

Grant Final Progress Report

Title of Project: PROJECT EXTEND: A COMMUNITY EXTENDED CASE CONFERENCE TO IMPROVE LYMPHOMA CARE

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STRUCTURED ABSTRACT

Purpose: The overall goal was to improve the care of patients with lymphoma treated by community oncologists (CO) by implementing an educational program embedded in a community extended multidisciplinary case conferences (MCC) or tumor board meetings (EXTEND Program).

Scope: Improve the care of patients treated by CO by increasing adherence to evidenced-based guidelines or expert panel recommended treatments.

Methods: Provide one hour meetings at UNMC and broadcast live via the web through a HIPPA compliant network. CO submitted radiology and pathology reports to UNMC prior to the meetings. During the conference, CO were able to discuss and the cases presented with recognized lymphoma experts.

Results: Even though there was a change in the course director and technical issues, which were resolved, CO reported patient care was enhanced and their confidence to treat patients was increased. They also stated it would be helpful to expand this to all hematologic malignancies instead of limiting to only lymphoma.

Conclusion: This was the first time a conference using this technology was implemented at UNMC. The goals that were identified were very ambitious. However, CO and UNMC experts were positive with the outcomes and patient care was enhanced.

Key Words: Lymphoma, patient care, technology

PURPOSE

The improvement in care of patients treated by CO will be manifested by an increase in adherence to evidenced-based guidelines or expert panel recommended treatments. The expectation is that the increase in adherence by CO will lead to comparable clinical outcomes of their patients to those treated by university-based oncologists (UO). The educational program will empower CO with knowledge, skills, as well as confidence, to clinically handle patients with lymphoma, to monitor and prevent treatment toxicities, and to enhance their abilities in deciding what treatment options to consider for treatment failure or when patients are best referred for further advanced treatments (example, hematopoietic cell transplantation or clinical trials).

SCOPE

The educational program objective was to compare among CO (who are part of the Nebraska Lymphoma Study Group - NLSG) either participating or not participating in the EXTEND program and UO in the following specific aims:

Primary aim

<u>To compare the adherence rates</u> of oncologists to evidence-based guidelines or expert panel recommended lymphoma treatment plans.

Outcomes: Expert panelists from UNMC discussed cases with the patient's physicians. At the conclusion of each meeting, they were able to recommend a treatment plan.

Secondary aims

1) <u>To compare patient clinical outcomes</u> after lymphoma treatment including: a) treatment response at restaging, b) 6-month severe medical service utilization (emergency room (ER) visits, and/or hospitalizations), c) 6-month progression-free survival (PFS), and d) 6-month overall survival (OS).

Outcomes: During the meetings, cases were reviewed and if necessary, new treatment plans were initiated. Unfortunately, comparison patient data was not able to be collected.

2) <u>To evaluate the satisfaction of CO participating in the EXTEND program</u> overtime (Weeks 1, 12, 24, 36, and 48) in the following areas:

Outcomes: Due to the challenges that were encountered with the change in Principal Investigator and CO sending pathology and radiology reports to UNMC, evaluating the satisfaction of CO participants occurred at the beginning, interim, and post.

CONFERENCE DATA	
Number of meetings	24
Average number of participants per meeting	6
Total number of cases/patients reviewed	45

September 2015-January 2016 meetings were not held due to site visit training.

CO Nebraska Locations: Grand Island, Kearney, Hastings, and Lincoln

a) <u>Conference Satisfaction</u> (adequacy of expertise, quality of information obtained, quality of discussion, level of professionalism, and cordiality of environment. *Outcomes*: The *interim survey* focused on the learning objectives and whether or not the meetings were relevant to their practice. Five physician-oncologists and 2 radiologists responded to the survey. All expressed that the objectives were being met and the meetings were relevant. The *post survey* focused on the satisfaction of the meetings. The format and quality received an average of 4.8 out of 5.

Please rate the following aspects of these conferences/case discussions. [strongly disagree – 1; strongly agree – 5]	AVERAGE
UNMC faculty displayed expertise in discussing the cases	4.8
The quality of information provided on my case(s) was helpful in deciding on a treatment plan	4.8
The discussion of other cases gave me additional insight into the treatment of lymphoma	4.8
The format of the case conference was conducive to the exchange of ideas	4.8
The format of the case conference was appropriate	4.8

b) <u>Personal Benefits</u> (knowledge acquisition, confidence in treating patients, confidence in treating relapsed disease, confidence in handling complications, confidence in determining when to refer).

Outcomes: At the *interim-survey* participants were asked a yes/no question on whether or not the content has provided valuable information to assist in improving quality of care for patients, all responded with a 'yes'. At the *post-survey* they reported their level of confidence was an average of 8.7 out of 10.

For each of the following, please rate your level of confidence. [1 - not at all confident; 10 - very confident]	AVERAGE
Treating lymphoma	8.8
Managing complications of lymphoma treatment	8.6
Deciding when to refer patients for other types of lymphoma	8.8
treatment	
Treating relapse	8.4

c) <u>Service Benefits</u> (diagnostic evaluations, consultations).

Outcomes: At the *post-survey* diagnostic and pathology review of cases received a 5 out of 5 average. The consultation between the meetings received a 4 out of 5. The proposal stated a "hotline" was going to be generated, however, that was not feasible. Instead, CO were able to directly contact UNMC experts when needed.

How helpful were the following? [Not helpful at all – 1; very helpful – 5]	AVERAGE
Diagnostic evaluations	5.0
Pathology review of my cases	5.0
Consultation provided between conference	4.0

d) <u>Technical Satisfaction</u> (format, frequency of meetings, time allotted for meeting, clarity of broadcast).

Outcomes: Due to technical difficulties, conferences were put on hold from the end of August 2015 to February 2016. During this time a team went to each site to provide training regarding the process to submit radiology and pathology reports to UNMC and how to use the video conference system.

Please rate the following aspects of these conferences/case discussions. [strongly disagree – 1; strongly agree – 5]	AVERAGE
The format of the case conference was conducive to the exchange of ideas	4.8
The format of the case conference was appropriate	4.8
The time allotted for discussion of each case was adequate	4.8
I was able to receive clear images during the conferences	4.0
The audio portion of the conferences was clear	4.2
The broadcast had good quality, with little to no delays	4.0

e) Overall Satisfaction

Outcomes: At the *interim* and *post-survey*, participants reported they are more knowledgeable in the treatment of lymphoma, have more confidence in consulting with UNMC experts, and the patient outcomes have been enhanced.

Please share any other comments on this program: Community Extended			
Case	Case Conference to Improve Lymphoma Care.		
1	This has been a helpful conference to help with our collegiality with		
	the UNMC experts and has kept an open channel of communication		
	that will in the end help with referral of patients to UNMC for more		
	advanced treatments.		
2	Time and audiovisual challenges and difficulty transferring xray		
	images and pathology at UNMC were the challenges		
3	We need this program to continue in the future. It was very helpful to		
	community oncologist to get direct consultation on our cases		
4	We should expand this to all Hematologic Malignancies		

METHODS

Prior to each meeting, CO submitted pathology and radiology reports to UNMC. The reports were then reviewed by expert pathologist, radiologists, and UNMC lymphoma experts. At the meeting CO and UNMC experts would call-in using Vidyo. Everyone was able to view the pathology and radiology reports at the same time. Each test could be enlarged and toggled as needed. This provided all participants an opportunity to ask questions and dialog about each case. At the end of each case a treatment plan would be developed and reported on at the next meeting.

The goal was to have meetings weekly. Unfortunately, Nebraska has two time zones which resulted in scheduling conflicts with CO. Instead of weekly, meetings were held on average

twice a month. In the interim, physicians were able to consult via phone with UNMC experts.

SYSTEM EVALUATION AND FINDINGS

Using the Vidyo system was technology challenging at the beginning. However, after personalized training, it became successful. It was extremely efficient in allowing everyone attending – either live or via Vidyo – to view the reports using this method.

Participants provided positive feedback to this educational activity. However, they did express their desire to not limit the cases to lymphoma. Patient care was enhanced, which was the ultimate goal.

Conclusion

The primary goals of this educational program was very ambitious and in foresight not attainable with the principal investigator leaving UNMC. The concept of providing conferences in this format was successful and is now being utilized in other conferences at UNMC.

The participating physicians have expressed a desire to continue these programs as they have seen a difference it has made in patient care. Patients benefits:

- 1) expert diagnosis
- 2) treatment plans
- 3) access to experts without having to travel.