



National Patient Safety Goals: Anticoagulation

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The National Patient Safety Goals (NPSGs) reflect the ongoing efforts by The Joint Commission (TJC) to focus healthcare providers' attention on those topics that are of highest priority to patient safety and quality care. Compliance with the NPSG and Universal Protocol performance elements are vital components of achieving and maintaining TJC hospital accreditation. Innovative use of clinical documentation software combined with a logical workflow process can make the *right* thing to do the *easy* thing to do for the busy clinician. Bottom line? Better charting, greater compliance, and more EMR user satisfaction!

Tools and Tips: What's available to help the busy Clinician be successful with regulatory compliance?

Although different vendors have unique configuration capabilities, most clinical documentation software systems have inherent features that can increase compliance with structured processes like the NPSG. Standard features of the McKesson *Horizon™ Clinicals* suite of products include:

- Barcode technology for positive patient and medication identification
- Real-time availability of data to multiple users in multiple locations
- Numerous configuration options to group defined performance elements into topic-specific categories; These could include checklists with built-in prompts that lead the clinician through the required steps while promoting the use of the desired "buzz words" in documentation
- On-screen capabilities for tracking and trending specific data elements over time

Optional tools can be built and made available to clinicians and quality auditors. These include:

- Display of pertinent data from companion applications, such as Laboratory Results and Medication Administrations, for easy review during clinician documentation
- Automated data extraction with targeted, scheduled clinical queries
- Menu links to relevant internal and external websites
- Display of reference documents, such as policy/procedure excerpts, for clinician review during documentation

NPSG compliance can be enhanced with creative documentation solutions. Let's focus on this one:

<i>2011 National Patient Safety Goals</i>	
NPSG.01.01.01	Use at least two patient identifiers when providing care, treatment, and services.
NPSG.01.03.01	Eliminate transfusion errors related to patient misidentification.
NPSG.02.03.01	Report critical results of tests and diagnostic procedures on a timely basis.
NPSG.03.04.01	Label all medications, medication containers, and other solutions on and off the sterile field in peri-operative and other procedural settings.
NPSG.03.05.01	Reduce the likelihood of patient harm associated with the use of anticoagulant therapy.
NPSG.03.06.01	Maintain and communicate accurate patient medication information. (<i>eff. 4/01/2011</i>)
NPSG.07.01.01	Comply with either the current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines or the current World Health Organization (WHO) hand hygiene guidelines.
NPSG.07.03.01	Implement evidence-based practices to prevent health care–associated infections due to multidrug-resistant organisms in acute care hospitals.
NPSG.07.04.01	Implement evidence-based practices to prevent central line–associated bloodstream infections.
NPSG.07.05.01	Implement evidence-based practices for preventing surgical site infections.
NPSG.15.01.01	Identify patients at risk for suicide.
<i>2011 Universal Protocol for Surgical and Non-Surgical Invasive Procedures</i>	
UP.01.01.01	Conduct a pre-procedure verification process.
UP.01.02.01	Mark the procedure site.
UP.01.03.01	A time-out is performed before the procedure.

An “all-in-one” design saves valuable time during evaluation of drug therapy efficacy.

One of the most challenging patient management issues is reflected by NPSG.03.05.01: *Reduce the likelihood of patient harm associated with the use of anticoagulant therapy*. Optimal anticoagulation is highly individualized with the same dose often producing different results in each patient. In acute care, therapy must be followed closely, usually by a Clinical Pharmacist, until the desired steady state of anticoagulation is achieved. To fully evaluate drug therapy efficacy and provide recommendations to the physician, the Clinical Pharmacist must review the indications and goals for anticoagulation, the medications and dosages administered, the relevant lab values, and any patient-specific special considerations.

- In the paper world, the Pharmacist would need to physically track down and review several chart and bedside record components. Even in the electronic world, the Pharmacist might need to click through several review screens to find all of the necessary information. With an all-in-one Chartable Review, all of the relevant data and charting options are found on one screen. The following example was built in McKesson’s *Horizon Expert Documentation*™ (ER 7.6 SP2) for a facility that also had *Star Laboratory*™ and *Horizon Admin-Rx*:

The *AntiCoag* Chartable Review consists of five classes: two for Pharmacist charting, one for Nurse charting, and two non-translated, view-only classes with selected medication administrations from *Admin-Rx* and selected lab values from *Star Lab*.

The Nurse charts the details of titrated IV anticoagulation therapy in the *IV Anticoag Tx* class.

In the *Anticoag Plan* class, the Clinical Pharmacist documents the medications ordered, the indication for anticoagulation and the targeted goals for therapy. Pharmacist conclusions and recommendations are then charted in the *Pharmacy Review* class.

The screenshot shows a software window titled "TEST, KATHY L Review Charting Session" with a date of 02/24/2009 and time 08:36. It is divided into two main sections: "AntiCoag Plan" and "Pharmacy Review".

AntiCoag Plan:

- Med ordered: Coumadin, Heparin IV
- Indication: VTE/DVT
- Target INR range: 2.0 - 3.0
- Target aPTT: per protocol

Pharmacy Review:

- Meds/Doses: reviewed
- Lab Results: reviewed
- Conclusion: Anticoagulation, not therapeutic, but improving, too low
- Considerations: EVIDENCE OF: decr H&H
- Recommendations: increase, dose/frequency, to (specify): titrate/protocol. **Increase Coumadin to 7.5mg daily. Titrate Heparin per protocol.**
- MD contact: in person
- MD response: orders received

Look how easy it is to track and trend data on the companion *Flowsheet Review*:

	Patient Select	Prior Admits	Admission DB	Extended Hx	MedHx/Allergy	Chart Review	Text View	Lab Results	Rad Results	Significant On	Configure	Refresh	EXIT
			02/22/09 17:05	18:07	18:50	19:00	02/23/09 07:20	11:00	16:06	19:15	20:51	02/24/09 06:10	
A	Med ordered:							CoumdnHep*					
n	Indication:							Hxdvt					
	Target INR range							T2030					
A	PTT-Heparin secs				57.8 H					65.3 H			
n	PT-Coumadin secs						12.4					15.1	
t	INR						1.22&					1.50&	
i	Hgb gm/dl		11.1 L										
c	Hgb gm/dL						10.4 L						
o	Hct %		33.4 L				30.7 L						
a	Platelet Count K/mm3						252						
g	Creatinine mg/dl												
	GFR mL/min/1.73 m2												
A	HEPARIN												
I	WARFARIN	7.5 MG							7.5 MG				
V	HEPARIN												
	Current rate:					26 ml/hr					26 ml/hr		
A	Action:					Conunc					Conunc		
n	Bolus:												
	New rate:												
p	Next aPTT due:					02/23/2009 1*						02/24/2009 1*	
h	Meds/Doses							Reviwd					
a	Lab Results							Reviwd					
r	Conclusion:							AnticgThrpeu					
	Considerations:												
	Recommendations:							NodchgTitpr*					

02/23/09 20:51	02/23/09 20:51	IV Anticoag Tx	HEPARIN	Current rate:	26 ml/hr
02/22/09 06:31				Action:	continued unchgd
02/21/09 06:47				Next aPTT due:	02/24/2009 19:00
	02/23/09 11:00	AntiCoag Plan	Med ordered:	Coumadin	
				Heparin IV	
			Indication:	Hx of VTE/DVT	
			Target INR range	2.0 - 3.0	
	Pharmacy Review		Meds/Doses	reviewed	
			Lab Results	reviewed	
			Conclusion:	Anticoagulation therapeutic	
			Recommendations:	continue w/o chg titrate/protocol	
				Order/monitor:	PT/INR
					labs/protocol

In addition, these "bottom line" results can be attached to topic-specific reviews made available in *Horizon Physician Portal*.

Conclusion:	Anticoagulation therapeutic
Recommendations:	continue w/o chg titrate/protocol
Order/monitor:	PT/INR
	labs/protocol

The AntiCoag Monitor class as it could appear on an Ancillary Consult Review in Physician Portal:

Report: Time Interval: Significant Only

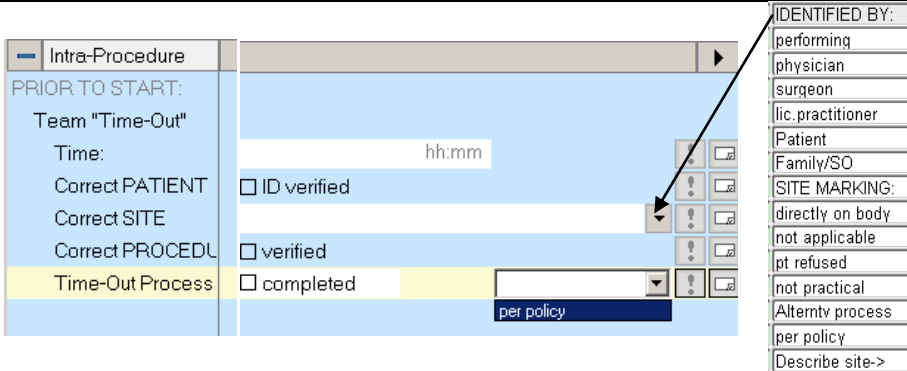
Start On: Go Back: Days Column Display: (Max = 14)

Hotlinks: [Physician 24H Summary](#) [I&O Summary](#) [Glucose Review](#)

AntiCoag Monitor	10/19/09 16:39	10/20/09 07:30	08:30	12:00	20:22	20:29	20:31
AntiCoag Monitor Back to Top							
Med ordered:					Coumdn		
Conclusion:					AnticNotthr...		
Considerations:					LbnorPzzEvd...		
Recommendations:					IncreDsfreqI		
					...		
RD Eval/Recmnd Back to Top	10/19/09 16:39	10/20/09 07:30	08:30	12:00	20:22	20:29	20:31
RD Evaluation:		PoinadSeesug					
PO SUGGESTIONS:		PureedNocaff					
Change diet to:		BidJuven					
Chg/add supplmt:		Yes					
MED SUGGESTIONS:		Albmn					
MVI w/ minerals:		Dsphag					
OTHER SUGGESTNS:							
Follow-up Labs:							
Consult SLP:							
Calorie Count:							
Calorie Count:	Day3Conclid						
Est. K-calories:	1,250 Kcal/d...						
Est. Protein:	35 gm/day						
Comments:							
Rehab Back to Top	10/19/09 16:39	10/20/09 07:30					
Eval/Recmnd							
PT TreatmentPlan						Yes	
PT indicated?						ContptPerpoc...	
Plan Status						ThrxGaittr	
Methods						BidWkx35	
Frequency						Fair	
Rehab potential						ImpredEndran...	
Problems/Issues						5ft Maxas1	
Ambulation						PtrecoPthenf...	
DC Recommendatns						ThrbscPfmwk	
DC Equipment							
OT TreatmentPlan							
Frequency							Wkx35
Methods							AdpteqAdlrt
Rehab potential							Fair
Disch recommend							Hwhhot
From BS SwalEval							
BS Swallow Eval			Cmpltd				
MBS indicated?			YesMdnofyOff...				
Intake Status			PosuovRnawre				
Diet Consistency			SolidzPureed...				
Case Mgm Intrvn Back to Top	10/19/09 16:39	10/20/09 07:30	08:30	12:00	20:22	20:29	20:31
Type of Visit					(Flwup)		
TentativeDC Plan					(HomeWith2Hm...		

To further assist the Pharmacists with reporting the facility-wide compliance with the NPSG, a Business Objects XI (BOXI) query can be built to collect and tabulate anticoagulation therapy indications and results on a monthly or quarterly basis.

Here is a simple design for Nursing and RT that meets the intent for the Universal Protocol “Time-Out”:



Quality charting can be simple and to the point when it is supported by a well-designed, precisely worded Policy/Procedure.

If you would like more information about Horizon Expert Documentation or McKesson solutions provided by VCS, please contact us at 610.444.1233 or vcs@getvitalized.com. Additional information about the services and solutions offered by VCS can be found at our website, www.getvitalized.com.