Implementing Telephone Triage Guidelines into Nursing Workflow

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Due to changes in the healthcare and reimbursement landscape, today's oncology patients are managed in the outpatient setting—at a physician-owned practice or a hospital-based outpatient department—rather than being hospitalized and treated as an inpatient. Yet many oncology patients have complicated co-morbidities and high acuities, thus, cancer programs must have systems in place to respond to patient questions and ensure they are triaged appropriately when care is needed.

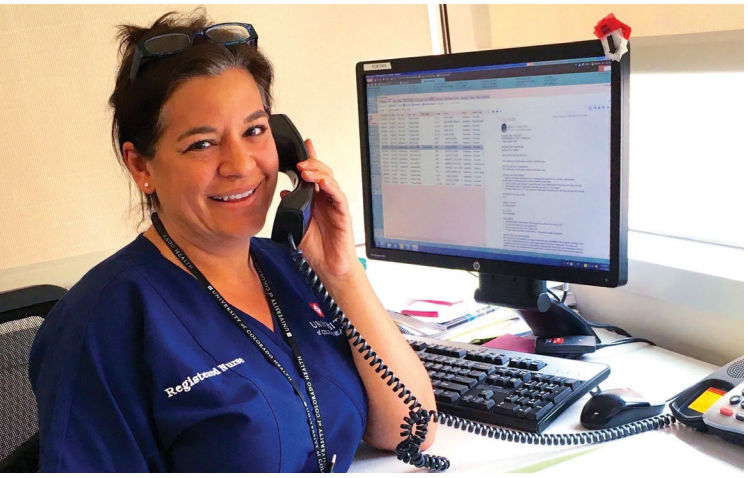
Telephone triage has emerged as a convenient and immediate method for patients to discuss their symptoms and ask questions of their clinicians. Indeed, telephone triage has become an integral part of ambulatory care, both in terms of increasing interaction between patients and providers, and controlling healthcare costs.[1] According to Lucia and colleagues, "The telephone has become almost as important as the stethoscope in managing cancer patients."[1] In addition to caring for patients in the clinics, nurses need to be able to competently and appropriately respond to patient questions and concerns over the phone.

Yet, the expectation for nurses to manage patient care over the telephone often brings increased demands and anxieties. The responsibility of triaging patients over the telephone can leave nurses feeling unsure of what advice to give, as well as unsupported in determining the appropriate disposition for the patient.[2] Purc-Stephenson and Thrasher cite four studies in which nurses felt, "uncomfortable or uneasy making decisions over the telephone."[2] Close management of telephone triage is required to monitor for quality care and to provide maximum benefit to both patients and providers. For these reasons, the University of Colorado Cancer Center (UCCC) sought to provide structure to the telephone triage services provided to its patients.

> Patients want to know that their questions and needs will be addressed, and that they will be directed to the appropriate level of care no matter who is on the other end of the phone.

Putting Guidelines to Work

As a first step in building this structure, the UCCC medical director reviewed telephone triage guidelines developed by the Oncology Nursing Society (ONS).[3] These telephone triage guidelines were created from a thorough synthesis of current information in the field. Additionally, they were written specifically to serve the unique needs of the oncology patient population. (The Table of Contents for *Telephone Triage for Oncology Nurses*, 2nd Ed. can be found in Table 1, page 50.) After the medical director validated the ONS guidelines as a decision-support tool for UCCC nurses performing telephone triage at the cancer center, UCCC developed a licensing agreement with ONS to incorporate these guidelines into UCCC's



Krista Treichel, RN, OCN, utilizes the ONS telephone triage guidelines while on a call with a patient.

electronic health record (EHR). This integration allowed nurses to refer to the guidelines and document within the patient's medical record in real-time—a much more efficient and effective use of nurse time than having to look up the guidelines in a book (see Figure 1, right). Other benefits to this type of decision-support tool include the ability to:[3]

- Provide a standardized structure for telephone assessment
- Assist in sound decision-making
- Offer legal protection for providers.

Implementation of the ONS telephone triage guidelines also supports UCCC's vision: "Best Outcomes, Best Patient Experience, Best Place to Work." For example, the ONS telephone triage guidelines support "Best Outcomes" because they help UCCC nurses provide consistent, evidence-based care to all patients. The

Table 1. Table of Contents for Telephone Triage for Oncology Nurses, 2nd Ed.[3]

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Figure 1. Nausea and Vomiting ONS Telephone Triage Guidelines in the UCCC EHR

Cross-Referenced Protocols in Hickey & Newton	Protocol Definition	Initial Assessment Questions	Background Information		
Call EMS (Emergency Medical Services) 911 NOW					
Seek emergency care. Call an ambulance immediately?			Yes	No	
Decreased level of consciousness?			Yes	No	
			All negative		
Go to ED (Emergency Department) NOW **Seek emergency care.**					
Fainting?			Yes	No	
Recent injury to head or abdomen and vomiting?			Yes	No	
Severe stomach pain while vomiting?			Yes	No	
Temperature above 100.4° F (38° C) or chills with suspected neutropenia?			Yes	No	
			All negative		
Seek Urgent Care Within 24 Hours					
Nausea with no significant intake for more than 24 hours?			Yes	No	
Vomiting more than six episodes in 24 hours?			Yes	No	
Projectile vomiting?			Yes	No	
Weakness, dizziness along with nausea/vomiting?			Yes	No	
Nausea and vomiting persisting after 24 hours with antiemetic therapy?			Yes	No	
			All negative		
Home Care **Follow homecare instructions. Notify MD if no improvement.**					
Nausea but able to eat? Suggested: Care Advice Disposition			**Yes**	No	
Vomiting, one episode in 24 hours?			Yes	No	
Diarrhea or constipation?			Yes	No	
Other household members who have been or are ill?			Yes	No	
Recent addition of antibiotic, analgesic, or other new medication?			Yes	No	
			All negative		

guidelines promote "Best Patient Experience" as patients receive consistent advice regardless of which nurse they speak to during the call. The care experience can be frustrating for patients when they receive different answers and advice depending on which clinic nurse answers the phone. Patients want to know that their questions and needs will be addressed, and that they will be directed to the appropriate level of care no matter who is on the other end of the phone. Finally—because these guidelines help nurses feel adequately supported in the care they are providing to patients—they help foster UCCC's vision of being the "Best Place to Work."

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UCCC nurses feel confident in the advice they give because the ONS guidelines contain accurate and evidence-based information. This resource is especially important for nurses who are new to oncology, with less experience providing care in-person, let alone over the phone. In other words, the ONS telephone triage guidelines are a valuable tool to assist less experienced nurses in providing symptom management and determining appropriate disposition. Figure 1, page 51, illustrates how the Nausea and Vomiting ONS Telephone Triage Guidelines were incorporated into the UCCC EHR.

Implementation & Training

Once the ONS telephone triage guidelines were available in the EHR, UCCC educated its nurses. Between March and October 2015, nurses attended five hours of training that included both didactic classroom instruction and hands-on computer practice. Nurses then began using the relevant ONS guideline to address all patients' symptom-based calls.

In October 2015, UCCC performed an audit on phone calls that occurred during a three-month period following the completion of training. Manual chart reviews examined calls where the patient reported a symptom (nausea, pain, fever) to see if the correct corresponding ONS guideline was used. Surprisingly, of the 431 calls audited, UCCC found that nurses used the guidelines for only 11 calls, or 2.5 percent of the time. This percentage was significantly lower than expected, and indicated that the UCCC nurses were not employing the telephone triage guidelines appropriately.

The low utilization rate suggested the initial training did not address the nurses' training needs. A review of course curriculum determined that the original education was not focused enough on information immediately relevant to the nurses. A large portion of the content was focused on telephone nursing and telephone triage as a discipline, as well as legal considerations and implications for practice. Additionally, the training covered functions and documentation intricacies of the EHR system. While that information was valuable to share with the nurses, the classroom material was very theoretical. Instead, UCCC nurses performing telephone triage needed directly applicable content and instructions on using the ONS guidelines.

UCCC nurses were not provided with enough specific direction on accessing the ONS telephone triage guidelines in the EHR, nor were they provided with enough opportunity to practice

using and applying the guidelines in the EHR system. Following the initial training, 35 percent of RNs self-reported needing more practice and training as a barrier to utilizing the ONS telephone triage guidelines. When asked how they would rate their proficiency in using the guidelines, only 14 percent of nurses reported feeling moderately to extremely proficient (Table 2, below). Additionally, 20 percent of nurses reported feeling moderately to extremely aware when questioned about how they would rate their knowledge of the role of the nurse and use of telephone triage approved resources. This data highlighted a need for a process for increasing nurse confidence and utilization of the ONS telephone triage guidelines.

Additional Training Needed

As a starting point for increasing utilization, the UCCC clinical nurse educators facilitated one-hour sessions as additional training for nurses. Participants received streamlined and specific directions on how to locate and use the ONS guidelines. UCCC nurses were then given the opportunity to practice applying the telephone triage guidelines through mock scenarios in a "playground" version of the EHR. Emphasis was placed on how to use the guidelines to address patient symptoms in the specific practice areas.

Nurses hired after the initial education interventions were trained "on the job," but had not received any formal instruction on the use of the ONS telephone triage guidelines. Instead, the UCCC clinical nurse educators facilitated a two-hour training session, which reviewed the basic concepts of telephone triage nursing. The majority of the session focused specifically on the logistics of using the ONS telephone triage guidelines. Similar to the refresher training, nurses were guided through mock calls to have an opportunity to practice locating and applying the guidelines.

Training on the ONS telephone triage guidelines has been incorporated into a monthly cancer center orientation to capture new nurses upon hire. Additionally, the UCCC clinical nurse educators continue to provide individualized instruction and answer specific workflow questions at staff meetings and huddles.

To reach nurses who may not have been able to attend training and provide a reference moving forward, UCCC clinical nurse educators developed additional tools and resources and made them available to staff. For example, UCCC created a short video with step-by-step screen shots of how to access and utilize the ONS telephone triage guidelines. The intention is for nurses to turn to this resource on their own time—if and when they have questions or need reminders. Nurses were also given simple tip sheets on how to use the guidelines in 14 easy steps, and how to better search for specific guidelines within the constraints of the EHR system. Laminated "cheat sheets" listing all the available telephone triage guidelines were made available for nurses to keep at their work stations as a quick reference.

During this additional training and utilization period, UCCC found a few oversights that had occurred when the ONS telephone triage guidelines were initially built into the EHR. Specifically, certain symptoms were not triggering the guidelines to populate as initially planned. For example, when a nurse entered "mucositis" as the reason for call, the EHR failed to suggest the ONS guideline because it was titled "Oral Mucositis." UCCC reviewed the list of symptoms that trigger each guideline and updated them as necessary

Table 2. Training on the ONS Telephone Triage Guidelines: A 2015 and 2016 Comparison

Survey Date	October 31, 2015 (After initial training) N=51	August 30, 2016 (Following additional training) N=51
How would you rate your knowledge about the role of the nurse and use of telephone triage approved resources (ONS guidelines)?	20 percent moderately to extremely aware	67 percent moderately to extremely aware
How would you rate your proficiency in using the ONS telephone triage guidelines built into the EHR?	14 percent moderately to extremely aware	47 percent moderately to extremely aware
How well do you feel leadership supports training and education on the ONS telephone triage guidelines?	51 percent moderately to extremely aware	78 percent moderately to extremely aware

to make the guidelines easier for nurses to locate and use. Additional adjustments continue to be made as they are identified.

Following these educational interventions, UCCC once again collected data on nurse utilization of the ONS telephone triage guidelines. In December 2016 there were 381 symptom-based calls and the corresponding ONS telephone triage guidelines were used for 296, or 77 percent of the time. When asked to rate their knowledge about the role of the nurse and use of telephone triage approved resources, 67 percent of nurses chose moderately to extremely aware (up from 20 percent after the initial implementation in 2015). Regarding proficiency in using the guidelines built in the EHR, 47 percent of nurses self-reported moderately to extremely aware (up from 14 percent in 2015) (see Table 2, page 53).

Lessons Learned

While decision-support tools have been shown to benefit both patients and staff, implementing these tools can be difficult as nurses are called upon to change their historical nursing practice. The utilization rate following the initial implementation highlighted the challenges of executing a practice change. Utilization rates following additional interventions illustrate positive change outcomes with strategic techniques and approaches.

From the very beginning, UCCC should have communicated clearly to nurses the intention, scope, and benefit of the ONS telephone triage guidelines. Adult learning theory principles suggest that adults learn best when they have a "need to know," or when information is directly relevant to them.[4] In the follow-up training, greater emphasis was placed on how the ONS guidelines can benefit the nurses and support them in providing high-quality care to their patients. This proved to be a successful strategy based upon the follow-up survey and audits.

A few nurses expressed concerns that the telephone triage guidelines were being instituted as a replacement for their clinical nursing judgment. Nurses were reminded that the guidelines are a tool to support, not replace, their clinical judgment and critical thinking. According to Hickey and Newton, "Telephone protocols are only as good as the nurses who use them."[3] UCCC emphasized to nurses the importance of performing a thorough nursing assessment and synthesizing pertinent information in conjunction with the ONS telephone triage guidelines. Bottom line: the telephone triage guidelines are a tool to aid them in the nursing process and decision-making.

Ideally, utilization rates should be 100 percent, indicating nurses are using the ONS telephone triage guidelines whenever there is a symptom-based call with a corresponding guideline. Following the additional educational interventions, a shift has occurred from a knowledge deficit requiring education to an intentional behavioral issue. Nurses now know how and when to use the guidelines, but some are choosing not to use them in certain situations. In addition to setting firm expectations for use, leadership needs to hold nurses accountable for using the guidelines. Moving forward, UCCC is considering audits of individual nurse utilization to identify and address individuals who are consistently not employing the guidelines.

Future Possibilities

In addition to continuing to increase utilization, UCCC may explore other aspects of using the ONS telephone triage guidelines. For example, currently there is a lack of information related to telephone triage and nurse satisfaction and self-efficacy with using guidelines. It would be valuable to know if UCCC nurses are experiencing the intended benefits of support and guidance from the ONS telephone triage guidelines. As previously mentioned, implementation of this decision-support tool is part of the UCCC vision to be the best place to work, so additional information on nurse satisfaction would be useful.

Areas of further study also include the effectiveness of the telephone triage guidelines. Created by experts in the field, these guidelines are intended to enable nurses to provide high-quality evidence-based care. UCCC may explore the impact effective and efficient symptom management has on the overall well-being of patients, specifically as it relates to emergency department (ED) visit avoidance. Data could also be gathered on the percentage of times the correct disposition was suggested or accurate advice was given.

Lastly, UCCC may look at patient satisfaction with the telephone triage guidelines. For patients who placed calls to the UCCC before the telephone triage guidelines were implemented, it would be interesting to know if they have noticed a change in the advice they receive. It would also be beneficial to know if patients are satisfied with the consistency of care advice they are receiving. OI

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