

IMPROVING HEALTH OUTCOMES IN PANCREATIC CANCER USING ANIMATED PANCREAS PATIENT (APP) VISUAL FORMATS OF LEARNING. A NATIONAL PANCREAS FOUNDATION (NPF) PATIENT EDUCATION INITIATIVE

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Background:

Pancreatic cancer (PC) is the fourth cause of cancer mortality in the United States (US). Efforts are focused on early diagnosis, treatment and prevention of PC. However, knowledge translation in patient education and resources that address barriers to health literacy are limited. We evaluated the NPF's APP as a resource to address patient barriers to health literacy and gaps in understanding.

Methods:

Using visual formats of learning (animations, videos and slide shows), we monitored APP website and YouTube metrics from September 2013 to May 2019. We evaluated learner activity, number of views with highest retention in US and globally.

Results:

APP gathered 2,602,865 views (409,574 views on the APP website and 2,193,291 views on YouTube) from over 100 countries (Figure 1). The majority of viewers (59%) were from the US with 54% being patients, 17% family/caregivers, 14% healthcare providers and 15% other (Figure 2, 3). The animations "*Understanding Clinical Trials*", "*Pancreatic Cancer: Treatment and Outcomes*", "*Pancreatic Cancer: Signs, Symptoms and Risk Factors*", and "*Pancreatic Cancer: Pathophysiology, Diagnosis and Staging*" had 1,127, 4,253, 6,804 and 3,794 views respectively on the website and 71,056, 36,307, 14,290 and 12,588 views respectively on YouTube (Table 1). Top expert videos viewed most were "*What are the different stages of pancreatic cancer?*", "*What are the symptoms of pancreatic cancer?*", "*What should I expect following surgery to remove a malignant pancreatic cancer tumor?*", and "*What is 'palliative treatment' for pancreatic cancer?*" with 459, 1,221, 222, and 327 views respectively on the website and 10,726, 4,848, 2,604, and 1,154 views respectively on YouTube (Table 2).

Conclusion:

Our study suggests visual formats of education are effective in communicating complex health information to persons with poor health literacy. Pancreatic cancer education based on visual formats have vast potential to provide effective learning for patients. Continued efforts should be made to provide resources that address patient barriers for best health outcomes.

References:

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Table 1. Most Popular Pancreatic Cancer Animations

Animation Title	Views
Understanding Clinical Trials	72,183
Pancreatic Cancer: Treatment and Outcomes	40,560
Pancreatic Cancer: Signs, Symptoms and Risk Factors	21,094
Pancreatic Cancer: Pathophysiology, Diagnosis and Staging	16,382

Table 2. Most Popular Pancreatic Cancer Videos

Expert Video Title	Views
What are the different stages of pancreatic cancer?	11,185
What are the symptoms of pancreatic cancer?	6,069
What should I expect following surgery to remove a malignant pancreatic cancer tumor?	2,826
What is "palliative treatment" for pancreatic cancer?	1,481

Figure 1. Visitors to the APP Pancreatic Cancer Modules



Figure 2. Audience Geography

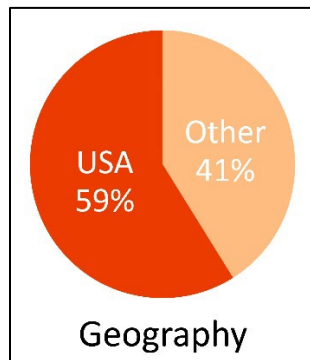


Figure 3. Audience Reach and Demographics

