

WHITE PAPER

How to Develop and Use Effective Patient/Consumer Education

INTRODUCTION

Patient education materials are no longer “extras” appended to a visit to the doctor, pharmacy, or hospital. Instead, they have become an integral part of how patient care is delivered. When prepared and used properly, patient education materials can improve healthcare and outcomes, help prevent disease, instill healthy behavior, and reduce costs. This white paper looks at why patient education materials are so important, and how to make them most effective, highlighting the importance of top-quality content and offering best practices for use.



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Why Are Patient Education Materials Important?

Patient education materials offer many benefits for patients, providers, and payers as healthcare becomes more patient centered, with patients moving from mere consumers of health services to active participants in their own care. To fully participate, patients must be better informed, and patient education materials play a central role. The right materials can significantly improve patients' abilities to manage their own health.

This means that patient education materials are not an adjunct to medical care, but an extension of it. The best materials add to a patient's knowledge and change his or her behavior for the better. Spoken advice from healthcare professionals can easily be forgotten or misinterpreted. But patient education materials can be accessed repeatedly, as needed, so their messages are less likely to be forgotten or misunderstood. Patients who receive the right education are much more likely to follow physician instructions, adhere to medication regimens, and make necessary lifestyle changes.

There is also a less obvious benefit. When healthcare providers and payers give patients professional, well-prepared materials, it sends a message that the patient is important and demonstrates that the patient's health is paramount, leading to patient or member satisfaction and loyalty.

Reducing Healthcare Costs

Patient education materials can help reduce healthcare costs. Preventable diseases such as type 2 diabetes take up an increasingly large portion of healthcare dollars. Preventing such diseases and conditions or managing them better can have tremendous financial payoffs. Evidence shows that patient education materials can clearly improve outcomes and reduce costs. The American Association of Diabetes Educators found that hospitalization rates for patients with diabetes who received educational materials is 34 percent lower than those given no materials.¹

Patient education can also help reduce hospital readmissions. An article in the *Journal of the American Medical Association* found that at least 20 percent of hospital patients in the United States return within 30 days of discharge.² A study funded by the Agency for Healthcare Research and Quality (AHRQ) published in the *Annals of Internal Medicine* found that patients who are given clear after-hospital care instructions, such as how to take the proper medications and when they should schedule follow-up visits, are 30 percent less likely to go to an emergency department or be readmitted to a hospital than patients not given this information.³

A study of heart failure patients at Columbia San Jose Medical Center found that those who participated in an education program about self-care and medication compliance were nearly half as likely to be readmitted to the hospital as nonparticipants.

Many other studies have similar findings. The Del Sol Medical Center in El Paso, Texas, for example, deployed a software system for printing outpatient education materials about heart attacks and heart failure, which contributed to a significant decrease in the heart failure readmission rate from 16 percent to seven percent.⁴

Similarly, a study at Columbia San Jose Medical Center found that heart failure patients who participated in an education program about self-care and medication compliance were nearly half as likely to be readmitted to the hospital as nonparticipants.⁵

Regulatory Compliance

Patient education is prominently addressed in the Affordable Care Act, which seeks to expand awareness of clinical preventive services and benefits, and enhance community-based preventive programs, such as for obesity reduction and tobacco cessation. An important part of preventive programs is patient education.

In addition, for healthcare facilities to be eligible for funds available under Meaningful Use guidelines, they must provide patient-specific education materials to more than 10 percent of all patients seen. (These Meaningful Use documents Stage 1 and Stage 2 are available on the CMS site.)⁶ These materials can include print, multimedia, and interactive materials, such as decision aids and tools for helping patients track and manage their healthcare conditions.

Patient education materials are also exempt from the Sunshine Act, which requires pharmaceutical and medical device manufacturers to report any payments or “transfers of value” that are made directly to physicians and teaching hospitals. Patient education materials are exempt because they benefit patients directly.

What Makes Effective Patient/Consumer Education Materials?

To be effective, patient education materials must use evidence-based, credible, and up-to-date medical information from a well-known and highly reliable source.

Whether education materials are printed, multimedia, interactive, or online, there are common characteristics that make them most effective.

First, they must be easily accessible. If printed, they should go beyond standard sizes and should be made available in formats commonly used by patients, such as wallet-sized reference cards, bookmarks, and calendars. Videos must be viewable in any Web browser or on DVD. If Web based, materials must be clearly laid out and easy to navigate.

Effective patient education materials must be easy to understand, available in multiple languages, and available for appropriate reading levels. They also should be appropriate for a patient's needs, lifestyles, and values, and help them understand and manage specific health problems. Education materials do not exist in a vacuum; they should be compatible with all other information given to patients.

Above all, patient education materials must be prepared in a way so that they will be used. They should be visually appealing, well illustrated, and well designed so that a patient will want to read them—thus, when the materials are read, the message is delivered as efficiently as possible. They should be written in clear, direct language, and designed so that they can be reviewed easily and quickly.

Finally, to be effective, patient education materials must use evidence-based, credible, and up-to-date medical

information from a well-known and highly reliable source.

The Importance of Structure, Style, and Visuals

Simply having the right information is not enough when it comes to patient education materials—the information should be presented in an easy-to-understand, visually compelling way that reinforces the materials' key messages. In printed materials, that means using simple language, the active voice, illustrations, large fonts for easy reading, and color coding to highlight the most important messages. For videos, it means going beyond “talking heads” and presenting powerful animations and illustrations.

For printed pieces and websites, keep in mind that people do not have a limitless ability to take in information all at once. They typically have a difficult time remembering more than three to five main points. Thus, when structuring a piece or website, individual sections should not make more than five main points. If there are more than five, the section should be divided further for easier comprehension.

The most important information should be presented first. Everything should flow in a logical manner. Information should be presented in small chunks. Paragraphs should each have a single message—not multiple messages—and they should be kept as short as possible. The use of bulleted lists is a good way to present multiple pieces of information.

Subtitles break out information visually and focus people’s attention on the topic. They make it easy for people to find a specific piece of information without having to read the entire piece. They should be in a larger font, often in bold text, and possibly in color as well.

As for the writing style, simpler is better. Short, direct sentences using plain language works best, particularly when complex information about medical conditions is presented. The active voice should be used whenever possible, and the writing style should be conversational.

The Importance of Visuals and Design

When it comes to visuals and design in print and online, simple is best. The visual structure should be straightforward and clear. Font sizes should be large enough to be read—in print, typically 11 to 14 point, although if the material is for older readers, larger font sizes should be considered. Color should be used sparingly, for example, for subtitles or for bold-faced callouts from the text.

Adequate white space around text is restful for the eyes and makes for easier reading. Images and other graphic elements should serve specific purposes. Illustrations and images should be related to nearby text and should be simple so that they can be understood at a glance. Captions should be used to reinforce graphics’ main points. Graphics should be spread as evenly as possible throughout a piece, balanced with text and white space. For websites, embedded videos and animations help tremendously.

Some important questions to ask when assessing patient/consumer education materials:

- **IS THE INFORMATION ACCURATE AND UP-TO-DATE?** Is the information evidence-based, credible, and unbiased? Has the underlying information been provided by the most reliable sources possible? Are the materials updated frequently?
- **IS THERE A BREADTH OF TOPICS COVERED?** Most importantly, do they cover areas of interest that are most relevant to the greatest number of patients?
- **ARE THEY AVAILABLE IN MULTIPLE LANGUAGES?** Non-English speakers make up a sizable percentage of the population. The U.S. Census Bureau reports that nearly 50 million Americans use a primary language other than English at home and more than 24 million people, some 8.6 percent of the population, speak English less than “very well.” Thus, materials must be provided for this portion of the population as well as for native English speakers.
- **ARE THEY AVAILABLE IN MULTIPLE FORMATS?** Patients prefer different formats, including print, multimedia, interactive, and online. Ideally, materials should be provided in as many formats as possible.
- **IS THE READING LEVEL APPROPRIATE?** Are the materials written in clear, plain, easy-to-understand language? Are they appropriate even for patients who have low levels of literacy and health literacy?

Healthcare providers need to know which coding standards (such as Current Procedural Terminology [CPT] or International Classification of Diseases [ICD-9]) are used to identify education resources specific to a patient's condition. ICD-10 to replace ICD-9 effective October 1, 2015.

- **ARE THE MATERIALS CULTURALLY APPROPRIATE?** Different audiences respond differently to sensitive medical information and advice. Make sure that your materials are culturally appropriate for your intended audience.
- **ARE THEY FREE OF FEAR-MONGERING?** When creating patient education materials, there can be a tendency to use fear tactics to drive points home. Avoid fear tactics and present the information directly and in a straightforward manner.
- **ARE THEY EASY TO USE?** Can patients easily navigate through and use the multimedia and interactive materials? For all materials, can important information be identified easily, such as when to call a healthcare provider?
- **ARE THEY CUSTOMIZABLE?** Can they be customized by healthcare providers to meet providers' specific needs and the needs of their patients?
- **ARE OTHER RESOURCES REFERENCED?** Patients should be told where they can get more information, including websites, books, and organizations. Phone numbers should be included, whenever possible.
- **ARE THEY INTEGRATED WITH ELECTRONIC HEALTH RECORDS (EHRS)?** In addition to this integration, healthcare providers need to know which coding standards (such as Current Procedural Terminology [CPT] or International Classification of Diseases [ICD-9]) are used to identify education resources specific to a patient's condition. ICD-10 to replace ICD-9 effective October 1, 2015.

Types of Patient Education Materials

Not only can the format of patient education materials differ (e.g., printed, multimedia, interactive, and online), but the purpose of the materials can vary as well. There are several different purposes, and each should be understood clearly:

- Informational materials provide information about health conditions, diseases, medications, medical procedures, and similar health topics. Their primary purpose is educational rather than advice oriented.
- Patient instructions offer specific advice for patients, such as self-care instructions, instructions about how to take medications, how to prepare for tests and procedures, and when patients should make follow-up appointments.
- Decision-support tools help patients understand the risks and benefits of procedures and their healthcare choices and aid them in making informed decisions.
- Self-management tools help patients manage chronic health conditions such as diabetes and asthma.

You can mix and match different types of materials in a single handout, such as informational materials and patient instructions.

Best Practices for Using Patient Education Materials

Preparing the best possible education materials is one thing, but having people actually use them is another. Pennsylvania's Lehigh Valley Health Network has been a pioneer in the effective use of patient education materials. In concert with the Institute for Health Care Improvement, Lehigh Valley launched an overall improvement program that included the proper use of patient education materials.⁷

They found that one important reason patient education efforts fail is that “key learners” are not identified. A key learner is not necessarily the patient. Key learners include a person or even a group of people who accompany the patient to doctors' appointments, provide care at home, and assist the patient with medication.

The Lehigh Valley Health Network now clearly identifies key learners by asking patients a series of questions—such as whether anyone assists the patient with medication—and includes those learners in the education process and provides them with the necessary materials.

Here are other best practices for the use of patient education materials:

- **PROVIDE EDUCATIONAL MATERIALS TO PATIENTS DURING, NOT AFTER, A MEDICAL CONSULTATION.** Patient education materials should be considered an integral part of providing healthcare and should not be handed out as an afterthought at the end of the visit. Medical professionals should review the materials with patients, highlight important information, go over action items, and ensure that patients understand the materials and how to use them.
- **ASK PATIENTS IN WHAT FORMAT THEY PREFER TO RECEIVE MATERIALS.** Do they have language preferences or specific formats they prefer, such as printed materials or an online patient portal?
- **PROVIDE PATIENT EDUCATION MATERIALS TO PEOPLE IN MULTIPLE FORMATS.** Even if patients express a particular preference, having materials in several formats will be helpful. Thus, providing printed material along with links to websites, for example, can be effective.
- **MAKE SURE THAT PRINTERS AND COMPUTERS ARE EASILY ACCESSIBLE AND PLACED STRATEGICALLY IN A HEALTHCARE FACILITY.** Ensure that providers can easily obtain printed materials to provide to patients, or that providers can view online materials with patients during consultations.
- **ENSURE THAT PATIENTS CAN GET MORE INFORMATION AFTER THE VISIT,** especially via the Web.

Patient education materials must be entirely correct and current. It is easy to overlook the importance of this, but without it, the best writing, layout, and design serve little purpose.

- **EDUCATE PATIENTS ABOUT WHAT IS TRUSTWORTHY ON THE WEB.** Caution patients that there is a great deal of incorrect medical information available online, and explain that they should only trust reputable websites. Provide examples of trustworthy websites, if possible.
- **GET PATIENT FEEDBACK** to find out what is useful, what is not useful, and what else patients would like to see in education materials.
- **REINFORCE THE MATERIAL AND PROVIDE FOLLOW-UP CONTACT INFORMATION.** Patients should be given phone numbers and follow-up contact information. In addition, referring to the education materials in future visits will reinforce the materials' messages.

The Importance of Quality Content

Patient education materials must be entirely correct and current. It is easy to overlook the importance of this, but without it, the best writing, layout, and design serve little purpose.

Medical information should be evidence-based, peer reviewed, and up-to-date. The surest way to ensure this is to use a credible content provider that constantly updates information based on the latest research and best practices. Using sources that already enforce strict editorial guidelines to publish medical and pharmaceutical information trusted by the healthcare community saves time and money while vastly reducing the chance of errors or misinformation.

The Elsevier Difference

Elsevier provides a variety of products and services with the right content for education materials. Custom patient education materials are available using content from tried, true, and proven resources: the recognized authors who have published definitive works in their fields of expertise, the established leaders that physicians and allied health professionals learned from and still turn to today.

Elsevier's custom patient education includes interactive videos, educational handouts, illustrations, and medication management tools that help care teams build meaningful connections with their patients, fueling better questions and conversations. Elsevier's MEDCounselor helps healthcare providers and pharmacists

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provide consumers with the accurate, comprehensive information they need to understand and correctly use their medications.

Elsevier's ExitCare is the most trusted solution for patient education, with more than 4,000 health topics organized by diagnosis with peer-reviewed, evidence-based patient education and disease and drug information for inpatient and ambulatory settings, available in multiple languages and various literacy levels. ExitCare OnScreen makes patient education easy and interactive through videos accessible in provider settings, through web portals, kiosks, and patient homes.

MedsOnCue by VUCA Health in partnership with Elsevier, is the largest and most robust medication video library in the world, covering thousands of top-prescribed medications across multiple conditions. The average video is 60 seconds long to maintain patient engagement, and each video is developed by a team of pharmacists with over 50 years of combined experience educating patients in both acute care and outpatient settings.

Conclusion

Patient education materials can improve healthcare and outcomes, prevent disease, instill healthy behavior, and reduce costs. They have become an integral part of patient care, not just an afterthought. The best patient education materials are easily accessible, are presented in clear, easy-to-understand language, and use graphical formats that make the information easy to follow and comprehend.

Of paramount importance is quality content. Patient and consumer education materials must contain reliable content from credible sources. The medical information should be evidence-based, peer reviewed and current, based on the latest medical research and best practices.

For more information, please:

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REFERENCES

- 1 Robbins JM, Thatcher GE, Webb DA, Valdmanis VG. Nutritionist visits, diabetes classes, and hospitalization rates and charges: the Urban Diabetes Study. *Diabetes Care* 2008;31(4):655-660.
Note, the above study was cited in this patient education fact sheet from the American Association of Diabetes Educators: http://www.diabeteseducator.org/export/sites/aade/_resources/pdf/research/Diabetes_Education_Fact_Sheet_09-10.pdf
- 2 Hernandez AF, Greiner MA, Fonarow GC, et al. Relationship between early physician follow-up and 30-day readmission among Medicare beneficiaries hospitalized for heart failure. *JAMA*. 2010;303(17):1716-1722.
- 3 Jack BW, Chetty VK, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization. *Ann Intern Med*. 2009;150(3):178-187.
- 4 Robert Wood Johnson “Combining Better Systems and Intensive Patient Education for Better Heart Care,” March 24, 2010, <http://www.rwjf.org/qualityequality/product.jsp?id=58789>
- 5 Krames Patient Education, Heart Failure Outcome Study, https://www.shopstaywell.com/OA_MEDIA/krames/pdf/chf.pdf
- 6 CMS Eligible Professional Meaningful Use, Menu Set Measures, Measures 5 of 9, Last Updated: May, 2014, Last Updated: April 2013, http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/6_Patient-Specific_Education_Resources.pdf And CMS Stage 2 Eligible Professional Meaningful Use Core Measures, Measure 13 of 17, Date issued: October, 2012, http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/Stage2_EPCore_13_PatientSpecificEdRes.pdf
- 7 Fierce Healthcare/Krames Patient Education, “Reducing Hospital Readmissions with Enhanced Patient Education”, https://www.bu.edu/fammed/projectred/publications/news/krames_dec_final.pdf