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LESSONS LEARNED FROM USING WHITEBOARD VIDEOS AND YOUTUBE FOR DEPRESCRIBING GUIDELINES KNOWLEDGE MOBILIZATION.

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ABSTRACT

Objectives Deprescribing is the planned and supervised process of dose reduction or stopping medication. Few clinical guidelines exist to help health care professionals in making decisions about deprescribing. The Bruyère Deprescribing Guidelines Team developed a series of evidence-based medication-class specific deprescribing guidelines and, to extend reach and uptake, disseminated them as whiteboard videos published on YouTube. This paper reports on the creation, sharing and evaluation of videos on proton pump inhibitor (PPI), antihyperglycemic (AHG), antipsychotic (AP) and benzodiazepine receptor agonist (BZRA) deprescribing guidelines.

Methods Whiteboard videos depict an animator drawing on a whiteboard, while the narrator reads the script. In each video, the deprescribing algorithm is applied to mock patient cases. The videos were shared on YouTube and promoted via Twitter and other web-based tools. Evaluation methods included YouTube analytics and the validated Information Assessment Method (IAM) questionnaire.

Key findings The four videos have a combined total of 26 387 views over the approximately 50 months since publishing, with viewers watching 34–40% of the videos' runtimes on average. The PPI and AHG deprescribing videos were viewed 4318 times in 97 countries during the first year. IAM respondents perceived the PPI, AHG and AP video content to be relevant, useful to learning and applicable to patient care.

Conclusions Using whiteboard videos on YouTube to explain deprescribing guidelines was a successful approach to knowledge mobilization. The evaluation approach is innovative as it combines typical success factors for online learning videos (e.g. views, estimated minutes watched) with responses to a validated information assessment tool.

Keywords: knowledge mobilization; dissemination; information assessment; deprescribing; clinical guidelines; educational videos; YouTube

INTRODUCTION

Deprescribing – the planned and supervised process of dose reduction or stopping of medication – is recommended when potential harm outweighs the potential benefit of continuing a medication.[1] While patients may be willing to have a medication reduced or stopped, the process can be challenging.[2] Clinical guidelines typically recommend adding medications and rarely provide guidance for health care providers (here- after 'providers') as to when to reduce or stop doses.[3] To help providers make decisions about when and how to reduce medications safely, the Bruyère Deprescribing Guidelines Team used the GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach to develop four evidence-based medication-class specific deprescribing guidelines and subsequently collaborated with Australian researchers to develop a fifth.[1, 4–8] The guideline publications and tools are available here: Deprescribing Guidelines and Algorithms – Deprescribing.org.

Guideline dissemination typically involves publication in peer-reviewed journals. However, guideline uptake is known to be erratic and slow often due to ineffective and passive dissemination; active approaches are needed to enable awareness and facilitate uptake.[9, 10] These include stake- holder engagement throughout the development and implementation processes, keeping guideline tools short and user friendly and conducting purposeful structured strategies for dissemination, education and training designed to ad- dress personal factors such as familiarity with guide- line recommendations, self-efficacy and skills to use the guidelines. Anticipating this, the team engaged in various active knowledge mobilization strategies to achieve impact, for example: publishing in open-access journals; developing a practical two-page decision-making algorithm and in- formation sheet with stakeholder input; conducting a marketing exercise to develop a recognizable brand for these tools, offering free access to tools by linking the guidelines to the team's website; disseminating links via e-newsletters and using Twitter to build discussion and sharing the algorithms at professional conferences and workshops.

As awareness grew, so did requests for wider continuing professional development (CPD) on using

the guidelines. From 2017 to 2018, as a response to these requests, the team developed whiteboard videos to illustrate the use of guidelines and demonstrate each step. These are short, narrated videos that depict an animator drawing on a whiteboard.[11, 12] This creative style was chosen to maintain a similar visual approach across all the videos, to enable close-up highlights of each algorithm and to stimulate viewer engagement.[13] Each major point is accompanied by its drawing, with the animator constructing the drawing while the narrator talks.[12] The video reaches the main point as the drawing is completed, and the animator moves on to a blank board to start the next point.[12] In health sciences, whiteboard videos have been used for a variety of purposes including knowledge mobilization.[14–16] Similar whiteboard videos for healthcare professional education have been widely viewed.[17] Each of the deprescribing guideline videos guides providers in making decisions about which patients should continue the medication and for which to consider deprescribing (depending on the original or on- going reason for use), illustrating each step with the relevant visual content from the algorithm. The videos also guide users to identify clinical targets for therapy when appropriate, decide whether to taper to a lower dose or stop a particular medication, monitor for the return of symptoms and manage such symptoms. By walking viewers through the algorithm step-by- step for two different patient cases, we anticipated that viewers would acquire clinical reasoning skills to apply the guideline's recommendations in a variety of patient scenarios. This is consistent with the concept of demonstrating the 'think-aloud' strategy (by having an expert share their thought process) to encourage learners to think critically about the guideline recommendations as they problem-solve.[18] We chose to freely publish the videos on YouTube so that people could view the videos anytime and anywhere, watching on their own or used as part of a lecture or presentation. YouTube is a large video-sharing platform available internationally, used widely to share educational content and is increasingly being used in health care professional education.[19]

The whiteboard video educational program is aimed to maximize guideline reach, awareness and uptake amongst providers. This paper reports on the creation, sharing and evaluation of videos on proton pump inhibitor (PPI), antihyperglycemic (AHG), antipsychotic (AP) and benzodiazepine receptor agonist (BZRA) deprescribing guidelines. The project was exempted from the Research Ethics Board review from the Bruyère Research Institute (REB # M16-18-061) as it was deemed a quality improvement activity.

METHODS

Program description

Video scripts were generated for each of the first four guidelines available at the time. Each video contained at least two mock patient cases to which the guideline algorithm was applied. A guideline development team member provided narration. Audio recordings were edited using Audacity software. Digital illustrations were hand-drawn via Adobe Illustrator and a Wacom drawing tablet. Illustrations, algorithm visuals, text and audio were synced using VideoScribe software. Animation effects (e.g. highlighting or circling) were added to visually guide the viewer through the close-up visuals of each of the algorithm steps. Using Adobe Premiere, post- processing effects and royalty free sound effects were added. Before finalization, revisions were made based on feedback from investigators, research project staff and guideline development team members.

Each video contains a one-minute introduction to the narrator, the concept of deprescribing guidelines, the purpose of the video and the format of the algorithm. Next, over approximately eight (PPI), 10 (AP) and 12 (AHG, BZRA) minutes, the narrator applies the algorithm in a stepwise fashion for each patient case, as visualized by zooming in on algorithm components (e.g. reason for medication use). Changes in medications and relevant lab parameters are provided at the beginning and end of each patient case. The one-minute conclusion includes a summary statement on the goal of deprescribing, an invitation to complete a questionnaire about the video, and a disclosure of funding sources and members involved in guideline and video development. The Bruyère Deprescribing Guidelines Team created a Deprescribing.org YouTube channel to centrally and publicly host free and open access to the videos, then actively promoted and shared them with targeted healthcare professional groups through Twitter, electronic newsletters, profession blasts to members and information pages hosted on the team's website (https:// deprescribing.org/).

Program evaluation

YouTube analytic reports were examined to gain insight into the reach of the videos. The reports were exported to an Excel file on 15 July 2021. Data were examined from the date of the initial posting of each video (found in Table 1) to 15 July 2021. To draw comparisons between the viewership of videos that had been posted at different time points, data were also examined from the date of initial posting of the video to 1 year after posting. Descriptive statistics were used to analyse the number of views for each video and how long the video was viewed for on average. The

absolute audience retention curve was also examined, which shows a ratio between the number of views a video has at any given moment of the video as a percentage of the number of views at the beginning of the video.[20, 21] Dips can indicate viewers are skipping or leaving the video, and spikes can appear when more viewers are watching, rewatching or sharing those parts of the video.[21] Viewers' geographic locations for the PPI and AHG videos were also analyzed using descriptive statistics for the period that data was available (exported 27 May 2018). These data were unavailable beyond June 2018 due to changes in YouTube's policy.

The Information Assessment Method (IAM) (https:// www.mcgill.ca/iam/) was used to evaluate the information contained in each video. The IAM includes a validated questionnaire that extends a generic model of interaction between humans and information, revealing the 'value' of information (how information is valuable) from the readers' perspective.[22, 23] This is done by documenting respondents' perceptions of the cognitive impact of the information (nine items; e.g. learning something new), its relevance to practice (three items), application to a specific patient (seven items; e.g., using the information to justify a choice) and anticipated patient health-related benefits (four items; e.g., avoiding referral). The IAM can be used to stimulate and document reflective learning for CPD.[24, 25] IAM responses provide evidence of what information clinicians perceive as valuable, allowing for knowledge creators and CPD planners to optimize and improve their educational resources.[25, 26] Moreover, knowledge providers can use IAM responses (ratings and constructive feedback comments) to revise information content and respond to the user.[27]

The IAM questionnaire (with an additional question pertaining to the respondent's professional background) was programmed into Survey Monkey. Links to the questionnaire were added to the team's website and in the description of each video on the team's YouTube channel; at the end of each video, a verbal reminder was provided asking people to complete the questionnaire. Participants were a convenience sample of those who watched a video anytime between the posting of the video on YouTube and 15 July 2021, and who volunteered to complete the questionnaire. Participants could complete the questionnaire more than once, for example, if viewing a different guideline video or viewing the same video for different patient scenarios at different points in time. Responses were exported to an Excel spreadsheet on 15 July 2021 for analysis using descriptive statistics. The Clinical Relevance of Information Index (CRII) was used to measure providers' perceptions of the relevance of the information for at least one patient.[28] CRII considers the three

possible responses to the IAM question, Is this information relevant for at least one of your patients? ('totally relevant', 'partially relevant' and 'not relevant'). CRII is determined using the following formula where T= totally relevant, P = partially relevant and N = not relevant:

$$\text{CRII}= \begin{cases} \frac{2T\,(T+P)}{(T+P+N)(2T+P)}, & \text{when } T+P>0 \\ 0, & \text{otherwise} \end{cases}$$

The formula yields a value within a range of 0 (not relevant) to 1 (totally relevant). CRII has been used to evaluate clinical relevance of other digital content for clinicians, such as Gene Messengers.[29] To our knowledge, this is the first time the IAM and CRII have been used to evaluate videos.

RESULTS

YouTube analytics

From May 2017 to 14 July 2021, the four videos had been viewed 26 387 times. For each video, Table 1 illustrates the length, the date it was posted to YouTube, the number of views within the first year of posting, the number of total views (as of 14 July 2021), the number of countries in which it was viewed in within the first year of posting and the audience retention time. For all videos, Table 1 and Figure 1 show that audience retention declined as video time elapsed with 34–40% of video content viewed.

IAM respondents and responses

As of 14 July 2021, a total of 422 providers completed at least one IAM questionnaire for the PPI, AHG and AP videos (Table 2). Data for the BZRA video is not displayed due to a high percentage of incomplete IAM questionnaires.

Cognitive impact

Respondents were asked about the impact of the video- related information on them or their practice (up to five response options). They most commonly indicated that the videos motivated them to learn more: 161 of 295 (55%), 45 of 81 (56%) and 24 of 46 (52%) respondents for the PPI, AHG and AP videos, respectively. Then, they commonly re- ported that the video taught them something

new: 115 of 295 (39%), 38 of 81 (47%) and 18 of 46 (39%) respondents for the PPI, AHG and AP videos, respectively. Respondents also indicated that the videos confirmed they are doing the right thing (69/295; 23%, 15/81; 19% and 6/46; 13% of respondents for the PPI, AHG and AP videos, respectively), offered reassurance (38/295; 13%, 13/81; 16% and 6/46; 13% of respondents for the PPI, AHG and AP videos, respectively), and reminded them of something they already knew (26/295; 9%, 9/81; 11% and 6/46; 13% of respondents for the PPI, AHG and AP videos, respectively).

Relevance to practice

The PPI, AHG and AP videos were rated highly relevant (total CRII for all disciplines = 0.93, 0.94 and 0.91, respectively) (Table 3).

Application to patient care

Respondents were asked how they intended to use the video-related information for a specific patient (six response options). The top three ways respondents indicated their intention to use the PPI video, for example, included: managing the patient differently (97/295; 33%); using the information to justify a choice (52/295, 18%) and using the information in a discussion with the patient or another provider (48/295; 16%). Details are displayed in Table 4.

Anticipated patient health-related benefits

Finally, respondents were asked about anticipated patient health-related benefits as a result of applying video-related in- formation (three response options). Respondents most commonly reported that the videos would help to improve the patient's health status, function or resilience (143/295; 48%, 49/81; 60% and 24/46; 52% of respondents for the PPI, AHG and AP videos, respectively). Then, they commonly indicated that the videos could avoid unnecessary or inappropriate treatment, diagnostic procedures, preventative interventions, or a referral for the patient (113/295; 38%, 25/81; 31% and 13/46; 28% of respondents for the PPI, AHG and AP videos, respectively). Across the three videos, the least commonly reported benefit was preventing a disease or preventing the worsening of a disease (39/295; 13%, 7/81; 9% and 9/46; 20% of respondents for the PPI, AHG and AP videos, respectively).

DISCUSSION

This educational program utilized YouTube to maximize the reach of deprescribing guidelines with

the goal of enabling awareness and uptake amongst health care providers. Our findings suggest we met our objectives of increased guideline reach and awareness, with over 26 000 global views across the four videos. Findings from the IAM questionnaire revealed that the videos reached the intended audiences: medical, pharmacy and nursing healthcare providers and that these audiences considered the measured video material to be relevant, useful to learning and applicable to patient care.

Although widely viewed, comparatively few IAM questionnaires were completed; this could be considered a limitation in interpreting the data. However, we believe a strength of the study lies in this being the first known in- stance of using the validated IAM questionnaire to evaluate videos. The videos themselves are of high scientific trustworthiness by virtue of their development by clinician-researchers with expertise in deprescribing and utilizing evidence-based deprescribing guidelines.

In terms of viewership, the PPI video received the highest number of views, which is consistent with the many requests the research team receives for guidance and permission to implement the PPI deprescribing guideline in clinical practice and its high citation rate (over 300 citations in Google Scholar).[4]

Audience retention declined gradually across all videos. Nearly one-third of our audience dropped off in the first 15 s; such early drop-off may have occurred because viewers clicked on the video accidentally, found it hard to under- stand or the video was not what they expected. They might also have stopped watching with the intention of viewing the video at a later time but our data did not allow us to measure repeat views. Later drop-off could have occurred due to providers' workloads (i.e. not enough time to watch the full video) or feeling they had learned enough to implement the corresponding guideline. Drop-off in the last minute, after the content was provided, occurred during the video conclusion about the questionnaire and contextual information. Most IAM respondents had backgrounds in medicine, pharmacy and nursing, suggesting that the videos reached the professional audiences involved in deprescribing.[30,31] The majority of IAM respondents found the video content to be highly relevant to clinical practice. Approximately a third of respondents indicated the videos could avoid an unnecessary or inappropriate treatment, procedure, preventative intervention, or a referral. This anticipated benefit is aligned with the

Choosing Wisely campaign which aims to reduce unnecessary tests and treatments in health care and has produced several toolkits which highlight medications addressed by our guidelines.[32] Many respondents (from 48% to 60%) reported expected benefits of the video information for a specific patient. These results are very promising compared to clinicians' IAM ratings of emailed treatment recommendations in the context of CPD programs; for example, only 29.2% of family physicians' ratings (n = 40 267) reported expected health benefits for specific patients.[33] From the IAM questionnaire alone we are unable to assess whether these expectations translated (and how) into patient health outcomes. The number of completed questionnaires was much lower than the overall number of video views; this may have been because questionnaire completion was voluntary, without incentives or compensation, and also because those who did not watch the video until the end, did not hear the verbal request to complete the questionnaire. While the descriptive study de- sign and convenience sampling limits us from generalizing results to the broad healthcare provider population, the prevalence of respondents' self-reported potential health benefits of the information affirmed the investment in this educational program. More than half of respondents indicated they were motivated to learn more; this finding prompted our subsequent investment in a mobile app which links algorithm steps with more fulsome guideline content and resources.[34]

Web-based video-sharing platforms for health professions education has been described ranging from pre-licensure training to CPD.[35–39] For example, YouTube has been described as a popular educational tool within anatomy education. Whiteboard videos specifically have been found to improve short-term knowledge acquisition for medical students.[16] However, some authors have cautioned against the use of YouTube for educational purposes, and reported concerns about the trustworthiness of YouTube video-related information[39–42]; they have also commented on the lack of a standardized, validated means of assessing the quality of YouTube videos.[41,43] Current means include checklists to determine the accuracy and/or quality of informational content of the videos applied by a panel of experts or simply relying on popularity or the likelihood of a video being viewed, ignoring the quality of the information provided.[41–44] While YouTube has produced online advice regarding strategies to maximize audience retention, little is yet known about optimal video duration or how to successfully apply these strategies in the context of healthcare provider education.[20, 21, 45] The use of YouTube videos for healthcare provider education is growing but few evaluative studies have documented the impact of such approaches beyond viewer reaction and satisfaction.[39] This work furthers knowledge of YouTube video

evaluation by using the validated IAM questionnaire to document the value of this information through the concepts of cognitive impact, relevance, intention to use for specific patients, and expected patient health benefits of the information.[23]

In returning to our objective, it is apparent that developing whiteboard videos and disseminating them widely through YouTube and social media, was an effective way to reach a wide and relevant audience. This supports the use of this strategy for guideline dissemination. However, the varied viewership times warrant further investigation to see if changes to the video format and length need to be made. Reports of relevance to practice and patient care imply this whiteboard video strategy with the verbalization of thought processes as the guidelines are applied, can be an effective method of learning for healthcare providers. The integration of such innovative programming and evaluation into CPD activities can also increase providers' uptake, and could be considered for similar programs, for example, via credits for reflective learning through the IAM.

CONCLUSION

Multi-faceted implementation strategies are most likely to be effective in mobilizing guideline uptake.[46] Using whiteboard videos and YouTube facilitated extended reach and uptake of deprescribing guidelines; the IAM evaluation demonstrated learning and potential benefits to patient health. These results contribute to the body of literature discussing the potential value of using web-based video-sharing platforms for health professions education.

The Deprescribing whiteboard videos can be viewed and evaluated at Deprescribing Guidelines and Algorithms – Deprescribing.org.

Author Contributions

B.F. and V.V. designed and produced the whiteboard videos. B.F., R.G. and P.P. conceived the evaluation plan. R.E.G. and D.D. carried out the analysis plan with assistance from B.F., R.G., V.G., H.E.S., S.S. and P.P. B.F. and R.E.G. wrote the first draft of the manuscript; all authors provided critical review and input to the final manuscript. All authors had complete access to the study data supporting the publication.

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Conflict of Interest

The authors declare that there are no conflicts of interest.

Classifications

Knowledge Translation, Online/computer-based education; Research/Evaluation – survey methodology; Social Media

Ethical Approval

This project was exempted on 12 December 2018 from Research Ethics Board review from the Bruyère Research Institute (REB # M16-18-061), as it was deemed program e- valuation.

Data Availability

The data underlying this article will be shared on reasonable request to the corresponding author.

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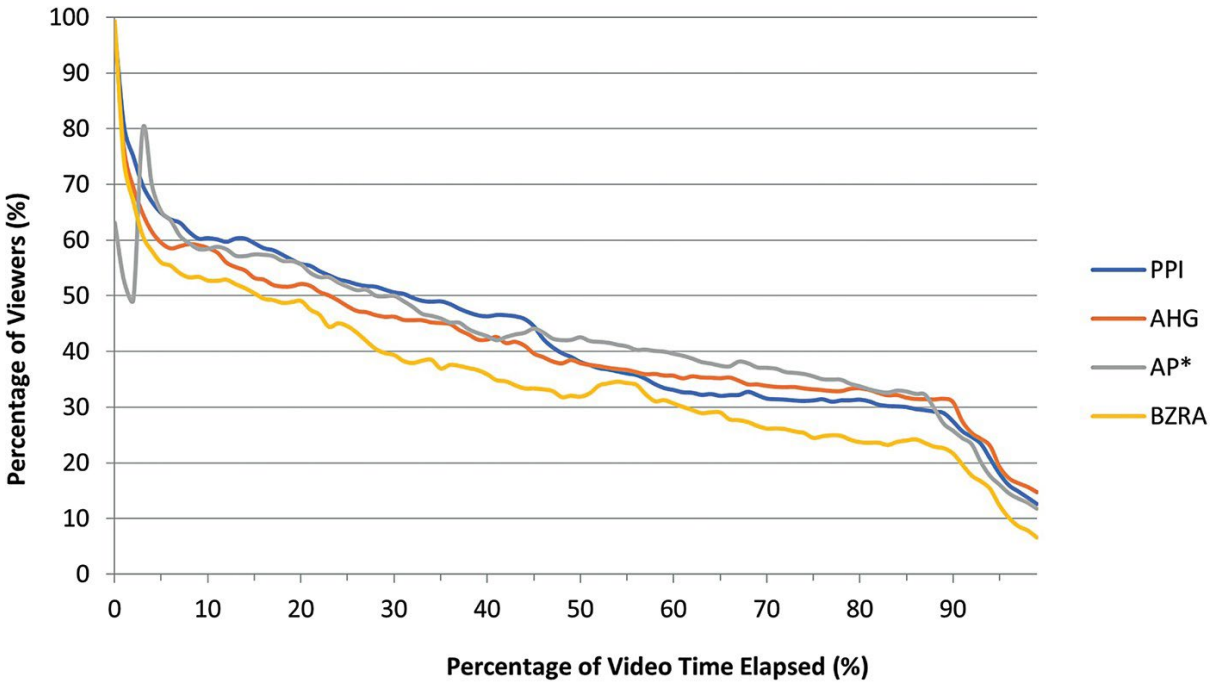

Figure 1. Absolute audience retention curve for each video.
*When posted on the website, the AP video was inadvertently cued to start at 0:19 s. This is why absolute audience retention is not 100% at 0% of video time elapsed; viewers viewing the video from the website started watching at the 0:19 s mark.

Table 1 Deprescribing Videos' Length, Views and Audience Retention

Video Title	Length (min)	Date posted	Views within first year of posting	Countries viewed in within first year of posting*	Total views**	%Viewers remaining at 15 seconds	%Viewers remaining at end of first case	%Viewers remaining at end of second case	%Viewers remaining at completion of video	Average View duration (min, % of video length)
Using the PPI Deprescribing Algorithm	9:44	17 May 2017	3039	91	16496	74%	46%	29%	13%	3:52, 40%
Using the AHG Deprescribing Algorithm	11:58	24 May 2017	1279	60	3667	69%	41%	31%	15%	4:37, 37%
Using the AP Deprescribing Algorithm	10:10	3 April 2018	684	–	2626	***	44%	32%	12%	3:58, 39%
Using the BZRA Deprescribing Algorithm	12:00	16 July 2018	905	–	3598	67%	29%	22%	7%	4:07, 34%

*Viewers' geographical data unavailable after 2018 due to changes in YouTube's policies; thus, such data are available only for PPI and AHG videos, which were viewed mostly from the United States (1,412 views or 32.70%), Canada (1264 views or 29.27%), United Kingdom (304 views, or 7.04%), Spain (221 views or 5.12%), and Australia (171 views or 3.96%) -among 97 countries-.

**As of July 14th, 2021

***When posted on the website, the AP video was inadvertently cued to start at 0:19s. Therefore, viewers started watching at the 0:19s mark.

Table 2 Disciplines of IAM Respondents

Discipline	PPI Video	AHG Video	AP Video	Total
Pharmacist	130	36	18	184
Physician	114	31	16	161
Nurse	39	14	12	65
Other - Student (Pharmacy, Nursing, Medical)	8	0	0	8
Other - Physician Assistant	1	0	0	1
Other - Practice Facilitator	1	0	0	1
Other - Clinical Psychologist	1	0	0	1
Other - Acupuncturist	1	0	0	1
Total Respondents	295	81	46	422

Table 3 CRII Scores by Video and Disciplinary Group

Video	Discipline	Totally Relevant (n)	Partially Relevant (n)	Not Relevant (n)	CRII**
PPI	Pharmacist (n = 130)	110	19	1	0.91
	Physician (n = 114)	101	12	1	0.94
	Nurse (n = 39)	37	2	0	0.97
	Total (n = 295)	259	34	2	0.93
AHG	Pharmacist (n = 36)	30	6	0	0.91
	Physician (n = 31)	30	1	0	0.98
	Nurse (n = 14)	13	0	1	0.93
	Total (n = 81)	73	7	1	0.94
AP	Pharmacist (n = 18)	12	5	1	0.78
	Physician (n = 16)	16	0	0	1.00
	Nurse (n = 12)	11	1	0	0.96
	Total (n = 46)	39	6	1	0.91

*This table excludes 12 results for the PPI video from 8 students (profession unknown), 1 Physician Assistant ,1 Practice Facilitator, 1 Clinical Psychologist and 1 Acupuncturist due to low response numbers; however, these data points are included in the total values.

**Each value is in the range between 0 (no relevance) to 1 (maximum relevance)

Table 4 Application to a Specific Patient by Video and Disciplinary Group

Response (intention to use information for a specific patient)	Video	Pharmacists, n(%)	Physicians, n(%)	Nurses, n(%)	Total*, n(%)
As a result of this information I will manage this patient differently.	PPI	34 (26.15)	45 (39.47)	14 (35.90)	97 (32.88)
	AHG	10 (27.78)	14 (45.16)	3 (21.43)	27 (33.33)
	AP	2 (11.11)	8 (50.00)	1 (8.33)	11 (23.91)
I had several options for this patient and I will use this information to justify a choice.	PPI	24 (18.46)	20 (17.54)	7 (17.95)	52 (17.63)
	AHG	7 (19.44)	8 (25.81)	5 (35.71)	20 (24.69)
	AP	3 (16.67)	3 (18.75)	1 (8.33)	7 (15.22)
I thought I knew what to do, and I will use this information to be more certain about the management of a patient.	PPI	13 (10.00)	11 (9.65)	1 (2.56)	25 (8.47)
	AHG	3 (8.33)	3 (9.68)	1 (7.14)	7 (8.64)
	AP	4 (22.22)	2 (12.50)	0 (0)	6 (13.04)
I will use this information to better understand a particular issue related to this patient.	PPI	12 (9.23)	13 (11.40)	5 (12.82)	32 (10.85)
	AHG	5 (13.89)	2 (6.45)	4 (28.57)	11 (13.58)
	AP	5 (27.78)	0 (0)	4 (33.33)	9 (19.57)
I will use this information in a discussion with this patient or with other health professionals about this patient.	PPI	22 (16.92)	15 (13.16)	8 (20.51)	48 (16.27)
	AHG	10 (27.78)	2 (6.45)	1 (7.14)	13 (16.05)
	AP	3 (16.67)	2 (12.50)	6 (50.00)	11 (23.91)
I will use this information to persuade this patient, or to persuade other health professionals to make a change for this patient.	PPI	25 (19.23)	10 (8.77)	4 (10.26)	41 (13.90)
	AHG	1 (2.78)	2 (6.45)	0 (0)	3 (3.70)
	AP	1 (5.56)	1 (6.25)	0 (0)	2 (4.35)

This table does not display individual results from the 8 students, 1 Physician Assistant ,1 Practice Facilitator, 1 Clinical Psychologist and 1 Acupuncturist for the PPI video; however, these data points are included in the 'Total' column.