

Animaciones sobre enfermedades del páncreas™

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Animated Pancreas Patient Education Program

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Background and Aim

- Pancreatic diseases (PD) account for substantial morbidity and mortality.
- Current U.S. costs are \$3.73 billion (direct and indirect costs).
- The burden of PD continues to increase; however, reliable evidence-based education in PD for patients is limited.
- Providing education to facilitate informed patient decision-making has been shown to improve outcomes.
- The *Institute of Medicine* reports 90 million Americans lack health literacy (HL) skills needed to act on health information.
- 41% of Hispanics lack basic HL and only 4% have abilities to make appropriate health decisions.
- In the U.S., Hispanics constitute the largest minority (15%) and are estimated to reach 30% by 2050.
- To help address HL in the Spanish speaking population, the *National Pancreas Foundation (NPF)* has introduced www.PancreasAnimado.com to educate patients, family members and health care providers, and improve PD health outcomes.
- We evaluated PancreasAnimado.com as a visual education resource, to address needs, and reduce HL barriers to improve disease understanding and health outcomes in PD.

Methods

Study Design and Participation:

- Using visual formats of learning for education (animations, expert videos, slide shows) we tracked patient interactions and knowledge transfer via the PancreasAnimado.com website and YouTube channel from April 2015 to March 2017.
- We evaluated performance metrics of patients who reported learning new information and commitment to change via a voluntary pre- and post-test questionnaire, as well as program surveys.
- From our website and YouTube channel, we tracked and aggregated the number of visitors, content viewed, as well as learner metrics for most popular content by media type and top video retentions.

Results

Table 1: Top 5 Most Popular Animations

Animation Title	# of Views
Función y anatomía del páncreas (The Role and Anatomy of the Pancreas)	221,215
¿Qué es la colangiopancreatografía retrógrada endoscópica (CPRE)? (Understanding Endoscopic Retrograde Cholangiopancreatography (ERCP))	104,823
Pancreatitis crónica (Chronic Pancreatitis)	85,205
Cáncer de páncreas: signos, síntomas y factores de riesgo (Pancreatic Cancer: Signs, Symptoms and Risk Factors)	81,115
Pancreatitis aguda (Acute Pancreatitis)	50,292

Results (continued)

Figure 1: Audience Reach



Figure 2: Audience Demographics

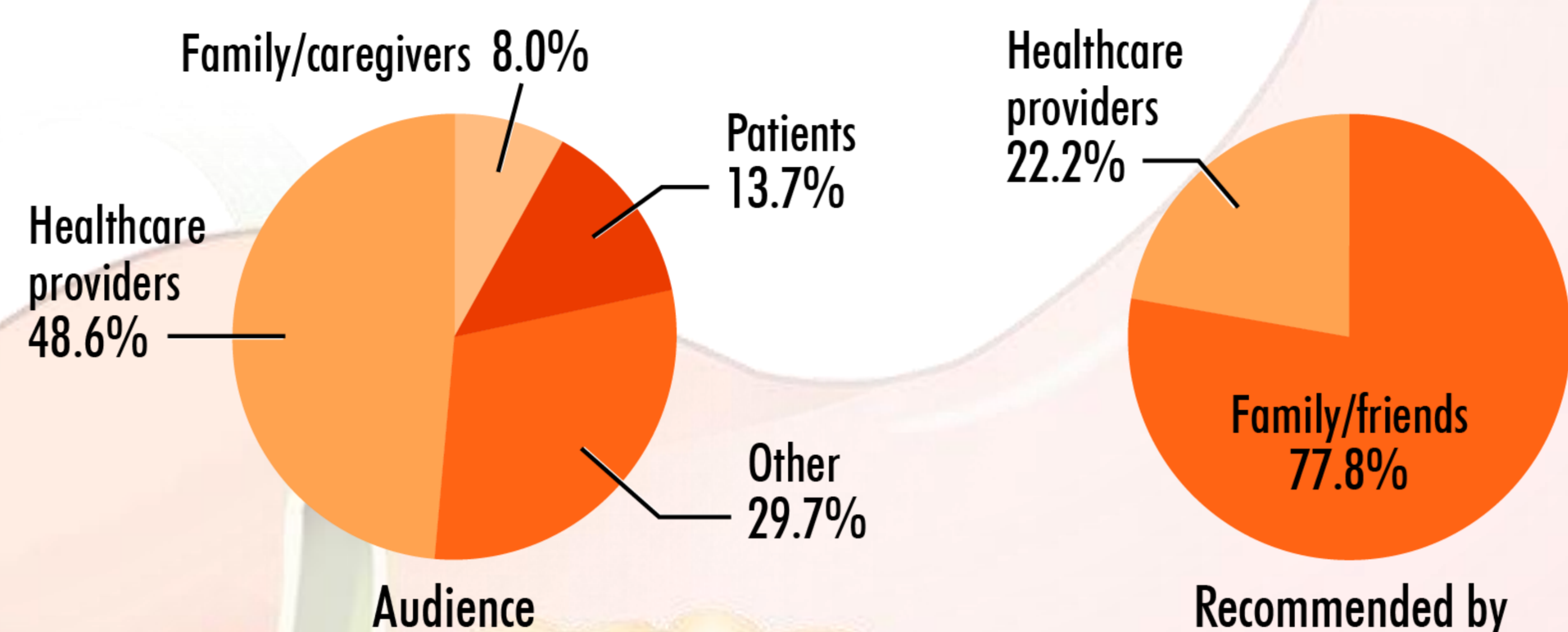


Figure 3: Outcomes – Participants Who Reported Learning New Information on Pancreas Diseases

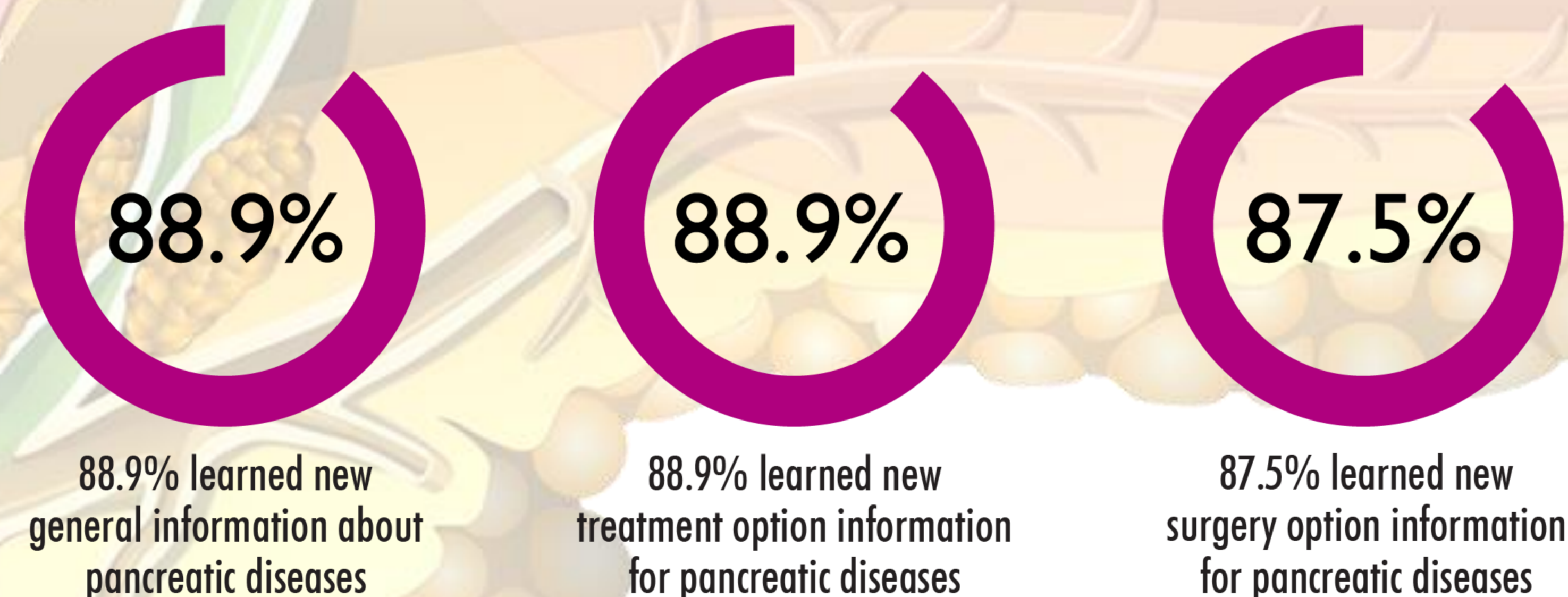
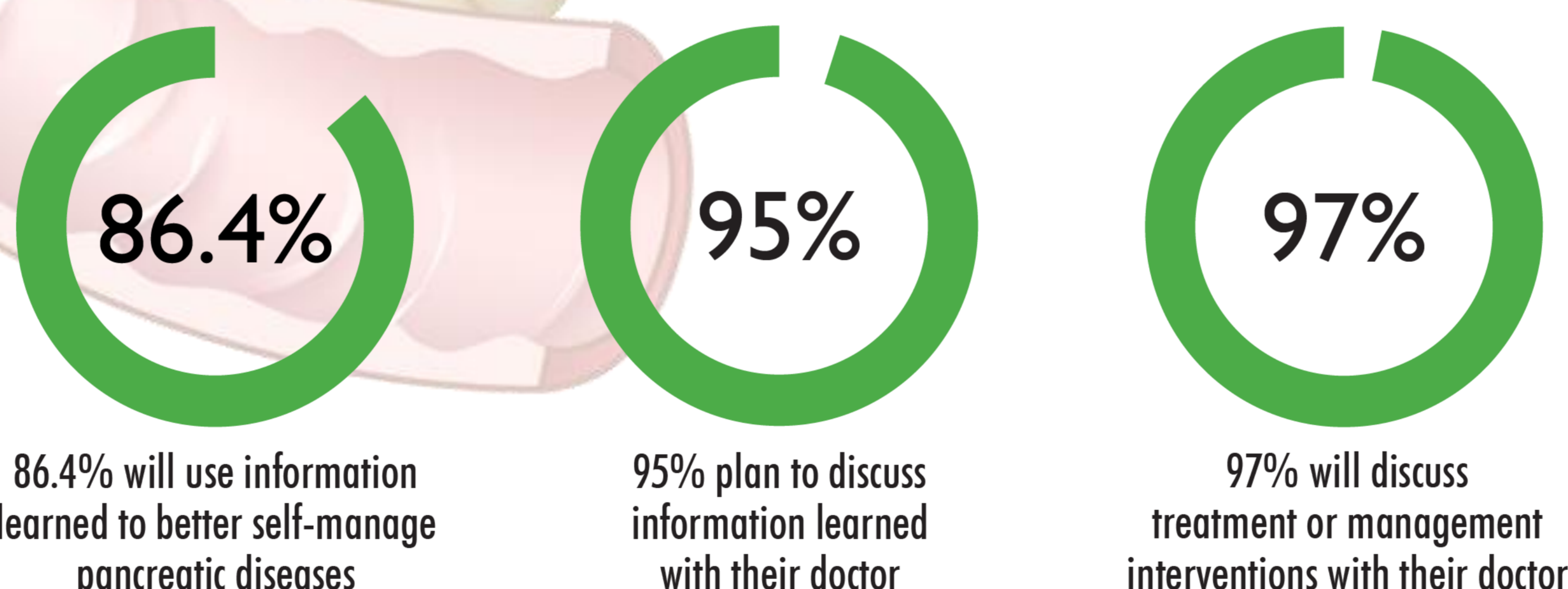


Figure 4: Outcomes – Patients Who Reported Commitment to Change



Results (continued)

Table 2: Top 5 Most Popular Expert Videos

Expert Video Title	# of Views
¿Qué es la pancreatitis aguda y cuáles son sus causas y síntomas y cómo se diagnostica? (What is acute pancreatitis and what are its causes and symptoms and how is it diagnosed?)	12,533
¿Cuáles son los síntomas del cáncer de páncreas? (What are the symptoms of pancreatic cancer?)	12,274
¿Qué es una CPRE? (What is ERCP?)	9,753
¿Cómo se trata la pancreatitis aguda? (How is acute pancreatitis treated?)	2,597
¿Qué es la pancreatitis crónica y cuáles son sus causas y síntomas? (What is chronic pancreatitis and what are its causes and symptoms?)	2,287

Table 3: Top 5 Expert Video Retentions

Expert Video Title	Duration (min)	Time Spent (min)	Retention (%)
Pancreatitis aguda: ¿qué alimentos y bebidas debo evitar? (Acute Pancreatitis: What foods and beverages should I avoid?)	1.00	0.95	95.0%
¿Qué puedo esperar después de un ataque de pancreatitis aguda? (What can I expect following an attack of acute pancreatitis?)	1.48	1.39	94.0%
Pancreatitis crónica: ¿qué alimentos y bebidas debo evitar? (Chronic Pancreatitis: What foods and beverages should I avoid?)	1.60	1.45	90.6%
¿Qué tan probable es que vaya a sufrir otro ataque de pancreatitis aguda? (How likely is it that I will have another attack of acute pancreatitis?)	2.43	2.17	89.3%
¿Qué es la pancreatitis crónica y cuáles son sus causas y síntomas? (What is chronic pancreatitis and what are its causes and symptoms?)	2.82	2.51	89.0%

Study Highlights

- From April 2015 to March 2017, the program garnered **678,149 views** and reached an audience of **355,501 visitors** from over 100 countries.
- The top 2 videos with the highest retention were **Pancreatitis aguda: ¿qué alimentos y bebidas debo evitar?** (95%) and **¿Qué puedo esperar después de un ataque de pancreatitis aguda?** (94%).
- Hispanic participants substantially increased their knowledge and understanding of PD after reviewing the educational content.
- Hispanic participants also reported commitment to change in 3 ways:
86.4% - will use the information learned to better self-manage their disease.
95% - planned to discuss the information learned with their doctor.
97% - indicated discussing treatment or management interventions with their doctor.

Conclusions

- We demonstrated wide reach (>100 countries) and effectiveness among Hispanic audiences as validated by website and YouTube activities.
- Visual formats of learning, particularly animations are favored by patients as a means to learn about pancreatic diseases.
- Pancreas disease online education consisting of animation and video formats has great potential to provide effective education to Hispanic patients.

