



Niagara Health Quality Coalition

Improving Quality Through Cooperation

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VIA ELECTRONIC SUBMISSION

Charlene M. Frizzera, Acting Administrator
Centers for Medicare and Medicaid Services
Department of Health and Human Services
Room 445-G
Hubert H. Humphrey Building
200 Independence Avenue, S.W.
Washington, D.C. 20201

Re: CMS-1406-P

Medicare Program; Proposed Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2010 Rates and to the Long-Term Care Hospital Prospective Payment System and Rate Year 2010 Rates

CMS has published the Proposed Rules for FY 2010 and invited the public to comment on the specific measures identified and to provide suggestions for other measures and other issues of interest. I would like to comment on the importance of a potential preventable Venous Thromboembolism 30-day readmission and its impact on patients, hospitals, and healthcare costs. Analysis of the Niagara Health Quality Coalition's (NHQC) New York State *Statewide Planning and Research Cooperative System* found of all readmissions, some 2.6% had a VTE event associated with those readmissions. This rises to 2.7% in the over 65 population. In sub group analysis of the Surgical Care Improvement Project (SCIP) patients had a 3.3% VTE associated rate of readmissions. The VTE-associated readmissions are 83% higher than the rate MedPAC reported for AMI 30-day readmission, which is presently measured as part of RHQDAPU. Based on the rate of VTE in the NHQC findings, there would be 87,000 potentially preventable readmissions with VTE in the Medicare population.

VTE contributes to the morbidity and mortality of Medicare patients. Medicare has recognized VTE as a reasonably preventable event and moved forward with implementation of process measures (SCIP VTE 1 and VTE 2) and VTE as a Hospital Acquired Condition for a subgroup of orthopedic surgeries. Medicare is now proposing to expand to address VTE in the non-SCIP-VTE patients: prophylaxis in ICU patients, management of VTE treatment and outcome measure for VTE events in those who did not receive prophylaxis (patients admitted for medical reasons and surgery not included in SCIP-VTE for 2011). All the present measures address the inpatient rate for prophylaxis but do not address the appropriateness of the prophylaxis (e.g., choice of agent, dosing, or duration) during the inpatient stay and need for extended prophylaxis at the time of discharge. The high rate of VTE readmissions in our study demonstrates that a focus on the rates of prophylaxis may not be enough to improve the outcome: that there is still a gap in VTE prevention that is not being sufficiently addressed by the process measures. We believe that the evidence supports the need for an expansion of the 30-day readmissions measures to include a measure for readmission for VTE, to focus more attention on the issue which is to actually improve the outcome of care – reduce rates of VTE, of readmissions and mortality.

I will be presenting new preliminary data from the New York State *Statewide Planning and Research Cooperative System* data on the importance of readmissions as a part of the over-all picture of the VTE experience.

Background

Potentially preventable hospital readmissions represent a significant and avoidable cost to Medicare and they lower overall patient outcomes. Studies have found that 17.6 %¹ to 19.6 %² of all Medicare patients who were discharged from a hospital were readmitted within 30 days. CMS estimates that nearly three-quarters of readmissions are potentially preventable.³ The costs from unplanned hospital readmissions have been estimated to be between \$12 billion¹ to \$17.4 billion.² In order to address this issue the CMS has developed three risk-standardized 30-day readmission measures for acute myocardial infarction (AMI), heart failure (HF) and pneumonia (PN). These three were identified by the Medicare Payment Advisory Commission (MedPAC) as common, costly, and often preventable.¹ Estimated readmission rates for these conditions are 13.4 %¹, 26.9 %², and 20.1 %² respectively. Additionally, based on the MEDPAC findings these conditions each individually account for 1.8 %, 6.6%, and 8.0% of all readmissions, respectively.

Venous thromboembolisms (VTEs) are also a relatively common condition with an estimated 4.3 million discharged surgical patients being at medium, high, or very high risk of experiencing a VTE event.⁴ The risk of a surgical patient experiencing a hospital acquired deep-vein thrombosis (DVT) is as high as 60% without appropriate prophylaxis.⁵ The risk of developing a DVT can be significantly reduced, as low as 5%, in patients who do receive appropriate prophylaxis.⁶ Additionally, hospital and physician billed charges were more than \$4 billion in 1997⁷ for DVT. These figures raise the important question as to whether VTE events meet the criteria of being common, costly, and preventable and if they should be considered for inclusion as one of the 30-day readmission measures.

Results

Table 1 shows the results of our analysis; in particular, after exclusions we have over 1.5 million index admissions with an associated 337,414 readmissions during our 12 month period. This is an overall readmission rate of 21.2%, and 22.5% for the patients who are over 65. This is close to the previous estimates for over 65 readmissions of 19.6%. In particular, of all readmissions, some 2.6% had a VTE event associated with those readmissions. This rises to 2.7% in the over 65 population.⁸

¹ MEDPAC, Report to the Congress, Promoting Greater Efficiency in Medicare, Chapter 5 Payment policy for inpatient readmissions, June 2007.

² Jencks, S.F., et al., Rehospitalizations among Patients in the Medicare Fee-for-Service Program, NEJM 360(14), 1418-1428, April, 2009.

³ CMS Acting Administrator Charlene Frizzera, Medicare announces sites for pilot program to improve quality as patients move across care settings, April 13, 2009.

⁴ Anderson F.A. et al., Estimated annual numbers of US acute-care hospital patients at risk for venous thromboembolism. Am J Hematol. 82, 777-782, 2007.

⁵ Geerts W.H., et al. Prevention of venous thromboembolism: American College of Chest Physicians evidence-based clinical practice guidelines, 8th edn. Chest, 133(6 Supply), 381S-453S (2008).

⁶ Prevention of venous thromboembolism, International Consensus Statement (guidelines according to scientific evidence). Int. Angiol, 1997, 16 3-38

⁷ Lissovoy G., Economic Issues in the Treatment and Prevention of Deep vein Thrombosis from a Managed Care Perspective, The Am. J of Mngd Care, 7(17), S535-S544, Nov. 2001.

⁸ McElligott, S., Statistical Analyst, SMT Inc., Jun 2009.

Table 1. Counts of types of admissions

		All	Over 65
All	Index	1,547,517	649,123
	Readmits	337,414	146,253
	VTE - readmits	8,874	3,901
SCIP	Index	94,879	40,563
	Readmits	29,390	12,608
	VTE - readmits	998	443
Non-SCIP	Index	1,452,638	608,560
	Readmits	308,024	133,645
	VTE - readmits	7,876	3,458

Examining the data in more detail (Table 2) for the HTV (VTE-POA) and the HAV (hospital acquired VTE) populations, we find that their readmission rates are higher than the overall readmission rates. Patients who had a VTE that was present on admission during their index admission will be readmitted to the hospital over a quarter of the time. Patients who had a hospital acquired VTE will be readmitted over one third of the time. In terms of charges, the HTV population had average charges about 20 percent higher than the control population⁹ and 3.2% readmission charges. These figures rise to 22.5% and 10.4% for the over 65 population. The HAV population had higher average charges as well, 9.9% (index) and 5.9% (readmission) for the entire population and 14.1% (index) and 19.2% (readmission) for the over 65 population.

Table 2. Readmission rates and charges

	Admissions			Percent Total Charges			
	Index Admissions	Readmissions	Readmission Rate	Index	Readmission	Index – Over 65	Readmission – Over 65
Hospital Treatable VTEs (HTV)	17252	4328	25.1%	20.8%	3.2%	22.5%	10.4%
Hospital Acquired VTEs (HAV)	3721	1280	34.4%	9.9%	5.9%	14.1%	19.2%

Conclusion

Addressing preventable hospital admissions is important because they decrease the quality of patient outcomes and also increase health care costs. CMS has begun to address this issue for AMI, CHF and pneumonia by implementing measures to reduce events in the hospital and by collecting data on the outcomes as measured in mortality and readmissions, events that appear to be reasonably preventable, costly, and common. We find that VTE events also meet all of these criteria and should be considered for a 30-day readmission measure.

⁹ The control population was selected by finding patients that had the same principle diagnosis and procedure as the HTV or HAV populations. It should be noted that these are not true controls as the matching was not based on propensity score or risk adjustment. Additionally, because this study is preliminary we do not control for these differences in this initial analysis.

Thank you for this opportunity to comment on current and future CMS quality measures. Please feel free to call me to discuss my comments at (716) 250-6472 or by e-mail at bruceb@nhqc.com

Sincerely,



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