Supplemental digital content for Pronovost PJ, Armstrong M, Demski R, et al. Creating a high reliability health care system: improving performance on core processes of care at Johns Hopkins Medicine. Acad Med.

Supplemental Digital Table 1

Compliance on All Core Process of Care Measures Before (2011) and After (2012 and 2013) Implementation of the Johns Hopkins Health System Quality Improvement Initiative

	% of patients who received recommended process of care														
	Joh	ns Hopk	ins												
	Bayview Medical			Howard County			The Johns Hopkins			Sible	y Memo	orial			
_	Center			General Hospital			Hospital			Hospital			Suburban Hospital		
Targeted measures	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
AMI: Aspirin at arrival ^a	99	100	100	99	100	100	100	100	100	100	100	100	100	100	100
AMI: Aspirin prescribed at discharge ^{a,b}	100	100	100	99	100	98	100	100	99	100	100	100	100	100	100
AMI: ACEI/ARB for LVSD ^a	100	100	100	100	100	96	98	100	96	100	100	100	98	100	100
AMI: Beta blocker prescribed at discharge ^a	100	100	99	100	100	100	100	99	100	100	100	100	98	100	100
AMI: $PCI \le 90$ minutes ^{a,c,d}	97	100	92	93	87	89	93	95	75	_	_	_	93	82	95
AMI: Statin prescribed at discharge ^{a,b}	99	100	100	96	99	100	98	99	99	100	86 ^f	100	98	99	99
HF: Discharge instructions ^d	85	95	97	97	98	95	100	97	100	83	98	100	100	97	83
HF: ACEI/ARB for LVSD ^{a,b}	97	97	97	100	100	96	99	100	100	97	100	100	93	98	100
HF: LVEF assessment ^b	100	99	99	99	99	99	100	100	100	100	100	100	99	97	99
PN: Blood cultures within 24 hours of arrival ^a	94	95	95	100	100	100	100	100	100	100	100	100	97	100	100
PN: Blood cultures performed in ED before initial antibiotics received in hospital ^{a,b,d}	84	92	98	96	93	99	98	100	100	98	99	100	96	97	100
PN: Initial antibiotic selection for CAP in immunocompetent patient ^{a,b}	95	97	95	93	94	97	100	100	100	98	99	100	92	98	99

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SCIP: Prophylactic antibiotic received ≤ 1 hour before surgical incision ^{a,b}	98	98	98	97	98	99	98	98	98	95	97	97	97	98	99
SCIP: Prophylactic antibiotic selection ^{a,b}	99	100	99	98	97	99	98	98	99	98	99	99	98	99	99
SCIP: Prophylactic antibiotics discontinued ≤ 24 hours after surgery end time ^{a,b}	99	99	98	94	99	98	98	99	100	99	99	97	97	99	99
SCIP: Cardiac surgery glucose control ^{a,d,e}	N/A	N/A	N/A	N/A	N/A	N/A	97	96	98	N/A	N/A	N/A	90	93	96
SCIP: Appropriate hair removal ^a	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
SCIP: Surgery patients on beta blocker therapy before admission who received beta blocker during perioperative period ^{a,b,d}	98	97	97	94	95	99	95	99	99	94	98	96	94	100	98
SCIP: Surgery patients with recommended venous thromboembolism prophylaxis ordered ^{a,b}	99	99	N/A	97	97	N/A	100	100	N/A	100	99	N/A	98	100	N/A
SCIP: Surgery patients with recommended venous thromboembolism prophylaxis within 24 hours before surgery to 24 hours after surgery ^{a,b}	99	99	98	96	97	98	99	100	99	100	99	97	98	100	98
SCIP: Urinary catheter removed on postoperative day 1 or 2 ^{a,b,d}	100	99	98	86	96	97	93	97	99	98	99	98	99	100	99
SCIP: Surgical patients with perioperative temperature management ^b	100	100	100	100	100	100	99	99	100	98	99	100	100	100	100

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CAC: Reliever medications while hospitalized ^a	100	100	100	100	100	100	100	100	100	N/A	N/A	N/A	N/A	N/A	N/A
CAC: Systemic corticosteroid medications ^a	100	100	100	100	100	100	100	100	100	N/A	N/A	N/A	N/A	N/A	N/A
CAC: Home management plan ^{a,d}	90	94	91	79	100	97	78	98	98	N/A	N/A	N/A	N/A	N/A	N/A

Abbreviations: AMI, acute myocardial infarction; ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker; LVSD, left ventricular systolic dysfunction; PCI, percutaneous coronary intervention; HF, heart failure; LVEF, left ventricular ejection fraction; PN, pneumonia; ED, emergency department; CAP, community-acquired pneumonia; SCIP, Surgical Care Improvement Project; CAC, children's asthma care.

^a Accountability measure for The Joint Commission Top Performer on Key Quality Measures award.

^b Required measure for the Delmarva Foundation for Medical Care Excellence Award for Quality Improvement in Hospitals.

^c Sibley Hospital did not have enough cases to report the measure; the remaining hospitals had only a small number of cases.

^d Measures targeted for improvement in the core measure initiative at the Johns Hopkins Health System.

^e N/A indicates that the hospital does not provide this clinical service.

f Measure excluded from determination of the Delmarva Foundation Award because total cases per quarter were below the required ≥ 10 cases.