



Research Article

Optimizing Discussion of Advance Directives and Completion of MOLST Forms in a Telemetry/Stroke Unit (9 South) in a Community-based Hospital in Brooklyn, NY

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Introduction

The MOLST form is a medical order that documents decisions about life-sustaining treatment made by patients with serious advanced illnesses. These decisions are made after patients (or surrogates) and healthcare providers discuss the patient's advance directives, the risks and benefits of life-sustaining treatment, and the patient's values and goals of care. The MOLST form documents specific treatments the patient wants or does not want to receive. It functions as a communication tool between health care professionals (e.g., doctors, emergency responders, nurses) about patient treatment preferences so that they can be known and honored [1]. Under State law, the MOLST form is the only authorized form in New York State for documenting non-

hospital Do Not Resuscitate (DNR) and Do Not Intubate (DNI) orders. In addition, the form is beneficial to patients and providers as it provides specific medical orders and is recognized and used in a variety of health care settings. Unfortunately, discussions of advance directives do not always occur, particularly when patients are admitted with acute and severe illnesses, unclear or in-existent advance directives and goals of care, and no MOLST form completed. This performance improvement project aims to increase the number of MOLST forms completed in the Telemetry Unit on 9 South at Wyckoff Hospital.

Methods

Our intervention to increase the number of MOLST forms during admission aimed at educating residents, nurses, and social

workers of the importance of advance directives and translate patient’s advance directives into a MOLST form. A virtual noon conference was conducted by a faculty member (Palliative Care Physician) to raise awareness of the importance of the MOLST forms, teach residents to initiate the conversation of advance directives with patients, and in-service residents how to complete the MOLST form [2]. The project was presented to the telemetry unit staff, including Attendees, rotating residents, Social Workers, Case Managers, Patient Care Managers, and nursing staff. All the residents in the Geriatrics rotation were reminded of the importance of advance directives and MOLST forms completion. In addition, awareness has been raised during daily rounds on discussing advance directives and the importance of MOLST form completions. The staff of 9 South was very receptive and engaged in the project. For the intervention analysis, we used station 9 South admission numbers and data on numbers of completed MOLST forms before the time of admission and at the time of discharge. To obtain baseline data before the intervention, we selected patients discharged from 9 South from October to December 2020. For each month, we calculated the number of MOLST forms completed by the staff of 9 South as a difference between MOLST forms at discharge and before admission. Based on all three MOLST form numbers, we calculated percentages relative to the total number of admissions. The per-month tabulations were summed up and used to calculate a monthly average which served as baseline data. We did a corresponding analysis for the time after the intervention, from January to May 2021. For this time frame, we also determined the relative increase of forms completed by the staff compared to its baseline average value (column rel. to BL). The outcome of the intervention was determined using monthly

average values for the time after the intervention. We analyzed the effect and significance of the intervention on 1. MOLST forms completed by the staff during admissions and on 2. Total MOLST forms at discharge using the unpaired two-tailed Student’s T-Test and monthly numbers before and after the intervention.

Results

Our baseline is based on 740 patients discharged from 9 South from October to December 2020. The monthly average was approximately 247 discharges. For this period, 45 patients had a MOLST form before admission (6.1%) of patients had a MOLST form before admission; for 20 MOLST patients (2.7%) a form was completed during the admission by the staff, resulting in a total of 65 patients (8.8%) with a MOLST form completed at the time of discharge. (Table 1). The staff achieved an average of approximately 7 MOLST forms completed per month. Our post-intervention data showed that 1,397 patients were discharged from January to May 2021 from 9 South. The monthly average was 279 discharges, about 13.3% more compared to the baseline. 417 patients had a MOLST 219 (15.7%) before admission; for 40 patients (14.2%) a form was completed during admission by the staff, resulting in a total of 83 patients (29.8%) with a MOLST form completed at the time of discharge. The staff achieved an average of about 40 MOLST forms per month, compared to 7 forms at the baseline, which is an approximate 594% increase and of high statistical significance ($P \leq 0.001$, Figure 1A and Table 2). The average monthly value of about 83 MOLST forms at discharge compared to 22 forms at the baseline was an approximate 385% statistically significant increase ($P = 0.0108$, Figure 1B and Table 2).

MOLST Forms

Phase	Time period	Admissions			MOLST Forms			MOLST Forms		
		#	#	per adm.	#	per adm.	rel. to BL	#	per adm.	rel. to BL
Before inter-vention	Oct-20	243	6.0	2.5%	2.0	0.8%		8.0	3.3%	
	Nov-20	250	14.0	5.6%	6.0	2.4%		20.0	8.0%	
	Dec-20	247	25.0	10.1%	12.0	4.9%		37.0	15.0%	
	Total 2020	740	45.0	6.1%	20.0	2.7%		65.0	8.8%	
Baseline	Monthly avr. 2020	247	15.0	6.1%	6.7	2.7%		21.7	8.8%	
After inter-vention	Jan-21	267	65.0	24.3%	50.0	18.7%	750%	115.0	43.1%	531%
	Feb-21	260	54.0	20.8%	47.0	18.1%	705%	101.0	38.8%	466%
	Mar-21	299	49.0	16.4%	36.0	12.0%	540%	85.0	28.4%	392%
	Apr-21	285	36.0	12.6%	32.0	11.2%	480%	68.0	23.9%	314%
	May-21	286	15.0	5.2%	33.0	11.5%	495%	48.0	16.8%	222%
	Total 2021	1397	219.0	15.7%	198.0	14.2%		417.0	29.8%	
Outcome	Monthly avr. 2021	279	43.8	15.7%	39.6	14.2%	594%	83.4	29.8%	385%

Table 1: Completion of MOLST forms before and after intervention.

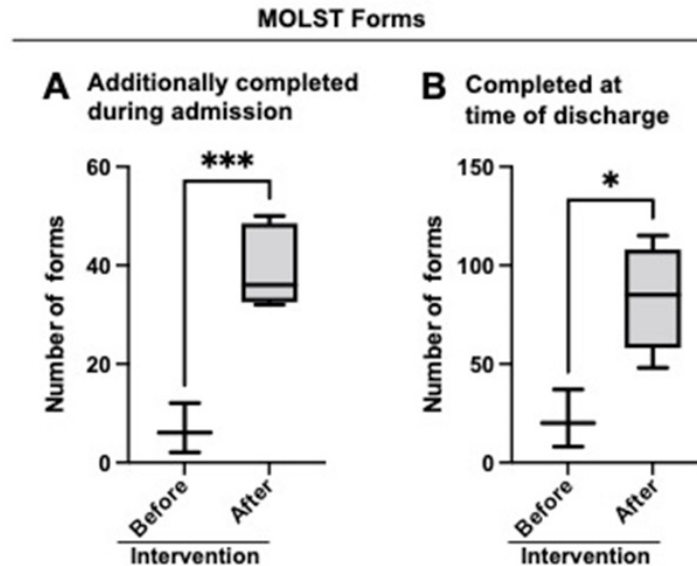


Figure 1: Significance of study results. Monthly MOLST forms before and after intervention. A Additionally completed forms during admission. B Forms completed at the time of discharge.

Student T Test: MOLST forms completed at discharge, monthly

P value	0.0108	* (significant)
Mean before intervention	21.7	
Mean after intervention	83.4	

Student T Test: MOLST forms additionally completed during admission, monthly

P value	0.0009	*** (significant)
Mean before intervention	6.7	
Mean after intervention	39.6	

Table 2: Results of Student’s T test.

Discussion

It is crucial for Healthcare providers and patients to understand the importance of discussing advance directives and completing a MOLST form. Misconceptions from healthcare providers about advance directives and MOLST forms frequently lead to skipping this critical step in clinical encounters, particularly in the inpatient setting. Healthcare providers need to be educated about addressing advance directives with their patients, particularly if they are older and/or advanced diseases. Patients and families also have misconceptions about advanced directives and MOLST forms and need education and counselling [3,4].

Our intervention of raising awareness and providing education to residents and the 9 South staff resulted in a statistically 5.9-fold increase of monthly MOLST forms completed by the staff, and a statistically significant 3.8-fold increase in completed monthly MOLST forms at discharge, compared to the baseline. While monthly averages of admissions before and after the interventions differed by only 13.3% and are not expected to have a noticeable effect on the outcome, the results may still be influenced by different patient populations

observed at the two time points, which may be considered in future studies. Based on our intervention, we would like to continue monitoring this process regularly and adjusting it accordingly to keep the positive trend. Given that there was a steady decline in monthly MOLST forms completed by the staff over time, from 50 forms in January to 33 forms in May 2021, it may be a good idea to emphasize and educate about the importance of this measure frequently. We also would like to implement our project into other medical units in the hospital.

Conclusion

It is recommended that discussion of advanced directives is conducted at the time of admission, and a MOLST form is completed reflecting patients' wishes. It is also essential to involve the patient's family, particularly when patients have advanced

age and diseases. Raising awareness and educating healthcare providers on how to discuss advance directives and MOLST forms with patients and families can increase the completion of MOLST forms during admission in the inpatient setting.

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