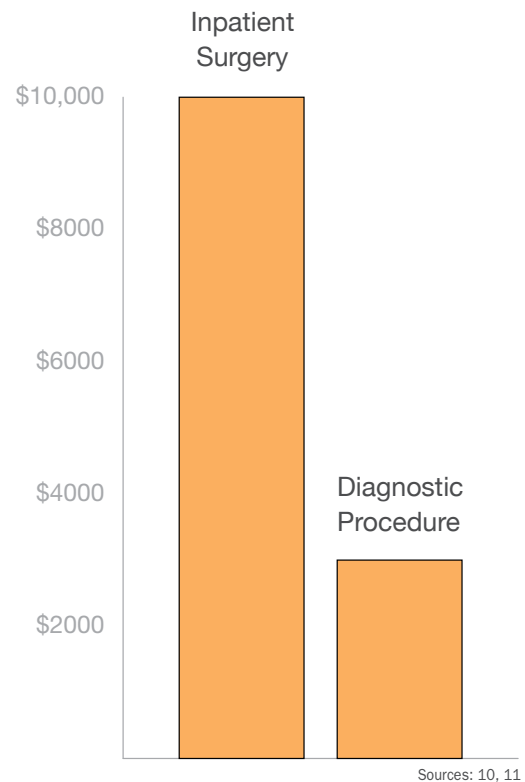
Reducing cancellations

Engaging patients in their care prior to scheduled procedures plays a critical role in reducing cancellations and no-shows. Whether it is through perioperative clinic visits, telephone calls or online communication, hospitals that educate and connect with patients before the day of surgery allay patient concerns and reduce cancellations.¹⁴⁻¹⁵ Hospitals that proactively seek patient feedback prior to scheduled procedures can identify which patients are most likely to cancel, allowing them to address the reasons why patients are considering cancelling before the cancellation actually occurs. This dramatically improves patient attendance for surgical procedures.¹⁶

Increasing procedure volume

Engaging patients can increase the volume of diagnostic procedures. Specifically, enhanced communication with patients greatly improves compliance with diagnostic procedures like colonoscopy. The Dana Farber Cancer Institute and the National Cancer Institute estimate 50% to 60% of patients referred for colorectal screening follow through and schedule the procedure.¹⁷⁻¹⁸ By educating and engaging patients early in care, hospitals can improve the number of scheduled diagnostic procedures.¹⁹ Improved communication with colonoscopy patients improves procedure compliance by as much as 25%.²⁰ Scheduling just a handful of additional diagnostic procedures can generate significant net profits.

Unrealized Revenue per Cancellation



Sources: 10, 11

Hospitals successful in avoiding just one cancellation per day, per operating room, could generate an additional 4 to 7 million dollars in annual revenue.

Healthcare Financial Management Association and the Health Care Advisory Board

The Difference Between Receiving and Retaining Information

Improving efficiency is more than cutting costs and generating revenue. It is about making the most of resources that have already been allocated. Engaging patients in their own health creates real value. Specifically, enhancing communication with patients prior to care can reduce the burden of repetitive education and high call volume.

Putting a stop to repetitive education

Most patients retain very little of the information given to them by their providers. Between 40% and 80% of the information covered in a consultation is lost almost immediately.²¹ Patients' families are rarely included in education efforts or they are involved at the very last minute—when the patient is admitted to the hospital. Consequently, nurses spend much of their time covering patients' gaps in understanding and re-explaining critical details to patients' family members or loved ones. Studies estimate that nurses spend upwards of 23% of their time on repetitive patient education.²² Many hospitals find that improving communication with patients and families prior to admission can address this problem and create significant improvement in nurse productivity. Across a hospital or health system, this translates into thousands of additional hours of more nursing capacity.

Reducing call volume

In an outpatient setting, poor patient retention translates to a high number of calls to the office. In some surgical specialties, providers average more than 25 calls per day from patient questions.²³ Each call represents a disruption in workflow. Moreover, disruptions can easily multiply, as often, many attempts are needed to return a patient's call. Providers can make a big difference with small changes in the way they communicate with patients. For example, healthcare organizations that use e-mail or the web to educate and communicate with patients can cut call volume by as much as 18%.²⁴ Physicians who engage patients using electronic methods have seen productivity rise as much as 11%.²⁵ For a physician's office, this translates to seeing two extra patients per day. For an outpatient center, this means greater through-put and increased revenues.

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University of Minnesota

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Oncology Interactive Education

“
Investing in technology is the most cost-effective way to extend the reach and efficacy of providers.”

*Dave Printz, Chief Information Officer
Central DuPage Hospital*

Leveraging Technology to Engage Patients

Today, more than ever, patients are seeking ways to become more involved in their care. More than 160 million American adults searched a health-related topic online in the last three months.²⁶ It is not uncommon for patients to arrive at their appointment armed with reams of computer print-outs and theories on self-diagnosis. What patients need, however, is reliable, trusted medical information. Few patients check the source of the information they find online.²⁷ Hospitals spend time and money putting health information on their websites, but this information is largely ignored.

Patients want their providers to provide them with the right information at the right time. According to the McKinsey Quarterly, 77% of commercially-insured patients would switch hospitals to one that provided them with more information about their care.²⁸ One study found that a quarter of all patients who had recently left their physician cited poor communication around treatment and alternatives as the deciding factor.²⁹ It is not surprising then, that all five of the issues driving Press Ganey and HCAHPS[®] scores are related to patient-provider communication.³⁰

With tight budgets and a shortage of providers, it is not always feasible to allot more time for individual patient communication. Thus, it is imperative that hospitals find solutions to improve the time physicians and nurses spend with patients. Many hospitals have turned to technology to improve communication with patients—from implementing online secure messaging to using interactive, web-based tools that educate patients and enhance the patient-provider conversation.

Studies show that patients who receive computer-based visualization tools instead of a written leaflet experience a higher satisfaction with their medical procedure.³¹ Likewise, computer-educated patients retain information at a higher level than patients who received standard education practices.³² Hospitals have found these tools enhance communication by creating a baseline of understanding, and by providing a structured way for patients to ask questions and get feedback. By using audio-visual computer education tools, hospitals improve communication and increase patient satisfaction without demanding significantly more time from their physicians or staff.

Emmi Solutions is the Leader in Patient Engagement

Chicago-based Emmi Solutions is the leader in engaging patients through communication. The company creates a series of web-based programs, called Emmi[®], that educate patients about their upcoming procedures and helps them manage their chronic conditions. These award-winning programs are designed to take complex medical information and make it simple and easy to understand. Using interactive, audio and visual techniques, the programs empower patients to take an active role in their own health.

Emmi Solutions understands that hospitals cannot improve what they cannot measure. For this reason, Emmi programs are self-documenting. This enables healthcare organizations to track a patient's experience and receive feedback throughout the continuum of care. Emmi Solutions works with clients to measure the impact engaging patients has on their bottom line.

Sources

- 1 Warner, A. "Health literacy, medication errors, and health outcomes: is there a relationship?" *Hospital Pharmacy* 2006; 41(6): 542-51
- 2 Harkey, J. "Quality of health care and financial performance: is there a link?" *Health Care Management Review* 1992; 17(4):55-63
- 3 Levinson, W. "Physician-Patient Communication. The Relationship with Malpractice Claims Among Primary Care Physicians and Surgeons." *JAMA* 1997; 277(7)
- 4 Terry, K. "Telling patients will save you more: explaining the risks and benefits of treatment options prevents confusion, improves compliance, and lessens the chance of a lawsuit." *Medical Economics* 1994; 71(14): 40-52
- 5 Benedetto, A. "Six sigma: not for the faint of heart." *Radiology Management* 2003; 25(2): 40-53
- 6 Kaplan, S. "Assessing the effects of physician-patient interactions on the outcomes of chronic disease." *Medical Care* 1989; 27 (3 suppl); S110-27
- 7 Greenfield, S. "Patient participation in medical care: on blood sugar control and quality of life in diabetes." *Journal of General Internal Medicine* 1988; 3:448-57
- 8 Peltier, J. "Patient loyalty that lasts a lifetime." *Marketing Health Services* 2002; 22(2)
- 9 Stelfox, H. "The relation of patient satisfaction with complaints against physicians and malpractice lawsuits." *The American Journal of Medicine* 2005; 118 (10): 1126-1133
- 10 "Industry overview: hospitals." Hoovers 2007. http://www.hoovers.com/hospitals/-ID__60-/free-ind-fr-profile-basic.xhtml. Accessed August 2008
- 11 "Outpatient procedure average prices." Spectrum Health. http://www.spectrum-health.org/cs/Satellite?c=eHA_Content_C&cid=1181580258349&pagename=Spectrum_Health_Core%2FeHA_Content_C%2FSpectrum_Average_Charges_Procedure_Detail_Template&ac_proc_id=467. Accessed August 2008
- 12 Glick, D. "Who cancelled my case? Day-of-surgery cancellations in inpatient and outpatient surgery settings." *American Society of Anesthesiologists: Annual Meeting Abstracts* 2006
- 13 Basson, M. "Predicting Patient Nonappearance for Surgery as a Scheduling Strategy to Optimize Operating Room Utilization in a Veterans' Administration Hospital." *Anesthesiology* 2006; 104:826-34
- 14 Ferschl, M. "Preoperative clinic visits reduce operating room cancellations and delays." *Anesthesiology* 2005; 103(4): 855-9
- 15 Kleinfeldt, A. "Preoperative phone calls. Reducing cancellations in pediatric day surgery." *AORN* 1990; 51(6): 1559-64
- 16 Parhiscar, A. "Can patient satisfaction with decisions predict compliance with surgery?" *Otolaryngology-Head and Neck Surgery* 2002
- 17 Frazier, A. "Cost-effectiveness of screening for colorectal cancer in the general population." *JAMA* 2000; 284(15): 1954-61
- 18 Vernon, S. "Participation in colorectal cancer screening: a review." *Journal of the National Cancer Institute* 1997; 89(19):1406-22
- 19 Hurley, D. "More people undergoing colonoscopy in New York." *The New York Times* June 6, 2008
- 20 Thomas, T. "Impact of an internet-based educational program on colonoscopy attendance and quality." *American College of Gastroenterology Annual Scientific Meeting* 2007
- 21 Williams, M. "The role of health literacy in patient-physician communication." *Family Medicine* 2002; 34(5): 383-9
- 22 Knee, K. "More than a wise patient care decision, computer-based education makes good business sense." *Oncology Interactive Education Series*
- 23 Schimpf, M. "Patterns of telephone calls triaged by registered nurses in a urogynecology practice." *Urologic Nursing* 2008; 28(3): 213-16
- 24 Liederman, E. "Patient-Physician Web Messaging." *Journal of General Internal Medicine* 2005; 20: 52-7
- 25 Liederman, E. "The impact of patient-physician web messaging on provider productivity." *Journal of Healthcare Information Management* 2005; 19(2): 81-6
- 26 "Harris poll shows number of 'cyberchondriacs'- adults who have ever gone online for health information-increases to an estimated 160 million nationwide." *The Harris Poll* 2007; #76
- 27 Fox, S. "Most internet users start at a search engine when looking for health information online. Very few check the source and date of the information they find." *Pew Internet & American Life Project* 2006
- 28 Grote, KD. "A better hospital experience." *The McKinsey Quarterly* 2007
- 29 Terry, K. 1994
- 30 "Hospital pulse report 2008: patient perspectives on American health care." *Press Ganey Associates, Inc.* 2008
- 31 Enzenhofer, M. et al. "Improvement of the Educational Process by Computer-Based Visualization of Procedures: Randomized Controlled Trial." *Journal of Medical Internet Research* 2004; Vol. 6(2)Enzenhofer, manuel, et al.
- 32 O'Conner-Von, S. "Preparation of Adolescents for Outpatient Surgery: Using an Internet Program." *AORN* 2008; Vol. 87(2)

Emmi Solutions, LLC
300 West Adams Street
Suite 1100
Chicago, IL 60606
Main Number 312.236.3650
Toll Free 866.900.3664

www.emmisolutions.com

For information about Emmi Solutions,
e-mail us at info@emmisolutions.com.

If you would like to speak with a sales
representative, call 866.900.EMMI (3664)
or e-mail sales@emmisolutions.com

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