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COVID-19 Vaccine Videos: Health Literacy Considerations

Iris Feinberg, PhD; Michelle Ogradnick, PhD; and Jamie Bernhardt, MS

ABSTRACT

Background: Multimedia videos are important tools to inform uptake of the COVID-19 vaccine. Video design using health literacy guidelines may help optimize video usefulness. Many health organizations (HO) (provides information) and health care (HCO) (provides direct health care) organizations have used YouTube to deliver videos about COVID-19 vaccines. **Objective:** We examined HO and HCO COVID-19 vaccine videos shown on YouTube for health literacy guidelines (quality, understandability and actionability). **Methods:** The top 30 most viewed COVID-19 vaccine videos posted by HO and HCO were analyzed using the Global Quality Score (GQS) and the Patient Education Assessment Tool for evaluating audiovisual formats (PEMAT-AV). **Key Results:** GQS scores averaged 3.12 (standard deviation [SD] .789), which is equivalent to 80%. Using PEMAT-AV, there was a relationship between actionability and quality ($r(28) = .453, p < .05$) for HO; for HCO, there was a relationship between usability and quality ($r(28) = .455, p < .05$). Odds ratio analysis showed quality in HO leading to higher odds of actionability (3.573, 95% confidence interval [CI] [1.480-14.569]) and quality in HCO videos leading to higher understandability (4.093, CI [1.203-17.865]). **Conclusion:** Few organizations applied all health literacy principles to video design. Video creation for mass media health campaigns by HO and HCO should include consideration of evidence-based health literacy measures (quality, understandability, actionability) to ensure intended results across viewers with different health literacy levels including communities who have been disproportionately affected by COVID-19. [HLRP: *Health Literacy Research and Practice*. 2023;7(2):e111–e118.]

Vaccine uptake is a global public health goal for containing, preventing, and stopping transmission of COVID-19 (coronavirus disease 2019) (Machingaidze & Wiysonge, 2021). Videos about COVID-19 vaccines have flooded the internet; the ubiquitous availability of internet access across low-, middle-, and high-income countries provides individuals with endless opportunities to learn about the safety, efficacy, and the necessity for COVID-19 vaccines (Machingaidze & Wiysonge, 2021). The rush to promote vaccine uptake by improving people's understanding and acceptance of the COVID-19 vaccine has led to a plethora of internet-based videos created by health organizations (HOs), health care organizations (HCOs), health professionals, government agencies, individuals, and others with little systematic attention paid to quality of information, use of plain language, health literacy guidelines, or visual learning theories (Abdel-Latif, 2020; Arslan et al., 2022; Szmuda et al., 2020).

For people to adopt and implement protective practices like getting the COVID-19 vaccine, they should be able to

access, understand, and use health information in a way that helps them make informed health-related decisions. This means that information must be delivered in a way that makes it easy for individuals to understand and apply that information. Theories of multimedia learning and visual processing describe the importance of words and pictures in message delivery (Mayer, 2020). Processed by the brain separately, both words and pictures must be understood before they can be refined into meaning through working memory and long-term memory (Mayer, 2020). Poor quality input will always produce faulty output; that is, if people cannot initially understand the words and images of a health-related video, they will not be able to process the more complex, nuanced, and blended message the video is trying to deliver.

Delivering meaningful and usable health information is part of organizational health literacy that focuses on those who deliver health information and their broad efforts to implement policies, practices, and systems that make it easier for people to navigate, understand, and use health information

to take care of their own health (Farmanova et al., 2018; Sentell et al., 2021). Healthy People 2030 has affirmed the importance of organizational health literacy by including it as criteria for positive health outcomes (Santana et al., 2021). Using evidence-based health literacy protocols and practices can help organizations improve patient safety and satisfaction, which are key quality improvement and assurance indicators (Agency for Healthcare Research and Quality, 2022).

Health organizations are those that provide information about health but do not provide health care services; their goals are to provide public health information and services and include organizations like the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) (Duran et al., 2011). Healthcare organizations provide services to individuals that have a direct impact on their health, such as emergency department services and primary and specialty care; their actions are driven by a primary intent to restore and maintain individual health (Duran et al., 2011). During the ongoing COVID-19 pandemic, both HOs and HCOs have engaged in broad vaccine uptake efforts including dissemination of messaging through YouTube videos (Li et al., 2020).

Internet platforms like YouTube deliver high-quality videos to massive amounts of people. Videos on YouTube have spread both information and misinformation about COVID-19 prevention and protection practices. In October 2020, YouTube issued a ban on videos that spread misinformation about COVID-19 vaccines, stating that it will remove videos that contradict the WHO's advice and guidelines about COVID-19 vaccines (Culliford & Dave, 2020). At that time, YouTube removed over 200,000 videos deemed as spreading misinformation (Culliford & Dave, 2020). YouTube (2021) makes its COVID-19 misinformation policy about COVID-19 vaccination videos available online; the policy is updated based on the latest information available from the WHO.

As HOs and HCOs increasingly use YouTube as part of their health communication efforts, research about this phenomenon is needed to inform best efforts about both optimizing video design using learning science principles and health communication theories, and by maximizing accurate health literate information in plain language that is commensurate with the public's abilities to understand and use what they view and learn (Adam et al., 2019; Seixas et al., 2021; Sudore & Schillinger, 2009). Multimedia Learning Theory and associated hypotheses of dual processing, attentional load, and learn matching guide instructional design to maximize cognitive loads conducive to comprehension and learning (Mayer, 2020). However, there is a paucity of research on how evidence-based health literacy principles are used when creating and evaluating features of video design. Using health literacy principles can help ensure that individuals can understand provided health information. Some researchers have reviewed YouTube videos about COVID-19 for quality, trustworthiness, and reliability (Kocyigit & Akyol, 2021; Marwah et al., 2021; Szmuda et al., 2020; Yuksel & Cakmak, 2020). These are important features to consider for video design, but to optimize the video-based learning experience for people of varying health literacy levels, video designers should also consider how to use health literacy guidelines that improve understandability and actionability. Evidence-based practices include creating high quality content and using plain language, but also implementing systematic and system-wide guidelines for making messaging in videos understandable and actionable (Brach, 2017). Messaging is understandable and actionable when it has a clear purpose, presents information logically in short sections, and identifies clear steps the audience can take (Shoemaker, Wolf & Brach, 2014). Videos about COVID-19 vaccines should include factual information and avoid misinformation and also optimize understandability, actionability, and quality to maximize individual learning.

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The purpose of our study was 2-fold: (1) to examine the extent to which HO and HCO YouTube videos about COVID-19 vaccines used health literacy guidelines for enhancing understandability, actionability and quality of video messages and features, and (2) to evaluate the relationships between understandability, actionability and quality of videos created by the two different types of organizations. We ask the following research questions:

1. Is there a difference in understandability, actionability, quality, and video length between COVID-19 vaccine videos created by health and health care organizations?
2. What are the relations between understandability, actionability, quality scores, and video length for health and health care organizations individually and combined?
3. What is the relative understandability or actionability of a COVID-19 vaccine video that has higher quality scores, and does that differ according to type of organization?

METHODS

Sample

Between May 2021 and June 2021, the keywords “COVID vaccine” and “COVID-19 vaccine” were used to search for videos about COVID-19 vaccines on YouTube. The researcher used a Google Chrome web browser in incognito mode on an iMac operating system, with no Google or YouTube account logged in, to prevent interactions between past search histories and the YouTube algorithm. The researcher specified the following filters for the search: This year (upload date); Video (type); Under 4 minutes (duration); “Features” left all options unselected to consider any of them; sorted by relevance. Video length of under 4 minutes was guided by two factors: (1) videos up to 4 minutes provided enough content to use our evaluation tools and (2) viewer engagement for videos under 4 minutes ranges from 62%–75%, whereas engagement drops to 50% for longer videos (Fisherman, 2016). We were interested in videos that were more likely to be viewed completely.

HO was defined as an organization of experts (e.g., universities or governmental agencies) that may publicize information about health, but do not directly provide health care services to the public; HCO was an organization (e.g., hospital system) that offers health care services directly to the public in some form. If an organization involved both a university and a hospital system or health care system, it was coded as HCO only. We selected the first 30 most viewed videos in each category.

Measures

The Patient Education Materials Assessment Tool for evaluating audiovisual formats (PEMAT-AV), developed by compiling items from other research-based health literacy tools (Shoemaker, Wolf & Brach, 2014), was used to determine actionability and understandability. The PEMAT-AV is a 17-question measure where a researcher considers each question from a patient perspective and supplies an answer of (0) *disagree*, (1) *agree*, *not applicable*. Twelve questions are organized into five understandability subscores (content, word choice and style, organization, layout and design, and use of visual aids); the remaining five questions are scored as actionability. The PEMAT-AV supplies two global scores—one for understandability and one for actionability; the scores are reported as percentages. The higher the score, the more understandable or actionable the material (Shoemaker, Wolf & Brach, 2014). To evaluate quality, the Global Quality Scoring System (GQS) tool was used. This tool uses a 5-point Likert style scale for subjective evaluation of online resources about health topics with responses ranging from 1 (*poor quality*—is unlikely to be of use for patient education) to 5 (*excellent quality and flow*—is highly useful to patients) (Bernard et al., 2007; Rocha, 2012).

METHODS

Two researchers (M.O. & J.B.) trained in health literacy evaluation scored each video using both the PEMAT-AV and the GQS. Scoring for the GQS was completed first; PEMAT-AV scoring occurred approximately 1 week after GQS scoring. In addition to scoring, each researcher also recorded notes in their spreadsheets next to items where they wanted to share a rationale for why they coded it that way. After coding separately, the two researchers (M.O. & J.B.) came together to discuss the results of the GQS based on the codes and the notes and resolved any differences in coding based on discussing the notes available, re-watching the related video, and reaching agreements about the final code for the items about that video. The two researchers (M.O. & J.B.) used the same process for resolving any initial disagreements in codes in the PEMAT-AV items for each of the 60 videos included. Of the total 870 possible scores, there was disagreement on 26.7% of items, primarily due initial scoring of the word “vaccination” as jargon by one researcher (J.B.). For the GQS scores, there was substantial agreement between the two raters’ scores, $k = .713$ (95% confidence interval [CI], .211 to .703), $p < .05$ according to Cohen (1968). For the PEMAT-AV, there was also substantial agreement between the two raters’ scores, $k = .685$ (95% CI, .243 to .690), $p < .05$ according to Cohen (1968). The study’s principal investiga-

tor (I.F.) resolved significant conflicts among the researchers (M.O. & J.B.).

Statistical Methods

We used SPSS 26 for data analysis. Descriptive statistics included means, standard deviations, frequencies, and chi-square calculations. Pearson correlations, Mann-Whitney U, and odds ratios were also used.

RESULTS

We viewed the 60 most-watched HO and HCO COVID-19 vaccine videos that focused on vaccine knowledge, safety, and/or efficacy (understandability). For vaccine knowledge, content included vaccines preventing death but not illness, vaccines as a way back to normal life, and myths and misinformation including how the COVID-19 vaccines were made. For vaccine safety and/or efficacy, content included a lack of long-term data versus long-term risk of COVID-19, clinical trials, and the science of vaccines. All videos encouraged either preventive measures (mask wearing, social distancing) or getting a vaccine, although many actions were indirect, e.g., “roll up your sleeve,” “get the jab” (actionability).

For all videos, PEMAT-AV understandability scores averaged 70.3 (*SD* 15.5) of 100 with HCO scoring lower and HO scoring higher than the combined mean. For all videos, PEMAT-AV actionability scores averaged 46.6 of 100 with HOs scoring lower and HCOs scoring higher than the overall mean. For GQS scores, the total sample averaged 62.3 (15.7) of 100 with HCOs scoring lower and HOs scoring higher than the overall mean. Health care organization video length was greater than HO length (121.7 vs. 84.5 seconds). Characteristics of COVID-19 vaccine videos are reported in **Table 1**.

We were also interested in how each video scored according to the subscore sections of PEMAT-AV understandability and actionability (see **Table A**). For HOs in the top quartile (75%-100%), 67% were in this quartile for content, 53% for word choice and style, 53% for organization, 73% for layout and design, 47% for use of visual aids, and 20% for actionability. For HCOs in the top quartile (75%-100%), 27% were in this quartile for content, 13% for word choice and style, 33% for organization, 97% for layout and design, 57% for use of visual aids, and 17% for actionability. GQS score averages were 3.2 (*SD* .81) for HOs and 3.3 (*SD* .76) for HCOs. **Table B** shows the highest and lowest scored videos for quality, understandability, and actionability. Only one video, Health Organization Video #17, scored in the highest categories for all three measures and only one video, Health Organization Video #12, scored in the lowest categories for all three measures.

To answer research question 1, “Is there a difference in understandability, actionability, quality and video length between COVID-19 vaccine videos created by health and healthcare organizations?” a Mann-Whitney U test was run to determine if there were differences in understandability, actionability, or quality because the data were not distributed normally. There were no reported differences in values between HOs and HCOs for actionability, understandability, or quality; video length for Health Care Organization Video (Median = 129.5) was longer than for Health Organization Video (Median = 49). A Mann-Whitney test indicated that this difference was statistically significant, $U(HCO = 30, HO = 30) = 611.5, z = 2.398, p < .05$.

To answer research question 2, “What are the relations between average understandability, actionability, quality scores, and video length health and health care organizations individually and combined?” for HOs and HCOs combined, Pearson correlations show a significant relationship between understandability and quality ($r(58) = .272, p < .05$), actionability and quality ($r(58) = .297, p < .05$), and understandability and video length ($r(58) = -.356, p < .05$). For HOs only, Pearson correlations show a significant relationship between actionability and quality ($r(28) = .453, p < .05$) and actionability and video length ($r(58) = -.416, p < .05$). For HCO only, Pearson correlations show a significant relationship between understandability and quality ($r(28) = .455, p < .05$).

To answer research question 3, “What is the relative understandability or actionability of a COVID-19 vaccine video that has higher quality scores and does that differ according to type of organization? An odds ratio analysis was performed. HO videos with higher quality (scoring above the mean of 3.2) had higher actionability scores (above the mean of 42.2) than those scoring below the mean. The odds ratio of having higher actionability in HO videos is 3.573, 95% CI [1.480 to 14.569]. HCO videos with higher quality (above the mean of 3.0) had higher understandability scores (above the mean of 51.1) than those scoring below the mean. The odds ratio of having higher understandability in HCO videos is 4.093, CI [1.203 to 17.865].

DISCUSSION

Our study shows that there is a wide range of use of health literacy guidelines by video designers at HO and HCO; there is also a relationship between quality of COVID-19 vaccine YouTube videos and either understandability or actionability, dependent on type of organization that is sending the mes-

TABLE 1
Characteristics of COVID-19 Vaccine Videos

Variable	Health Organization		Health Care Organization		Total Sample	
	Mean (SD)	Minimum-Maximum	Mean (SD)	Minimum-Maximum	Mean (SD)	Minimum-Maximum
	n = 30		n = 30		n = 60	
Number of views	641.3 (969.2)	135-4,853	210.3 (287.2)	50.0-1516.6	740.8 (425.6)	50-4,853
PEMAT U ^a	72.2 (16.6)	40-100	68.4(14.4)	45.5-100	70.3 (15.5)	40-100
PEMAT A ^b	42.2 (39.1)	0-100	51.1 (34.7)	0-100	46.6 (36.9)	0-100
Global Quality Score	3.2 (.81)	1-4	3.0 (.76)	1-4	3.1 (.78)	1-4
Video length (seconds)	84.5 (79.7)	14-332	121.7 (60.4)	25-218	103.1 (72.6)	14-332

Note. PEMAT = Patient Education Materials Assessment Tool.

^aUnderstandability.

^bActionability.

sage. Overall, HOs and HCOs can take steps to improve the quality, understandability, and actionability of the videos they produce by using evidence-based health literacy and plain language principles. Using these principles can help to ensure that information is easily identifiable and understandable. For example, when creating videos, it is necessary to make sure that the purpose of the video is apparent in the content as well as the name of the video (e.g., a video describing the effectiveness of the COVID-19 vaccine could be introduced as such in the opening visual shot and could also have the title *COVID-19 Vaccine Effectiveness*.) Additionally, research tells us that 1 of 5 adults in the U.S. read at the elementary level, and more than one-third have basic or below basic health literacy (Schmidt, 2022; U.S. Department of Education, 2017). Therefore, having audio in videos could prove beneficial to those who struggle with literacy skills. If the video contains words on a screen, it is crucial to consider the color, font, and size of the text displayed, as it should be easy for viewers to see. Similarly, there should be ample time for individuals of varying literacy levels to read the content, and videos should use minimal medical jargon. The PEMAT-AV User's Guide provides clear and detailed explanations as well as examples for each scoring item (<https://www.ahrq.gov/health-literacy/patient-education/pemat.html>).

In our study, videos that received the highest understandability scores had a clear purpose, presented information in a logical order, and chunked information together that made sense and was easy to follow. Additionally, 4 of the 5 videos used narration that allowed the audience to hear the spoken words at an appropriate pace and volume throughout the video. Videos that received

the highest actionability scores addressed the audience directly and presented at minimum one action the audience could perform with explicit directions on how to complete the action. By using these features, the videos may have been clearer and easier to understand. HOs and HCOs can incorporate these existing tools in their organizational health literacy plans to ensure the most effective and health literate video messaging for patients and other health consumers (Farmanova et al., 2018; Santana et al., 2021; Sentell et al., 2021).

Successful learning through viewing educational health-related videos on many things, including how engaging and accessible the message is (Adam et al., 2019; Guo et al., 2014; Marwah et al., 2021). Design features need to be appealing and informative, and messages need to stand out among a plethora of similar looking and sounding videos (Adam et al., 2019; Ferguson, 2012; Marwah et al., 2021). To that end, we found that most of the COVID-19 vaccine videos did not apply health literacy principles as measured by PEMAT-AV. Health literacy principles should be applied to video content to better serve viewers across demographics, social and economic barriers, and health literacy levels (Brach, 2017; Mani et al., 2021; Sentell et al., 2021; Spring, 2020).

HOs provide expertise on health information and include the CDC, Healthy Canadians, and U.S. state-based public health departments. HCOs provide direct health care; in our study, these were primarily large hospital systems. HOs had slightly higher understandability scores than HCOs (72.2% vs. 68.4%) and HCOs had slightly higher actionability scores than HO (42.2% vs 51.1%). These scores, however, indicate

that neither type of organization created highly understandable and actionable health education videos; only 6.7% of all organizations scored higher than 80% on understandability and 16.7% of all organizations scored higher than 80% on actionability. These findings align with the missions of HOs and HCOs; that is, HOs are more likely to want to share public health messages and HCOs are more likely to encourage patients to take an action on their individual health.

There is a wide range of understandability and actionability scores across the videos we studied, with very little consistent application of PEMAT-AV health literacy guidelines. As part of HOs and HCOs, professionals who create health messaging and translate that messaging into video format could benefit from more consistently using PEMAT-AV guidelines to direct their work. Further, although not a specific health literacy measure, the GQS measures important video-based constructs that make videos useful to patients such as the flow of the video and whether information is missing or adequately discussed; it has been used widely to score videos containing health information. The key GQS question is whether the information and flow of information is useful for patients. In our study, only 12 HO videos (40%) of all videos scored above 80% in quality; only 8 HCO videos (26.7%) scored above 80% in quality.

As one of the largest search engines in the world by volume, YouTube is one second only to Google, and acts as a gateway for many users (Global Reach, 2020). When YouTube videos are developed to be understandable, users with a range of health literacy skills who search YouTube can more likely understand health information, a key tenet in individual health literacy (Berkman, Davis & McCormack, 2010), and a first step in using health messaging to make informed health-related decisions for themselves and their families. Further, when videos provide usable and actionable information, they may also improve comprehension of the message, and enable individuals to consider taking actions to change health-related behaviors, such as getting the COVID-19 vaccine.

Finally, mass media campaigns focusing on health behavior and promotion are not new; however, health communication theory has not always been systematically applied to messaging development (Al-Tammemi & Tarhini, 2021; Wakefield, Loken & Hornik, 2010). In addition to health communication theories, which may inform message uptake, the socioecological model that describes the complex interactions between an individual, relationships, community, and society on health behavior must be taken into account when creating health messaging (Sentell, Vamos, Okan, 2020). It is also critically important to engage the end-user in designing and testing any health communication message to ensure

messages will be understood and adopted. This approach prioritizes community knowledge, voices, and experiences and aims to engage end users in developing their own capacity for behavior change (Cueva et al., 2015). Asking community members to determine the extent to which the content is understandable/informative and reflects cultural and linguistic appropriateness adds to the quality of public health awareness campaigns. We do not know how the videos in our study were created; that is, if community members were engaged in design and testing, how design features were chosen, or how messaging was determined; thus, we can only share findings on the application of evidence-based health literacy and quality measures.

It is not clear if health communication and behavior or learning science theories were considered in the rush to create mass media messaging about the safety, efficacy, and availability of the COVID-19 vaccines. The COVID-19 pandemic has put a spotlight on the effect of low health literacy in lower resourced communities, communities of color, and non-native English-speaking communities where individual health literacy levels are typically low; data show a high disproportionate burden of COVID-19 morbidity and mortality for these communities (Ndugga, Hill, & Artiga, 2022). Improving health messaging by employing health literacy guidelines is not a panacea, but it is a start in providing health communication that is clear, understandable, and usable for communities of all health literacy levels.

LIMITATIONS

The results of this study should be interpreted in the context of a few limitations. The number of videos were limited to the first 60 most viewed in two separate organization types as generated by the search query. Although this limits the generalizability of the findings to all HO/HCO COVID-19 vaccine videos, actual video searching patterns indicate that viewers rarely investigate more than the first few pages of any search (Mani et al., 2021); this makes the methodology we used strongly applicable to actual searching patterns. Another limitation may be the expertise of the video evaluators; although they were both trained by the same health literacy expert, both the PEMAT-AV and GQS require subjective evaluation. We did not measure accuracy or reliability of information in the sample of videos as we are not experts in COVID-19 vaccine science; we only measured understandability, actionability, and quality of the video itself. Due to the ability to turn YouTube statistics off, we were not able to capture whether more health literate videos were liked more or were more frequently viewed. This data could have allowed us to analyze the impact of higher quality videos on health

consumers viewing habits, which in turn may provide insight into personal health literacy. Finally, although the dissemination of video-based high quality actionable and understandable information regarding the COVID-19 vaccine may play a role in educating health consumers, it is clear that other factors such as culture, social stigma, behavioral economics, and politicization of messaging during the COVID-19 pandemic also play a significant role in vaccine understanding and uptake (Neumann-Böhme et al., 2020; Fisher et al., 2020).

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Table B The Five Highest Rated Videos for Quality, Understandability, and Actionability

	Organization Type	Title (Hyperlinked)	Score	Length	Views (as of June 2021)	Producer
Quality	HOV	COVID-19 Vaccine Conversations	80%	00:58	158,553	CDC
	HOV	HSE COVID-19 Vaccination Registration	80%	03:24	59,317	HSE Ireland
	HOV	COVID-19 Vaccine – It’s time to roll up our sleeves 18-49 years old	80%	00:40	143,148	Scottish Government
	HOV	FAQs surrounding COVID-19 Vaccine Introduction	80%	03:25	67,254	Ministry of Health & Family Welfare
	HCOV	Video No Longer Available	80%	01:28	143,148	CVS Pharmacy
Understandability	HOV	How do I know the COVID-19 vaccines are safe?	83.3%	00:30	1,110,843	Healthy Canadians
	HOV	Are COVID-19 vaccines safe for pregnant women and children?	81.8%	02:29	294, 786	Digital Medic at Stanford University
	HOV	The road to a COVID-19 vaccine	81.8%	03:00	80,193	World Health Organization
	HOV	COVID-19 Vaccine Conversations	80%	00:58	158,553	CDC
	HCOV	After COVID-19 Vaccination: CDC Guidelines Explained (3/8/21)	80%	03:09	MISSING	UC Davis Health
Actionability	HOV	FAQs surrounding COVID-19 Vaccine Introduction	100%	03:25	67,254	Ministry of Health & Family Welfare
	HOV	Video No Longer Available	100%	01:27	455,514	CDC
	HOV	How to make your COVID-19 vaccination appointment online	100%	05:32	173, 641	Health Vermont
	HCOV	Opting Out of COVID-19 Vaccine- A shot of Truth	100%	01:54	127, 918	Community Health Network
	HCOV	Register for COVID-19 Vaccine at Narayana Health	100%	00:25	MISSING	Narayana Health

	Organization Type	Title (Hyperlinked)	Score	Length	Views (as of June 2021)	Producer
Quality	HOV	What is the Most Common Side Effect of a COVID-19 Vaccine?	40%	00:14	1,301,852	US Department of Health and Human Services
	HCOV	COVID-19 Vaccine: We're in This Together	40%	00:30	496,443	Ohio State Wexner Medical Center
	HCOV	Concerns about COVID-19 Vaccine Side Effects	40%	03:10	207,020	Hartford HealthCare
	HCOV	Understanding COVID-19 Vaccine side effects, why second dose could feel worse	40%	02:26	234,933	Mayo Clinic
	HCOV	Video No Longer Available	40%	NA	68,863	US Department of Health and Human Services
Understandability	HOV	Dr. Amesika Nyaku- How safe, effective COVID-19 vaccines were developed quickly	50%	01:42	88,663	NJ Dept of Health
	HCOV	Infectious Disease Doctor Calls J&J Vaccine "A Game Changer"	50%	02:49	68,293	UVA Health
	HCOV	Types of COVID-19 Vaccines in India	45.4%	02:46	NA	Yashoda hospitals Hyderabad
	HOV	COVID-19 vaccination expanded to younger age groups	44.4%	02:49	62,193	Government of Singapore
	HOV	COVID-19 vaccine auditions	40%	02:13	275,693	NHS
Actionability	HOV	Dr. Amesika Nyaku- How safe, effective COVID-19 vaccines were developed quickly	0%	01:42	88,663	NJ Department of Health
	HOV	Is the COVID-19 Vaccine Safe?	0%	01:29	58,874	National Institute of Diabetes and Digestive and Kidney Diseases
	HOV	Did you know? COVID-19 Vaccines Meet Strict FDA Standards for Safety and Effectiveness	0%	00:14	335,029	US Department of Health and Human Services
	HCOV	Infectious Disease Doctor Calls J&J Vaccine "A Game Changer"	0%	02:49	68,293	UVA Health
	HCOV	What Are the Long-term Side Effects of COVID-19 Vaccine?	0%		188,739	The Children's Hospital of Philadelphia