
HOSPITAL-ACQUIRED CONDITIONS AT STANFORD HOSPITAL

Stanford Hospital is a 474 bed, general acute care hospital located in Palo Alto, California. Stanford is a teaching hospital, associated with the Stanford School of Medicine. While it holds a reputation as one of the most prestigious academic hospitals in the country, high rates of Hospital Acquired Conditions (HACs) have become an issue at Stanford.ⁱ Cases of patients contracting some medical conditions while staying at Stanford have risen in recent years, and these high rates of HACs have led the Centers for Medicare and Medicaid Services (CMS) to reduce Medicare payments to the hospital for two years in a row, placing the world-class institution in the bottom-performing 25% of hospitals—nationwide—for HACs.^{ii,iii} It is imperative that hospital administration seek to remedy these issues by improving patient and worker education around proper infection control practices in order to better ensure the health, safety, and well-being of Stanford patients and workers alike.

BACKGROUND

HOSPITAL-ACQUIRED CONDITION REDUCTION PROGRAM

Hospital-Acquired Conditions (HACs) are often avoidable medical conditions contracted during a hospital stay, and are not present on admission to the hospital. As part of the Patient Protection and Affordable Care Act (ACA), the CMS established the Hospital-Acquired Condition Reduction Program (HACRP) in 2014 to incentivize hospitals to reduce rates of HACs through a payment reduction mechanism that can result in reduced Medicare payments for hospitals performing poorly on a number of HAC measures.^{iv}

The CMS uses a combined HAC measure called the “Total HAC Score” to rank hospitals according to their HAC performance. The Total HAC Score consists of six separate measures: the AHRQ PSI 90 Composite score and five CDC NHSN measures, including Central Line-Associated Blood Stream Infections (CLABSI), Catheter-Associated Urinary Tract Infections (CAUTI), Surgical Site Infection (SSI), Methicillin-resistant Staphylococcus aureus (MRSA), and Clostridium Difficile (CDI).^v Hospitals are given a score from one to ten—one being the best-performing decile and ten the worst—for the six individual measures, indicating their decile ranking amongst all applicable hospitals,¹ nationwide, which are then combined to calculate a hospital’s Total HAC Score. Hospitals that rank in the bottom-performing quartile of Total HAC Scores for a given reporting period will have their Medicare reimbursement rates reduced to 99 percent—or reduced by 1 percent—of what Medicare would normally pay for such discharges.^{vi}

POOR HAC PERFORMANCE RESULTS IN CONSECUTIVE

MEDICARE PAYMENT REDUCTIONS

For two years in a row now, Stanford has had its Medicare payments reduced by the CMS for consistently poor performance on HAC measures at its main Palo Alto facility. For the most recent reporting period, affecting fiscal year 2017, Stanford scored in the worst-performing quartile of applicable hospitals, nationwide, for HAC performance, with a Total HAC Score of 7.85.^{vii} Compared with other Bay Area academic hospitals, only two others received reduction in payments from Medicare for FY 2017—UC Davis and California Pacific Medical Center. The hospital’s two worst performing measures were CDI and SSI, with individual scores of 9 and 10 respectively—the two worst performing deciles. The CMS also rated Stanford as

HAC Measure Scores – Stanford	
AHRQ PSI 90	7
CLABSI	7
CAUTI	8
SSI	10
MRSA	6
CDI	9
Total HAC Score	7.85

¹ Children’s hospitals, VA hospitals, and Critical Access hospitals, among others, are exempt from the HACRP. For a complete list of exempt hospitals visit: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/AffectedHospitals.html>

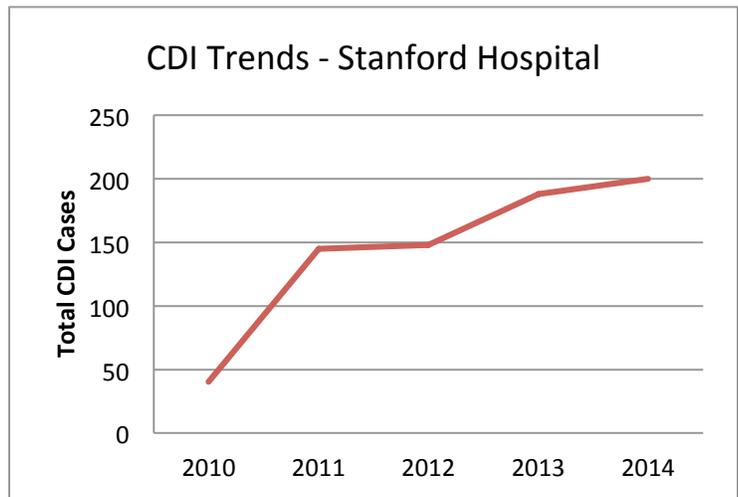
performing “Worse than the National Benchmark” for both CDI and CAUTI measures under the Healthcare-Associated Infections section of its Hospital Compare website for the most recent reporting period.^{viii}

A deep dive into statewide hospital and CDC data, discussed in depth below, reveals some troubling trends around CDI and SSI rates at Stanford. Data shows a substantial increase in the number of CDI cases and deaths of CDI patients, as well as a substantially high rate of CDI when compared with other Bay Area teaching hospitals. Data also shows a reoccurring history of high rates of SSI’s in women who have had an abdominal hysterectomy at the hospital. These high rates of infections—particularly of contagious infections such as CDI—are of concern for patients and workers of this once lauded academic hospital.

RISING CDI RATES FAR EXCEED RATES AT NEIGHBORING ACADEMIC HOSPITALS

CDI has been a problem at Stanford for years. This bacterium, acquired through contact of infected fecal matter with an uninfected person’s mucus membrane, can cause mild to severe symptoms, including: watery diarrhea 3-15 times a day, severe abdominal pain, blood or pus in the stool, kidney failure, and even death, among others.^{ix,x}

An analysis of the most recently available state-wide discharge data from California’s Office of Statewide Health Planning and Development (OSHPD) shows a consistent and substantial increase in the number of CDI cases at Stanford in recent years, reaching 200 cases in 2014.^{xi} The data also shows a three-fold increase in deaths of patients that contracted CDI while staying at the hospital, jumping from 12 in 2011 to 26 in 2014.^{xii} The table to the right shows the number of CDI cases and the number of deaths of CDI patients, by year, at Stanford.



When news of the institution’s first brush with Medicare payment reductions hit in 2015, Stanford asserted that patients at major teaching hospitals were more medically complex and had different needs than patients at non-teaching hospitals—a possible basis for explanation as to why the hospital’s HAC performance was so poor.^{xiii} However, analysis of OSHPD data reveals that, when compared with other teaching hospitals in Northern California’s San Francisco Bay Area, Stanford’s CDI rates were the highest of any of the seven Bay Area teaching hospitals.² In fact, in 2013 and 2014, Stanford’s CDI rates were so high that they nearly doubled those of UCSF Medical Center—the teaching hospital with the second highest rate of CDI for those years.^{xiv} As seen in the table below, since 2011, these rates have been significantly higher at Stanford than at any other Bay Area teaching hospital.^{xv}

CDI Cases Per 1000 Patient Days							
Year	Stanford	UCSF	UC Davis	CPMC	SF General	SCVMC	St. Mary’s
2014	1.38	0.74	0.46	0.43	0.33	0.29	0.55
2013	1.34	0.66	0.35	0.30	0.20	0.11	0.57
2012	1.05	0.75	0.53	0.38	0.31	0.18	0.53
2011	1.05	0.74	0.52	0.59	0.58	0.30	0.57

² The metric used for comparing CDI rates across Bay Area teaching hospitals was CDI count per one thousand patient days. Teaching hospitals analyzed include: Stanford Hospital, UCSF Medical Center, UC Davis Medical Center, California Pacific Medical Center, San Francisco General Hospital, Santa Clara Valley Medical Center, and St. Mary’s Medical Center.

2010	0.30	0.71	0.51	0.36	0.34	0.35	0.49
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SURGICAL SITE INFECTIONS RISE IN RECENT YEARS

A look at data from the CDC’s National Health Safety Network shows a rise in the number of hysterectomy SSIs at the hospital in recent years. Using this data, the CMS rated Stanford as performing “Worse than the National Benchmark” on SSI: Abdominal Hysterectomy—an HAI measure that contributes to a hospital’s SSI score for the CMS’s HAC Reduction Program—in 2014 and 2015, indicating that SSI rates for hysterectomies at the hospital were substantially higher than expected; the hospital also received the same score in 2012 and parts of 2011.^{xvi} In its most recent ratings release, the CMS rated Stanford as “No Worse than the National Benchmark” for SSI: Abdominal Hysterectomy.^{xvii} However, this measure rating period spans July 1, 2015, through June 30, 2016, as opposed to a standard calendar year rating, and could possibly reflect simply a temporary improvement in the measure for the first half of 2016. This measure, along with others, should be closely watched in the coming months as Stanford’s progress on addressing and improving rates of infectious diseases at its hospital is tracked.

INSUFFICIENT TRAININGS, POOR COMMUNICATION, UNDERSTAFFING LEAVES STAFF UNPREPARED

Discussions with several workers reveal a concerning situation at the hospital around two issues of high importance when dealing with infection control—education and communication. Workers report an overall lack of training and education around infectious diseases, leaving them unable to properly deal with the threat that these diseases pose. Workers also report a problematic communication structure that often results in lapses in infection control protocols that are otherwise preventable.

Training and education

Most concerns around infection control training and education come from housekeeping staff at the hospital. Some workers report having never received training on CDI and other infectious diseases, while others are concerned that what little training is provided is inadequate and infrequent.

The hospital’s main system of employee education is called Health Stream—and online portal that takes staff members through a series of readings, then gives quizzes over the reading material to test workers’ knowledge of various healthcare topics, including infection control. However, some workers report that this system does not include any hands on training such as demonstrations on how to properly don personal protective equipment (PPE), or how to properly clean isolation rooms. Workers also report that managers often help workers through health systems quizzes in order to bring employees under compliance. These practices not only fail to ensure that employees are properly equipped with the tools they need to defend patients from the threats that highly contagious diseases pose.

Communication

Another common concern expressed by workers at the hospital is that there are constant lapses in communication between different levels of hospital staff, leading to situations where frontline caregivers and other hospital staff are regularly out of the loop when it comes to a patient’s isolation status. Most often, this problem is manifested as improper signage outside an isolation patient’s room. This frequently leads to instances where a worker enters an isolation patient’s room without proper PPE, then goes to other areas of the hospital. These occurrences increase both the risk of spreading an infectious disease—such as CDI—throughout the hospital, as well as unnecessarily exposing staff to these infections. One Stanford phlebotomist described a recent event where a patient was tuberculosis (TB) positive, but there was a communication lapse between physicians, nursing staff and phlebotomists about whether or not the patient was TB positive. As a result, multiple employees were unnecessarily exposed to the infection.

Understaffing

Many housekeeping staff members have expressed concern over staffing levels in their department. These concerns center on staff's inability to consistently follow proper cleaning procedures for patient rooms. Housekeeping staff attempts to adhere to a seven-step cleaning protocol that, when correctly used, can greatly reduce the risk of infectious diseases being spread throughout the hospital. However, many staff members feel they are unable to adhere to proper cleaning procedures due to constant rushing of managerial staff. One hospital employee of nearly 40-years observed that, "Housekeeping is not given enough time to clean patient rooms, especially isolation rooms. They are constantly being pushed to clean more quickly, which often forces them to cut corners and miss vital cleaning steps. This puts patients at greater risk for spreading and contracting contagious diseases." The employee went on to explain other issues that housekeepers face, including managerial staff marking rooms as "cleaned" before they are actually finished. This pushes housekeeping staff to cut corners and more quickly clean rooms, increasing the risk of infections being spread.

LOW PRIORITIZATION OF PATIENT CARE PUTS PATIENTS AT RISK

Consecutively low HAC scores reflect a recurring lack of prioritization of patient care by hospital administration staff. HACs are often preventable when proper infection control and/or safety procedures are used, and when employees, patients, and visitors receive robust education on these procedures. It is apparent that Stanford's current process of educating on and enforcing these procedures is in desperate need of an overhaul in order to better ensure that patients' health and safety are protected, as much as possible, from the threat of HACs. A revamping of this process should include: a stronger partnership between hospital administration and frontline caregivers, including the creation of a committee or task force with a focus on improving infection control practices and communication amongst hospital staff; more frequent and more robust training for hospital staff on recommended infection control practices. Administration should also review hospital staffing levels, particularly for environmental service and direct-patient-care staff, as they are the first line of defense against HACs, and cannot adequately adhere to recommended cleaning procedures when understaffed. Until then, we can expect to continue seeing abnormally high rates of CDI and other HACs amongst Stanford's inpatient population.

ⁱ <http://www.stanforddaily.com/2016/02/17/stanford-health-care-faces-criticisms-for-poor-patient-care-measures/>

ⁱⁱ <http://www.npr.org/sections/health-shots/2015/12/10/459243853/medicare-penalizes-758-hospitals-for-safety-incidents>

ⁱⁱⁱ <http://www.healthcarefinancenews.com/news/list-769-hospitals-fined-medical-errors-infections-cms>

^{iv} <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html>

^v <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html>

^{vi} <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html>

^{vii} <https://www.medicare.gov/hospitalcompare/HAC-reduction-program.html>

^{viii}

<https://www.medicare.gov/hospitalcompare/details.html?msrCd=prnt3grp4&ID=050441&stCd=CA&stName=CALIFORNIA>

^{ix} <http://www.mayoclinic.org/diseases-conditions/c-difficile/symptoms-causes/dxc-20202389>

^x <http://www.medscape.com/viewarticle/845534>

^{xi} California Office of Statewide Planning and Development, Patient Discharge Data Public Use File, 2011-2014, see: https://www.oshpd.ca.gov/HID/Data_Request_Center/PUF.html

^{xii} California Office of Statewide Planning and Development, Patient Discharge Data Public Use File, 2011-2014, see: https://www.oshpd.ca.gov/HID/Data_Request_Center/PUF.html

^{xiii} <http://www.stanforddaily.com/2016/02/17/stanford-health-care-faces-criticisms-for-poor-patient-care-measures/>

^{xiv} California Office of Statewide Planning and Development, Patient Discharge Data Public Use File, 2011-2014, see: https://www.oshpd.ca.gov/HID/Data_Request_Center/PUF.html

^{xv} California Office of Statewide Planning and Development, Patient Discharge Data Public Use File, 2011-2014, see: https://www.oshpd.ca.gov/HID/Data_Request_Center/PUF.html

^{xvi} <https://data.medicare.gov/data/archives/hospital-compare>

^{xvii}

<https://www.medicare.gov/hospitalcompare/details.html?msrCd=prnt3grp4&ID=050441&stCd=CA&stName=CALIFORNIA>