

INFOGRAPHIC

Nurse Triage Hot Words for Health Care Call Centers

Guillermo J. Holguin



INTE 6710 | Spring 2018
Creative Designs for Instructional Materials
University of Colorado Denver
Project link: <https://wp.me/p99P84-n7>
www.guillermojholguin.com
guill.holguin@gmail.com

Overview

Over the past three years, I have been delivering training for a startup health care call center in Denver, CO. The call center services multiple primary care clinics around the Denver metro area assisting them with scheduling appointments, provider-to-provider referrals, and 24/7 phone access to nurse triage services. At the start of 2018, I decided to change my department's focus and have a more active role evaluating call transfers between our non-clinical agents and clinical team.

One of the primary responsibilities of our clinical team is to triage patients over the phone which effectively reduce unnecessary medical costs for our patients. This service has been in place for about 30 years, however, three years ago they were integrated into the one-stop-shop virtual resource center idea which expanded our staff numbers when non-clinical positions were introduced. This new team would be responsible for inbound and outbound scheduling and referral management phone calls.

To continue reducing unnecessary costs for patients, our non-clinical team (aka Resource Specialists) were asked to use their active listening skills and capture any potential emergency or urgent symptoms a caller may share while trying to schedule an appointment or get information about their referrals. These "Hot Words" serve as trigger words which require the call is transferred to a nurse for triage.

FOCUS

Resource Specialists would now need to improve their active listening skill and basic medical knowledge to ensure patients requiring triage aren't being missed. As member of the Training and Development team, I am responsible for delivering training and learning material to our non-clinical team so I have begun brainstorming a variety of ways to improve our team's skills and knowledge to

ensure all hot words are being captured. Prior to the start of my Instructional Design master's degree, training was inadequate.

I have recently completed a Training Needs Analysis and discovered the team has been missing hot words primarily because they lack the necessary medical knowledge to think critically about potential outcomes when symptoms worsen. They may also benefit from realistic simulations to improve their empathy skill and raise motivation.

Learning Objectives

- 1** Recognize emergency and urgent "hot words" during inbound and outbound patient phone calls.
- 2** Obtain and transfer necessary patient information over the phone to complete a warm transfer to the clinical team.
- 3** Apply active listening techniques to build trust, show understanding, and acquire information.
- 4** Formulate follow-up questions during phone calls when emergency and urgent "hot words" are identified.

AUDIENCE

The team is made up of about 30 adults between ages 25-70 and the majority have a general understanding of medical terminology. Fortunately, I have found enormous success using e-learning courses to deliver training because all our learners are comfortable using technology. Courses are typically very linear which are easier to follow and motivates learners by rewarding when questions are answered correctly and courses are completed.

Training Structure and Tools

Learning will be structured primarily as an e-Learning course created using Adobe Captive and uploaded to TalentLMS. The course will include a variety of micro-learnings such as software

simulations (how to videos), caller-agent scenarios, knowledge checks, and final assessment. In addition, I will create an infographic with an overview of the general nurse triage process as well as a handout with a list of common hot words. The infographic will be created in Adobe InDesign with many of its graphic elements created in Illustrator.

Design Decisions

Designing for motivation is challenging because it involves tailoring to multiple personalities, so I chose to create an infographic with universal components that deliver the message the infographic intended. While approaching the design process for this infographic, I considered the agents' job function and need for quick reference material. Phone calls in a health care call center can vary drastically so agents need to be prepared for different scenarios each time they receive or make a call. Recognizing emergency acute symptoms during these calls is crucial to a patient's safety which drove me to create a job aid that is easily accessible and quick to reference for these situations.

Design Decision #1

I responded to my audience's frustrations by creating an easy-to-read reference sheet to reduce number of missed patients requiring triage due to progressive acute symptoms. Many times, an agent is unable to make quick decisions on the phone when there's a high call volume. Reynolds (2009) emphasized the importance of clarifying the intention and "deliberately making choices about what to include and what to exclude." I chose to simplify the delivery of the message by organizing the list of emergency "hot words" into categories based on the area of the body that its affecting. Doing so improves readability and motivates agents to use the job aid which addresses the first learning objective of recognizing these "hot words" during patient phone calls.

Design Decision #2

As stated by team supervisors, a Quality Assurance criterion will be added to capture agents' active listening competency and failing to recognize nurse triage hot words greatly impacts the QA score. Therefore, it is very important for agents to have easy access to this infographic. I formatted the layout of the infographic to print as 11 x 17 since this job aid will be placed at each agent's cubicle. Printing this design on 8 ½ by 11 size paper would have been too small and only decrease employee and patient satisfaction when emergency situations arise. Dunlap and Lowenthal (2016) explained that effective infographics do not exceed more than two pages. Having to print multiple pages would also increase costs for the center as well as reduce agents' motivation to use the job aid.

Design Decision #3

Regarding the graphics I chose, I included one photograph at the beginning of the infographic and applied it as a background to support the initial attention grabber. As I began to plan this infographic, I considered including a large vector image of a human body that would make up most of the infographic and include various text boxes pointing to distinct parts of the body. However, I took a step back and realized I had made my message too complex. Although the body diagram was what I like to call a "nice-to-have" rather than a "what-is-needed", I followed Reynolds' (2008) advise and tailored my design to include a harmonious balance between simplicity and complexity. I omitted the body diagram and instead chose distinct icons for each category of hot words listed, i.e., a heart icon for the chest and heart category which included symptoms like chest pain and increased heart rate.

Design Decision #4

I debated including a comparison model to outline the triage responsibilities of a clinical vs non-clinical person hoping to clarify the differences when handling emergency situations. Although this information may have been beneficial, especially for new employees, it was something I chose to exclude from this job aid as it was unnecessary for the intention of the infographic. Instead, I created a visual scenario for the call transfer process once a hot word has been identified and the patient needs to speak with a nurse to complete triage. The timeline or "process walkthrough" was simplified into four steps, each with its corresponding visual icon to convey content within context. Dunlap and Lowenthal (2016) recommend a visual representation of flow to show process or sequential progression over time. I arranged the call transfer process into a quadrant visual where step 1 starts at the top-left quadrant and step 3 at the top-right quadrant similar to how a typical document is read from top to bottom then to the next page. Using a familiar reading pattern, as Krum (2014) states, is a much faster way to comprehend information. This pattern, combined with visual icons as content representations, ensures agents retain this knowledge as long-term memory.

Design Decision #5

One of the concerns I had when creating this infographic was making a job aid that would get lost with desk clutter or locked in a drawer. Although the purpose of this infographic is to be a supportive material to formal classroom training, I needed to ensure each agent would use it during every inbound and outbound call. To increase motivation, I picked an inviting font for the title and headings which increases the appeal of the infographic. I believe the font selection in any design document has a considerable impact on whether someone will read it. The playful, cursive headings also remind me of doctor's prescription scripts, although the font I selected is legible. This small detail seemed essential to the scheme of the infographic.

Formative Evaluation Response

Peer Review Question #1: *How may I improve text readability and ease of access? (motivate people to use the infographic during patient phone calls)*

I asked this question because I wanted to capture initial reactions and understanding of the intent of the infographic. These reactions would measure the success of the infographic.

Peer Reviewer A: I like the idea of aligning the hot words with the body parts. It makes sense to me that someone would complain about symptoms in a body part and you would then look at the body part for hot words. I think there are some issues with proximity with some of the headings. I worry that the baby/infant words get lost at the bottom. A possible solution for this if you keep this layout would be to make an image of a baby with those hot words on it. I would say adding an image of a pregnant woman with those symptoms might also be helpful. If I were answering phones or at an intake desk, it would be easier for me to quickly assess and prioritize the patient.

Peer Reviewer B: I think you can easily improve the text readability by highlighting key/important words within a section different colors. This way the reader can easily skim through it and get the information he/she is looking for. Another thing you can do is change the font so that it stands out a bit more.

Considerations: I took Peer Reviewer A's solution suggestion to add visual icons to each category rather than highlighting different areas of the body then listing the hot words associated with that area. This led to a major decision regarding the layout so I omitted the body diagram.

Peer Review Question #2: *How could I improve this infographic to ensure people want to read it?*

This question also measured initial reactions and I asked it in a different way to get their suggestions to increase number of readers / attention.

Peer Reviewer A: In order to grab attention at the top of the graphic I actually would have less explanation. For instance, you could say: Identifying Triage Hot Words and take out the "how to identify them" statement. This would make the title stand out more and seem more important. This change would then allow you to take out the "What is a hot word" question giving more emphasis to the hot word definition by making the font bigger.

Peer Reviewer B: You can make your subject a bit more clear. You can do this by changing the title to be a bit more informative so that I know what you will be discussing right away. Doing this will clarify a lot for your audience. You can also make your description font a bit bigger. It's currently the same size as the descriptive words which doesn't allow it to pull focus.

Considerations: I disagreed with Peer Reviewer A regarding having less explanation at the top of the infographic. I thought this information was necessary because it would benefit not only veteran employees but also new hires just learning about nurse triage and the process related to hot words. Peer Reviewer B had a great suggestion regarding the title of the infographic. I knew I had to make it clearer for the reader. I'm still not a fan of the length of the title although it does clarify the subject of the infographic. It's very specific to health care call center agents.

Peer Review Question #3: *Regarding category headings, what are other suggestions that could clearly encompass its contents (hot words)?*

This question helped me organize the placement of each category based on severity, e.g., behavioral hot words like suicide would be at the top vs allergic reactions (skin related) would be at the bottom of the list, but still important.

Peer Reviewer A: The category headings would be more clear if the infants, pregnancy and behavioral headings were tied to different images other than the legs. While I think it is easy to scan the page with the headings aligned this way for the other symptoms, by reading it top down, it somehow makes those items seem less important in my mind - which I know is not your intent.

Peer Reviewer B: I understand your font choice for the category headings but I think the opacity of the font may be a little too low. I think if you want it to stand out and encompass the hot words, you may want to make it a bit brighter. Just a suggestion.

Considerations: Feedback from both reviewers reinforced my decision to omit the body diagram as some of categories were only causing confusion because of their placement on the body diagram.

Peer Review Question #4: *What changes regarding color choices (background, title, text, categories, graphic) lose viewer interest? What color palettes would reduce noise/clutter?*

I asked this question because I was worried about the darkness of the infographic. I was stubborn on using dark colors because of an image I was inspired by; however, I knew I needed to hear it from somebody else.

Peer Reviewer A: The color palate is aesthetically appealing but seems busy to me for its function in triage. In terms of color I would use more contrast vs. going with one shade. The

contrast of the colors would make the page easier to scan in a situation that requires a quick decision.

Peer Reviewer B: So I think your color palette is fine. Your subject is a bit serious, so I think the color palette match that well. You may want to vary the font color (stick with white but do different opacities or shades and highlight key words with different colors?).

Considerations: I chose to use of the same colors (blues) and even added black but I Peer Reviewer B gave me a great suggestion on using different opacities. I wanted to get away from the typical health care blues, whites, and turquoise. Overall, I'm very happy with what I ended up with.

Peer Review Question #5: *Overall, what suggestions do you have regarding the layout?*

The infographic is all about layout and I knew I needed different ideas. I got married to the body diagram idea which created a mental block. I needed different suggestions.

Peer Reviewer A: Overall, I think choosing a more familiar, block style font would make this more readable. I wonder how it would work to group the headings by symptoms, as some of the symptoms are similar and would warrant a call no matter where on the body they occurred.

This topic lends itself to a well to a "call to action." I think you explain very well the meaning of a hot word. You could have a stronger statement urging someone to call when they hear a hot word. This call might also empower an employee who is hesitant to escalate a case to the next level.

Peer Reviewer B: The layout is fine. I think the body icon is great and makes a lot of sense with your subject. In this department, I think you're fine.

Considerations: Peer Reviewer B liked the body diagram idea but I ended up removing it because other placement issues were causing too much confusion.

Lessons Learned

As someone new to designing infographics, I'm very happy with the result of my work. I struggled initially because I tend to stifle my own creativity by overthinking about logistics. How something is going to look? What colors do I need to pick? Should I start collecting images? All these questions are unnecessary at the start of the design process and it is this expectation to start with perfection that stifles my creativity. I've been aware of this tendency, so I've been surrounding myself with people that have no issues brainstorming and throwing out ideas without thinking of "is it possible?" This project has allowed me to challenge myself by giving me a deadline to work towards. Unfortunately, I'm motivated by deadlines and procrastinating on purpose. Another lesson I learned from this project is the importance of choosing a good creative tool that I'm comfortable with. I thought I could tackle this infographic using Adobe InDesign but it became a tedious, manual process. Instead, I decided to try Visme to make my infographic. It provided inspiration, guides, workflows, icons, images, and color palettes. It was great! This is probably the best lesson I learned from this experience. I would advise future designers to try out tools like Visme or Piktochart when they are first starting rather than going for manual graphic design tools like Adobe Illustrator or InDesign.

Overall, these lessons and experiences have allowed me to acknowledge that my expectation for perfection only stifles creativity. And jumping to creating on the computer is not a promising idea. I recommend taking time to think about the goal or intent, then drawing things out on a piece of paper. I'm excited to see the work I'll produce in the future.

Bibliography

Dunlap, J. C., & Lowenthal, P.R. (2016). Getting graphic about infographics: design lessons learned from popular infographics. *Journal of Visual Literacy*,35(1), 24-59.

Doi:10.1080/1051144x2016.1205832

Krum, R. (2014). Cool infographics: effective communication with data visualization and design. Indianapolis, IN: Wiley.

Reynolds, G. (2009). *Presentation zen design: Simple design principles and techniques to enhance your presentations*. Berkeley, CA: New Riders.