From Brochures to Apps
Evolving Strategies for Diabetes Education Resources in the 21st Century

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Disclosure to Participants
- Notice of Requirements For Successful Completion
  - Please refer to learning goals and objectives
  - Learners must attend the full activity and complete the evaluation in order to claim continuing education credit/hours
- Conflict of Interest (COI) and Financial Relationship Disclosures:
  - Presenter: XX, PharmD, CDE – Speaker's Bureau: XYZ Pharmaceuticals; Advisory Board: ABC, Inc
  - Presenter: XX, MS, RD – No COI/Financial Relationship to disclose
- Non-Endorsement of Products
  - Accredited status does not imply endorsement by AADE, ANCC, ACPE or CDR of any commercial products displayed in conjunction with this educational activity
- Off-Label Use:
  - Participants will be notified by speakers to any product used for a purpose other than for which it was approved by the Food and Drug Administration

Learning Objectives
- Demonstrate how diabetes education can be supplemented by resources available on the web.
- Discuss the application of learning theory to adopting online teaching strategies that are most appropriate for assuring outcomes related to the AADE7 Self-Care behaviors.
- Describe trends in high risk populations online media use.
- List online resources that can be adopted to support the practice of diabetes education.
Today’s Resources
Diigo: http://goo.gl/TsDma2

www.pinterest.com/awilli2747

What the literature shows
Some positive outcomes
- Physical activity
- Dietary behaviors
- Self-monitoring
- A1c
- Knowledge
- Self-efficacy
- Behavioral capacity
- Improved scores on self-management capacity

But...
- Small number of studies
- Few studies focused on high-risk populations
- Not clear what behaviors should be the focus
- Is there a dose issue?
- Many studies show no effect

For more information: http://goo.gl/TsDma2

Internet Use
- 87% of American adults use the internet
- 64% of Americans have a smartphone
  - 13% of Americans with an annual household income of less than $30,000 per year are smartphone-dependent
  - 12% of African Americans and 13% of Latinos are smartphone-dependent, compared with 4% of whites
- 74% of internet users use social media
  - More than half of online adults 65+ use Facebook (31% of all seniors)

For more information: http://goo.gl/TsDma2 Pew Internet and American Life Project, 2014

Internet Use Among People with Chronic Diseases
- 72% of U.S. adults living with chronic conditions use the internet vs 89% of adults without a chronic condition

“Holding other variables constant (including age, income, education, ethnicity, and overall health status), living with a chronic disease has an independent, negative effect on someone’s likelihood to use the internet.”

For more information: http://goo.gl/TsDma2 Pew Internet and American Life Project, 2014

Online Resources are Tools
- Use and approach that is:
  - Planned
  - Theory-driven
  - Evaluable
Basic Principles of Adult Learning
- Content that is relevant and meaningful
- Learn through observation, experience and social interaction
- Opportunities to practice
  - Commit learning to memory
    - Assess and manage information
  - Meaningful feedback

Metacognition = Thinking about Thinking
- Skills for learning and thinking
  - Understanding what to pay attention to
  - Using strategies to support learning
  - Evaluating how well the strategies worked
- Adults with well developed metacognitive skills
  - Better at problem solving, decision making and critical thinking
  - More able and more motivated to learn
  - More likely to be able to manage their emotions and complexity, and cope with conflict

Other Supported Behaviors
- Monitoring and tracking
- Managing expectations
- Goal setting
- Planning
- Self-efficacy
- Behavior modeling

The AADE7 Framework
- Healthy eating
- Being active
- Monitoring
- Taking medication
- Problem solving
- Reducing risks
- Healthy coping

Commonly used online teaching tools and resources
- Online health information resources push information out to the patient, whereas online health engagement resources promote the sharing of information, as well as support and interaction among patients

For more information: http://goo.gl/TsDma2
Commonly used online teaching tools and resources

- Within an online health information resource, the information flows in one direction—from the content author to people with diabetes
  - Examples of online health information resources for people with diabetes include Web sites: ADA (www.diabetes.org), NDEP (www.ndep.nih.gov), and CDC (www.cdc.gov/diabetes).
  - Or online learning centers affiliated with medical centers such as the Joslin Diabetes Center (www.joslin.org).

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AADE7 System

- Online software package
- Track patients’ goals, indicators, and medications
- Administer online patient self-assessments and follow-ups
- Track educational services
- Generate patient and facility reports
- Manage classes
- Create letters for physicians and patients
- Gather program accreditation data

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NDEP TOOLS AND RESOURCES

Diabetes HealthSense provides easy access to:

- Resources that support people with diabetes and those at risk for the disease in making lifestyle changes and coping with the demands of diabetes
- Resources for health care professionals to help facilitate lifestyle changes in their patients

For more information: http://goo.gl/TsDma2
Health Care Professionals

Exercise & Physical Activity: Your Everyday Guide

Make a Plan

Xavier

Cynthia

<table>
<thead>
<tr>
<th>Health Care Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Wants to lose some weight</td>
</tr>
<tr>
<td>• Has a hard time “sticking with it”</td>
</tr>
<tr>
<td>• Really doesn’t like to exercise</td>
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<table>
<thead>
<tr>
<th>Exercise &amp; Physical Activity: Your Everyday Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Newly diagnosed with type 2 diabetes</td>
</tr>
<tr>
<td>• Feeling overwhelmed</td>
</tr>
<tr>
<td>• Not sure where to start to manage her diabetes</td>
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</tbody>
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Goal Tracker Mobile App

NDEP Materials for People Living with Diabetes

NDEP Materials for People at Risk for Type 2 Diabetes

NDEP Materials for Children and Adolescents

NDEP Materials for Health Care Professionals

NDEP Materials for Community Organizations

For more information: http://goo.gl/TsDma2

Reviewed for Plain Language Principles
Where can I share information?

- Google Docs/Dropbox
- Social Bookmarks
- Slide Share
- Pinterest
- YouTube
- Wikis
- Blogs

For more information: http://goo.gl/TsDma2

Where can I connect my patients with others?

- Facebook
- Twitter
- Forums
- Blogs

For more information: http://goo.gl/TsDma2

What can help my patients stay organized?

- Pinterest
- Google Doc/Dropbox
- Evernote

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Promoting Web Health Literacy

- Does the content come from a credible source?
- Is the content kept up-to-date?
- Is the content easy to understand?
- Is the content accessible to people with disabilities?

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“The problem with quotes on the Internet is that it is hard to verify their authenticity.”

- Abraham Lincoln
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INTEGRATING ONLINE RESOURCES IN DIABETES EDUCATION

Group brainstorming

- What are your concerns as a DE about participating in social media related to the Health Insurance Portability and Accountability Act (HIPAA)?
- What uncertainties do you have about how much to engage with people (possibly patients) online?

What is the diabetes online community?

- Congregate
- Interact
- Engagement
- Learning
- Empowerment

HIPAA/ HITECH

- Protects patients’ privacy by limiting the ways in which their information is shared with others
Integrating online resources in diabetes education

• HIPPA considerations
  – HCPs' reading of content that patients chose to share online does not violate HIPAA.
  – Commenting in a public setting to an individual patient without the patient's signed consent may be considered a HIPAA violation
  – Privacy-protected e-mail is the best tool for direct online communication about medical care with individual patients

Tips to avoid HIPAA violations in social media

• Don’t talk about patients, even in general terms
• If you wouldn’t say it in the elevator, don’t put it online.

Examples

• The October 10, 2012 edition of Medical Economics recounted that two paramedic students who were in the ED of Martin Memorial Medical Center in Stuart, Florida as part of their training took digital photos of a patient (shark attack victim), and subsequently e-mailed the photos to numerous friends.
  • In July 2012, a Chicago Daily Herald article reported the following items: “[A] physician, on his blog, called a patient “lazy” and “ignorant” because she had made several visits to the emergency room after failing to monitor her sugar levels. In yet another case, a medical student filmed a doctor inserting a chest tube into a patient, whose face was clearly visible, and posted the footage on YouTube.”

Social Media Compliance Challenges: From HIPAA to the NLRA
https://www.healthlawyers.org/Events/Programs/Materials/Documents/HHS13/Z_rorer.pdf

How can I get started?

• Be a learner
• Know your learners
• Develop partnerships
  – Community groups, senior centers

How can I get started? (Advanced)

• Create an online community for patients to continue learning beyond the classroom
  – Pinterest (shared boards)
  – Facebook
  – phConnect, Google+
  – YouTube, Google Hangout
• Develop blog/microblog to keep patients involved

What is Diabetes?

For more information: http://goo.gl/TsDma2

Qué es la diabetes?

For more information: http://goo.gl/TsDma2

What is Diabetes?

Qué es la diabetes?
• Uses video during classes
• Posts videos, handouts and other resources to a shared folder in Dropbox
• Has Pinterest boards

• Uses an Education Wiki service
• Creates audio and video
• Posts handouts
• Microblogs
• Uses Pinterest

Why this information is relevant to diabetes educators?
• Become a “curator”
• Create a list of credible online resources to proactively share with patients during office visits
• Assess patients’ use of online resources and level of health literacy

For more information call 1-800-CDC-INFO (800-232-4636)
TTY 1-(888) 232-6348 or visit www.cdc.gov/info.
To order resources, visit www.cdc.gov/diabetes/ndep.