## HAC and HAI Displays for Hospital Compare

Draft

David Miranda 1/27/2011

Draft mockups and narrative for consumer testing of HAC and HAI measures

Data available

General Information			Quality of Care			
HOSPITAL NAME, ADDRESS	Safety Measures	Effectiveness Measures	Patient-Centered Measures	Timeliness Measures	Measures of Resource Use	
<b>EDGEFIELD HOSPITAL</b> 41 HIGHLAND AVE WINCHESTER, MA 01890 (781) 555-9000			0			
RIVER VIEW HOSPITAL 150 S. HUNTINGTON AVE JAMAICA PLAIN , MA 02130 (617) 555-9500						
MITCHELL HOSPITAL 800 WASHINGTON ST BOSTON, MA 02111 (617) 555-5000						

	Safety Measures	Effectiveness Measures	Patient-Centered Measures	Timeliness Measures	Measures of Resource Use		
Serious Complications	Hospital-Acquired Conditions (HACs)						
Deaths from Selected Medical Conditions	Patients who enter the hospital for treatment of one medical problem sometimes leave with additional injuries, infections, or other serious conditions that occur during their hospital stay.						
Hospital-Acquired Conditions	Although some of these complications may not be avoidable, some could have been prevented if the hospital had taken proper precautions. Hospitals are required to report how often patients get any one of ten potentially avoidable conditions while being treated in the hospital.						
Healthcare- Associated Infections	The information below shows the number of cases reported by the hospitals you selected for each hospital-acquired condition (HAC). Since these kinds of events are usually very rare, the numbers shown are very small. This information can help you determine how well hospitals are preventing or avoiding HACs and questions you may want to ask.						
	<u>Read more in</u> <u>Acquired Condit</u>	formation about ions are Important	Hospital-Acquired (	Conditions. Learr	<u>why Hospital-</u>		

Medicare.gov>Hospital Compare Home>Hospital Results>Hospital Compare

#### Information about Hospital-Acquired Conditions (HACs)

Patients who enter the hospital for treatment of one medical problem sometimes get other serious injuries or conditions during the course of their hospital stay. The Deficit Reduction Act (DRA) of 2005 requires the Secretary of Health and Human Services to identify common, serious, high-cost conditions that could reasonably have been prevented if proper procedures had been followed. Medicare will only pay hospitals for the treatment of these conditions if patients already had the condition when they were admitted to the hospital. These payment policies are designed to encourage hospitals to examine patients thoroughly when they are admitted to the hospital to identify potential problems, take steps to reduce patients' risk of acquiring serious conditions while they are in the hospital, and avoid preventable medical errors.

Currently, Medicare will not pay for the ten types of avoidable hospital-acquired conditions (HACs) listed below. People with Medicare are also not responsible for these costs.

- 1. Foreign Object Retained After Surgery
- 2. Air Embolism (air bubble in the bloodstream)
- 3. Blood Incompatibility (mismatched blood types)
- 4. State III and IV Pressure Ulcers (serious pressure sores or bedsores)
- 5. Falls and Trauma (falls and injuries), including
  - o Fractures
    - o Dislocations
    - o Intracranial Injuries (head injuries)
    - o Crushing Injuries
    - o Burns
    - o Electric Shock
- 6. Manifestations of Poor Glycemic Control (signs of uncontrolled blood sugar), including
  - o Diabetic Ketoacidosis (buildup of ketones in the body)
  - Nonketotic Hyperosmolar Coma (loss of consciousness due to extremely high blood sugar and dehydration)
  - o Hypoglycemic Coma (loss of consciousness due to very low blood sugar)
  - Secondary Diabetes (diabetes that develops due to another illness) with Ketoacidosis
  - Secondary Diabetes with Hyperosmolarity (concentration of salt, sugar, and other substances in the bloodstream)
- 7. Catheter-Associated Urinary Tract Infection (UTI)
- 8. Vascular Catheter-Associated Infection
- 9. Surgical Site Infection following:
  - o Coronary Artery Bypass Graft (CABG) Mediastinitis
  - o Bariatric Surgery
  - o Orthopedic Procedures
- 10. Blood Clots in a Large Vein (Deep Vein Thrombosis) or the Lung (Pulmonary Embolism) following
  - o Total Knee Replacement
  - o Hip Replacement

#### What HACs Are and Why They Are Important

Name	Description
Foreign object retained after surgery (Objects accidentally left in the body after surgery)	This measure refers to objects, such as surgical instruments, sponges, or other foreign objects, accidentally left inside a patient after a surgical procedure. Although these kinds of occurrences are rare, they present considerable risk to patients and may require additional surgery to remove the object.
	The risk of having foreign objects left in the body in after surgery is higher during emergencies. The risk is also higher when surgical patients are very heavy.
	Hospitals can prevent this error by making sure members of the surgical team communicate with each other and by counting sponges and other surgical instruments throughout the surgical procedure.
Air embolism (Air bubble in the bloodstream)	This measure refers to air embolisms, which are blockages in the bloodstream caused by an air or gas bubble. The symptoms of an air embolism can be similar to the symptoms of a stroke or heart attack.
	Air bubbles can get into the bloodstream during surgery or other medical procedures. They often occur when tubes (central venous catheters) are inserted into or removed from large veins.
	Hospitals can prevent this serious complication by making sure that staff are trained in proper procedures for inserting and removing central venous catheters and other tubes, for removing air from syringes before giving injections, and for closely monitoring patients during surgery.

Blood Incompatibility (Mismatched blood types)	This measure refers to the reaction that can occur when patients are given the wrong type of blood. If a patient receives blood that is not compatible with their own blood type, they can suffer a serious reaction. Symptoms may include back pain, blood in the urine, fever, and yellowing of the skin. Hospitals can avoid giving patients the wrong blood type by following guidelines to make sure blood is properly typed and cross-matched, labeled correctly, and given to the correct patient.
Pressure ulcers, Stages III and IV (Severe pressure sores)	This measure refers to serious pressure sores (also known as bedsores) that develop while a patient is in the hospital. Stage III and IV pressure sores are very deep, serious sores that may even reach muscle or bone. They cause pain and serious infections, and may lead to long hospital stays and even amputation. Pressure sores are caused by staying in one position for a long period of time. Hospitals can prevent them (or keep them from getting worse) by turning or moving bedridden patients often and by regularly checking and caring for the patient's skin.
Falls and Trauma (Falls and injuries)	This measure refers to falls and injuries that occur while a patient is in the hospital, including broken or dislocated bones, crushing injuries, burns, or shocks. Although some falls and injuries may occur even when hospitals provide good care, many falls in hospitals can be avoided. Hospital staff should determine if patients are at risk for falls by checking patients' balance and coordination, or reviewing the patient's medications. Hospital staff should also assist patients who are unable to move around safely on their own. Hospitals can also reduce the likelihood of falls by removing clutter from floor, removing improperly fitting clothing, keeping bed rails up when patients are sleeping, providing enough staff and equipment when transferring a patient into and out of bed, and installing handrails in areas where patients need stability.

Vascular catheter- associated infections	This measure refers to infections caused by a vascular catheter, which is a thin flexible plastic tube inserted into a patient's vein. Vascular catheters make drawing blood or giving medications easy. Patients who need vascular catheters for a long period of time may need to have them put in during surgery.
	Vascular catheters can put patients at risk for infections and serious complications, especially if they are kept in for long periods of time. These might include skin infections at the site where the catheter was inserted and bloodstream infections.
	Hospitals can prevent vascular catheter-associated infections by choosing the best sites for inserting the catheter, using the right catheter material, keeping the site clean, and removing the catheter when it is no longer needed.
Catheter-associated urinary tract infection	This measure refers to urinary tract infections caused by a urinary catheter, which is a flexible tube inserted into the bladder to collect urine. Patients who don't have bladder control may have urinary catheters left in place for long periods of time. As a result, urinary tract infections are the most common kind of infection that hospital patients get. Elderly patients or patients who have been very sick for a long time are at high risk for these infections.
	Hospital staff can help prevent urinary tract infections by keeping patients clean, emptying drainage bags regularly, making sure patients get enough fluids, giving antibiotics to patients who need catheters for long periods of time, and by removing urinary catheters when they are not needed.
Manifestations of poor glycemic control (Signs of uncontrolled blood sugar)	This measure refers to signs of poor blood sugar control in patients with diabetes, which can lead to serious complications, coma, and even death. Although high blood sugar (hyperglycemia) and low blood sugar (hypoglycemia) are common in hospitalized patients with diabetes, extreme signs of poor blood sugar control are rare, and are reasonably preventable if patients are monitored regularly.

-			
-	OP		
		iuus -	
_	_		
_			

#### Hospital-Acquired Conditions (HACs)

Complications	Lower Rates Are Better				
Deaths from Selected Medical Conditions					
Hospital-Acquired Conditions					
Healthcare- Associated Infections		AVERAGE FOR ALL REPORTING HOSPITALS IN THE U.S.	EDGEFIELD HOSPITAL	RIVER VIEW HOSPITAL	MITCHELL HOSPITAL
	Foreign object retained after surgery	0.084 per 1,000 surgical discharges	<b>0</b> per 1,000 surgical discharges	<b>0</b> per 1,000 surgical discharges	<b>0</b> per 1,000 surgical discharges
	Air embolism	0.003 per 1,000 total discharges	<b>0.100</b> per 1,000 total discharges	<b>0.100</b> per 1,000 total discharges	<b>0</b> per 1,000 total discharges
	Blood incompatibility	<b>0.001</b> per 1,000 total discharges	<b>0</b> per 1,000 total discharges	<b>0.01</b> per 1,000 total discharges	<b>0</b> per 1,000 total discharges
	Pressure ulcers, stages III and IV	<b>0.166</b> per 1,000 total discharges	<b>0.300</b> per 1,000 total discharges	<b>0.100</b> per 1,000 total discharges	<b>0</b> per 1,000 total discharges
	Falls and trauma	<b>0.759</b> per 1,000 total discharges	<b>0.500</b> per 1,000 total discharges	<b>0.400</b> per 1,000 total discharges	<b>0.200</b> per 1,000 total discharges
	Vascular catheter- associated infection	0.290 per 1,000 total discharges	<b>0.200</b> per 1,000 total discharges	<b>0.200</b> per 1,000 total discharges	<b>0</b> per 1,000 total discharges
	Catheter-associated urinary tract infection	0.260 per 1,000 total discharges	<b>0.200</b> per 1,000 total discharges	<b>0</b> per 1,000 total discharges	<b>0.300</b> per 1,000 total discharges
	Manifestations of poor glycemic control	0.051 per 1,000 total discharges	<b>0</b> per 1,000 total discharges	<b>0.200</b> per 1,000 total discharges	<b>0.050</b> per 1,000 total discharges

	Safety Measures	Effectiveness Measures	Patient-Centered Measures	Timeliness Measures	Measures of Resource Use			
Serious Complications	Healthcare-As	Healthcare-Associated Infections (HAIs)						
Deaths from Selected Medical Conditions	Healthcare-Asso care. These ma nursing homes,	Healthcare-Associated Infections (HAIs) are infections that patients get as a result of medical care. These may occur in any healthcare setting, including hospitals, surgical centers, clinics, nursing homes, or rehabilitation facilities. Infections can result from many different kinds of						
Hospital- Acquired Conditions	medical care, including medical devices (such as catheters and ventilators), surgical procedures, or the prolonged use of antibiotics. These infections are also easily passed from one person to another when healthcare workers do not wash their hands properly.							
Healthcare- Associated Infections	Healthcare-associated infections are the most common complication of hospital care and one of the top 10 causes of death in the U.S. Many of these infections can be avoided if proper guidelines are followed.							
	Read more info Associated Infe	rmation about Hea ctions are Importa	althcare-Associated nt.	Infections. Learn	why Healthcare-			

Medicare.gov>Hospital Compare Home>Hospital Results>Hospital Compare

#### Information about Healthcare-Associated Infections (HAIs)

Modern healthcare uses many types of devices and procedures to treat patients and to help them recover. Infections can be associated with the devices used in medical procedures, such as catheters or ventilators. These healthcare-associated infections (HAIs) include central line-associated bloodstream infections, catheter-associated urinary tract infections, and ventilator-associated pneumonia, which account for roughly two-thirds of all HAIs. Infections may also occur at parts of the body where surgery was performed (known as surgical site infections). Additionally, *clostridium difficile*, a bacterial infection of the gastrointestinal tract that may develop because of prolonged use of antibiotics during treatment, can cause diarrhea and more serious intestinal conditions such as colitis.

HAIs occur in all settings of care, including hospitals, surgical centers, healthcare clinics, and in long-term care facilities, such as nursing homes and rehabilitation facilities. They are one of the top 10 causes of death in the U.S. and the most common complication of hospital care. Many of these infections can be prevented through the use of proper procedures and precautions.

#### What HAIs Are and Why They Are Important

Name	Description
Central line- associated bloodstream infection (CLABSI)	A central line-associated bloodstream infection is a serious infection that occurs when germs enter the bloodstream through a central line. A central line is a tube that's placed in a large vein in the neck, chest, or arm to give fluids, blood, or medications, or to do certain medical tests quickly. It may be left in place for several weeks. Patients who develop a catheter-associated bloodstream infection may become ill with fevers
(Bloodstream infections caused by a	and chills, or the skin around the catheter may become sore and red.
central catheter)	Hospital staff can prevent catheter-associated bloodstream infections by:
	<ul> <li>Choosing a vein where the catheter can be safely inserted and where the risk for infection is small</li> </ul>
	<ul> <li>Keeping the catheter sterile when putting it in place by cleaning their hands beforehand; wearing a mask, cap, sterile gown, and sterile gloves; covering the patient with a sterile sheet; and cleaning the patient's skin</li> </ul>
	<ul> <li>Keeping the opening clean, washing their hands, and using sterile gloves when using the catheter to draw blood or give medications or when changing the bandage</li> </ul>
	<ul> <li>Removing the catheter as soon as it's no longer needed</li> </ul>

#### Hospital Safety Measures Tables

#### Healthcare-Associated Infection Measures

Serious Complications	Healthcare-Associated Infections Lower Rates Are Better				
Deaths from Selected Medical Conditions					
Hospital-Acquired Conditions					
Healthcare- Associated Infections		AVERAGE FOR ALL REPORTING HOSPITALS IN THE U.S.	EDGEFIELD HOSPITAL	RIVER VIEW HOSPITAL	MITCHELL HOSPITAL
	Central Line- Associated Bloodstream Infection	0.70 infections for every 1,000 days central line catheter in place	<b>0.70</b> infections for every 1,000 days central line catheter in place	<b>1.59</b> infections for every 1,000 days central line catheter in place	<b>0.45</b> infections for every 1,000 days central line catheter in place

Lower Rates Are Better

#### Hospital Safety Measures Graphs

Healthcare-Associated Infection Measures

# Central line-associated blc (Bloodstream infections cause (lower numbers)

#### Why is this Important?

Hospitals can prevent catheter-associated bloodstream infections by choosing a vein where the catheter can be safely inserted and where the risk for infection is small. Hospitals can also ensure that hospital staff follow appropriate hand washing and other infection control practices to reduce the risk of infection for patients.