Brief Quality Improvement Report

Increasing Medical Power of Attorney Completion for Hospitalized Patients During the COVID Pandemic: A Social Work Led Quality Improvement Intervention

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Sarguni Singh, MD, Katie Herrmann, LCSW, Wendy Cyriacks, RN, BSN, ACM-RN, Jeanie Youngwerth, MD, Kathleen E. Bickel, MD, MPhil, MS, and Hillary D. Lum, MD, PhD

Division of Hospital Medicine (S.S.), University of Colorado School of Medicine, Aurora, CO; University of Colorado Hospital (K.H.), Aurora, CO; Division of General Internal Medicine (W.C., J.Y., K.E.B.), University of Colorado School of Medicine, Aurora, CO; and Division of Geriatric Medicine (H.D.L.), Department of Medicine, University of Colorado School of Medicine, Aurora, CO, USA

Abstract

Background. The high risk of mechanical ventilation with COVID hospitalizations requires health-care systems to rapidly innovate advance care planning (ACP) delivery for hospitalized patients to promote goal-concordant care.

Measures. Assess the impact of a social work and care management intervention on the proportion of admitted patients each week with a Medical Durable Power of Attorney (MDPOA).

Intervention. Social workers were consulted to assist with identification of a surrogate decision maker and completion of MDPOA forms for hospitalized patients. This intervention utilized change management strategies and was implemented between April and June 2020.

Outcomes. From a baseline average of 30.1%, the weekly percentage of admitted patients with MDPOA forms rose to 42.8% with correlating evidence of nonrandom special cause variation.

Lessons Learned. Use of change management strategies resulted in rapid implementation of an effective ACP initiative. Ongoing needs include focusing on intervention sustainability and education of interprofessional providers about ACP processes.   J Pain Symptom Manage 2021;61:579−584. © *2020 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.*

Key Message

This article describes a quality improvement intervention aimed at improving MDPOA completion rates for hospitalized patients during COVID-19. Human-centered design and effective change management strategies have led to early success. In anticipation of ongoing COVID hospital admissions, organizations need to implement hospital-based ACP initiatives to promote goal-concordant care.

Background

Studies have cited the effectiveness of advance care planning (ACP) in improving patient quality of life, decreasing use of intensive medical interventions at the end of life[1,2] and contributing to fewer in-hospital deaths.[3,4] Despite these benefits, patient engagement in ACP remains low[5,6] and interventions to improve ACP in health systems has remained elusive, particularly for patients hospitalized in acute

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Address correspondence to: Sarguni Singh, MD, Division of Hospital Medicine, University of Colorado School of Medicine, Leprino Building, 4th floor, 12401 E. 17th Avenue, Mailstop F-782, Aurora, CO, 80045, USA. E-mail: sarguni.singh@cuanschutz.edu

care settings. Barriers to implementation of ACP processes in the hospital setting include a hospital culture focused on curative norms, low health system organizational priority, work practices that pigeonhole ACP to a specific front-line provider group and lack of accountability and feedback.[7]

One aspect of ACP includes designating a medical durable power of attorney (MDPOA) to make treatment decisions if a patient becomes incapacitated.[8] Our academic center struggled with MDPOA document completion with completion rates around 25% since 2012. During the COVID pandemic, there was a high risk of respiratory decompensation, intubation, and mortality anticipated with COVID hospitalizations.[9] In this context, our hospital recognized the parallel surge of goals of care discussions and medical treatment decisions. We focused on rapidly developing a process where patients were provided the opportunity to complete an MDPOA form so that a decision maker was identified by the patient, should they become incapacitated at any point in their hospitalization. This paper outlines our approach to implementing this process and our results after two months of this innovation.

Methods

Stakeholder Engagement and Design

Our institution is a 650-bed tertiary referral, academic medical center serving the Denver metropolitan area. Our pre-existing process for completing MDPOA forms consisted of the bedside nurse completing MDPOA paperwork if one was not available in our electronic medical record (EMR). This process did not include any follow up or accountability metrics. A previously conducted survey of 732 bedside nurses, 125 medical assistants, and 52 care coordinators at our institution revealed that time constraints, logistical issues (i.e., locating ACP documents and uploading them into the EMR), and patient clinical condition (nonverbal or altered mental status) were the three main barriers to ACP completion for hospitalized patients.[10] In thinking about how to redesign this process, we engaged partners who brought diverse relevant perspectives and front-line experience about how the hospital was changing in the midst of the COVID pandemic. It was critical that the stakeholders we engaged also had the resources to sustain costs of a proposed intervention. We created a work group that included: chief medical officer of the revenue cycle, senior director of care management, social work (SW) and care management (CM) managers, physician advisor, and a palliative care physician. All members of the work group demonstrated a sense of responsibility and commitment to the goal of developing a rapid MDPOA process resulting in change.

The interdisciplinary work group used a human-centered design[11] approach, the Model for Improvement, and plan-do-study-act cycles when creating this intervention.[12] Human-centered design integrates the end-user—the person who will be ultimately conducting the intervention—into the design process. In addition, human-centered design considers the impact the design will have on key stakeholder groups.[13] The group focused on three main topics: 1) which discipline has the skillset to facilitate completion of an MDPOA document; 2) which discipline has the ability to rapidly integrate this process into their workflow; and 3) how to integrate accountability into the process. We predicted that nursing, physicians, and advanced practice providers would be overwhelmed with COVID admissions. We recognized that the SW team were ideally suited to assist with MDPOA completion given their training in supportive counseling, knowledge of ACP, and communication skillset. Our institution follows the American Case Management Association recommended model of staffing and has 1 SW per 36 floor level patients and 1 SW per 25 intensive care level patients. Our hospital has 28 SW's staffing floor level patients. We anticipated that some SW's could be reassigned from lower patient volume areas because of cancellation of elective procedures and would be able to assist busier COVID units.

Intervention

The intervention developed was a process where the CM, who completed a screen of all hospitalized patients, auto-consulted the SW if a patient did not have an MDPOA complete within the last year (Fig. 1). A CM routinely conducts a chart review for newly admitted patients within 24 hours of admission. If there is no MDPOA available in the Media tab, then the CM places an electronic SW consult in EPIC specifically requesting MDPOA completion. Only the CM completing the admission assessment for the patient places the SW consult for MDPOA completion.

We recognized that successful implementation required effective change management strategies. We anticipated resistance in two major forms: 1) concern for competing demands from CM and SW teams and 2) low tolerance for changing as quickly as the health system needs. The use of change management strategies to mitigate these concerns was paramount.[14] Education was disseminated to the SW and CM teams about the importance of the MDPOA. A one-hour in-person training session was conducted to train SW's on how to assist patients in completing the form. An email communication was sent to hospital medicine clinicians regarding the new process a
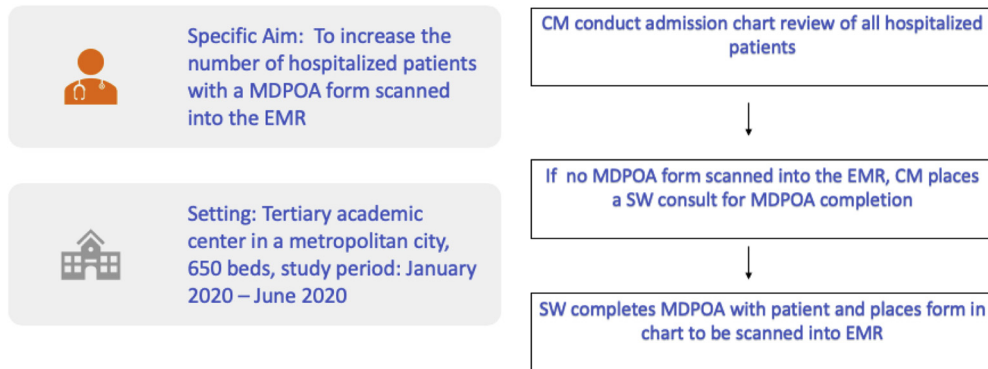
Fig. 1. Outline of Medical Durable Power of Attorney (MDPOA) quality improvement project. CM = care manager; SW = social worker; EMR = electronic medical record.

week prior to the start date of April 12, 2020. This provided opportunity for questions, concerns, and to manage expectations around the initiative. Proactive communication and education of front-line providers was critical and helped support organizational units most impacted by this quality improvement project. A key message was that this process would require flexibility and resilience but, if successful, would lead to a quick and necessary process change.

Data Collection

Data were collected using an automated search query in Epic, the EMR. A search query was created of weekly patients who were admitted as inpatient class at our hospital and whether they had an MDPOA form scanned into the EMR. The query collected all patients with an admission over the defined 7-day week, and then of those patients, determined how many patients had a scanned MDPOA form. If a patient had more than one encounter during the selected date range, data from the most recent encounter were utilized.

Measures

The primary quality measure was the proportion of admitted patients each week with a scanned MDPOA form. The numerator was the number of patients admitted that week who had an MDPOA form scanned into the EMR during the 7-day period searched. The denominator was the total number of hospitalized patients over the age of 18 during the 7-day period searched. In addition, the SW manager collected the number of SW consults placed solely for MDPOA completion during the first month of the intervention.

Analysis

The primary quality measure was tracked using a statistical process control (SPC) p-chart. This method was selected because SPC charts measure variation in data over time and allow for the determination of whether the variation observed reflects common-cause (random) variation or special-cause (nonrandom) variation. The upper and lower thresholds (control limits) on a p-chart account for variations in the denominator and are 3 standard deviations above and below the average. Thus, the type 1 error (alpha) for any single point outside of the control limits is 0.0027.[15]

Ethical Considerations

Per the Colorado Multiple Institutional Review Board, this project is a quality improvement initiative and does not require review. Reporting followed the Revised Standards for Quality Improvement Reporting Excellence.[16]

Results

The average baseline proportion of weekly admitted patients that had any scanned MDPOA forms was 0.302. Before the initiative, the process was under statistical control except for the week of March 8th where the proportion was 0.43. The week of March 8th is an example of a special cause signal or nonrandom variation.

The MDPOA process began the week of April 12th, 2020. Two additional steps were required by CM's which included reviewing the patient's chart for a previously completed MDPOA and placing an SW consult if an MDPOA had not been completed. While these activities required a small amount of extra time, the workload was manageable and did not require extra care management staff. From the week of April 12th through the week of May 3rd, the SW team received 1088 consults requesting MDPOA completion. Eight weeks into the intervention, the number of MDPOA consults overwhelmed the capacity of the SW team. As a result, the intervention was amended to prioritize

patients at risk for poor outcomes starting the week of May 31st. High-risk patient services were COVID, Acute Care of the Elder, Trauma Acute Care Surgery, Oncology, and Medicine. The total number of SW consults for MDPOA completion in June decreased to 153 after the intervention was amended compared to 358 MDPOA consult requests received the preceding month. The range of the total number of hospitalized patient's preintervention was 592−849 and during the intervention was 589−828. The preintervention average rate for MDPOA forms in the EMR was 30.1% and the postintervention average was 42.8%. Significant, or special cause (nonrandom), variation was noted in comparison to the baseline at all time points after April 12th (where the proportions were all above the upper control limit (3 SD) from the baseline mean (Fig. 2). Appendix A displays the same data but with the control limits fixed at the beginning of the intervention, and all points indicating evidence of special cause or nonrandom variation are indicated with open triangles.

Discussion

We observed an increase in the number of hospitalized patients who completed an MDPOA form after an SW led ACP intervention. This increase was immediately noted when the intervention began as demonstrated by an increased signal in Fig. 2 for the week of April 12th. This was an expected increase as the intervention was intentionally designed to automatically consult SW's for MDPOA completion. If an increase in MDPOA completion was not observed in the first week, this would have suggested the intervention was not being implemented correctly. In addition, continual media coverage of COVID-19 during this time likely contributed to patients' heightened awareness of the importance of ACP and possibly increased their receptiveness to discussions involving MDPOA's. Fig. 2 shows an increase in MDPOA completion the week of March 8th before the intervention had started. We do not have a clear explanation for this increase. We hypothesize that some of this increase might be due to earlier efforts in outpatient clinics to have patients complete an MDPOA form as well as media coverage of death and dying from COVID-19.

Existing literature on ACP completion in the acute care setting has focused on engaging palliative care teams and the positive impact this has on ACP, quality of care, and cost.[17−19] Sadeghi et al. evaluated the feasibility of implementing a hospital-based ACP intervention led by a nonclinician health educator. The study determined this type of intervention would be feasible to implement.[20] Our intervention demonstrates a less complex and scalable way to utilize an SW to assist with MDPOA completion. This work leverages the training of SWs to engage in potentially difficult conversations and promotes the importance of front-line providers engaging in primary palliative care. The success of this innovation comes as a result of a healthcare climate acutely aware of the importance of ACP, the health system making MDPOA completion an organizational priority, and engagement of key stakeholders. Having a shared purpose, effective utilization of available resources and automating social work consults for MDPOA completion were critical factors in the impact of this innovation.

Areas of Growth and Opportunity

This quality improvement project highlights further areas of opportunity. Front-line providers need to be educated about the importance of the scanned MDPOA instead of only verbal identification of a proxy. Colorado has a consensus surrogate
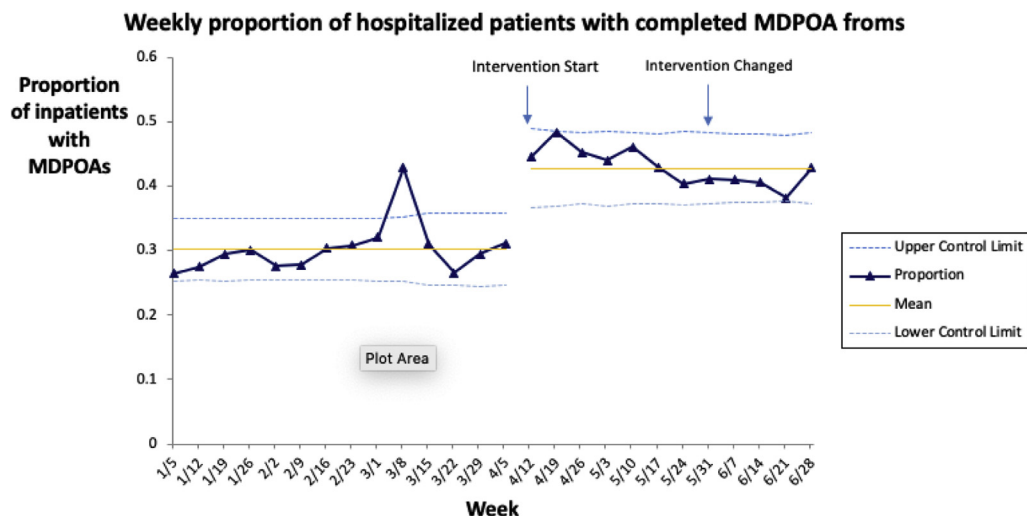

Fig. 2. Control chart for weekly proportion of hospitalized patients with completed MDPOA forms.

consent law that requires all reasonably available "interested persons" come to a consensus about who should act as the decision-maker. If a patient only has a verbally identified proxy and then subsequently loses decision-making capacity, an all-interested party meeting must be conducted to identify a decision maker. During the era of COVID, the time-consuming process of an all-interested party meeting is burdensome on the medical team, difficult to execute because of visitor restrictions, and has the potential to delay medical decision-making. Although the majority of states have hierarchy surrogate consent laws—where family members or people closest to the patient become decision makers—this approach has come under legal scrutiny due to concern about whether prespecifying a priority order of surrogates is able to accurately reflect contemporary family and cultural diversity.[21] Thus, this initiative encourages capturing the patients' own preferences for a trusted medical decision maker while they have capacity.

Sustainability

The increase in rates of MDPOA completion slowly decreased over the intervention period, but the process remained in statistical control, without evidence of a new downward special cause signal toward our baseline. Early on, we recognized that sustainability of this initiative would be challenging as we anticipated hospital capacity would increase with the re-introduction of elective surgeries and non-COVID admissions. MDPOA completion dropped toward the middle of May because of the rising number of SW consults and we amended the initiative the week of May 31st to focus on high risk patient populations. ACP workflows need to be owned by interprofessional front-line health-care disciplines because there are multiple opportunities to complete the MDPOA form during a hospitalization. Next steps include focusing on expanding outpatient ACP discussions in primary care and specialty clinics. We will work to provide a framework where inpatient front-line workers develop the knowledge and comfort to engage in ACP discussions as a routine part of care. It will be critical to integrate accountability and feedback into the processes. We are advocating for an ACP hospital safety and quality metric which will facilitate obtaining organizational support to ensure ongoing improvement in ACP processes.

Limitations

This quality improvement initiative had a number of limitations. The Epic query was only able to capture evidence that a hospitalized patient had a completed MDPOA form, not that the documentation was completed during the hospitalization. Thus, it is possible that differences in our study could be due to increased MDPOA completion in the outpatient setting. As reported, the SW team received 1088 MDPOA consults during the first month, completely separate from all other SW consults. Additional secondary measures that would have been helpful for our analysis include the date the MDPOA form was scanned into the EMR, the number of patients that refused to complete an MDPOA and why, and the number of patients who were unable to complete the form because of incapacitation.

Conclusion

Learning health-care systems have the ability to recognize a significant need and rapidly innovate and implement protocols to meet these needs. Our MDPOA quality improvement project is an example of this and, though we have had early success, we continue to refine the intervention with a focus on sustainability. In anticipation of ongoing COVID hospitalizations, organizations need to implement ACP initiatives to promote goal-concordant care. CM and SW leaders have the opportunity to be effective drivers of these initiatives and can highlight the need for more widespread accountability and normalization of ACP discussions.

Disclosures and Acknowledgments

References

1. Jimenez G, Tan WS, Virk AK, Low CK, Car J, Ho AHY. State of advance care planning research: a descriptive overview of systematic reviews. Palliat Support Care 2019;17:234−244.

2. Jimenez G, Tan WS, Virk AK, Low CK, Car J, Ho AHY. Overview of systematic reviews of advance care planning: Summary of evidence and Global Lessons. J Pain Symptom Manage 2018;56:436−459.e425.

3. Bischoff KE, Sudore R, Miao Y, Boscardin WJ, Smith AK. Advance care planning and the quality of end-of-life care in older adults. J Am Geriatr Soc 2013;61:209−214.

4. Ache K, Harrold J, Harris P, Dougherty M, Casarett D. Are advance directives associated with better hospice care? J Am Geriatr Soc 2014;62:1091−1096.

5. Yadav KN, Gabler NB, Cooney E, et al. Approximately one in three US adults completes any type of advance directive for end-of-life care. Health Aff (Millwood) 2017;36:1244−1251.

6. Rao JK, Anderson LA, Lin FC, Laux JP. Completion of advance directives among U.S. consumers. Am J Prev Med 2014;46:65−70.

7. Tan WS, Car J, Lall P, Low CK, Ho AHY. Implementing advance care planning in acute hospitals: Leading the Transformation of norms. J Am Geriatr Soc 2019;67:1278−1285.

8. Sudore RL, Lum HD, You JJ, et al. Defining advance care planning for adults: a consensus Definition from a Multidisciplinary Delphi Panel. J Pain Symptom Manage 2017;53: 821−832.e821.

9. Argenziano MG, Bruce SL, Slater CL, et al. Characterization and clinical course of 1000 patients with coronavirus disease 2019 in New York: retrospective case series. BMJ 2020;369:m1996.

10. Fink RM, Somes E, Brackett H, Shanbhag P, Anderson AN, Lum HD. Evaluation of quality improvement initiatives to improve and sustain advance care planning completion and documentation. J Hosp Palliat Nurs 2019; 21:71−79.

11. Ferreira FK, Song EH, Gomes H, Garcia EB, Ferreira LM. New mindset in scientific method in the health field: design Thinking. Clinics (Sao Paulo) 2015;70: 770−772.

12. Langley GLMR, Nolan KM, Nolan TW, Normal CL, Provost LP. The Improvement Guide: A Practial Approach to Enhancing Organizational Performance, 2nd ed. San Francisco: Jossey-Bass Publishers, 2009.

13. Roberts JP, Fisher TR, Trowbridge MJ, Bent C. A design thinking framework for healthcare management and innovation. Healthc (Amst) 2016;4:11−14.

14. Kotter JP, Schlesinger LA. Choosing strategies for change. Harv Business Rev 2008;86:7−8.

15. Benneyan JC, Lloyd RC, Plsek PE. Statistical process control as a tool for research and healthcare improvement. Qual Saf Health Care 2003;12:458−464.

16. Goodman D, Ogrinc G, Davies L, et al. Explanation and elaboration of the SQUIRE (standards for quality improvement reporting Excellence) Guidelines, V.2.0: examples of SQUIRE elements in the healthcare improvement literature. BMJ Qual Saf 2016;25:e7.

17. Casarett D, Pickard A, Bailey FA, et al. Do palliative consultations improve patient outcomes? J Am Geriatr Soc 2008; 56:593−599.

18. May P, Normand C, Cassel JB, et al. Economics of palliative care for hospitalized adults with Serious Illness: a Meta-analysis. JAMA Intern Med 2018;178:820−829.

19. Morrison RS, Dietrich J, Ladwig S, et al. Palliative care consultation teams cut hospital costs for Medicaid beneficiaries. Health Aff (Millwood) 2011;30:454−463.

20. Sadeghi B, Walling AM, Romano PS, Ahluwalia SC, Ong MK. A hospital-based advance care planning intervention for patients with Heart Failure: a feasibility study. J Palliat Med 2016;19:451−455.

21. Wynn S. Decisions by surrogates: an overview of surrogate consent laws in the United States. Bifocal 2014;36: 10−14.

Appendix
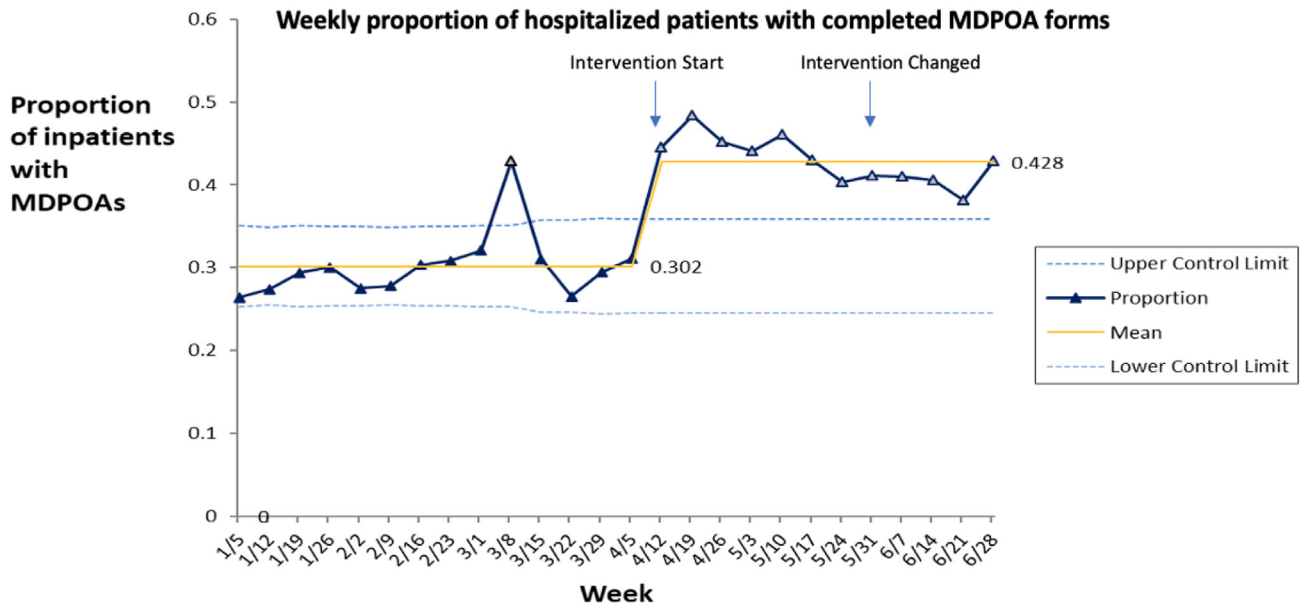
Appendix A. Control chart for weekly proportion of hospitalized patients with completed MDPOA forms. All points outside of the 3 standard deviation control limits (special cause signals) are indicated with open triangles in this alternative p-chart with a frozen baseline.