

From Text to Screen: An AI-Enhanced Workflow for Creating Video Plain Language Summaries of Clinical Study Results

Authors: Walter Bender, Alex Sterling, Meghan Berryman

Affiliations: Sorcero, Inc., Washington DC USA

Poster
28

Background

While plain language trial summaries (PLTS) are a standard for clinical trial transparency, traditional text-based formats may not effectively reach all audiences. In an era dominated by video, multimedia offers a compelling opportunity to improve comprehension and retention of complex health information [1-4]. This presents a critical need for medical affairs to evolve dissemination strategies, enhancing health literacy and patient trust [5-7].

Methods

To address this, we developed a scalable and compliant methodology for producing video PLTS (VPLS) (Figure 1). The process begins with a finalized, internally approved layperson summary. This is translated into a visual storyboard and a conversational script, which undergo an initial cross-functional review (Medical, Legal, Regulatory). Upon approval, these assets are input into an AI platform that generates a draft video, animating the content with a high-quality synthetic voice-over, dynamic transitions, and approved iconography. The draft then undergoes a comprehensive multi-stakeholder review, including an internal subject-matter expert (SME), the study team and patient advocacy groups, for expert and patient-centric feedback.

Results

Two videos have been generated (Figure 2). The AI-generation of the script and draft video takes less than 8 hours. SME revision takes less than one hour.

Declaration of Funding: No funding to disclose.

Discussion

This AI-enhanced workflow provides a scalable model for creating VPLS. By integrating AI for initial production, the process significantly reduces the time and cost of traditional animation while maintaining rigorous human oversight through well established, structured review cycles. The potential impact of AI-enhanced VPLS generation is an increase in the speed of delivery, reach, and comprehension of clinical trial results, empowering patients and working within a regulated framework [8,9]. This represents a practical step forward in making clinical science accessible to all, positioning medical affairs at the forefront of patient-centric innovation.

Key words

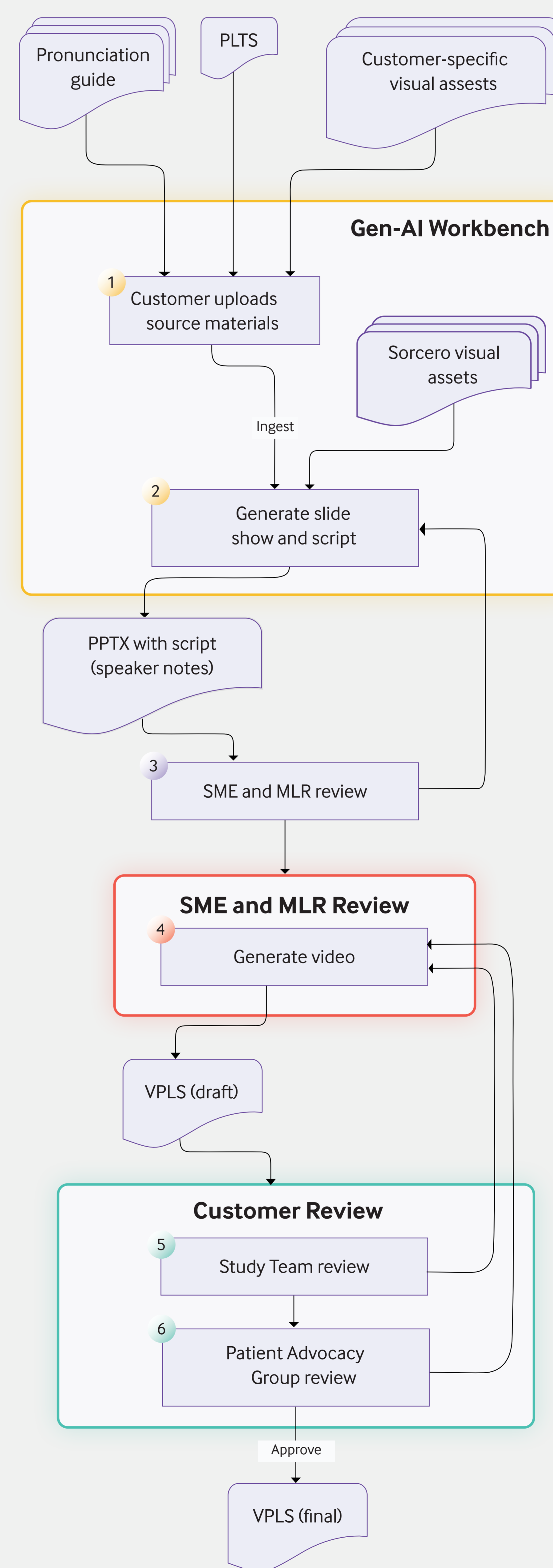
artificial intelligence (AI), plain language summaries (PLS), medical/scientific communications, publication extenders

“ Increase reach and comprehension of clinical trial results ”

References

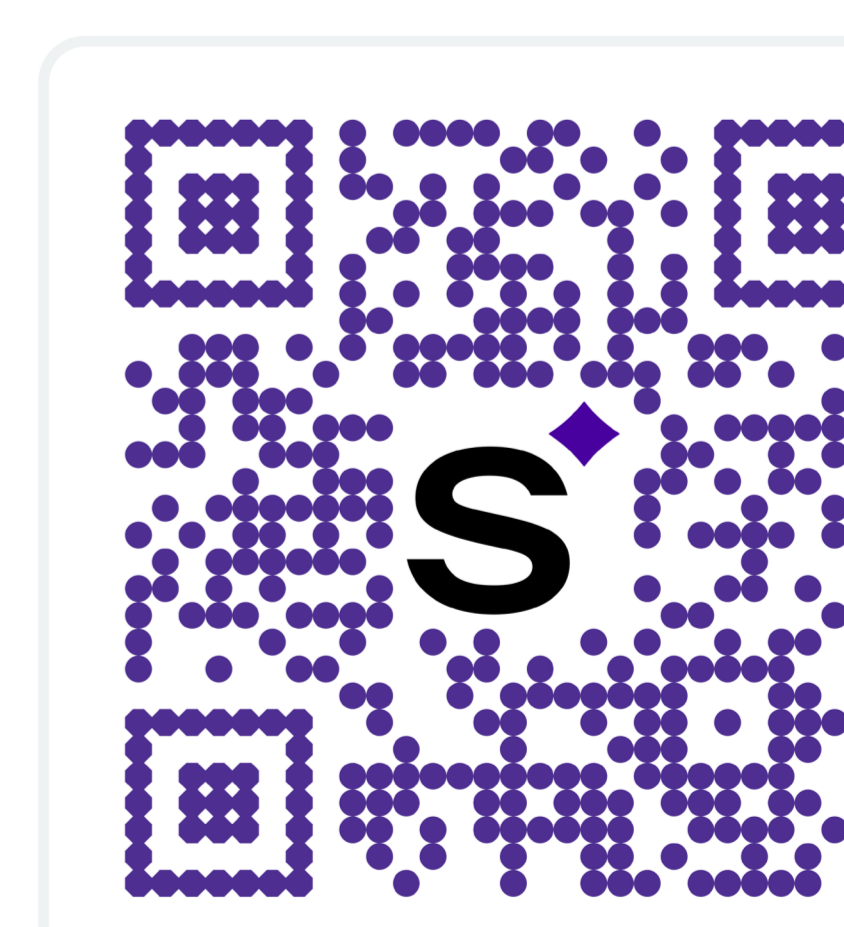
- 1.Regulation (EU) No 536/2014 of the European Parliament and of the Council of 16 April 2014 on clinical trials in medicinal products for human use and repealing Directive 2001/20/EC. Off J Eur Union. 2014;158
- 2.Penlington M, Silverman H, Vasudevan A, Pavithran P. Plain Language Summaries of Clinical Trial Results: A Preliminary Study to Assess Availability of Easy-to-Understand Summaries and Approaches to Improving Public Engagement. *Pharmaceut Med.* 2020;34(6):401-406. DOI: 10.1007/s40290-020-00359-4.
- 3.McQuivey, J. (2013). How Video Will Take Over the World. Forrester Research.
- 4.Insivia. (2025). Video Marketing Statistics You Must Know In 2025.
- 5.Hansen S, Jensen TS, Schmidt AM, Strøm J, Vistisen P, Høybye MT. The Effectiveness of Video Animations as a Tool to Improve Health Information Recall for Patients: Systematic Review. *J Med Internet Res.* 2024;26:e58306. Published 2024 Dec 30. DOI: 10.2196/58306.
- 6.Meppelink CS, Smit EG, Diviani N, Van Weert JC. Health Literacy and Online Health Information Processing: Unraveling the Underlying Mechanisms. *J Health Commun.* 2016;21(sup2):109-120. DOI: 10.1080/10810730.2016.1193920.
- 7.Lee H, Jin S, Henning-Smith C, Lee J, Lee J. Role of Health Literacy in Health-Related Information-Seeking Behavior Online: Cross-sectional Study. *J Med Internet Res* 2021;23(1):e14088. DOI: 10.2196/14088.
- 8.Rebello-Verboom, Ana Daniela & Oliveira, Ines & Verboom, Damion. (2022). The Impact of Artificial Intelligence on the Creativity of Videos. *ACM Transactions on Multimedia Computing, Communications, and Applications.* 18. 1-27. DOI: 10.1145/3462634.
- 9.Orak, C., & Turan, Z. (2024). Using Artificial Intelligence in Digital Video Production: A Systematic Review Study. *Journal of Educational Technology and Online Learning.* DOI: 10.31681/jetol.1459434.

Figure 1. The VPLS flow diagram. Steps: (1) The customer uploads a PLTS—typically PDF or DOCX—along with visuals such as product or company logos; (2) A large-language model (LLM) generates a slide deck and narration script (speaker notes); (3) SME and medical, legal, and regulatory teams review the slide deck and narration and provide feedback; (4) An AI video-creation tool generates a video; (5) The Study Team reviews the video and provides feedback; and (6) The Patient Advocacy Group reviews the video and provides feedback before the final VPLS is generated.



Abbreviations: MLR: medical, legal, regulatory; PDF: portable document format; DOCX: document in Open XML format; PLTS: plain-language trial summary; PPTX: slide show in Open XML format; SME: subject-matter expert; VPLS: video PLTS

Figure 2. Selected screen shots from a video generated by the AI-enhanced VPLS generation process.



Scan to learn more