



# **2016 Hospital Quality Institute Conference**

November 3, 2016

Concurrent Session: Reliable Design of  
Infection Prevention Programs

# ROI IP Program - Pay for Performance

(Arrows indicate IP Program impact)

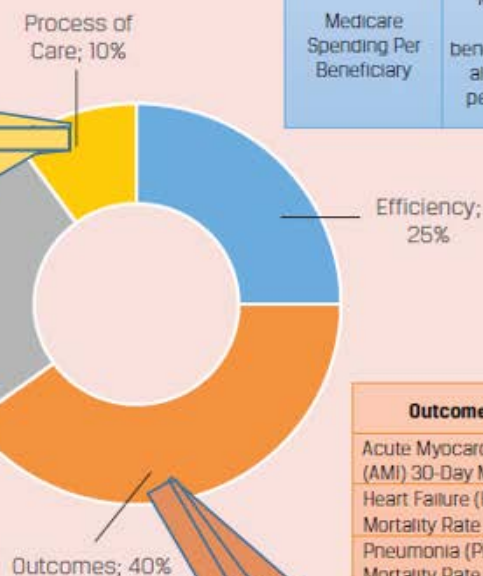
GRAPH 1

## VBP Domains and Weights, FY 2016

Process of Care Measure	2016 Threshold	2016 Benchmark
Fibrinolytic Therapy Received Within 30 minutes of Hospital Arrival	91.15%	100%
Initial Antibiotic Selection for CAP in Immunocompetent Patient	96.55%	100%
Prophylactic Antibiotic Selection for Surgical Patients	98.88%	100%
Prophylactic Antibiotics Discontinued Within 24 hours after Surgery End Time	98.88%	100%
Postoperative Urinary Catheter Removal on Post-Operative Day 1 or 2	98.88%	100%
Surgery Patients on a Beta Blocker Prior to Arrival that Received a Beta Blocker During the Perioperative Period	97.73%	100%
Surgery Patients who Received an Appropriate Venous Thromboembolism Prophylaxis Within 24 hours Prior to Surgery to 24 hours After Surgery	98.28%	100%
Influenza Immunization	90.61%	98.88%

Efficiency Measure	2015 National Threshold	2015 National Benchmark
Medicare Spending Per Beneficiary	Median Medicare spending per beneficiary ratio across all hospitals during performance period	Mean of lowest decile of Medicare spending per beneficiary ratios across all hospitals during performance period

Patient Experience (HCAHPS Survey) Measure	2016 Floor	2016 Threshold	2016 Benchmark
Communication with Nurses	53.99%	77.8%	86.07%
Communication with Doctors	57.01%	80%	88.56%
Responsiveness of Hospital Staff	38.2%	64.71%	79.76%
Pain Management	36%	70.18%	78.16%
Communication about Medication	34.61%	62.33%	72.77%
Hospital Cleanliness and Quietness	43.08%	64.95%	79.10%
Discharge Information	61.36%	84.70%	90.36%
Overall Rating of Hospital	34.95%	69.32%	83.97%



Outcomes Measure	Domain	2016 Threshold	2016 Benchmark
Acute Myocardial Infarction (AMI) 30-Day Mortality Rate	Mortality	84.75%	86.24%
Heart Failure (HF) 30-Day Mortality Rate	Mortality	88.15%	90.03%
Pneumonia (PN) 30-Day Mortality Rate	Mortality	88.27%	90.42%
Patient Safety Indicator Composite	Patient Safety	0.623%	0.452%
Central Line Associated Bloodstream Infections (CLABSI)	Infections	0.465%	0.000%
Catheter Associated Urinary Tract Infections (CAUTI)	Infections	80.10%	0.000%
Surgical Site Infections (SSI): Colon	Infections	66.80%	0.000%
SSI: Abdominal Hysterectomy	Infections	75.20%	0.000%

# ROI IP Programs – Cost Avoided/Prevented HAI

Mock data to show an example of simple ROI formula

	Number infections previous 12 months	Number infections current 12 months	Infections Prevented or Increased	Cost/infection *	Cost avoided or incurred
Urinary Tract Infections	400	300	100	\$896	\$89,600
Surgical Wound Infections Total Hip	60	50	10	\$20,785	\$207,850
CRBSI - non ICU	100	90	10	\$45,814	\$458,140
CDIFF	800	900	-100	\$11,285	(\$1,128,500)
* Costs from Zimlichman E et al. "Healthcare associated infections a meta analysis of costs and financial impact on the US healthcare system". JAMA Intern Med Published online Sept 2, 2013.					

**Note:** HAI cost = \$27 Million/year average hospital

Marchetti A, Rossiter R. Economic burden of healthcare-associated infection in US acute care hospitals: societal perspective. J Med Econ. 2013 Dec;16(12):1399-404.

# ROI IP Programs – Additional Benefits

- Patient safety
- Patient satisfaction (and improved scores) hand hygiene, clean environment, no suffering from infections
- Survey preparation - TJC and CMS Infection Prevention and Control standards
  - ✓ CMS: Condition of Participation for Infection Control
    - CFR 482.42 (a)(1), (b)(1), etc.
    - Medicare standards – TAG A-0747 - 0756
  - ✓ Joint Commission Standards
  - ✓ National Patient Safety Goals
  - ✓ APIC, FDA, EPA, OSHA, AORN, CDC, AIA, AAMI, etc.
- Organizational reputation and growth