

## Did your ED patients today understand their discharge instructions? Research suggests they didn't.

# Advancing Emergency Department Discharge Instructions

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PATIENT EDUCATION

Clear, comprehensible instructions to patients at the time they are discharged from the emergency department can keep those patients healthy and out of the hospital. Too often, however, emergency department discharge instructions are neither clear nor comprehensible. The result? Confused patients and overburdened emergency room staff. Patients need information presented in their language, at their literacy level, in a manner that encourages them to look at it. The material needs to be accurate, current, and easy to access for providers and patients, both of whom are likely to be overwhelmed.

It sounds elementary, but studies abound demonstrating otherwise.

There are exceptions. For example, Krames' Exit-Writer lets clinicians give patients customizable, easy-to-follow discharge instructions. Such solutions, however, are not broadly deployed, resulting in potentially dangerous situations.

### Fragmentation and misunderstanding

A 2004 Institute of Medicine (IOM) study found nearly half of all American adults have difficulty understanding and acting upon the health information they receive from physicians.<sup>1</sup> The situation doesn't appear to be improving, and the challenge in the emergency department is even more daunting.

A 2008 study reported in the *Annals of Emergency Medicine* found many patients leave the emergency department confused about the instructions they received. Researchers interviewed 140 English-speaking patients who visited one of two emergency departments. They compared those interviews with the patients' medical records, and found a serious mismatch between what providers said and what

patients understood. Even worse, those patients were pretty sure of what they “knew” 80 percent of the time—even if what they knew wasn’t quite right.<sup>2</sup>

It’s a clear case of “They don’t know what they don’t know.” And that’s dangerous. It’s imperative that patients understand their diagnosis, their care, and their discharge instructions, says Kirsten Engel, M.D., the lead author of the 2008 *Annals* paper. She’s a clinical instructor at Northwestern University and attending physician in the ED at Northwestern Memorial Hospital.

Researchers already knew that patients have difficulty recalling and comprehending their treatment and discharge instructions. Engel’s research, however, showed just how common such miscomprehension is. And perhaps more significant, it revealed that patients didn’t even realize what they were missing: Only 20 percent of patients whose comprehension was deficient knew what information they failed to comprehend.

A 2010 survey published in the *Archives of Internal Medicine* bolsters Engel’s research. It found not only is there a communications gap between doctors and patients, but that patients don’t know just how much they misunderstand. The findings revealed significant differences exist between patients’ and physicians’ impressions about patient knowledge and care received in the hospital, the authors said; they recommend efforts to improve patient/physician communication.<sup>3</sup>

### Poor comprehension, poor outcomes

Patients who fail to follow discharge instructions may have a greater likelihood of complications after leaving the emergency department. Diagnosis is just the beginning, says Dr. Engel. “Discharge instructions can’t be an afterthought.”

Unfortunately, her study is not the only one to find gaps between what patients need to know and what they understand. For example,

- A study published in the *Journal of General Internal Medicine* found that, following discharge, 49 percent of hospitalized patients experienced at least one medical error in medication continuity, diagnostic workup, or test follow-up.<sup>4</sup> Another study, this one published in the *Annals of Internal Medicine* in 2003, found that 19 percent of patients

had adverse events or injuries occurring as a result of medical management problems within three weeks after discharge.<sup>5</sup>

- Seventy-eight percent of patients do not fully understand the care and discharge instructions they receive in the emergency department, and the vast majority of them are unaware that they do not understand what doctors have told them, according to a 2009 study in the *Annals of Emergency Medicine*.<sup>6</sup>

### Overwhelmed, understaffed

It’s a serious problem, says Mark Harris, M.D., FACEP, senior vice president, hospital-based services for TeamHealth, which provides hospital-based clinical outsourcing. He offers several explanations, including increasing patient demand and declining provider capacity, which means the ED clinician has less time with each patient and, thus, spends less time explaining discharge instructions.

He cites a related problem: Traditionally, emergency departments relied upon the primary care doctor to help patients understand their discharge instructions. “However, with the increasing demand for primary care physicians and the decreasing supply, more and more ED patients are being forced to interpret their own discharge instructions to the best of their abilities.”

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And then, there's the inherent complexity of medical therapeutics. Research suggests that patients possess only a 6th grade average reading comprehension level, while some of the computer-generated discharge instructions are written at an 11th grade level, potentially causing more confusion, he says. Compounding the problem is the fact that many patients aren't fluent in English.

Computer-generated discharge instructions were created to address these problems. But, says Dr. Harris, "They often miss the mark, given the unique variables in any given patient's circumstances." The result: confusion and therapeutic failures.

Dr. Engel, too, is distressed by the status quo: Most discharge instructions are "abysmal." What physicians may find very comprehensible may not be to the patient, she says. Moreover, written materials are often so poorly presented that a typical patient wouldn't want to look at them.

### **A complex challenge in a charged environment**

What makes communicating discharge instructions so challenging are those numerous variables that come into play. "It's challenging for any of us to wrap our mind around it. This is a really difficult process," Dr. Engel says. It goes beyond developing the content. "The whole context is difficult." The ED is busy and the providers often overwhelmed. The patient is anxious and emotional—perhaps frightened.

In this stressful and distracting environment doctors and nurses must communicate vital information to patients; it's no surprise they often fail.

And, as the IOM report highlights, often those who are the least likely to understand instructions may be among the most vulnerable. Limited health literacy is more prevalent among older adults, those with limited education, and those with limited English proficiency. Adults with limited health literacy "have less knowledge of disease management and of health-promoting behaviors, report poorer health status, and are less likely to use preventive services," the report notes.

### **Consider Emergency Medicine Discharge Instruction Software**

Exit-Writer expedites patient checkout and supports successful follow-up care and recovery by addressing



the traditional problems with discharge instructions. Instructions are written so the patient will read and understand them—rather than tossing them aside (or just tossing them out). The text is engaging and easy to read. The patient's condition(s) is described in plain, non-technical language, written at a 6th-8th grade reading level. Many of the instructions include color pictures to enhance comprehension. Most are on a single page. The combination of easy-to-read text, supported by graphics created specifically for the topic, means the patient is more likely to understand and comply with the instructions.

Exit-Writer is fully customizable; the instructions are fully editable, and providers can add patient-specific and protocol-specific information before the instructions are printed. This aspect is crucial, says Todd Lang, M.D., medical director of Emergency & Trauma Services, Lourdes Health Network in Pasco, WA.

Just as important as the ability to tailor the instructions is the fact that they are consistent and current. They are subject neither to the vagaries of penmanship nor "variable provider effort put into the discharge process," Dr. Lang says. "It improves risk management by providing predictable, reproducible, and quality instructions." (He has used Exit-Writer at several hospitals throughout the United States.)

Not only is it easy to read and understand, but it's accurate and appropriate: All Exit-Writer content is evidence based, peer reviewed, and updated quarterly.

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Moreover, the instructions are available in English and Spanish, and the 150 most frequently used topics are provided in Chinese, Vietnamese, and Russian. And this isn't simply run through a translation program. Krames has in-house Spanish and Chinese medical editors. For Russian and Vietnamese, Krames outsources to a reputable translation house. The Spanish translations, in particular, have helped Dr. Lang communicate discharge instructions to patients. "I can say with confidence it improves provision of care, especially by non-Spanish-fluent providers, by having one-click translation."

Other Exit-Writer features include

- Fast and easy medication reconciliation that documents patient medication status and complies with patient-safety requirements
- Auto Fax-to-Referral-EMR interfacing capability supports HIT investment; optional HL7 interface
- ICD-9, CPT, and MESH coded
- Electronically saved information on patient visits for retrieval and quality assurance audits

### Enhanced efficiency

Exit-Writer also includes a printed prescription function, which yields multiple benefits. Electronic prescription writing not only improves patient safety, it saves time. "You can recoup a minimum of 30 staff minutes a day by eliminating phone calls from the pharmacy about illegible or incomplete prescriptions," says Lang. "Let's face it, handwritten prescriptions are a formula for diversion and medication errors, and we have known it for a decade now. Additionally, each time you add a med, Exit-Writer will automatically add medication-appropriate discharge info—like for narcotics, for example."

In addition, ExitWriter includes instructions for conditions, common to the ED, that many other systems ignore. "A good example is dyspnea," Lang says. "We encounter that all the time, but are often not able to substantiate a diagnosis of pneumonia or PE. With "symptom based" instructions, we can be more honest and get away from picking a diagnosis that is close, but not actually what they have."

It also allows for diagnoses attributed to "unknown source," he says—something that can prove very important in the ED. It allows the ED physician to be descriptive and specific; he or she does not have to assign an inapt computer-generated diagnosis.

None of this matters, however, unless clinicians actually use the tool and use it correctly: No technology, no matter how sophisticated, will be of benefit until it is deployed. Exit-Writer's simple interface means clinicians can use it with little training. Exit-Writer is easy to use, says Lang. "You don't have to train doctors to use it." For most doctors, all you need to do is give them their password and watch while they use it the first time. "Most doctors figure out how to use it without someone spending valuable time explaining. It's intuitively simple for anyone who can send an e-mail or fill out an online form."

It's even easy to learn if you are transitioning from paper (instead of another automated system). "If your ED is still on paper, you can turn this tool on and be at 100 percent use in a few shifts of work, without slowing down the department like EMRs do," says Dr. Lang.

EDs need to make the transition, be it from paper to computer or from generic to specific. "If you are using handwritten or non-emergency department-specific instruction, you are putting yourself at risk and giving your patients weak information, probably while doing it more slowly than you would do with Exit-Writer," says Dr. Lang. "Patients expect instructive, honest, professional instructions and prescriptions, not a carbon copy with the scribbles that we know are prone to errors."

## Resources

Institute of Medicine. "Health Literacy: A Prescription to End Confusion." Washington, DC: National Academies Press; 2004.

Rudd, R, BA Moeykens and TC Colton. "Health and literacy: a review of medical and public health literature." Annual Review of Adult Learning and Literacy. 2000.

## Endnotes

<sup>1</sup> The Committee on Health Literacy of the Institute of Medicine, *Health Literacy: A Prescription to End Confusion* (Nielsen-Bohman et al., 2004).

<sup>2</sup> Engel K.G., Heisler M., Smith D.M., Robinson C.H., Forman J.H., Ubel P.A. Patient Comprehension of Emergency Department Care and Instructions: Are Patients Aware of When They Do Not Understand? (2009) *Annals of Emergency Medicine*, 53 (4) <http://www.annemergmed.com/article/S0196-0644%2808%2900831-7/abstract>

<sup>3</sup> Communication Discrepancies Between Physicians and Hospitalized Patients Douglas P. Olson, MD; Donna M. Windish, MD, MPH *Arch Intern Med*. 2010;170(15):1302-1307 (<http://archinte.ama-assn.org/cgi/content/abstract/170/15/1302>)

<sup>4</sup> Moore C, Wisnivesky J, Williams S, McGinn T. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. *J Gen Intern Med*. 2003; 18:646-651.

<sup>5</sup> Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Ann Intern Med*. 2003; 138:161-7.

<sup>6</sup> Schoen et al. Taking the pulse of healthcare systems: experiences of patients with health problems in six countries. *Health Affairs*. 2005; 0: hlthaff.w5.509v3 ([www.commonwealthfund.org/surveys/surveys\\_show.htm?doc\\_id=313115](http://www.commonwealthfund.org/surveys/surveys_show.htm?doc_id=313115))

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thousands of dollars on readmission reduction, and has been proven to positively affect patient satisfaction scores. It's no wonder Krames has been the education of choice for thousands of nurses, physicians, health plans, employers, pharmaceutical companies, public health organizations, and many others for over 35 years.

Krames Exit-Writer® is the industry leader for emergency medicine discharge instructions. Because the software was designed by a practicing, board-certified emergency physician, it works the way emergency medicine professionals think. It's easy to learn and use with no formal training required. Krames Exit-Writer offers everything your facility needs to quickly, easily and effectively discharge patients from your busy ER. In addition to software solutions, Krames Exit-Writer offers comprehensive packages of discharge instructions for delivery through your EMR.

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