A Commitment to Patient Education

A Compendium of Presentations, Publications & Events
April 2017

Measureable positive clinical outcomes are an essential part of 21st century healthcare delivery and reimbursement, but these outcomes are not possible without the full participation and cooperation of the patient and their care partner.

In order for patients and their care partners to fully participate in their care, they need to understand their disease or condition and be prepared to discuss their treatment goals, preferences and options with their healthcare provider. Patients need convenient access to relevant, evidence-based, actionable health information, presented in a way that they can understand, in order to fully participate with their healthcare provider in shared decision making.

Medscape Education is committed to providing aligned professional and patient education that supports shared decision making, increases adherence and optimizes clinical outcomes. Over the past two years, 40 IME supporters have generously supported over 140 patient education activities in 67 disease states. These activities have been viewed by over 600,000 patient/care partner learners and educational outcome measures have been collected. Medscape Education is also committed to sharing the results of this work—placing it in the public domain and making it sustainable. To this end, we have taken advantage of several opportunities to present educational outcomes at scientific meetings, as well as, inform stakeholders about the value of patient/care partner education at industry meetings and events.

We are pleased to provide this WebMD Education Compendium of publications, presentations and events as a means to share the success of this work with the education community.

Most importantly, we could not have achieved these results or taken advantage of these opportunities without your leadership and ongoing support of patient and care partner education. We look forward to working with you in the months ahead.

Sincerely,

Susan R. Grady, MSN, RN-BC
Director, Educational Strategy and Patient Engagement

You can view the rest of the document on the next page.
Each activity included demographic questions, a pre- and post-activity knowledge question, and post-activity confidence and intent-to-change questions. The initiative consisted of 3 educational activities that were made available on WebMD Education, a website dedicated to patient/caregiver learning (Figure 1). Effect size was calculated using Cramer's V to determine learners who enrolled in the

METHODS

from October 29, 2015, through August 5, 2016. WebMD Education participation data were collected from October 29, 2015, through May 24, 2016. An informed, empowered, and participatory patient is necessary to achieve weight loss. Strategies to improve the patient experience should focus not only on providers but also on patients. In the United States, roughly 1 in 3 adults is obese2 (2011). Overweight/obese general health and well-being was related to their obesity and their behavior. A different topic included a resource kit and digital Health. The coaching program Pack program were called

INTRODUCTION

The role of education in patient engagement and coaching in obesity management was developed by the Pack program, an effective, short-term solution2179. Exercise for the

HOT TOPICS EVENTS

Supporting Education for Value-Based Care: Shared Decision Making in Oncology Practice

My Voice, My Choice: The Prepared Patient

WEB PAPERS

In an Era of Patient Engagement, New Importance and New Purpose for Independent Medical Education

IMPROVING QUALITY AND INCREASING AFFORDABILITY IN HEALTHCARE: THE ROLE OF EDUCATION IN PATIENT ENGAGEMENT

GENERATIONAL CONSIDERATIONS FOR SHARED DECISION MAKING

PODCAST PRESENTATIONS

Three Perspectives of Patient Engagement: A National Study

Blending Professional and Patient Education: Alignment of the CME Enterprise with the Empowered Patient

Generational Factors in Patient Engagement

Attract, Educate and Engage Patients: A Case Study

Aligned Professional and Patient Education with Coaching to Improve Outcomes in Weight Management: A Case Study

Uncover Beliefs about Patient-Generated Health Data

Abstracts Accepted/Submitted for Podium Presentation

POSTER PRESENTATIONS

**FIGURE 3**

**TABLE 1**

<table>
<thead>
<tr>
<th>AGE</th>
<th>Learners, %</th>
<th>Completers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 to 34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 to 44</td>
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<td></td>
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<tr>
<td>45 to 54</td>
<td></td>
<td></td>
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<tr>
<td>55 to 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 and over</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ETHNICITY</th>
<th>% of Learners</th>
<th>% of Completers</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Not sure to answer</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>90%</td>
<td>90%</td>
</tr>
</tbody>
</table>

BEHAVIORAL HEALTH COACHING PROGRAM:

- 233 learners enrolled in the coaching program following the education
- Coaches had 8420 touch points with these individuals (an average of 38 touch points per enrollee)
- 16.5% of learners reported making behavioral changes, compared to 7.2% of enrollees who did nothing

**FIGURE 6**

**TABLE 2**

<table>
<thead>
<tr>
<th>Activity Level (times per week), n=65</th>
<th>Completers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>28%</td>
</tr>
<tr>
<td>3-4</td>
<td>23%</td>
</tr>
<tr>
<td>5-6</td>
<td>25%</td>
</tr>
<tr>
<td>7-9</td>
<td>15%</td>
</tr>
<tr>
<td>10+</td>
<td>3%</td>
</tr>
</tbody>
</table>

**TABLE 3**

<table>
<thead>
<tr>
<th>Changes</th>
<th>Completers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0%</td>
<td>25%</td>
</tr>
<tr>
<td>1.0%</td>
<td>35%</td>
</tr>
</tbody>
</table>

CHANGES:

- 2.0% of learners reported making behavioral changes for each of the 3 activities
- 60% of learners reported making behavioral changes, compared to 7.2% of enrollees who did nothing

**TABLE 4**

<table>
<thead>
<tr>
<th>Activity Level (times per week), n=65</th>
<th>Completers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>28%</td>
</tr>
<tr>
<td>3-4</td>
<td>23%</td>
</tr>
<tr>
<td>5-6</td>
<td>25%</td>
</tr>
<tr>
<td>7-9</td>
<td>15%</td>
</tr>
<tr>
<td>10+</td>
<td>3%</td>
</tr>
</tbody>
</table>

**TABLE 5**

<table>
<thead>
<tr>
<th>Changes</th>
<th>Completers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0%</td>
<td>25%</td>
</tr>
<tr>
<td>1.0%</td>
<td>35%</td>
</tr>
</tbody>
</table>
Title: Patient Education as a Strategy to Improve Adherence

Authors: Amy Larkin, PharmD, Christina L. Hoffman, MS

Poster Presentation: Presented at Alliance 2015 National Meeting (January) in Grapevine, TX

Abstract

Adherence to medical advice (lifestyle modifications and medical therapy) is crucial in effectively treating chronic diseases, especially diabetes, both type 1 diabetes (T1D) and type 2 diabetes (T2D). We evaluated the extent to which many known factors that are cited as reasons for nonadherence impact self-reported adherence. We found patient education related to diabetes management reduces nonadherence.

Methods

Survey:
- Available online to patients with diabetes both T2D and T1D visiting the WebMD website (webmd.com)
- This health and medical news and information site has offered searchable answers to medical questions for the past 15 years, and is used by an estimated 3.4 million persons with diabetes yearly
- Available from April 30 to May 7, 2012
- Multiple-choice questions related to diabetes management and medication adherence
- Respondents classified by self-report

Definition of “Adherence”:
- Operationally defined in multiple ways across the survey and compared in the analytic process
- Behavioral adherence: proportion of missed doses/week compared to the prescribed doses/week
- Perceived adherence: relationship to the self-reported measure

Statistics:
- Partial Least Squares (PLS) Path-Model identify overall drivers of adherence
- Segmentation algorithm: closely respondents into groups with varying levels of adherence issues for further comparison

Results

Demographics:
- Total respondents to the survey: 807
- Respondents who reported taking a prescription medication for diabetes: T2D: 322 (39.2%), T1D: 235 (29.1%)
- Overall insulin use (of at least 1 type of insulin): nearly 20%
- Duration of diabetes: 33% at >10 years, 23% at 2 years

Reason for missing medication:
- Univariate analysis showed respondents reported the single most common cause of missing medications was that they “forgot.” Expense, side effects, and complexity of the treatment plan were less frequently mentioned as causes of nonadherence (Figure 1).

Adherence Relationship to Self-Monitoring of Blood Glucose (SMBG)
- Those who reported SMBG indicated greater medication adherence.

Behavioral Adherence vs. Perceived Adherence:
- Behavioral Adherence was highly correlated to Perceived Adherence (Table 1). Although not perfectly correlated (Pearson R = 0.528), the more likely respondents were to miss medication doses in a given week, the more likely they were to consider themselves nonadherent. In addition, both Behavioral and Perceived Adherence metrics were significantly correlated to the specific reason for missing a dose (1 forget).*

Table 1: Behavioral Adherence Compared With Perceived Adherence

<table>
<thead>
<tr>
<th>Reason for Missing Dose</th>
<th>Behavioral Adherence</th>
<th>Perceived Adherence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never/Once in a while</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Usually/All the time</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Respondents classified into 4 groups based on the number of issues they had with adherence, or how adherent they were:
- Adherent (0%-10% issues with adherence, n=18%): more likely to receive information, either via verbal instruction (43%) or written materials (65%), were more likely to report SMBG and be adherent to their medication regimen (Figures 2 & 3).
- Mostly adherent (11%-26% issues with adherence, n=42%): appeared to be associated more with self-conscious factors (i.e., interferes with lifestyle, embarrassment, afraid of needles) and/or the patient was better informed how to manage their disease (96% had access to an information site or disease management materials).
- Nonadherent (27%-88% issues with adherence, n=11%): were more likely to have high scores on the self-reported worries about medications. Respondents were more likely to miss doses due to medication side effects, or often to be associated more with self-conscious factors (i.e., interferes with lifestyle, embarrassment, afraid of needles).

Table 2: Difficulty Remembering to Take Medications

<table>
<thead>
<tr>
<th>Difficulty Remembering to Take Medications</th>
<th>SMBG-yes</th>
<th>SMBG-no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never/Once in a while</td>
<td>90%</td>
<td>78%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Usually/All the time</td>
<td>2%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Conclusions

Patient education can provide patients with the knowledge necessary to help them understand their disease and how they can improve their care with increased adherence to their care plan. When gaps exist to poor patient adherence impacting quality of care, the CME industry should offer clinicians education on strategies to improve patient involvement in care, clinician communication with patients, and approaches and resources for patient education.
Even through cardiovascular (CV) tests, which are used to assess coronary arterial disease (CAD), are included in different medical guidelines, cardiologists have limited ability to adequately perform appropriate testing modalities. In parallel, many patients have concerns or anxiety related to CV testing and are not proactively educated on how to prepare for their procedures.

Background

- A total of 312 cardiologists who participated in the CME activity and the patient/caregiver activities were assessed to measure the impact of education.
- Significant improvements post-assessment vs pre-assessment were observed in cardiologists’ ability to:
  - Recommend the appropriate pharmacologic stress test to a patient
  - Select the correct imaging modality for a patient
  - Answer multiple-choice questions related to CV testing who completed the patient/caregiver education module and the pre- and post-education questions were included in the assessment (N=7513)
- The patient demographics were consistent with the type of patient undergoing a cardiac testing procedure (Figure 2).

Methods

- An online CME activity was developed as a 26-minute interactive module with 8 learning objectives criteria for the appropriate use of stress testing and preparing physicians to communicate the risks and benefits of testing modalities to their patients to enable shared decision making.
- The activity included a transcript of the discussion and a downloadable slide deck to highlight and reinforce key recommendations.
- Participant responses to questions were collected after the education (post-assessment) and compared with each user’s baseline data (pre-assessment) using a 2-tailed paired t-test to provide P-values for assessing the impact of education.
- The CME activity also included a link to an interactive patient/caregiver education module, developed in parallel to educate patients and their caregivers about cardiac stress testing. The content of the patients’/caregivers module was designed to mirror the shared decision making concepts discussed in the CME activity.
- Patients/caregivers received pre-education-based knowledge about the procedure.
- Both the CME and the patient/caregiver activities launched on December 18, 2014, and data were collected through October 7, 2015.

Results

- Significant patient/caregiver educational gaps remain, warranting additional education on:
  - Use of appropriate cardiac testing modalities
  - Appropriate imaging modalities to detect reduced myocardial perfusion
- Significant physician educational gaps remain, warranting additional education on:
  - Appropriate imaging modalities to detect reduced myocardial perfusion

Conclusion

This study demonstrated that both knowledge completeness of cardiologists on evidence-based practices and the understanding of patient/caregivers on CV testing can be improved using a dual approach to education.

Acknowledgments

This CME certified activity was supported by an independent educational grant from Astellas Scientific and Medical Affairs, Inc.

For more information contact Jelena Spyropoulos, PhD, Director of Clinical Strategy, Medscape, LLC, at jspyropoulos@medscape.net
LIPID MANAGEMENT IN CLINICAL PRACTICE: OPTIMIZING OUTCOMES THROUGH DUAL PHYSICIAN-PATIENT EDUCATION

Jelena Spyropoulos, PhD, Piyali Chatterjee, Michael LaCouture, MA, Medscape LLC, New York, NY

BACKGROUND

Hypercholesterolemia can be a risk factor for coronary artery disease (CAD) and cardiovascular disease (CVD) and may be associated with increased risk of mortality from CVD in both the general population and among patients with CVD.1-3

GOALS

To determine if online, dual physician-patient educational interventions could:

- Improve the use of patient-centered care strategies by cardiologists and primary care physicians (PCPs) related to management of hypercholesterolemia
- Increase patient knowledge on the subject and their ability to participate actively in their care plan

METHODS

An online CMS-E activity was developed in a 25 minute roundtable discussion with 3 leading experts on patient-centered strategies for hypercholesterolemia treatment.

- Participants were asked to complete a post-education survey immediately following the discussion.

RESULTS

Participant Demographics

78 cardiologists and 320 PCPs who participated in the CMS-E activity and completed both pre- and post-assessment questions. A subset of demographics, were included in the analysis.

- A total of 1589 patient/caregiver responses participated in any portion of the activity; learning and 85% of the respondents participated in the patient/carer educator module (completed).

- 59% of the learners and 76% of the learners were patients with hypercholesterolemia.

- The participating patient demographics were consistent with the demographics of patients with hypercholesterolemia (Table 1).

Pre-Post-Assessment Improvement: Cardiologists and PCPs

- A significant improvement in knowledge was observed for both cardiologists (P<0.01; V=0.100) and PCPs (P<0.01; V=0.110) (Figure 2).

- Post-assessment, 68% of cardiologists and 72% of PCPs still answered all 4 questions correctly, compared with 51% and 54%, respectively, pre-assessment (Figure 3).

Significant improvements from pre- to post-assessment were observed in physicians’ ability to (Figure 4):

- Recognize the effect of nonpharmacological strategies (Figure 4A) and HDL-C (Figure 4B) for patients (P<0.05; V=0.196) and PCPs (P<0.05; V=0.182) (Figure 4B)

- Use appropriate lipid-lowering therapy for a patient with high LDL-C (Figure 4C)

- Identify the mechanism of action of PCSK9 inhibitors (Figure 4D)

Pre-Post-Assessment Improvement: Patients/Caregivers

- 85.7% of patient/caregivers were able to recognize the definition of LDL-C, or “low-density lipoprotein” comparable with 73.6% pre-education (Figure 5).

CONCLUSION

This study demonstrated that both knowledge and competence of cardiologists and PCPs regarding evidence-based interventions can be improved using a dual approach to education. These results emphasize the importance of multiple educational interventions in patient education, despite limitations in the breadth of the educational content.

Acknowledgments

This CMS-E certified activity was supported by an independent educational grant from the brand US and Regeneron Pharmaceuticals, Inc.

For more information contact Jelena Spyropoulos, PhD, Director of Clinical Strategy, Medscape LLC, jspyropoulos@medscape.com

For more information contact Jelena Spyropoulos, PhD, Director of Clinical Strategy, Medscape LLC, jspyropoulos@medscape.com

Pre-assessment data for patients/caregivers (correct response is highlighted in blue)

Pre/Post-Assessment Data for Patients/Caregivers (Correct response is highlighted in blue)

Pre-assessment data for patients/caregivers (correct response is highlighted in blue)

Pre/Post-Assessment Data for Patients/Caregivers (Correct response is highlighted in blue)

Pre-assessment data for patients/caregivers (correct response is highlighted in blue)

Pre/Post-Assessment Data for Patients/Caregivers (Correct response is highlighted in blue)

Pre-assessment data for patients/caregivers (correct response is highlighted in blue)
Title: Online Patient Education in T2D: Impact on Patient/Caregiver Knowledge

Authors: Amy T. Larkin, PharmD; Colleen S. Healy, MA; Jess Dropkin; Anne Le, PharmD

Poster Presentation: Presented at the American Diabetes Association (ADA), 2016 National Meeting (June) in New Orleans. Presented at the American Association of Diabetes Educators (AADE), 2016 National Meeting (August) in San Diego, CA.

INTRODUCTION

- Without adequate glycemic control, patients are at heightened risk for heart attack, stroke, and other diabetes-related complications, such as blindness and kidney disease (CDC 2014).

- Only 52.5% of patients with type 2 diabetes (T2D) to have achieved the recommended A1C goal (Medscape 2011).

- To address this gap, a patient/caregiver-focused educational initiative was developed to determine if online education modules could improve knowledge about T2D management.

METHODS

- The initiative consisted of 3 educational activities that were made available on WebMD Education, a website dedicated to patient/caregiver learning.

- Each activity included demographic questions and a pre-/post-activity question for participation in the educational activities.

ACTIVITIES

- Significant improvements in knowledge resulted from participation in the educational activities:
  - 32% increase in understanding that there are different GLP-1 RAs available that have various administration requirements (49% pre-activity; 73%, post-activity, Cramer’s V = 0.16, P <.001, activity 9).
  - 32% increase in understanding that there are different GLP-1 RAs available that have various administration requirements (49% pre-activity; 73%, post-activity, Cramer’s V = 0.16, P <.001, activity 9).

PRE-/POST-ASSESSMENT IMPROVEMENT

- Significant improvements in knowledge resulted from participation in the educational activities:
  - 32% increase in understanding that there are different GLP-1 RAs available that have various administration requirements (49% pre-activity; 73%, post-activity, Cramer’s V = 0.16, P <.001, activity 9).
  - 32% increase in understanding that there are different GLP-1 RAs available that have various administration requirements (49% pre-activity; 73%, post-activity, Cramer’s V = 0.16, P <.001, activity 9).

RESULTS

- Of these 22,229 individuals, 79% had T2D, 45% were women, 61% were over 54 years of age, and 56% were white/non-Hispanic.

- Of these 22,229 individuals, 79% had T2D, 45% were women, 61% were over 54 years of age, and 56% were white/non-Hispanic.

CONCLUSION

- For each of the 3 activities, a 12% to 32% (P <.001) improvement in knowledge was observed. This study demonstrates that well-designed online patient/caregiver-focused education is successful in improving knowledge of key components of successful T2D management. Such targeted and focused digital education has the potential to empower, engage, and equip patients and their care partners with information needed for self-care condition management.

- For each of the 3 activities, a 12% to 32% (P <.001) improvement in knowledge was observed. This study demonstrates that well-designed online patient/caregiver-focused education is successful in improving knowledge of key components of successful T2D management. Such targeted and focused digital education has the potential to empower, engage, and equip patients and their care partners with information needed for self-care condition management.

Source of Support

This initiative was supported by independent educational grants from AstaZeneca and Eli Lilly and Company.

Notes

- For more information contact Amy Larkin, PharmD, Director of Clinical Strategy, Medscape, LLC, at alarkin@medscape.net.

Disclosures

The authors have nothing to disclose.
Title: Improving Physicians’ and Patients’ Knowledge of IBS-C and CIC through Targeted Education

Authors: Jovana Lubarda, PhD; Piyali Chatterjee; Douglas Dressman, MD

(University of North Carolina, Chapel Hill)

Poster Presentation: Presented at the American College of Gastroenterology (ACG), 2016 Conference (October) in Las Vegas, NV.

Supported by: Allergan and Ironwood Pharmaceuticals

STUDY OBJECTIVES:

Both physicians and patients/caregivers improved their knowledge of effective communication strategies and available therapies for IBS-C and CIC following the education.

INSTRUCTIONAL METHODS:

- The interactive method, targeted for gastroenterologists and primary care physicians (PCPs) managing IBS-C and CIC, consisted of an online, continuing medical education (CME) activity designed to increase knowledge of strategies for effective physician-patient communication and available therapies for patients with IBS-C and CIC.

- The activity was hosted on Medscape Education and included a four-part didactic session, an interactive patient case, and a downloadable workbook to highlight and reinforce strategies discussed in the synchronous session.

- The CME activity included a quiz to assess physician knowledge of CIC-related patient education activities and WebMD with text and graphics. Patient/caregiver education activities were accessible through a search for relevant search engines or by accessing the patient education materials on the Medscape website or via the Patient Education Tool website.

- The following patient education activities were developed as short text with embedded videos:
  - Activity 1: Talking to Your Doctor About Constipation: How to Describe Your Symptoms.
  - Activity 2: Understanding Your Treatment Options for Constipation.

ASSESSMENT METHODS:

- United participants in the physician learning arm, as well as their own controls, were assessed with a set of individual pre-and post-CME assessment questions to determine the effectiveness of knowledge transfer in achieving significant improvement in participant knowledge.

- A 2-item test was used to assess whether the mean and median scores increased from the pre-test to the post-test assessment. A 2-item test was used to determine statistical significance.

- Effect size of the CME activity was calculated using Cohen’s d by determining the change in proportion of participants who answered questions correctly from pre-to-post assessment. Cohen’s d >0.80 represents a small effect, d>0.80-1.20 represents a medium effect, and >0.20 represents a large effect.

- Assessment of the effect of each of the patient/caregiver education activities was performed using an online survey counseling 18% of post-CME participants to complete questions related to the activity. Patient/caregiver demographics were also collected.

RESULTS:

- The educational activities launched on November 25, 2015, and data were collected through January 19, 2016.

- McNemar’s chi-squared statistic was used to determine relative percent change < 0.05.

- In any portion of the first activity (learners), while 60% of patients/caregivers were able to recognize effective active listening as a key component of interaction (Figure 1), 15% of gastroenterologists and 33% of PCPs improved to identify active listening as a key component of interaction with patients with IBS-C and CIC (Figures 2 and 3).

- In all, gastroenterologists and PCPs improved their knowledge of effective communication strategies and available therapies (Figure 4).

CONCLUSIONS:

- An integrated physician-patient educational approach in IBS-C and CIC was effective in educating both audiences, and may be a valuable method for improving shared decision making in functional gastrointestinal disorders.

- Acknowledgments:
  - The authors wish to thank the National Institutes of Health (NIH) for their support of this research. NIH’s role in the study was limited to funding the research.

- Supported by: Allergan and Ironwood Pharmaceuticals.
INTRODUCTION

As chronic, expensive, and participatory patient is necessary to achieve weight loss.

METHODS

The initiative consisted of 3 educational activities that were made available on WebMD Education, a website dedicated to patient/caregiver learning (Figure 1). Effect size was calculated using Cramer’s V to determine outcomes (change in knowledge) and PACK Health data related to their obesity and their behavior. A different topic was addressed each week to them throughout the week to once a week by their coach, who also texted or emailed 5% increase in recognizing that obesity is a problem, and 69% believing Medicare should cover weight loss medications (strategies to add exercise to daily life). Strategies to improve the patient experience should focus not only on providers but also on the patient’s ability to self-help and need for time providers.

RESULTS

Outcomes (change in knowledge) and PACK Health data related to their obesity and their behavior. A different topic was addressed each week to them throughout the week to once a week by their coach, who also texted or emailed 5% increase in recognizing that obesity is a problem, and 69% believing Medicare should cover weight loss medications (strategies to add exercise to daily life). Strategies to improve the patient experience should focus not only on providers but also on the patient’s ability to self-help and need for time providers.

Table: Learners who were highly activated patients had better care experiences than less activated patients.

CONCLUSIONS

For each of the 3 activities, a ≥30% (p < 0.01) improvement in knowledge and confidence was identified among learners who continued into the behavioral coaching program reported improvements in a wide variety of behaviors related to the management of the obesity and general health and well-being after 3 months. This study demonstrates that online patient education accompanied by health coaching can significantly improve critical success factors for obesity management, including knowledge of effective strategies, confidence in implementation, intention to change behaviors, and clinical outcomes. Such targeted and focused digital education has the potential to empower engagement and equip patients and their care partners with information needed for safe condition management.

Source of Support

This initiative was supported by an independent educational grant from Takeda Pharmaceuticals USA, Inc.
Title: Online Patient Education in Advanced Lung Cancer: Effect on Patient/Caregiver Knowledge

Authors: Elaine Hamrstrøm, PhD, Tara Herrmann, PhD, Christine Carey, PharmD

Poster Presentation: Presented at the IASLC 17th World Conference on Lung Cancer (December 2016) in Vienna, Austria.

Supported by: Genentech, AstaZeneca, Merck, and BMS

Online Patient Education in Advanced Lung Cancer: Effect on Patient/Caregiver Knowledge

Elaine Hamrstrøm, PhD, Tara Herrmann, PhD, Christine Carey, PharmD
Medscape Education, New York, NY

Introduction

Recent studies have found that patients with lung cancer consistently report suboptimal communication with their physicians which, in turn, can limit shared decision making and improve treatment outcomes. Ongoing efforts by patients and caregivers to become more engaged and informed about their care is a necessity in the management of advanced lung cancer. Digital education tools, specifically in an online module format, are an opportunity to provide baseline and targeted self-assessment in a manner that can assist patients and caregivers with obtaining and sharing treatment information.

Methods

- The initiative consisted of 4 educational activities that were made available on Medscape Education, a website dedicated to patient/caregiver learning.
- Activities 2 through 4 were posted simultaneously, while activity 1 was posted prior to the other activities.
- The activities were written at the 6th to 8th grade reading level and designed to be understandable for the patient/caregiver audience. They contained actionable content that improves patient knowledge, skills, and capabilities needed to lead to improved health outcomes and behavior change.
- The activities launched online between August and October 2015, and data were collected through April 2016.
- Each activity included demographic questions and a pre- and post-activity knowledge assessment, which was aligned with the learning objectives of the NCCN activities.

Analysis

- Participants were anonymous, but asked to provide basic demographic information on age group, ethnicity, gender, and whether they were a caregiver or a patient.
- Answers to each learner’s matching pre- and post-activity outcomes questions informed the comparative analysis of knowledge improvement relative to baseline self-assessment responses; in this way each learner served as his/her own control activity.

Results

After 6 months, a total of 690 individuals had participated in the education. Of the 182 lung cancer or caregivers of a person with the disease and 60% were female. The average age of individuals who participated in only 1 of 4 activities varied based on topic (Figure 1).

Significant post-participation improvements in knowledge were observed, including:
- A 5% increase in comprehension that treatment-related side effects should be reported to their cancer care team both while on the drug and after completion of treatment with a cancer immunotherapy (Figure 2).
- An 11% increase in understanding that the mechanism of action associated with use of cancer immunotherapies in the treatment of lung cancer (Figure 3).
- A 20% increase in recognizing that if response with cancer immunotherapies will take longer and may be more severe than chemotherapy(Figure 4).

A 20% increase in understanding that molecular testing is necessary in individuals with advanced NSCLC (p<.0001, n=90, 26.0% to 66.0%)

A 30% increase in understanding that molecular testing is necessary in individuals with advanced NSCLC or were caregivers of a person with NSCLC (p<.0001, n=90, 26.0% to 66.0%)

A 5% increase in comprehending that treatment-related side effects should be reported to their cancer care team both while on the drug and after completion of treatment with a cancer immunotherapy (Figure 3).

Conclusions

This study demonstrates that online patient education can be successfully improving familiarity with essential elements involved in the management of advanced lung cancer. Such targeted and focused digital education has the potential of improving knowledge needed for self-care condition management. However, it is also evident from the results that further education is warranted in several areas of NSCLC treatment and management in order to facilitate conversation and comfort between patients and their clinicians.

Source of Support

The patient education activities were funded in part through independent educational grants from Genentech, AstaZeneca, Merck, and BMS.

For more information, contact Tara Herrmann, PhD, Director, Educational Strategy, Medscape, LLC, Herrmann@medscape.com.

Medscape Education, New York, NY

Online Patient Education in Advanced Lung Cancer: Effect on Patient/Caregiver Knowledge

Elaine Hamrstrøm, PhD, Tara Herrmann, PhD, Christine Carey, PharmD

Poster Presentation: Presented at the IASLC 17th World Conference on Lung Cancer (December 2016) in Vienna, Austria.

Supported by: Genentech, AstaZeneca, Merck, and BMS

Online Patient Education in Advanced Lung Cancer: Effect on Patient/Caregiver Knowledge

Elaine Hamrstrøm, PhD, Tara Herrmann, PhD, Christine Carey, PharmD
Medscape Education, New York, NY

Introduction

Recent studies have found that patients with lung cancer consistently report suboptimal communication with their physicians which, in turn, can limit shared decision making and improve treatment outcomes. Ongoing efforts by patients and caregivers to become more engaged and informed about their care is a necessity in the management of advanced lung cancer. Digital education tools, specifically in an online module format, are an opportunity to provide baseline and targeted self-assessment in a manner that can assist patients and caregivers with obtaining and sharing treatment information.

Methods

- The initiative consisted of 4 educational activities that were made available on Medscape Education, a website dedicated to patient/caregiver learning. Activities 2 through 4 were posted simultaneously, while activity 1 was posted prior to the other activities.
- The activities were written at the 6th to 8th grade reading level and designed to be understandable for the patient/caregiver audience. They contained actionable content that improves patient knowledge, skills, and capabilities needed to lead to improved health outcomes and behavior change.
- The activities launched online between August and October 2015, and data were collected through April 2016.
- Each activity included demographic questions and a pre- and post-activity knowledge assessment, which was aligned with the learning objectives of the NCCN activities.

Analysis

- Participants were anonymous, but asked to provide basic demographic information on age group, ethnicity, gender, and whether they were a caregiver or a patient.
- Answers to each learner’s matching pre- and post-activity outcomes questions informed the comparative analysis of knowledge improvement relative to baseline self-assessment responses; in this way each learner served as his/her own control activity.

Results

After 6 months, a total of 690 individuals had participated in the education. Of the 182 lung cancer or caregivers of a person with the disease and 60% were female. The average age of individuals who participated in only 1 of 4 activities varied based on topic (Figure 1).

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This study demonstrates that online patient education can be successfully improving familiarity with essential elements involved in the management of advanced lung cancer. Such targeted and focused digital education has the potential of improving knowledge needed for self-care condition management. However, it is also evident from the results that further education is warranted in several areas of NSCLC treatment and management in order to facilitate conversation and comfort between patients and their clinicians.

Source of Support

The patient education activities were funded in part through independent educational grants from Genentech, AstaZeneca, Merck, and BMS.

For more information, contact Tara Herrmann, PhD, Director, Educational Strategy, Medscape, LLC, Herrmann@medscape.com.
Title: Aligned Physician-Patient Education Increases Awareness of Strategies to Improve Treatment Outcomes in Epilepsy

Authors: Thomas Finnegan and Piayi Chatterjee

Poster Presentation: Presented at American Epilepsy Society, 2016 (December) in Houston, TX

Supported by: Sunovion Pharmaceuticals, Inc.

ALIGNED PHYSICIAN-PATIENT EDUCATION INCREASES AWARENESS OF STRATEGIES TO IMPROVE TREATMENT OUTCOMES IN EPILEPSY

Thomas Finnegan and Piayi Chatterjee

Medscape, LLC, New York, NY, USA

INTRODUCTION

Epilepsy is a brain disorder characterized by an increased susceptibility to seizures. The condition affects about 2.5% of the US population and is much less prevalent in children than in adults. About 2.5-3% of people in the US have had seizures at some point in their lives. Epilepsy can be genetic or acquired and is associated with a risk of adverse outcomes. Epilepsy is a spectrum disorder that can occur in all age groups and can have a range of associated medical and psychiatric conditions. In many cases, epilepsy is associated with a better understanding of strategies to improve treatment outcomes. In this study, we investigated the extent to which physician-patient education increased awareness of strategies to improve treatment outcomes in epilepsy.

METHOD

CME-certified activities were included in this analysis. Both activities utilized together a mobile device-based, interactive learning experience to deliver learning objectives. The activities were available on the Medscape website and were designed to be interactive and engaging. The activities were administered to a large number of physicians and were evaluated using a variety of outcome measures. The results of the activities were used to assess whether the mean change in awareness of strategies to increase treatment outcomes was associated with the interactive learning experiences.

RESULTS

The results showed that the mean pre-assessment awareness of strategies to improve treatment outcomes was significantly higher than the post-assessment awareness of strategies to improve treatment outcomes. The results also showed that the mean change in awareness of strategies to improve treatment outcomes was significantly higher in the interactive learning experience group than in the non-interactive learning experience group. The results indicated that the interactive learning experience was effective in increasing awareness of strategies to improve treatment outcomes.

CONCLUSIONS

The results of this study suggest that interactive learning experiences can increase awareness of strategies to improve treatment outcomes in epilepsy. The results also suggest that interactive learning experiences can improve patient satisfaction and adherence to treatment. The results of this study have implications for the development of future interactive learning experiences to improve treatment outcomes in epilepsy.

ACKNOWLEDGMENT

The authors thank the following individuals for their contributions to this study:...

REFERENCES

THE ABILITY OF ALIGNED PROFESSIONAL AND PATIENT EDUCATION AND COACHING TO IMPROVE OUTCOMES: A CASE STUDY

Christina Hoffman, MS; Amy L. Larkin, PharmD; Susan R. Grady, MSN, RN-BC; Mazi Rasulnia, PhD

Medscape Education, New York, NY; Pack Health, Birmingham, AL

Supported by: Takeda Pharmaceuticals USA, Inc.

INTRODUCTION

Aligned professional and patient education that supports trusted decision making has the potential to improve adherence, patient outcomes, and providers’ clinical judgment.

Presented at RN-BC; Mazi Rasulnia, PhD

METHODS

Learners were enrolled in the coaching program. WebMD Education participation data were collected from October 29, 2015, to December 31, 2015. Pack Health coaching program data were collected from May 5, 2016, to August 31, 2016. The coaching program included a resource kit and digital and telephonic communication from a health coach (Figure 3).

RESULTS

Follow-up

The authors have nothing to disclose.

CONCLUSIONS

Follow-up

For more information contact Amy Larkin, PharmD, Director of Clinical Strategy, Medscape, LLC, at almarkin@medscape.com

Disclosures

The authors have nothing to disclose.

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Table 1

Table 2

Table 3

Table 4

Table 5

Table 6

Table 7

Table 8

Table 9

Table 10

Table 11
Title: Hypoparathyroidism Management: Success of Aligned Healthcare Provider and Patient/Care Partner Education at Prompting Changes in Practice

Authors: Amy Larkin, PharmD; Piyal Chatterjee, Mary Kathryn Van Kleunen; Susan Grady, MSN, RN-BC; Karen Badi, MD, MPH; Haleh Kadkhoda, MS; Julie Hunsaker

Poster Presentation: Presented at ENDO 2017 (April) in Orlando, FL

Supported by: NPS Pharmaceuticals, Inc., an indirect subsidiary of Shire North American Group, Inc.

HYPOPARATHYROIDISM MANAGEMENT: SUCCESS OF ALIGNED HEALTHCARE PROVIDER AND PATIENT/CARE PARTNER EDUCATION AT PROMPTING CHANGES IN PRACTICE

Amy Larkin, PharmD; Piyal Chatterjee, Mary Kathryn Van Kleunen; Susan Grady, MSN, RN-BC; Karen Badi, MD, MPH; Haleh Kadkhoda, MS; Julie Hunsaker; HypoPARAthyroidism Association, Inc.

CONCLUSIONS

- The metrics and analyses gathered in this assessment were done during an educational activity that did not have any educational associations. In addition, learning occurred through multiple channels. The data was from surveys, focus groups, and interviews. The activity was also assessed by an independent firm in a controlled environment. The data was analyzed to determine if there was change in practice.

- Targeted and focused digital education has the potential to improve engagement and satisfaction with information received for self-care and condition management.

- Aligned professional and patient/care partner education on developing and implementing hypoparathyroidism management plans is a useful way to effect changes in practice and support shared decision making.

Source of Support: This initiative is sponsored by an independent academic partner, NPS Pharmaceuticals, Inc., and is supported by data generated during the third party evaluation. For more information, contact Amy Larkin, PharmD; Piyal Chatterjee, MD; Mary Kathryn Van Kleunen, MD; Susan Grady, MSN, RN-BC; Karen Badi, MD, MPH; Haleh Kadkhoda, MS; Julie Hunsaker; HypoPARAthyroidism Association, Inc.

Disclosures: The authors have nothing to disclose.
SUCCESS OF ALIGNED PHYSICIAN AND PATIENT/CAREGIVER ONLINE EDUCATION ON COMBINATION THERAPY FOR T2D MANAGEMENT

Amy T. Larkin, PharmD, Colleen S. Healy, MA, Susan Grady, MSN, RN-BC, Anne Le, PharmD

Medscape Education, New York, NY

INTRODUCTION

Education needed and clinical performance gaps related to combination therapy in T2D management of diverse current treatment regimens.

METHODS

Educational need and clinical performance gaps related to combination therapy in T2D management of diverse current treatment regimens.

PHYSICIAN CME

Two online CME activities were developed; each has a 30-minute mandatory component followed by a 30-minute component that reader can access at their own pace. Readers can take one or both activities.

Both activities included transcripts and pre/post assessment questions.

We sought to determine if an online parallel physician education program through web-based education could improve knowledge/competence of PCPs and knowledge of patient outcomes related to T2D management with combination therapy.

RESULTS

- 8427 learners accessed 1 activity
- 378 learners accessed 2 activities
- 5% improved their knowledge
- 8427 learners accessed 1 activity
- 378 learners accessed 2 activities
- 5% improved their knowledge

CONCLUSIONS

This study demonstrates that well-designed aligned HCP and patient/caregiver education can be successful in improving knowledge/competence of key components of successful T2D management.

Supported by: AstraZeneca
BACKGROUND

Major depressive disorder (MDD) is the most prevalent mental disorder in the United States, causing significant patient disability and caregiver burden, and requiring extensive utilization of healthcare resources.1 Care of patients with MDD is suboptimal, and there are challenges in patient engagement and communication among the entire healthcare team, as well as with patients.2 Patient education in MDD, however, has been linked to improved clinical outcomes.3 This study examined the effect of two patient education programs based on knowledge of MDD symptoms, and treatments and side effects.4 We also sought to determine whether patients and care partners had different educational needs based on demographic characteristics, such as age and gender.5

METHODS

Two online-based activities focused on MDD symptoms and side effects of treatment were hosted on WebMD Education, a website dedicated to patient and care partner/family member education (Figure 1).

- Activities were 5 to 7 minutes in length, written at a fifth- to seventh-grade reading level, and included actionable next steps to facilitate learning and behavior change.

- On average, 156 million visits visit the WebMD Depression channel each month. WebMD delivers relevant content to the patient and care partner/family member needs based on personal interests.

- Activities included demographic questions regarding age, gender, race/ethnicity, and interest (patient vs care partner/family member). “Patient” was defined as a learner who self-identified as “having this condition” (Figure 2). A repeated pre/post-assessment question was included to measure impact of the education as defined by improvement in knowledge from pre- to post-activity (Figure 2).

- Statistical significance: A chi-square test determined if a statistically significant improvement (P < 0.05) occurred.

- Effect size: Cramer’s V determined the medium = 0.16-0.30; large = >0.30 pre- to post-assessment (small = 0.6-0.15; medium = 0.16-0.30; large = >0.30) differences.

- Participant data were collected between September 29, 2015, and July 1, 2016.

RESULTS

- There were no significant gender-based differences observed.

- Male and female patients with MDD aged <45 years answered correctly at a significantly higher rate than patients aged ≥45 years (P < 0.05) (Figure 4).

- Average drop-off rate for patients and care partners/family members, 34% (pre-assessment N vs post-assessment N who answered the activity assessment question).

- Care partners/family members, regardless of gender, aged <45 years outperformed care partners/family members aged ≥45 years (P < 0.05) (Figure 5).

- Female < 45: 179/119 (65%) 82/103 (77%) P = .019 Effect Size: 0.14

- Female ≥ 45: 483/383 (78%) 283/330 (84%) P = .019 Effect Size: 0.08

- Male < 45: 624/424 (68%) 378/288 (76%) P = .005 Effect Size: 0.09

- Male ≥ 45: 1421/1110 (78%) 1008/845 (84%) P < .001 Effect Size: 0.07

- Male and female patients with MDD aged <45 years of age, there were no significant gender-based differences observed.

- Care partners/family members aged <45 years (P < 0.02) and female care partner/family members of all ages underperformed other groups (P < 0.05) (Figure 5).

- Online patient and care partner/family member education improved actionable knowledge on MDD symptoms, side effects, and treatments, thus empowering, engaging, and equipping patients and their care partners/family members with information needed for self-care. Additionally, we uncovered differences, measured by performance on knowledge questions, between patients and care partners/family members aged ≥45 years of age, as well as greater educational needs among female care partners/family members of all ages. The average drop-off rate in this study was approximately 34% for each different subgroup of participants examined. Studies that have examined the enrollment and intention of patients in web-based interventions on health-related topics show a drop off from consent to completion of about 10% instantaneously, with an additional 2% drop out per every 100 survey items; some web-based studies have demonstrated greater than 20% immediate drop-off.7

CONCLUSION

Online patient- and care partner/family member education improved actionable knowledge on MDD symptoms, side effects, and treatments, thus empowering, engaging, and equipping patients and their care partners/family members aged ≥45 years of age, as well as greater educational needs among female care partners/family members of all ages. The average drop-off rate in this study was approximately 34% for each different subgroup of participants examined. Studies that have examined the enrollment and intention of patients in web-based interventions on health-related topics show a drop off from consent to completion of about 10% instantaneously, with an additional 2% drop out per every 100 survey items; some web-based studies have demonstrated greater than 20% immediate drop-off.7

While we are not able to determine if the education will translate to improved clinical outcomes for this population of learners, literature has shown that patient education in MDD has been linked to improved clinical outcomes.8 This research has implications for future design of education on mood disorders, suggesting that patients younger than age 45, regardless of gender, and female care partners/family members of all ages may benefit from educational approaches targeted to their unique educational needs.

Acknowledgments

The educational activity and outcomes measurement were funded through an independent educational grant from Tevidx Pharmaceutical U.S.A., Inc. and Lundbeck.

For more information, contact Jovana Lubarda, PhD, Associate Director, Educational Strategy, Medscape, LLC.

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ABSTRACTS ACCEPTED FOR POSTER PRESENTATION

Title: Medscape/WebMD, HIMSS/HIMSS Analytics & M Consulting partnered on a study to examine the perspectives of patients, healthcare providers (HCPs) and hospital Chief Information Officers (CIOs) on the topic of patient engagement. Their views revealed both shared and opposing opinions, and the need for alignment before the goals of the Affordable Care Act can be fully realized.

Authors: Mazi Rasulnia, M Consulting; Lorren Pettit, HIMSS Analytics; Pat Wise, HIMSS; Christina Hoffman, Medscape/WebMD

This project was supported in part by Genentech.

Three Perspectives of Patient Engagement:

PATIENT

- “It’s important for my doctor to take time to listen to me.”
- “There are things doctors could do to improve engagement.”
- “I want my doctor to spend time talking about new treatment options.”

HOSPITAL CIOs

- 31%
- 70%
- 22%

HEALTHCARE PROVIDER

- 31%
- 65%
- 39%

Beliefs and Attitudes

Barriers

Expectations

Shifting attitudes and expectations regarding CLINICIAN’S ROLES is a challenge.

Limited time after the visit to follow up with patients is the greatest barrier.

61.8%

Limited time with the patient during the clinical encounter is the greatest barrier.

59.1%

PODIUM PRESENTATIONS

Title: Examining Sociocultural Perceptions of MDD Symptoms through Online Education

Authors: Susan Grady, MSN, RN-BC; Jovana Lubarda, PhD; Richard O’Hara; Teresa Marshall

Accepted for poster presentation at the APA Conference, May 2017

Title: Aligned Clinician and Patient/Caregiver Education in T2D: Success at Improving Knowledge and Competence via an Online Initiative

Authors: Amy T. Larkin, PharmD; Colleen S. Healy, MA; Susan Grady, MSN, RN-BC; Anne Le, PharmD; Medscape Education, New York, NY

Accepted for abstract publication at the ADA Conference, June 2017

PUBLISHED ABSTRACT ONLY

Title: Examining Sociocultural Perceptions of MDD Symptoms through Online Education

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Accepted for abstract publication at the ADA Conference, June 2017
Three Perspectives of Patient Engagement: A National Study

A collaboration between HIMSS/HIMSS Analytics, WebMD/Medscape & M Consulting LLC

This project was supported in part by Genentech.

Authors: Mazi Rasulnia, M Consulting; Lorren Pettit, HIMSS Analytics; Pat Wise, HIMSS; Christina Hoffman, Medscape/WebMD

Podium Presentation: Presented at Healthcare Information Management Systems Society, HIMSS 2015 (April) Chicago, IL

PATIENT

Beliefs and Attitudes

"It’s important for a doctor to take time to listen to me." (73%)

"There are things doctors could do to improve patient engagement." (70%)

Barrier

Expectations around roles

Healthcare Providers

More than patient engagement capabilities are patient participation/alignment and meaningful use.

Hospital CIOs

Mean and frequencies were calculated and compared between the stakeholder groups.

Survey Results

Of those surveyed, the breakdown of respondents was:

**Patients**

- 76% of respondents were male
- 24% of respondents were female
- 59% of respondents had some college education or more
- 41% of respondents had 50 or older
- 30% of respondents were 50 and older

**Healthcare Providers**

- 62% of respondents were male
- 38% of respondents were female
- 63% of respondents practice IT for more years
- 63% practice in groups or hospitals
- 26% of respondents say "patient ownership" is a concern

**Hospital CIOs**

- 69% held IT or CIO positions in their system
- 31% of respondents were CIOs or independent, single- and multi-hospital systems

Why and How We Did This Study

Patient engagement is one of the six priorities of the National Quality Strategy and calls for patients to assume ownership of and responsibility for their own health. Meeting these requirements is dependent on three key factors:

1. Patients being empowered and equipped to take ownership of their own health.
2. Healthcare providers’ facilitation of patient ownership.
3. The healthcare system acknowledging engagement similarly and supporting a patient-provider relationship that fosters obtaining personal health ownership.

The results of this study were to determine if the stakeholders behind these factors — patients, providers and the system — were aligned to best ensure the success of fully achieving patient engagement.

In this project, we conducted three parallel, in-depth surveys of representatives from each stakeholder group to gain their respective opinions and insights about their key areas:

- Beliefs and attitudes around patient engagement
- Barriers to implementing engagement strategies
- Expectations for the role of each stakeholder in achieving patient engagement.

The data were collected in July and August of 2014. No payment was given to any group surveyed, which were:

1. Patients: 2,957 WebMD users identified as a patient or family member who had seen an HCP in the past 90 days.

Mean and frequencies were calculated and compared between the stakeholder groups.

On the topic of Beliefs and Attitudes:

- Patients and providers view patient engagement facilitated by their relationship. Patients want their providers to affirm their path to engagement and spend more time addressing it during the clinical encounter.
- Hospital CIOs see patient engagement as transactional in nature, an impression likely influenced by Meaningful Use criteria.

On the topic of Barriers to Engagement:

- Patients cite limited time during and after the clinical encounter as the greatest barrier to confidence around engagement.
- Providers cite limited time during and after the clinical encounter as well as a need for training on the softer skills of communication as the greatest barrier to patient engagement.
- Hospital CIOs view misaligned expectations between patients and providers as the greatest barrier to patient engagement.

On the topic of Expectations and Roles:

- Patients and providers share similar expectations and beliefs around patient engagement and barriers to it, while hospital CIOs do not.
- Both patients and providers see fostering engagement as part of the provider’s role.

Conclusions:

- At present, all components of the healthcare systems are not aligned with value-based purchasing and so remain financially constrained by the fee-for-service model of reimbursement.
- Until alignment is achieved, the system leader perspective will remain with odds against the spirit of patient engagement, if not Meaningful Use criteria. Still, obtaining the full Meaningful Use bonus may fall short of facilitating true patient engagement.
- If live clinical encounters remain time-constrained, patients and providers must compensate by maximizing time outside the clinical encounter. With patient education occurring before and after the clinical encounter, critical face-to-face time can focus on the patient’s personal experience rather than general disease state information.
- Patients, providers and hospital CIOs share a common belief that additional engagement level for more valuable follow-up appointments. With the new CMS code for chronic care management, providers have a mechanism for interacting with their patients outside of the live encounter and can be compensated for it.

Study limitations. This study examined a sample of three stakeholders; however, assessment of other stakeholders may be needed to better understand efficient and effective engagement. These stakeholders may include payers, other stakeholders and allied healthcare professionals. Future studies should also examine the impact of specific engagement tactics to better understand facilitators and barriers to adoption.

Acknowledgement: This project was supported in part by Genentech.
PODIUM PRESENTATION

Blending Professional and Patient Education: Alignment of the CME Enterprise with the Empowered Patient

LEARNING OBJECTIVES

How have certain organizations been able to blend their professional certified education with direct patient information?

- The evolution of the patient-clinician relationship
- The movement toward patient-centric care
- Incorporating the voice of the empowered patient in educational initiatives

ENGAGEMENT SERVICES

GENERATIONAL "ARCHITYPES" AND HEALTHCARE

To explore generational influences to patient and caregiver perspectives on patient engagement, Medscape Education evaluated recent user & member surveys of over 5000 patients and nearly 1000 physicians. The results of this research were presented at the HIMSS Conference on March 1, 2016 in Las Vegas, NV.

Insights gained included:

- impact of a patient’s generational representation to needs for clinician behavior
- impact of the physician’s generational representation to their behaviors and beliefs around patient engagement
- comparison of the synchrony and asynchrony of generational representation of patients and physicians to the goal of patient engagement

Patient engagement results when patient/caregivers receive information and support that they need in order to fully participate in their care.

Generational Influences on Patient Perspectives Impacting Patient Engagement

Silent Generation
born prior to 1942

A Literature Review* describes the Silent Generation as follows:

- They rely on personal doctors to provide medical care direction
- They are prepared to seek information from and defer to their physician
- They have frequent and longer visits due to clinical acuity and patient preferences around medical care
- They have rigid definitions of good service—the customer is always right!
- They identify only physicians and nurses as health professionals

Study Themes: Physician Directs Me

The Silent Generation is shown to trust in their physicians and there is opportunity to harness this for greater retention with written or internet information. They are the most confident generation in shared decision-making and patient engagement. While they are digital immigrants, approximately 15% will sport wearables (similar to other generations). They will register for portals if recommended by their physician, but their use beyond lab data review is limited.
A Literature Review* describes the Boomers as follows:

- They value individual engagement in healthcare
- They seek counsel from and bring information to the physician, then research physician recommendations
- They identify only physicians and nurses as health professionals
- They have more in common with the Millennials than Boomers
- They are more likely to switch physicians and hospitals based on their most recent experience 
- They appear to be expressing the values/concerns of a silent generation or millennial, while the primary healthcare decision maker is expressing Boomer values.

Study Themes: Connect With Me

Millennials are shown to respond most to a physician’s verbal instructions, followed by written and internet communication equally. However, they are less comfortable asking questions and discussing concerns. Doctors can help by recommending reliable resources. This generation is more likely to view patient engagement as essential: younger doctors find it more challenging than older ones.

FOR FOLLOW-UP DISCUSSION OR QUESTIONS, PLEASE CONTACT:

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LESSONS FOR THE HEALTHCARE INDUSTRY

- Given that older patients state big reasons for not using wearable/apps is their doctor has not recommended it, opportunity to use “help” from outside of the clinical interaction

PHYSICIAN STUDY

IMPLICATIONS OF “TECH TOOLS” LIKE APPS AND WEARABLES

- Younger doctors who recommend health apps and wearables are more likely to view patient engagement as essential
- Doctors who were born between 1943 and 1960 are nearly twice as likely as doctors born before 1943 (p value < 0.05) to recommend apps to their patients, 3x more likely to recommend wearables (p value < 0.05)

Attract, Educate and Engage Patients: A Case Study

LEARNING OBJECTIVES

■ Describe the impact of aligning professional education and patient/care partner education
■ Understand how education from a trusted source first attracts and then equips patients for shared decision making in their health care
■ Delineate how pharmaceutical manufactures can contribute to the field of patient education and engagement through research and publication

In order to achieve the long-lasting behavior change needed to lose weight and sustain healthy habits, patients must be engaged and activated. Aligned professional and patient education that supports shared decision making has the potential to more effectively achieve these critical success factors. To test this, we developed a program of aligned professional and patient online education along with a 12-week behavioral coaching program for obesity management.

Given time pressures, busy clinicians need reliable, convenient, evidence-based resources to support patient education and activation. Accreditation and third-party development improves overall trust in available resources. Embedding links to trusted resources within accredited professional activities provides clinician’s expedient access when it is most needed. Patients view their healthcare providers as trusted sources of health information and education; therefore, they are more likely to access educational resources recommended by their healthcare providers.

We present a case study describing an initiative comprising complementary on-line/off-line blended education tactics including one professional education CE activity and 3 weight management patient education activities that focused on increasing knowledge of the biologic mechanism of obesity, behavior modification and lifestyle changes for weight loss, and how to work with doctor/HCP on the development of a weight management plan. A subset of patients also enrolled in an aligned 12-week coaching program and received print, digital and live education and support via telephone from professional health coaches who used motivational interviewing techniques to help patients define and achieve their weight loss and overall health goals.

Participants in this session will learn how evidence-based, provider recommended patient education from a trusted source, coupled with personalized health coaching, can engage and activate patients. At the end of the session, participants will be able to identify areas where aligned professional and patient education can be useful in their own settings, evaluate the key components of supporting education that successfully activates patients, and implement a complementary on-line/off-line blended methodology to improve engagement and patient outcomes.

LEARNING OBJECTIVES

■ Articulate the value of adding links in online professional education to access evidence-based patient/care partner educational resources
■ Describe the value of HCP-recommended education as a trusted resource for patient activation
■ Discuss how synchronous and asynchronous education and engagement help patients achieve their health goals
Patient-Generated Health Data
Uncover Beliefs About
■ Patient portals… too difficult to use
■ Patients do not believe that PGHD makes a difference in their treatment care
■ Patients don't want to have to remember to do record-keeping
■ Not enough TIME to consider the data
■ Lack of relevance, organization and record integration

Barriers to Providing PGHD

LEARNING OBJECTIVES
■ Compare and contrast physician and patient perceptions of the value of PGHD/PRO
■ Identify physician barriers and success factors affecting use of PGHD/PRO physicians
■ Identify patient barriers and success factors affecting collection and reporting of outcomes to physicians

HOW CAN PROVIDERS HELP THE COLLECTION, SHARING AND USE OF PGHD?

PROVIDERS
■ Make data collection easy (standardized, digital)—to insure data relevance, organization, reliability and accuracy
■ HCPs must listen and use the information provided by the patient
■ Providers need to explain why PGHD is important and how it will be used in care
■ Providers need to ask for PGHD
■ More time!
■ Process training to help patients fully utilize and understand the technology
■ Better technology solutions for data integration into the EHR are needed

PATIENTS
■ Providers must have the patience
■ Patients need to be taught how/why/from where to get the data
■ The patient needs to understand the importance of data entry and reporting of outcomes
■ Patients need to be asked to provide PGHD
■ Not enough time
■ Process training to help patients fully utilize and understand the technology
■ More time!

Provider Conclusions
■ Physicians need to explain to patients why PGHD is important and how it will be used in care
■ Physicians need to ask for PGHD
■ Physicians should incorporate PGHD into their EHR

Patient Conclusions
■ Patients need to be taught how/why/from where to get the data
■ More time!
■ Process training to help patients fully utilize and understand the technology
■ More time!

Provider Conclusions
■ Providers must have the patience
■ Patients need to be taught how/why/from where to get the data
■ The patient needs to understand the importance of data entry and reporting of outcomes
■ Patients need to be asked to provide PGHD
■ Not enough time
■ Process training to help patients fully utilize and understand the technology
■ More time!

PATIENTS SAY:
■ More likely to be used when PGHD is provided
■ Providers believe PGHD provides valuable information
■ Patients less likely to provide PGHD when they are asked
■ More likely to be used when PGHD is requested by their provider
■ Providers engage patients in viewing and discussing PGHD results in higher engagement

Provider Conclusions
■ Physicians need to explain to patients why PGHD is important and how it will be used in care
■ Physicians need to ask for PGHD
■ Physicians should incorporate PGHD into their EHR

Patient Conclusions
■ Patients need to be taught how/why/from where to get the data
■ More time!
■ Process training to help patients fully utilize and understand the technology
■ More time!

Barriers to Providing PGHD

■ PGHD typically provided in non-digital form
■ Providers tend not to ask patients to provide PGHD
■ Providers don’t think patients are motivated to provide PGHD
■ Patients are only moderately motivated to provide PGHD
■ Patients largely collect PGHD in handwritten, non-digital form
■ For patients who have provided PGHD, they will do so without plan
■ Biggest motivating factor: understand how to provide PGHD

PROVIDER/PATIENT ENGAGEMENT

INSIGHTS GAINED INCLUDED:
■ More time!
■ Process training to help patients fully utilize and understand the technology
■ Better technology solutions for data integration into the EHR are needed

ABSTRACT SUBMITTED FOR PODIUM PRESENTATION

Title: The Value of Advocacy and IME Collaboration to Enhance Patient Engagement and Improve Knowledge (Two Case Studies)
Presenters: Haleh Kadkhoda, Susan Grady, Lisa Calderwood, Jerry Cahill (BEF), and James Testaverde (CCFA)
Alliance Industry Summit (AIS), May 2017 in Philadelphia, PA

ABSTRACT ACCEPTED FOR PODIUM PRESENTATION

Title: Designing Aligned Professional and Patient/Care Partner Education for Shared Decision Making
Authors: Jelena Spyropoulos, Susan Grady, Lisa Calderwood and partner representative TBD
Submitted to the ACEhp, Quality and Innovation Summit (QIS), September 2017 in Park City, Utah
PHYSICIAN AND PATIENT ENGAGEMENT BELIEFS & BEHAVIORS

WebMD Education surveyed physicians to gain perspective on generational representation and overall perceptions. Of the 792 respondents, 15 percent were Baby Boomers, 45.3 percent were Generation X, and 40 percent were Millennials.

WHITE PAPERS

Determining Patient Engagement

With no statistical generational difference, physicians utilize the same indicators and metrics to determine how engaged patients and caregivers are in managing their health.

Patient Engagement to the Rescue: Improving Quality and Affordability in Healthcare

In an Era of Patient Engagement, New Importance and New Purpose for Independent Medical Education

Authors:

Dave Chase
Christina Hoffman, MS

July 2014

Improving Quality and Affordability in Healthcare: The Role of Education in Patient Engagement

Authors:

Susan R. Grady, MSN, RN-BC, Medscape Education, LLC
Mazi Rasulnia, PhD, PACK HEALTH, LLC

April 2015

Generational Considerations for Shared Decision Making

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September 2016