

Webinar Series



Health Literacy
Solutions Center





AI in Action:

A Behind-the-Scenes Look at Using AI-Powered Videos for Health Communication

Tracy Mehan & Katie Donovan

Center for Injury Research and Policy at
Nationwide Children's Hospital



Welcome to the Webinar

- **All attendees will be muted** during the webinar
- **Ask questions** using the Question & Answer (Q&A) feature
- **Use the chat** for comments and discussions related to the webinar topic
- **The webinar will be recorded and posted** in the Health Literacy Solutions Center webinar archives

Following the webinar, you will receive an email containing a link to a brief online evaluation. If you are requesting continuing education (CE) credits, you must submit an evaluation in order to receive your CE certificate.



About the Speakers



Tracy Mehan

Director of Research Translation & Communication
Center for Injury Research & Policy at
Nationwide Children's Hospital



Katie Donovan

Digital Communication Specialist
Center for Injury Research & Policy at
Nationwide Children's Hospital



*Image created by AI
using DALL-E*

AI in Action:

A Behind-the-Scenes
Look at Using AI-
Powered Videos for
Health Communication

Importance of Visuals in Health Communication

Research has shown that:

- Visuals like simple drawings, cartoons, and color photos improve comprehension of health information (Houts et al., 2006)
- Animated videos improve comprehension of health information, especially when the info is complex (Feely et al., 2022)



*Example images are NOT from the listed papers



Role of Collaboration in Creating Visuals

“ Visuals can make complex health information accessible to a wide array of audiences, ranging from children and adolescents to adults with lower literacy levels.

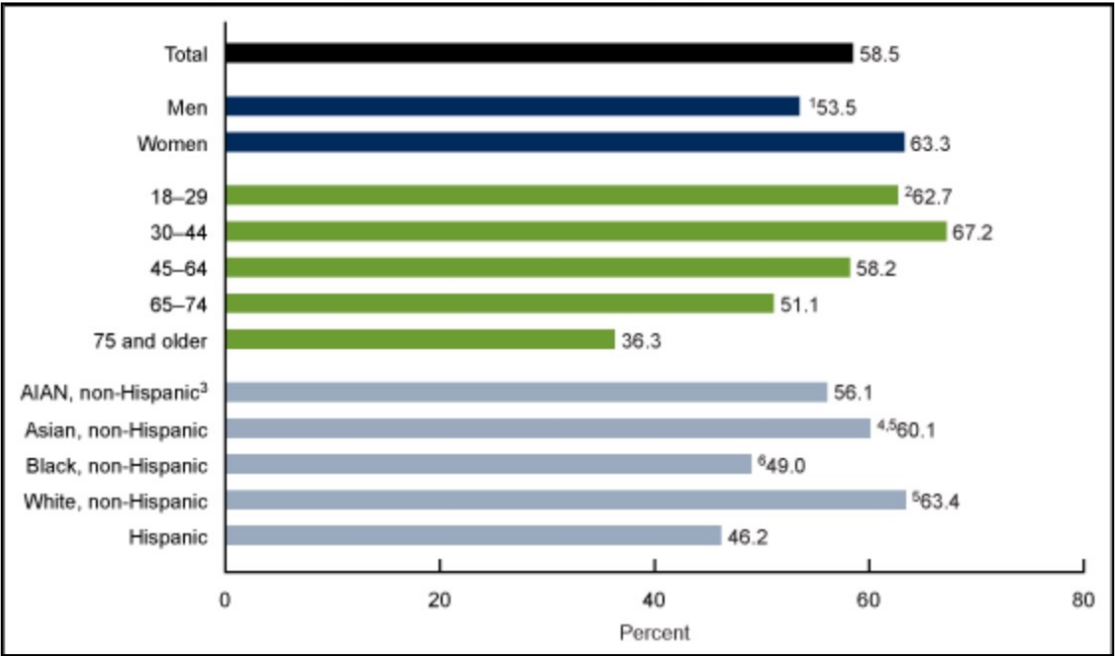
In order for health communication visuals to be accurate, useful, and engaging, **multidisciplinary collaboration between graphic design and health sectors is necessary.** ”

– (B Paulovich, 2016)

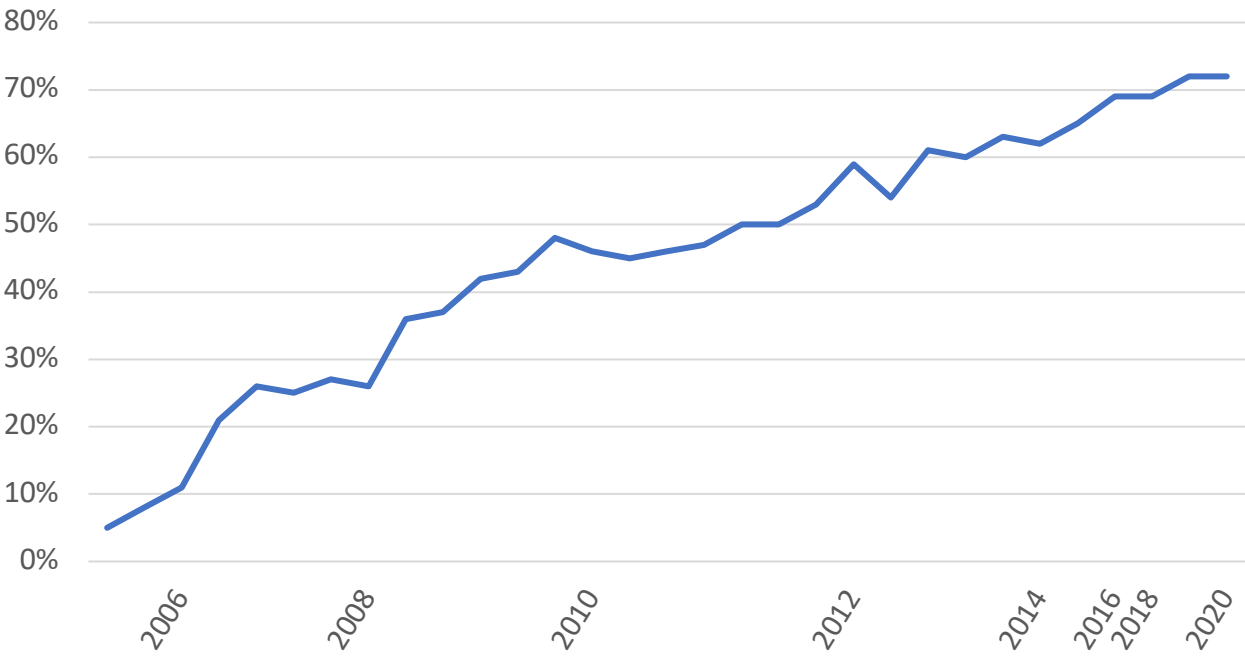


Visuals are Even More Important in the Online World

Figure 1. Percentage of adults who used the Internet in the past 12 months to look for health or medical information, by sex, age, and race and Hispanic origin: United States, July–December 2022



% of US Adults with at least 1 SM account

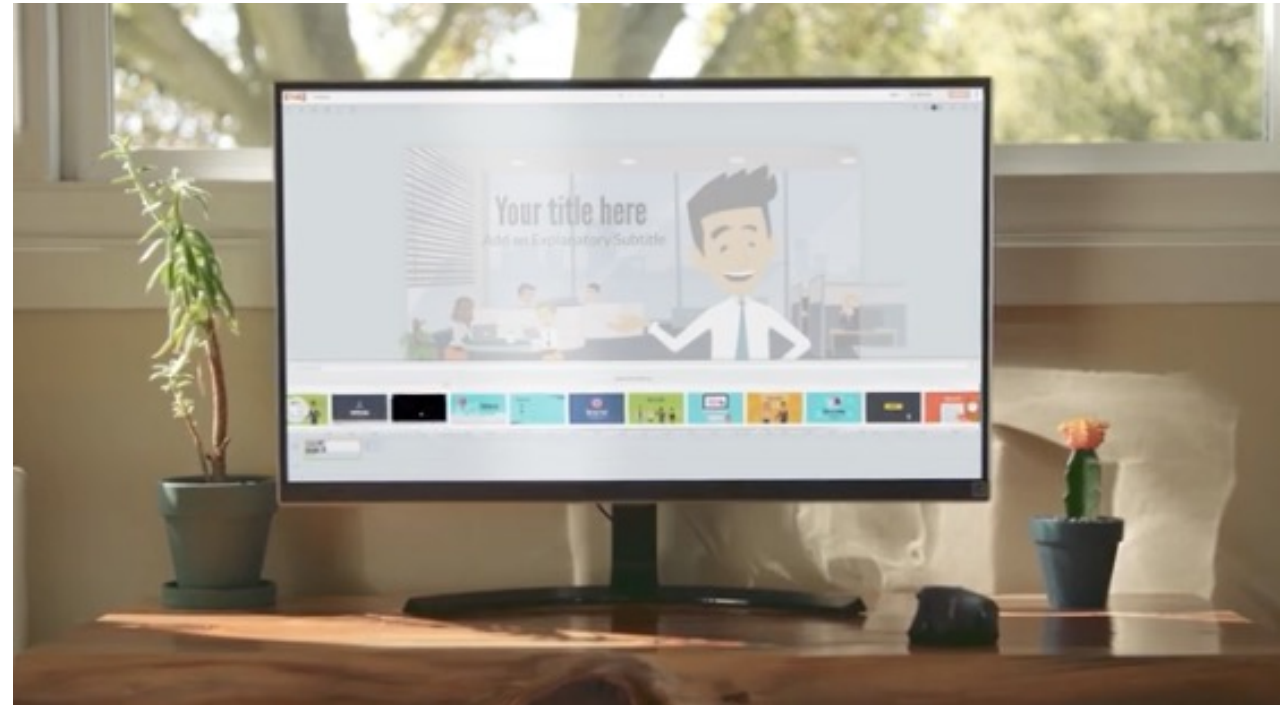


Visuals increase engagement

Vyond

What is Vyond?

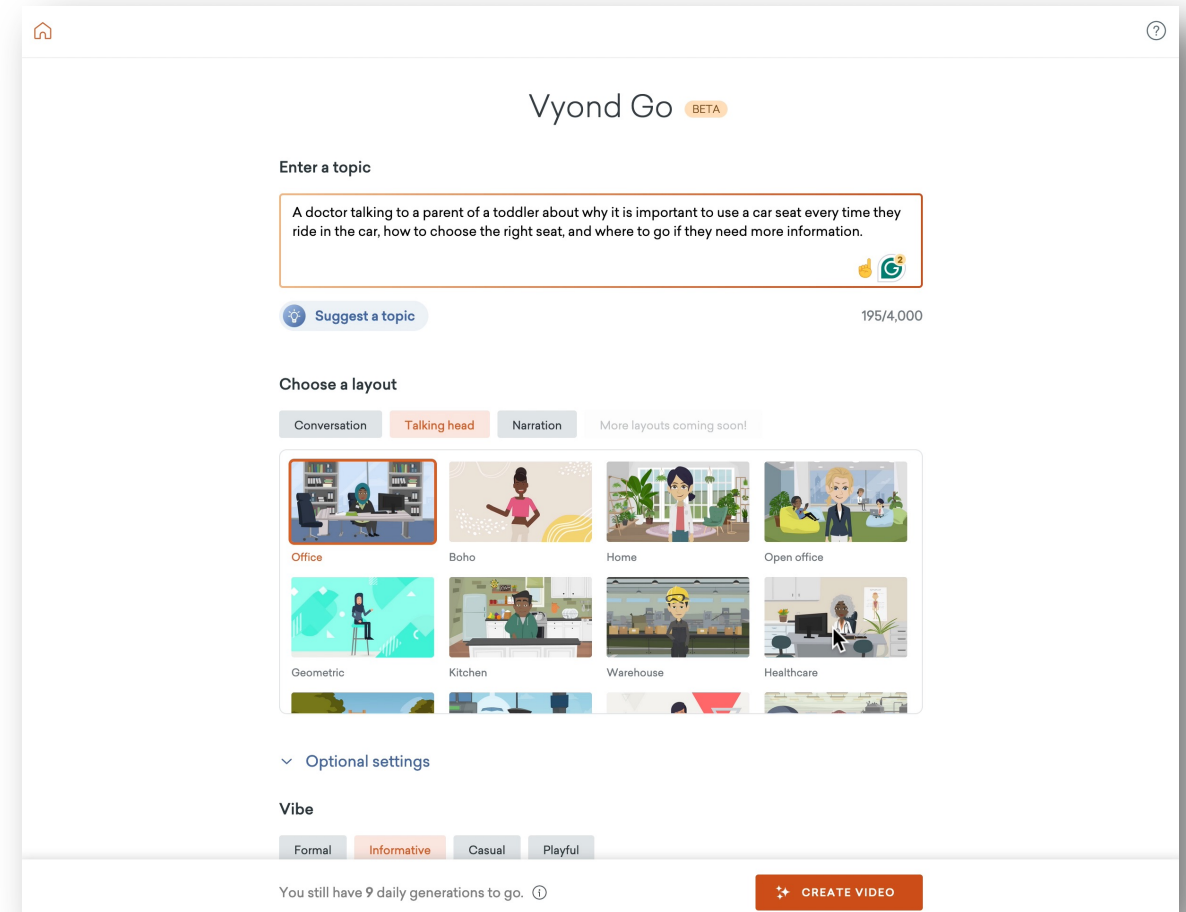
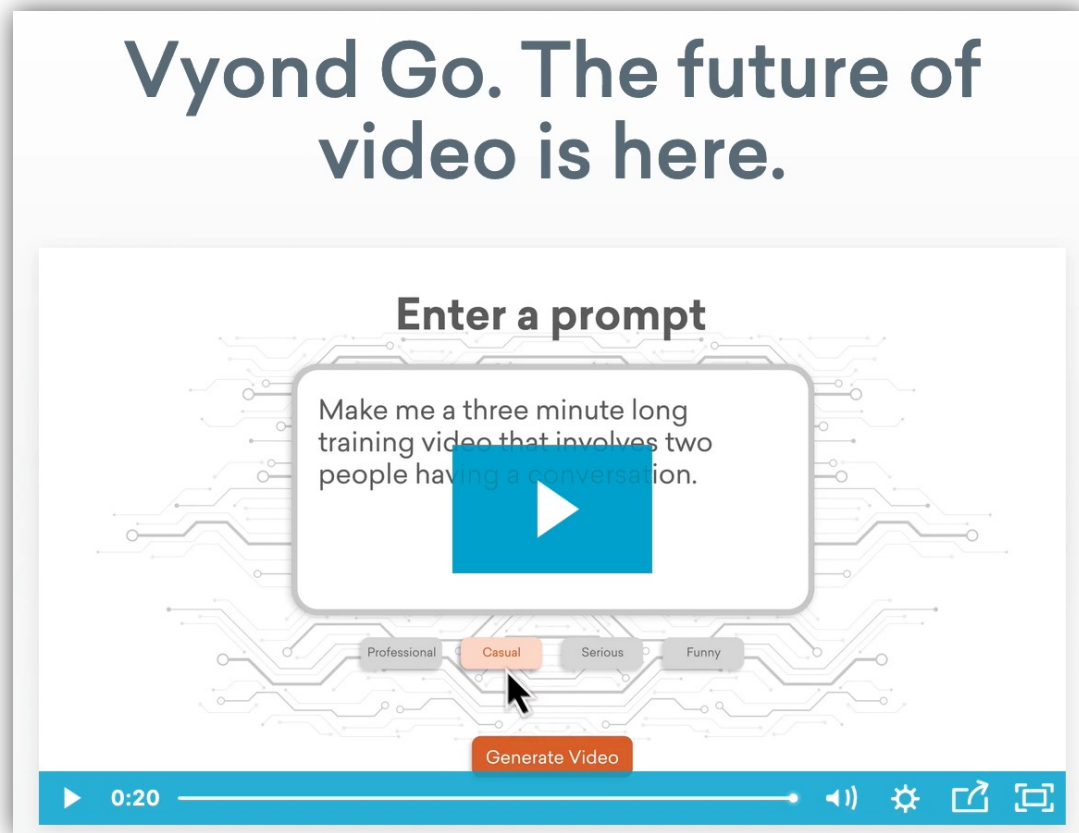
- Video generation software
- Similar to Canva – drag and drop
- “Video creation studio”
- “Create relevant, engaging videos that motivate stakeholders to take action.”



Prevent Child Injury Examples



Vyond Go: Video Creation Software + AI



Quick Edit Mode

<

A doctor talking to a parent of a toddler about ...

↶

↷

EDIT VIDEO

?

×

Quick Edit

BETA

Learn more

ALL

T

00:00

T

Protect Your Toddler in the Car

00:06

Hi there! I'm glad we have a chance to talk today about car seats.

00:11

Did you know that car crashes are a leading cause of death for young children?

00:16

T

Step 1: Choosing the Right Car Seat

00:19

Step 1: Choose the right car seat.

00:22

Make sure it's the right size for your child's weight and height.

00:26

The National Highway Traffic Safety Administration has a great guide for this.

00:00 | 01:16

Case Study

Creating a Video with AI



*Image created by AI
using DALL-E*

T4CIP Background



Teach **public health approaches** and **community engagement**

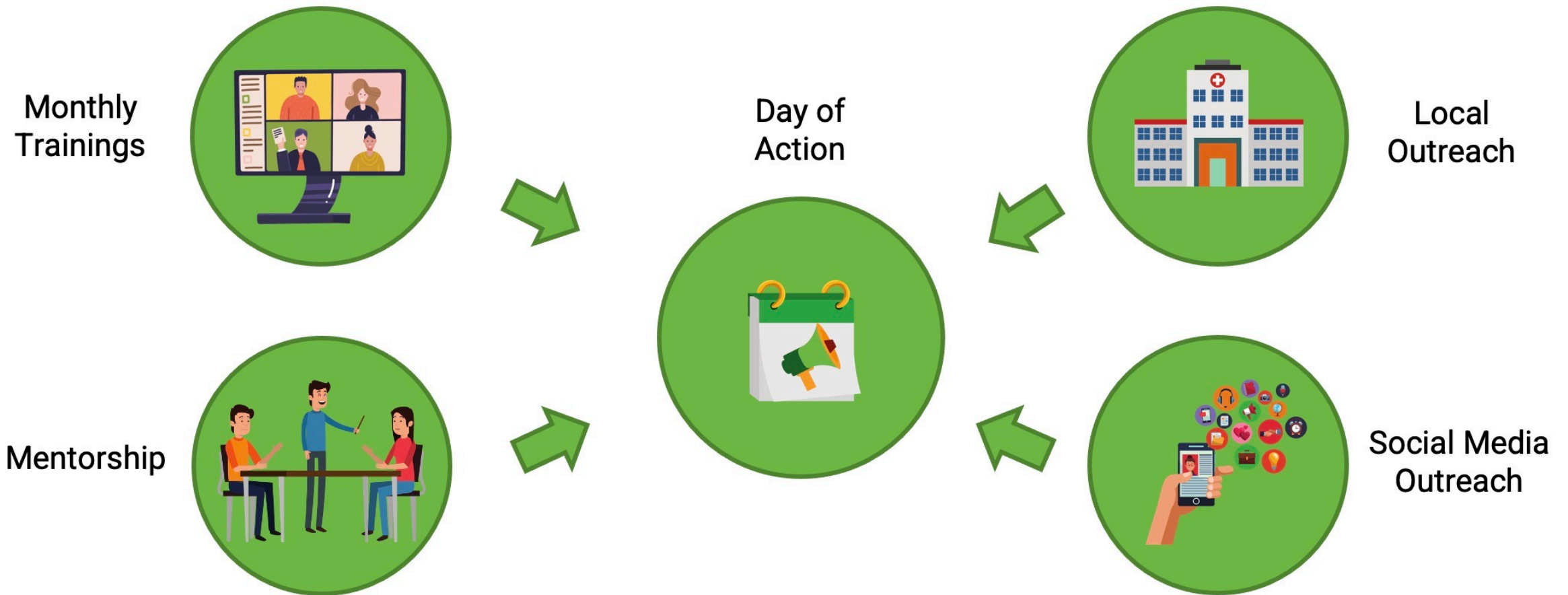


Promote **interest and engagement** in the area of **child injury prevention**



Facilitate and promote **pediatric trainee-initiated outreach and engagement activities nationally** to prevent child injury

T4CIP Activities



Edibles Background

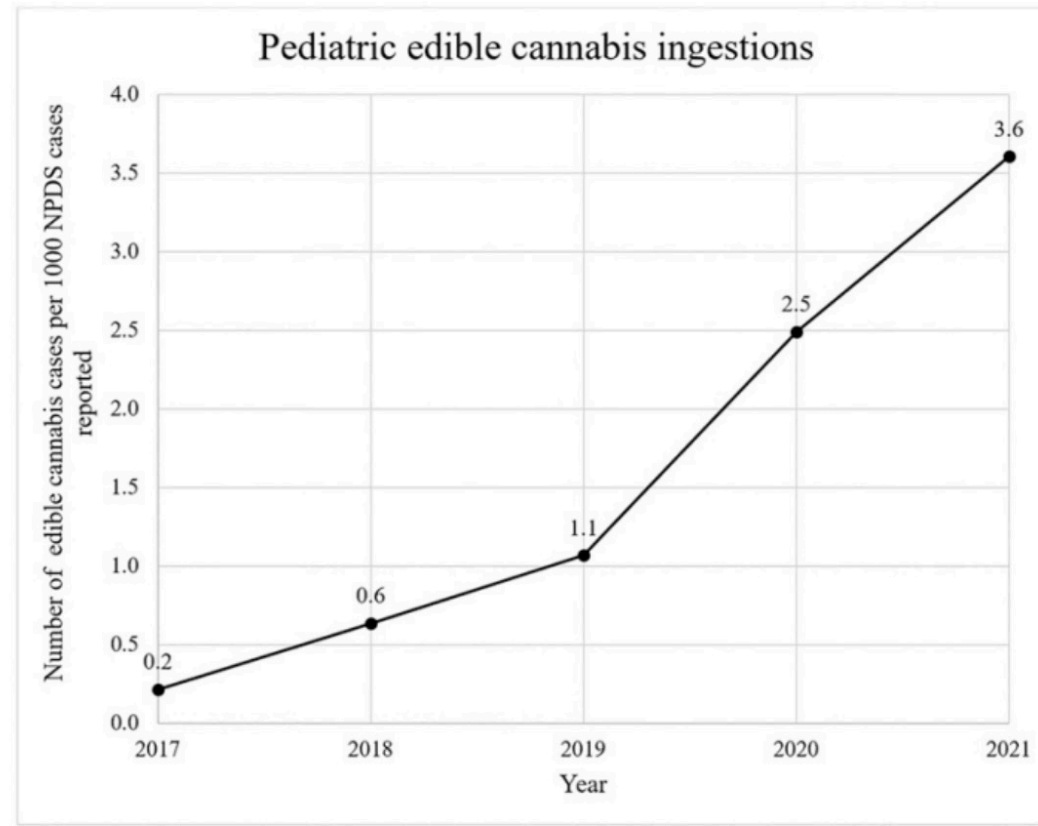


FIGURE 1

Pediatric edible cannabis product ingestions per 1000 pediatric calls to the National Poison Data System by year.



The First Video



Deciding on the Audience for the Video

- Parents?
 - Talking to their friends?
 - Talking to their adult family members?
 - Talking to their kids?
- Legislators?
- Marijuana edibles distributors?
- **Other doctors?**



What We Wanted Our Audience to Learn

- About the dangers of marijuana edibles to young kids
- How to talk to parents about this issue
 - In a non-judgmental way
 - Giving enough info
 - Role-modeling



Training Goals for Our Trainees



How to think about the visuals for educational materials

- Showing what you are talking about in the text
- Reinforcing the messaging
- People/situations that are relatable



Choice of language

- Too technical vs. easier to understand
- Not just telling them of the dangers/risks but giving them actionable steps they can take to prevent injuries from happening




Teaching how to look at reading grade levels of text



Role modeling concept

Script (Text) Changes



SCRIPT:

Working Draft of Script

Asked trainees to
provide feedback on
the script

	A	B	C	D	E	F
1	Timestamp	Scene #	Type	Original Text	Student 1	Student 2
2						Hello! I'm glad that you scheduled this visit to talk about keeping your daughter safe with marijuana edibles in the home, especially since more children are poisoned by marijuana edibles each year. (one thought is maybe having the doctor ask the parent why she wanted to talk about edible poisoning and having the parent respond that she had heard about increasing poisonings in children? just a thought!)
3	00:00:05,125 --> 00:00:09,916	2	Dialog	Hi, have you heard about the dangers of marijuana edibles in young children?	Hello! I'm glad that you scheduled this visit to ask about keeping your daughter safe with marijuana edibles in the home, especially since more children get marijuana poisoning each year.	
4	00:00:10,083 --> 00:00:14,208	3	Dialog	No, I haven't. What should I know?	Thank you! What should I know?	agree with student 1
5				Well, marijuana edibles can look like regular candy or baked goods, making them attractive to young children. If a child eats a marijuana edible, they can experience symptoms like dizziness, confusion, and sleepiness. That sounds scary. How can I recognize the signs of marijuana edible poisoning?	Well, marijuana edibles can look like regular candy or baked goods, making them attractive to young children. If a child eats a marijuana edible, they can experience a few symptoms that are important for parents to be able to recognize.	agree with student 1
6	00:00:14,375 --> 00:00:29,208	4-6	Dialog		How can I recognize the signs of marijuana edible poisoning?	agree with student 1
7	00:00:29,375 --> 00:00:36,125	7	Dialog		Some signs to look out for are difficulty walking, breathing problems, and extreme drowsiness. These symptoms are more likely to happen in young children. So if you notice any of these symptoms, you should seek medical attention immediately.	Some signs to look out for are difficulty walking, breathing problems, and extreme drowsiness. These symptoms are more likely to occur in younger children. So if you notice any of these symptoms, you should seek medical attention immediately.
8	00:00:36,291 --> 00:00:47,291	8-10	Dialog	What can I do to prevent my child from accidentally eating a marijuana edible?	That sounds scary! What can I do to prevent my child from accidentally eating a marijuana edible?	agree with student 1
9	00:00:47,458 --> 00:00:52,291	11	Dialog	One way is to store your marijuana edibles in a locked cabinet or container that's out of reach of children. You can also make sure that your edibles are clearly labeled and not easily confused with regular food.	NO CHANGE	agree with student 1
10	00:00:52,458 --> 00:01:04,291	12-14	Dialog	That's a good idea. Do you have any other tips for safely storing marijuana edibles at home?	NO CHANGE	agree with student 1
11	00:01:04,458 --> 00:01:11,125	15	Dialog		Another tip is to keep your edibles in their original packaging, with the THC content and dosage clearly labeled. This can help you keep track of how much you're consuming and prevent accidental overdoses.	agree
12	00:01:11,291 --> 00:01:23,291	16-18	Dialog		Talking to the other adults in my child's life is a good idea since I won't always be right with him! Is there anything else I can do?	Talking to the other adults in my son's life is a good idea since I won't always be with him! Is there anything else I can do?
13					As your child gets older, it's a good idea to teach your child to always ask a trusted adult before eating or touching something new.	As your child gets older, it's a good idea to teach him to always ask a trusted adult before eating or touching something new.
14	00:01:23,458 --> 00:01:30,666	19	Dialog	Thanks for the advice. What should I do if I suspect my child has eaten a marijuana edible?	NO CHANGE	no change
15	00:01:30,833 --> 00:01:42,083	20-22	Dialog	If you suspect your child has ingested a marijuana edible, call poison control or seek medical attention immediately. It's important to act quickly and get your child the help they need.	If you suspect your child has ingested a marijuana edible, call poison control at 1-800-222-1222 or seek medical attention immediately. It's important to act quickly and get your child the help they need.	get rid of the number and put it in the video if possible. otherwise no change
16	00:01:42,250 --> 00:01:48,625	23	Dialog	Thank you for all the information. I'll make sure to follow your tips to keep my child safe.	NO CHANGE	no change
17	00:01:48,791 --> 00:01:59,166	24	Dialog	You're welcome. It's important to be proactive and take steps to prevent accidental ingestion of marijuana edibles. Let's keep our children safe together.	NO CHANGE	no change
18						Overall I think we touch on the important topics - increasing poisonings, symptoms, what to do if ingested, and safe storage/prevention. I don't think there are other areas we need to focus on.

Trainer Notes

Notes

I'm not sure if a parent would schedule a visit just to talk about edibles so I came up with a slightly different approach. I also think it would be more helpful to model how a doctor could bring up the topic during a visit for something else. I am proposing that the video start as the doctor's visit is coming to an end. In my suggested edits, I thought about how I would respond as a parent and tried to make it more conversational in places. I also wanted to show some examples of what might happen if a parent didn't think this was a problem (give us a chance to do a little mythbusting). I went through it three times - once as a public health person thinking about the messages I thought it was important to convey, once as a doctor thinking about how I would talk to a patient about this, and once as a parent thinking about how I would be likely to talk to a doctor about this and what questions I might ask. It is important to look at any messaging we create for parents with all three hats on for it to be most effective. It is also important to feel empowered to make substantive changes if you don't like how something is going. As you can see, I added a few more back and forths between the doctor and the parent because I felt like there were a couple more things that would be important to address and/or likely to come up during a visit like this. AI can be a great start but it will never replace what we know as healthcare providers about the human interaction piece. I also tried to think of how a parent would talk. I'm not sure many parents are using the phrase marijuana poisoning for instance. You guys have experience with counseling in clinic like this so feel free to change things up if this isn't working for you.

Trainer Revisions

2	Timestamp	Scene #	Type	Original Text
3	00:00:05,125 --> 00:00:09,916	2	Dialog	Hi, have you heard about the dangers of mar edibles in young children?
4	00:00:10,083 --> 00:00:14,208	3	Dialog	No, I haven't. What should I know?
5	00:00:14,375 --> 00:00:29,208	4-6	Dialog	Well, marijuana edibles can look like regular baked goods, making them attractive to your If a child eats a marijuana edible, they can ex sypmtoms like dizziness, confusion, and sleep
6	00:00:29,375 --> 00:00:36,125	7	Dialog	That sounds scary. How can I recognize the s marijuana edible poisoning?
7	00:00:36,291 --> 00:00:47,291	8-10	Dialog	Some signs to look out for are difficulty walk breathing problems, and extreme drowsines: notice any of these symptoms, seek medical immediately.
8	00:00:47,458 --> 00:00:52,291	11	Dialog	What can I do to prevent my child from accid eating a marijuana edible?
9	00:00:52,458 --> 00:01:04,291	12-14	Dialog	One way is to store your marijuana edibles ir cabinet or container that's out of reach of ch can also make sure that your edibles are clea and not easily confused with regular food.
10	00:01:04,458 --> 00:01:11,125	15	Dialog	That's a good idea. Do you have any other tip storing marijuana edibles at home?
11	00:01:11,291 --> 00:01:23,291	16-18	Dialog	Another tip is to keep your edibles in their or packaging, with the THC content and dosage labeled. This can help you keep track of how consuming and prevent accidental overdose!
12				
13				
14	00:01:23,458 --> 00:01:30,666	19	Dialog	Thanks for the advice. What should I do if I s child has eaten a marijuana edible?
15	00:01:30,833 --> 00:01:42,083	20-22	Dialog	If you suspect your child has ingested a marij call poison control or seek medical attention immediately. It's important to act quickly and child the help they need.
16	00:01:42,250 --> 00:01:48,625	23	Dialog	Thank you for all the information. I'll make s your tips to keep my child safe.
17				You're welcome. It's important to be precaut

Trainer comments
Doctor: Thank you for coming in today. Everything is looking great. Before you leave, there is one more thing I wanted to talk about. We have been noticing that we are seeing a lot of young children coming into the hospital after accidentally getting into an adult's marijuana edibles so we are talking to all our families about this new danger. Even if you don't usually have edibles in your home, your child could get to one if someone else brings them into your home or if someone has them at a house he is visiting.
(Parent) I haven't heard about this. Can you tell me more about what I need to know?
Doctor: As states have started to legalize marijuana, more and more people are bringing edibles into their homes - even in states where it isn't legal. Since marijuana edibles can look like regular candy or baked goods it is easy to see how a child might want to eat one if they find it and not realize it is something that could hurt them.
Parent: Oh, I could definitely see that. That makes sense. But really, I don't think it would be that big of a deal. They might get a little silly but it won't really hurt them right?
Doctor: Acutally, marijuana is much stronger than it used to be. Back in the nineties, THC products only had about 4% THC. Now, some products are as high as 30 to 40 percent. The other thing to consider is that there are no regulations on these products so in some cases one adult dose of a gummy means you should only eat one fourth of one gummy. We know that many children will eat much more than that. Eating just a few gummies could cause the child to end up in the hospital with some pretty serious symptoms.

Shorter version?
Doctor: Thank you for coming in today. Everything is looking great. Before you leave, there is one more thing I wanted to talk about. Since marijuana has become legal, more people are bringing edibles home. This has led to more we have been noticing that we are seeing a lot of young children ending up in coming into the hospital after accidentally getting into an adult's marijuana edibles so we are talking to all our families about this new danger. Even if you don't usually have edibles in your home, your child could get to one if someone else brings them into your home or if someone has them at a house he is visiting.
(Parent) I haven't heard about this. Can you tell me more about what I need to know?
Doctor: As states have started to legalize marijuana, more and more people are bringing edibles into their homes—even in states where it isn't legal. Now that marijuana is legal in some states more people are bringing edibles into their homes. Since To a kid, marijuana edibles can look just like regular candy or baked goods. It is easy to see how a child might want to eat one if they find it and not realize it is something that could hurt them.
Parent: Oh, I could definitely see that. That makes sense. But really, I don't think it would be that big of a deal. They might get a little silly but it won't really hurt them right?
Doctor: Acutally, marijuana is much stronger than it used to be. Also, because there are no federal regulations on these products what is considered one dose varies. In some cases one adult dose of a gummy means you should only eat one fourth of one gummy. Eating just a few one gummy ies could be enough for cause the child to end up in the hospital with some pretty serious symptoms. And we know that many children will eat much more than just one that. (changed the order of the last two sentences)

What We Changed



More conversational



Technical/complicated words/sentence structure (plain language)



Added some data to help parents understand “why” this would impact them (perceived susceptibility)



Focused on recommendations that parents would feel they could do (self-efficacy)



Pointed out situations where parents would need to take action (cues to action)

Testing for Reading Grade Level

The screenshot displays the Microsoft Word interface with a document open. The document text is as follows:

Original Text

Hi, have you heard about the dangers of r
No, I haven't. What should I know?
Well, marijuana edibles can look like regu
children. If a child eats a marijuana edible
sleepiness.
That sounds scary. How can I recognize th
Some signs to look out for are difficulty w
notice any of these symptoms, seek medi
What can I do to prevent my child from ac
One way is to store your marijuana edible
children. You can also make sure that you
regular food.
That's a good idea. Do you have any othe
Another tip is to keep your edibles in thei
labeled. This can help you keep track of h
overdoses.

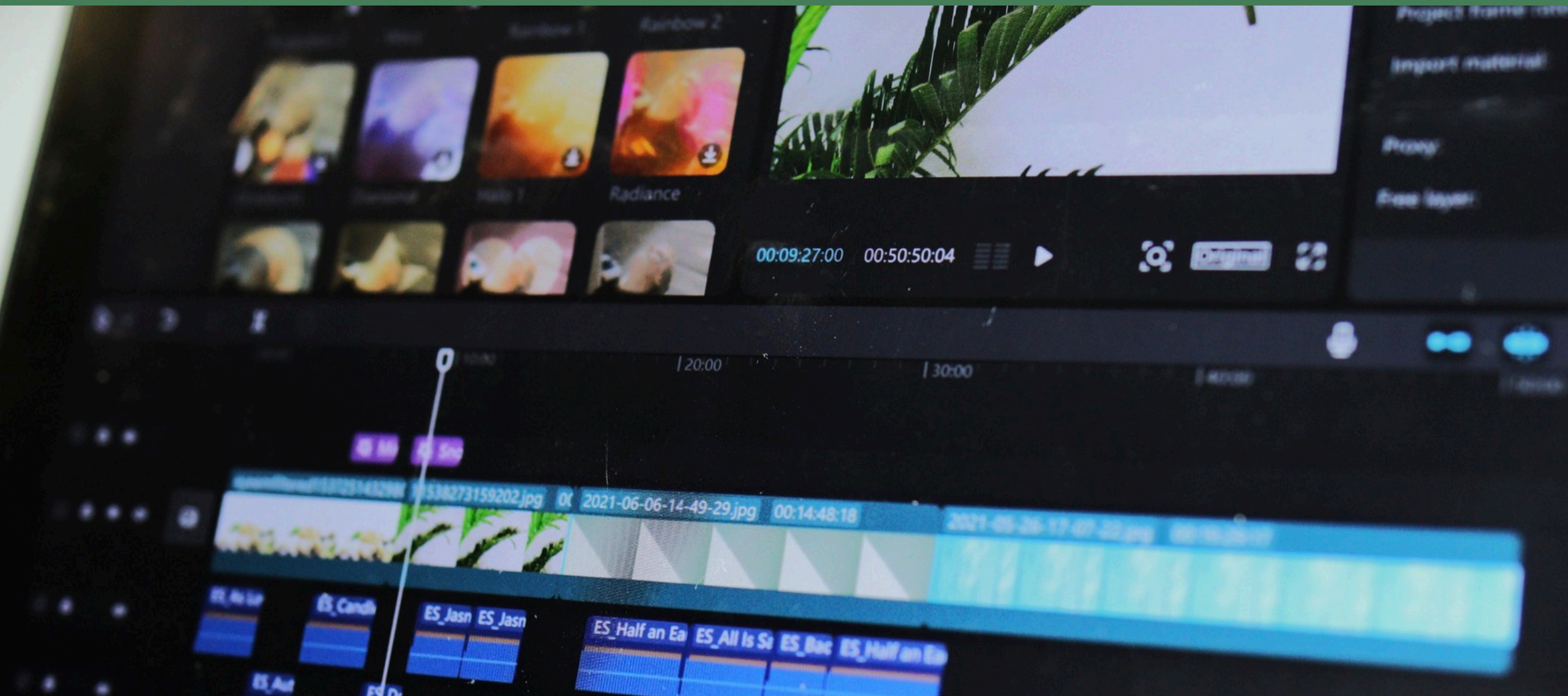
Thanks for the advice. What should I do if
If you suspect your child has ingested a m
immediately. It's important to act quickly
Thank you for all the information. I'll mak
You're welcome. It's important to be proa
marijuana edibles. Let's keep our children

The document is being reviewed using the 'Review' tab. The 'Readability Statistics' tool is open, showing the following data:

Readability Statistics	
Counts	
Words	536
Characters	2,366
Paragraphs	13
Sentences	37
Averages	
Sentences per Paragraph	3.3
Words per Sentence	14.2
Characters per Word	4.4
Readability	
Flesch Reading Ease	71.5
Flesch-Kincaid Grade Level	6.8
Passive Sentences	0%

The 'Readability Statistics' tool is highlighted with a red circle. The 'Flesch Reading Ease' score is 71.5, the 'Flesch-Kincaid Grade Level' is 6.8, and the 'Passive Sentences' percentage is 0%.

Visual Changes



Choosing a Layout

Choose a layout

Conversation

Talking head

Narration

More layouts coming soon!



Home office



Over breakfast



Study



Home office



Bedroom



Hotel reception



Train



Fast food dining

Optional settings

Vibe

Formal

Informative

Casual

Playful

Format

Anecdote

Announcement

Debate

Rant

How-to

Overview

Tips

Language

English

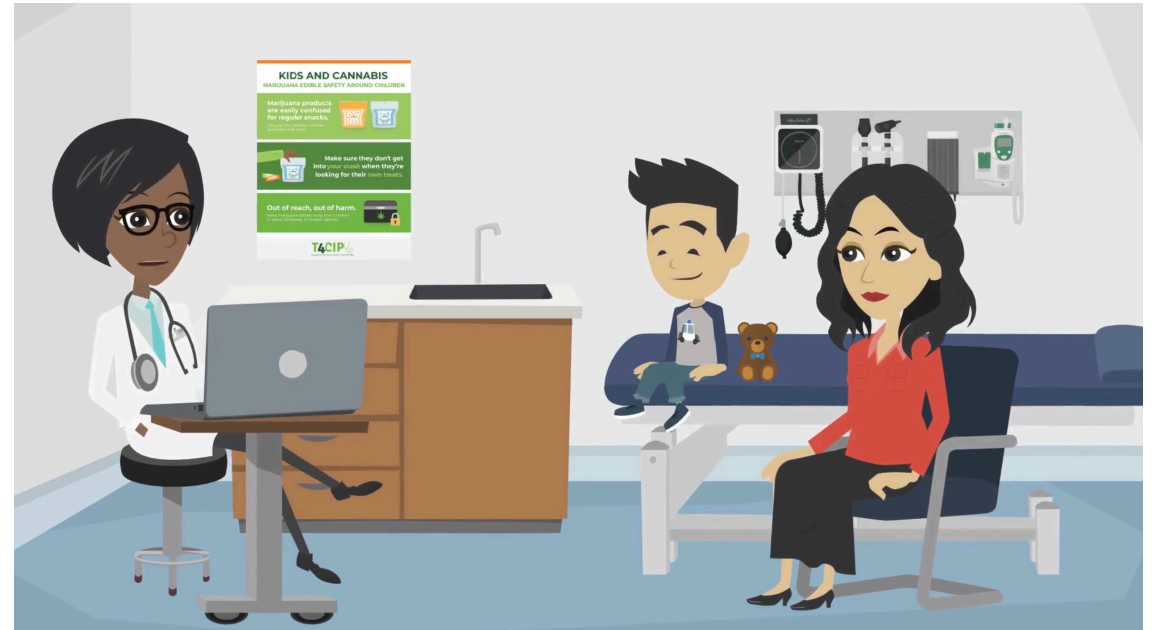
United States



Choosing the Characters



Before



After

Editing the Characters

Characters (2,000+) [VIEW ALL](#)

Your Characters
View your characters

Business Friendly
1053 characters

Whiteboard Animation
253 characters

Contemporary
362 characters


Generate From Photo
Upload photo to generate character

Casual Catering Government Healthcare

Holidays & Costumes Industrial Office Other Professions

Special Occasions Sports Travel

Healthcare (111)



Replace

Character Expressions



- The AI generator assigns an emotion to the characters, it didn't always fit the scene or match our tone

Editing the Emotions, Reactions, and Actions

The image displays a character animation software interface. On the left, a 3D rendered character with dark skin, curly hair, and a grey sweater sits in a room with a window and a potted plant. A red bounding box is overlaid on the character's face. To the right of the character are three main editing panels:

- EXPRESSION**: Shows a sad face icon and the text "Sad". A "RESET" button is visible.
- DIRECTION**: Shows a head icon and the text "According to Action". A "RESET" button is visible.
- REACTION**: A list of reaction options: Face Camera, Left, and Right.

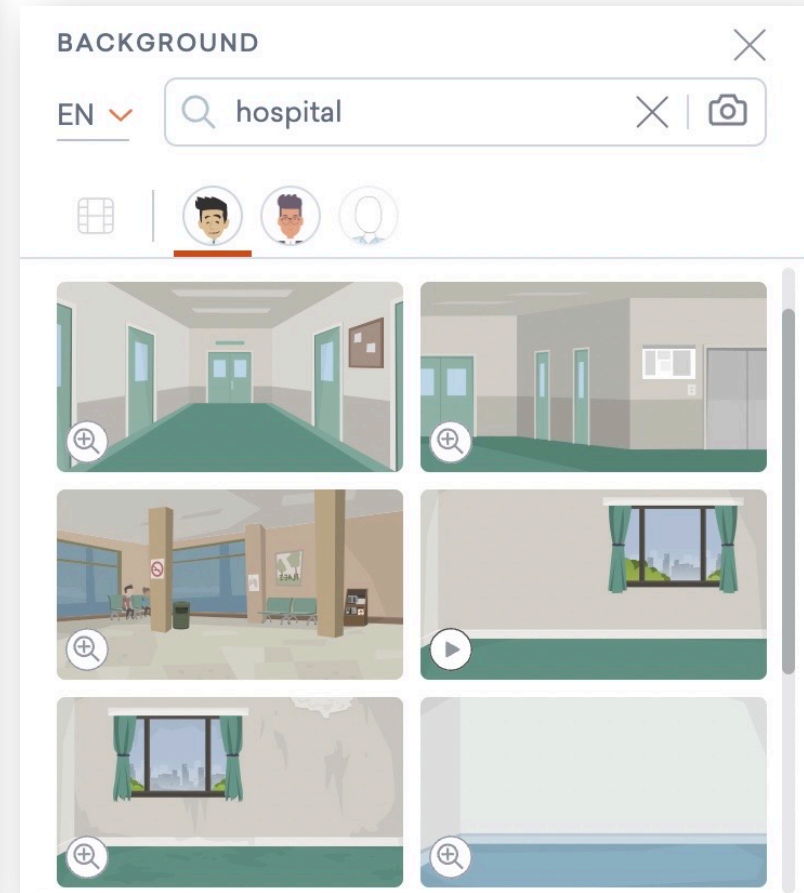
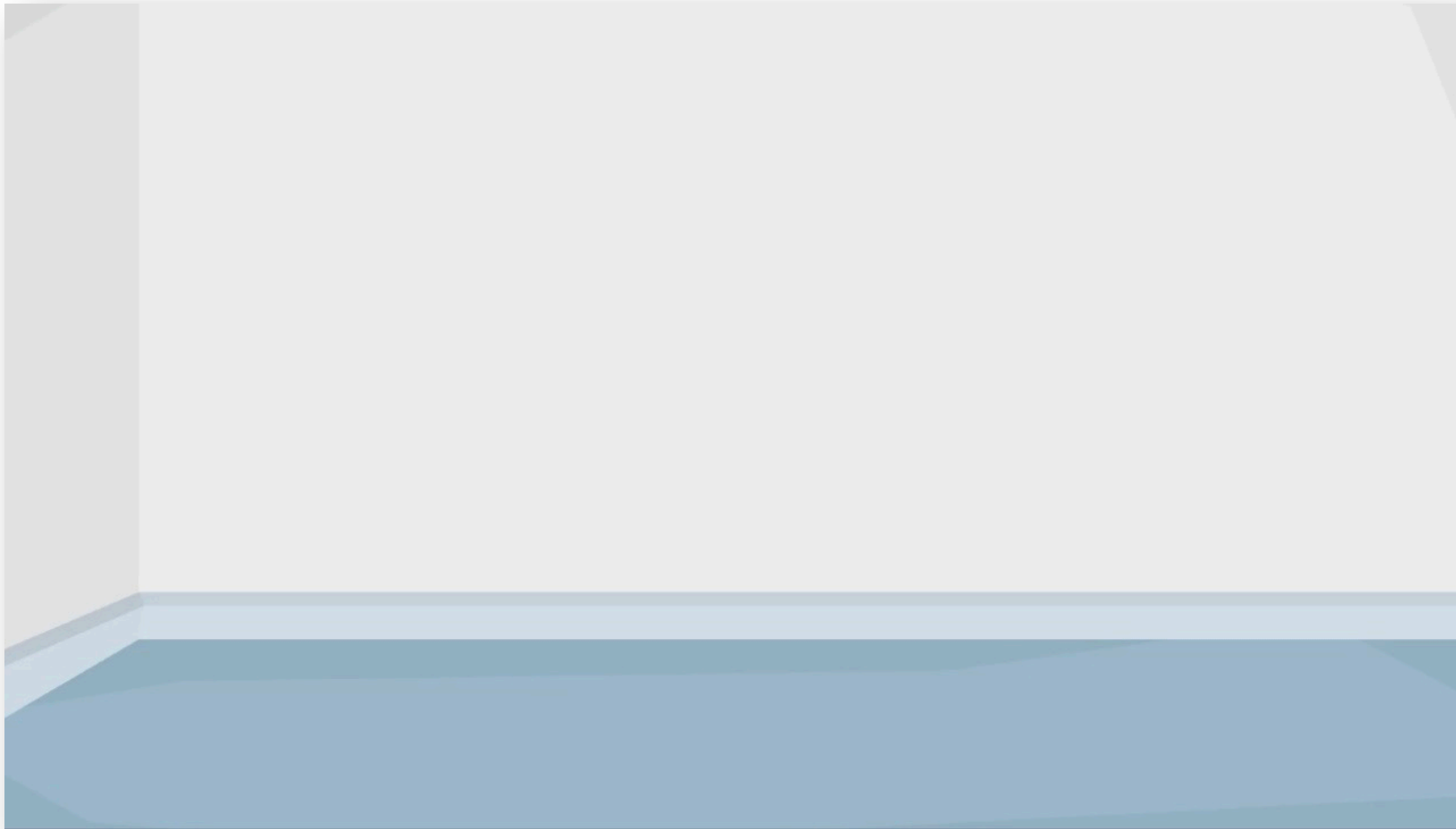
Two green arrows point from the "EXPRESSION" and "REACTION" panels to a larger, semi-transparent overlay window on the right. This overlay window contains two lists of options:

- EXPRESSION**: A search bar "Search expressions..." and a list of expressions: Angry, Angry 2, Anticipation, Confused, Cry, Desperate, Disgust, and Fear.
- ACTIONS**: A search bar "Search actions..." and a grid of action icons: Art & Music, Cashier, Cooking & Catering, Daily Life, Eat & Drink, Emotions, Farming, Handyman, Management, Medical - Doctor, Medical - Patient, and Mobile Devices.

The Room Set-Up Before

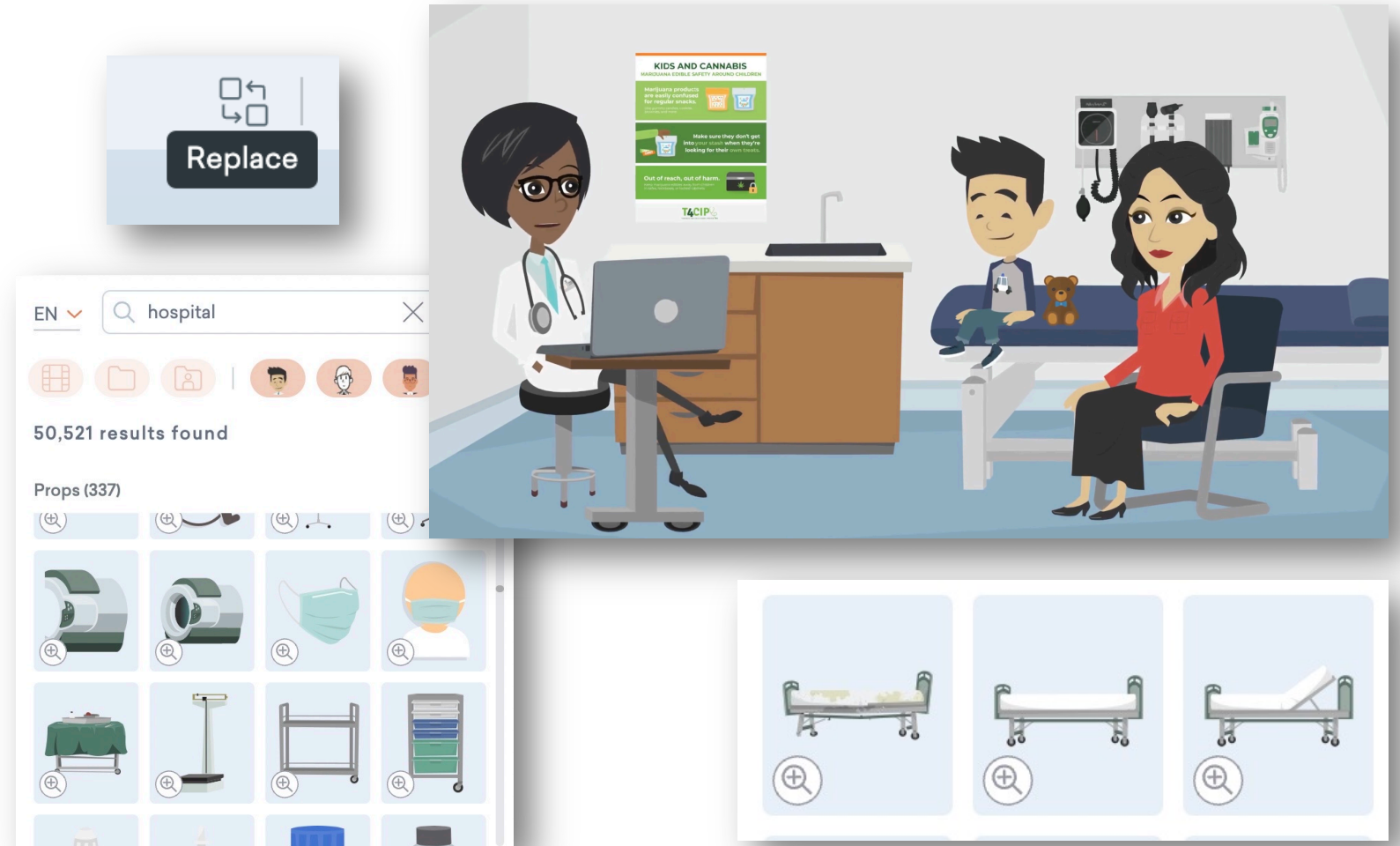


Creating the Doctor's Office

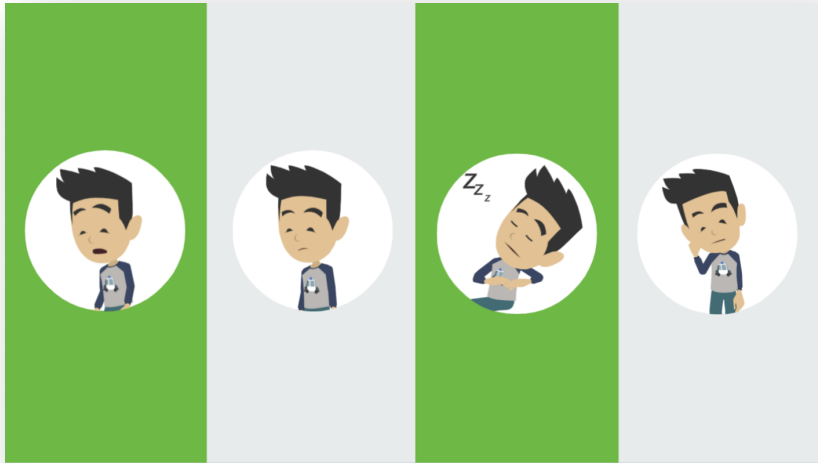


Modifying the Room Set-Up

- Doctor's stool and rolling laptop station
- Parent chair sitting behind child
- Child sitting on table
- Sink cabinet, tools on the wall, patient bed
- Teddy bear to give context to the child's age



Showing the Right Actions



Possible symptoms

How to safely store the products



Call Poison Control at **1-800-222-1222**



Call **911**

What to do if you suspect your child has eaten a marijuana edible

Adding Some T4CIP Branding

⚠️ KIDS AND CANNABIS
MARIJUANA EDIBLE SAFETY AROUND CHILDREN

Marijuana products are easily confused for regular snacks.
Like gummy candies, cookies, brownies, and more.



Make sure they don't get into *your stash* when they're looking for their *own treats*.



Out of reach, out of harm.
Keep marijuana edibles away from children in safes, lockboxes, or locked cabinets



T4CIP
TRAINEES FOR CHILD INJURY PREVENTION



Where to Go For More Information



- Limited time for video
 - Wanted to keep under 3 min
- Important to give a place they can go if they want more information
- Added an end slide

Final Product



Feedback from Doctors

"It is much more conversational and really sounds like how a doctor might talk to a patient."

"Before watching this video I thought it would be awkward bring up edibles to a parent. Now I see how easy it can be."

Final Thoughts on AI-powered Videos

Benefits

- Quick
- Easy
- Easy to make some of the changes (but not all)

Challenges

- Robot-sounding voices
- Need someone with editing skills if you want to make more advanced edits or add branding
- Will still need to work on the script

Want to go even more behind the scenes?

Come to our workshop at the IHA Virtual Conference May 14 – 16th

We will:

- create a video live from a prompt from the audience
- do live edits to a video
- change the language of the video
- showcase some of the newer features of the program
- And more...



Thank You!
Have questions? Feel free to contact us



Tracy Mehan

Tracy.Mehan@NationwideChildrens.org



<https://linktr.ee/tracymehan>



Katie Donovan

Katie.Donovan@NationwideChildrens.org



<https://bit.ly/katie-donovan>



Thank you for Attending

You will receive an email containing a link to a brief online evaluation. If you are requesting continuing education (CE) credits, you must submit an evaluation in order to receive your CE certificate.

Visit the Health Literacy Solutions Center at www.healthliteracysolutions.org to:

- Access the recording and presentation materials of today's webinar.
- Register for upcoming webinars.