

Table s1. Hospitalist contract--management of inpatient admissions and observation/rapid in and out

Daily Hospital Rounds	Rounds on all patients at least daily, communicate with case manager on all patients
Medical Management	
1	Provide services in accordance with credentials granted by hospital medical staff
2	Personally arrange consultation and document attempts reaching to primary care physician (PCP)
3	Serve as “captain of the ship” & document communication with PCP within 24 hours after admission
4	Document communication with patient's existing specialists
5	Complete H&P within 24 hours of admission and prior to invasive procedure
6	Coordinate ancillary & post-discharge services
7	Ensure appropriate and timely utilization of hospital resources
8	Ensure appropriate utilization and oversight of consultants
9	Ensure patients meet admission criteria and level of care
10	Direct-admitted patients seen within 4 hours
11	All physician orders done electronically through hospital’s computerized physician order entry system (CPOE)
Hospital Discharge Management	
1	Actively participate in and approve pre-discharge planning
2	Ensure timely, medically appropriate discharge or transfer
3	Document communication with patient’s PCP if patient is at risk for readmission
4	Complete discharge summary the day of discharge
5	Sign initial Plan of Treatment Orders for home care services
6	Be available for follow-up issues identified by home care service until patient seen by PCP
Coordination with Hospital Administration	
1	Attend meetings, perform chart reviews as necessary
2	Participate in patient safety initiatives
Other Provisions	
1	Complete patient’s H&P prior to ordering specialist consultation
2	Utilize hospital’s admission order sets and power plans at least 90% of cases
3	Participate in Case Management Avoidable Delay Program
4	Utilize CPOE on medication orders
5	Collaborate with hospital residency programs
6	Cooperate with hospital to achieve readmission rate less than CMS top quartile performance
7	Cooperate with hospital to achieve mortality rate less than CMS top quartile performance
8	Meet hand washing and contact precautions protocol requirements
9	Document any condition present on admission within 24-48 hours of admission
10	Maintain same attending physician for average of 3 days during patient's stay
11	Implement effective handoff communication for transfer of care
12	Achieve power plans and power notes goals
13	Achieve glycemic management goals

Table s2. Hospitalist contract--performance metrics

Core Performance Metrics--Need to Achieve to Maintain Contracted Status	
Daily Hospital Rounds	Rounds on all patients at least daily, communicate with case manager on all patients
Daily Patient Load	Less than 18 billable patients per FTE hospitalist per calendar day
Billing Data Submission	Daily patient level billing data must be submitted at least weekly
In-house Coverage	Restricted ^a in-house coverage ≥ 10 hours per day
Daily Rounding	Patient perception of daily nurse-physician rounding from HCAHPS $\geq 80\%$
Response to CDI queries	Response to CDI queries within 24 hours $\geq 90\%$
PowerPlan Usage	Compliance with established order sets and pathways (PowerPlans)
Sepsis Bundle Usage	Compliance with all four elements [†] of the 3-hour sepsis bundle
Comply with Hypoglycemic Rate	Percent of patient days less than 40mg/dL $\leq 0.06\%$
Bonus Performance Metrics	
HCAHPS Doctor Communication Domain	3/32 of bonus ≥ 33 rd percentile in % top box OR 1/8 of bonus ≥ 50 th percentile in % top box
Discharge Summary	Completion of discharge summary on same calendar day as discharge or discharge day minus one $\geq 90\%$
CPOE Discharge Order	CPOE discharge orders completed by noon on day of discharge $\geq 50\%$
ED Call Response Time	Time elapsed between ED call/page and admit to venue orders placed in 30-min $\geq 75\%$ of the time

Note. ^a Restricted Coverage is defined as the requirement of Group Physician to be physically present, onsite, and solely dedicated to providing Services

[†] 1. Measure lactate level; 2. Obtain blood culture prior to administration of antibiotics; 3. Administer broad spectrum antibiotics; 4. Administer 30 mL/kg crystalloid for hypotension or lactate ≥ 4 mmol/L Source:

<http://www.survivingsepsis.org/SiteCollectionDocuments/Bundle-Three-Hour-SSC.pdf>

Table s3. Summary of adjusted discharge campus clustering model parameter estimate results with 95% CI

Outcome Measures	Contracted vs. Non-Contracted	<i>p</i>-value
	Mean Estimate	
Total Cost, \$ (95% CI)	-437 (-702 to -172)	.007
Variable Cost, \$ (95% CI)	-123 (-271 to 25)	.088
Contribution Margin, \$ (95% CI)	361 (164 to 558)	.004
LOS, day (95% CI)	-0.37 (-0.59 to -0.16)	.005
In-Hospital Mortality, odds ratio (95% CI)	1.02 (0.93 to 1.12)	.676
30-day Readmission, odds ratio (95% CI)	0.82 (0.78 to 0.87)	< .001

Table s4. Propensity-score matching parameter estimate result with 95% CI comparing contracted and non-contracted hospitalists *

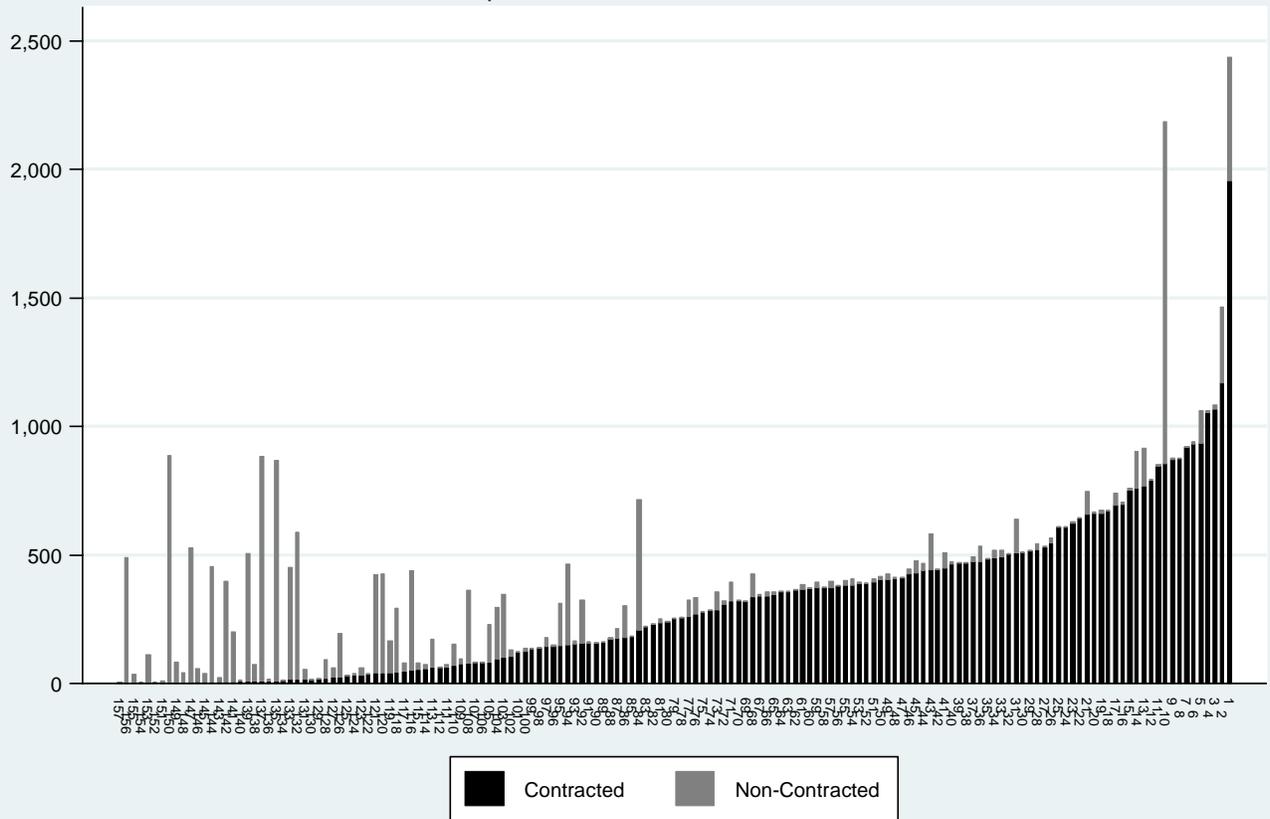
Outcome Measures	Contracted vs. Non-Contracted	p-value
	Mean Estimate	
Total Cost, \$ (95% CI)	-552 (-758 to -345)	< .001
Variable Cost, \$ (95% CI)	-201 (-295 to -107)	< .001
Contribution Margin, \$ (95% CI)	255 (-0.18 to 510)	.05
LOS, day (95% CI)	-0.26 (-0.34 to -0.18)	< .001
In-Hospital Mortality, Absolute Difference, (95% CI)	0.0007 (-0.0008 to 0.002)	.341
30-day Readmission, Absolute Difference, (95% CI)	-0.014 (-0.022 to -0.006)	< .001

Note. * Showing probit function coefficients with average treatment effect on the treated be estimated

Table s5. Top 20 High Volume DRGs

Demographic and characteristics	Attending Hospitalist	
	Contracted (n = 54,265)	Non-Contracted (n = 38,772)
Top 20 High Volume MS-DRGs, n (%)		
872 Septicemia W/O Mv 96+ Hours W/O MCC	1,539 (2.84)	890 (2.30)
871 Septicemia W/O Mv 96+ Hours W MCC	2,706 (4.99)	1,837 (4.74)
853 Infectious & Parasitic Diseases W O.	602 (1.11)	453 (1.17)
812 Red Blood Cell Disorders W/O MCC	679 (1.25)	505 (1.30)
690 Kidney & Urinary Tract Infections W/	697 (1.28)	551 (1.42)
683 Renal Failure W CC	614 (1.13)	488 (1.26)
682 Renal Failure W MCC	446 (0.82)	365 (0.94)
65 Intracranial Hemorrhage Or Cerebral I	484 (0.89)	230 (0.59)
638 Diabetes W CC	667 (1.23)	410 (1.06)
603 Cellulitis W/O MCC	1,051 (1.94)	599 (1.54)
470 Major Joint Replacement Or Reattachm	587 (1.08)	119 (0.31)
460 Spinal Fusion Except Cervical W/O MC	466 (0.86)	13 (0.03)
392 Esophagitis, Gastroent & Misc Digest	1,862 (3.43)	1,272 (3.28)
378 G.I. Hemorrhage W CC	643 (1.18)	448 (1.16)
313 Chest Pain	595 (1.10)	424 (1.09)
291 Heart Failure & Shock W MCC	1,513 (2.79)	1,296 (3.34)
287 Circulatory Disorders Except Ami, W	461 (0.85)	335 (0.86)
194 Simple Pneumonia & Pleurisy W Cc	559 (1.03)	431 (1.11)
193 Simple Pneumonia & Pleurisy W MCC	498 (0.92)	374 (0.96)
101 Seizures W/O MCC	723 (1.33)	228 (0.59)
Top 20 High Volume MS-DRG Total Percentage	32.05	29.06

Appendix Figure 1. Patient Volume by Aliased Hospitalists
Hospitalists with Both Contractual Status



Appendix Figure 2. Flow Diagram for Study Population Selection

