

APPENDIX A. Major Diagnostic Categories, Clinical Coding, and Outcomes for Healthcare-Associated Infections

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Prevalence and Burden of Healthcare-Associated Infections (HAIs), 2016–2021

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Table A.1. Most frequent major diagnostic categories (MDC) among adult inpatient stays with any of the five examined healthcare-associated infections (HAIs) (N=82,096), 2019

Rank	Major Diagnostic Category (MDC)	Number of stays	Percent of stays
1	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	13,876	16.9%
2	Diseases & Disorders of the Circulatory System (MDC 5)	12,677	15.4%
3	Diseases & Disorders of the Nervous System (MDC 1)	10,529	12.8%
4	Diseases & Disorders of the Respiratory System (MDC 4)	8,016	9.8%
5	Diseases & Disorders of the Digestive System (MDC 6)	7,744	9.4%
<i>All other MDC (not used for figures 2 through 7)</i>	Diseases & Disorders of the Musculoskeletal System & Connective Tissue (MDC 8)	5,446	6.6%
	Diseases & Disorders of the Kidney & Urinary Tract (MDC 11)	5,007	6.1%
	Myeloproliferative Diseases & Disorders, Poorly Differentiated Neoplasms (MDC 17)	3,475	4.2%
	Diseases & Disorders of the Hepatobiliary System & Pancreas (MDC 7)	2,955	3.6%
	Endocrine, Nutritional & Metabolic Diseases & Disorders (MDC 10)	2,414	2.9%
	Injuries, Poisonings & Toxic Effects of Drugs (MDC 21)	2,013	2.5%
	Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast (MDC 9)	1,435	1.7%
	Multiple Significant Trauma (MDC 24)	1,295	1.6%
	Diseases & Disorders of Blood, Blood Forming Organs, Immunologic Disorders (MDC 16)	1,115	1.4%
	Alcohol/Drug Use & Alcohol/Drug Induced Organic Mental Disorders (MDC 20)	761	0.9%
	Factors Influencing Health Status & Other Contacts with Health Services (MDC 23)	729	0.9%
	Diseases & Disorders of the Ear, Nose, Mouth & Throat (MDC 3)	588	0.7%
	Burns (MDC 22)	379	0.5%
	Mental Diseases & Disorders (MDC 19)	355	0.4%
	Diseases & Disorders of the Female Reproductive System (MDC 13)	308	0.4%
	Pregnancy, Childbirth & the Puerperium (MDC 14)	290	0.4%
	Pre-MDC	245	0.3%
	Diseases & Disorders of the Male Reproductive System (MDC 12)	208	0.3%
	Human Immunodeficiency Virus Infections (MDC 25)	200	0.2%
	Diseases & Disorders of the Eye (MDC 2)	36	0.0%
Newborns & Other Neonates with Conditions Originating in Perinatal Period (MDC 15)	0	0.0%	

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.2. Clinical coding of HAIs with valid ICD-10-CM codes through FY 2024

Diagnosis or procedure	ICD-10-CM/PCS code	ICD-10-CM/PCS code description
Central line-associated bloodstream infection (CLABSI)		
Diagnosis	T80211A	Bloodstream infection due to central venous catheter, initial encounter
Catheter-associated urinary tract infection (CAUTI)		
Any of the following diagnosis codes (secondary diagnoses, not present on admission)		
Diagnosis	T83511A	Infection and inflammatory reaction due to indwelling urethral catheter, initial encounter
Diagnosis	T8351XA	Infection and inflammatory reaction due to indwelling urinary catheter, initial encounter (pre-existing code before 10/1/2016)
OR, the following procedure code + any of the following diagnosis codes (secondary diagnoses, not present on admission)		
Procedure	0T9B70Z	Drainage of Bladder with Drainage Device, Via Natural or Artificial Opening
Diagnosis	N10	Acute pyelonephritis
Diagnosis	N151	Renal and perinephric abscess
Diagnosis	N12	Tubulo-interstitial nephritis, not specified as acute or chronic (pyelonephritis NOS)
Diagnosis	N159	Renal tubulo-interstitial disease, unspecified (pyelonephritis)
Diagnosis	N3000	Acute cystitis without hematuria
Diagnosis	N3001	Acute cystitis with hematuria
Diagnosis	N3080	Other cystitis without hematuria
Diagnosis	N3081	Other cystitis with hematuria
Diagnosis	N3090	Cystitis, unspecified without hematuria
Diagnosis	N3091	Cystitis, unspecified with hematuria
Diagnosis	N390	Urinary tract infection, site not specified
Ventilator-associated pneumonia (VAP)		
Diagnosis	J95851	Ventilator-associated pneumonia
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)		
Diagnosis	A4102	Sepsis due to Methicillin resistant <i>Staphylococcus aureus</i>
Diagnosis	A4902	Methicillin resistant <i>Staphylococcus aureus</i> infection, unspecified site
Diagnosis	B9562	Methicillin resistant <i>Staphylococcus aureus</i> infection as the cause of diseases classified elsewhere
Diagnosis	J15212	Pneumonia due to Methicillin resistant <i>Staphylococcus aureus</i>
<i>Clostridioides difficile</i> (C. difficile)		
Diagnosis	A047	Enterocolitis due to <i>Clostridium difficile</i>
Diagnosis	A0471	Enterocolitis due to <i>Clostridium difficile</i> , recurrent
Diagnosis	A0472	Enterocolitis due to <i>Clostridium difficile</i> , not specified as recurrent

Table A.3. Details to support Figure 1. Trends in the rate of healthcare-associated infections (hais) per 100,000 adult inpatient stays, by infection type, 2016–2021

HAI	Group	2016	2017	2018	2019	2020	2021
CLABSI	Rate among all inpatient stays	21.4	18.8	17.9	18.3	24.1	25.1
	Rate among non-COVID-19 inpatient stays	--				19.0	19.8
CAUTI	Rate among all inpatient stays	40.9	35.9	35.3	33.1	33.8	35.7
	Rate among non-COVID-19 inpatient stays	--				31.2	30.7
VAP	Rate among all inpatient stays	40.2	44.6	47.0	48.3	95.9	125.4
	Rate among non-COVID-19 inpatient stays	--				62.7	73.5
MRSA infection	Rate among all inpatient stays	64.2	60.8	59.4	57.4	73.2	84.4
	Rate among non-COVID-19 inpatient stays	--				60.9	62.6
<i>C. difficile</i> infection	Rate among all inpatient stays	226.2	201.6	177.6	151.9	143.4	144.2
	Rate among non-COVID-19 inpatient stays	--				140.8	140.6

Abbreviations: CLABSI, central line-associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAP, ventilator-associated pneumonia; MRSA, methicillin-resistant *Staphylococcus aureus*; *C. difficile*, *Clostridioides difficile*; COVID-19, coronavirus disease 2019.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.4. Details to Support Figure 2. Median length of stay, in-hospital mortality rate, and median total hospital cost for adult inpatient stays with any examined healthcare-associated infection (HAI) among top diagnostic categories, 2019 and 2021

Year, COVID-19 status	Major Diagnostic Category	Presence of any examined HAI	Median inpatient length of stay (days)	In-hospital mortality (%)	Median total hospital cost (\$)	
2019	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With any examined HAI	17.0	15.5	\$47,056	
		Without any examined HAI	5.0	7.7	\$11,116	
	Diseases & Disorders of the Circulatory System (MDC 5)	With any examined HAI	17.0	15.0	\$56,752	
		Without any examined HAI	3.0	2.5	\$10,849	
	Diseases & Disorders of the Nervous System (MDC 1)	With any examined HAI	21.0	11.9	\$73,289	
		Without any examined HAI	3.0	3.3	\$10,256	
	Diseases & Disorders of the Respiratory System (MDC 4)	With any examined HAI	17.0	16.3	\$49,709	
		Without any examined HAI	4.0	3.5	\$8,411	
	Diseases & Disorders of the Digestive System (MDC 6)	With any examined HAI	15.0	8.0	\$37,889	
		Without any examined HAI	3.0	1.4	\$8,839	
	2021, With COVID-19	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With any examined HAI	29.0	50.4	\$109,134
			Without any examined HAI	7.0	23.9	\$16,895
Diseases & Disorders of the Circulatory System (MDC 5)		With any examined HAI	27.0	32.4	\$88,148	
		Without any examined HAI	4.0	7.7	\$12,098	
Diseases & Disorders of the Nervous System (MDC 1)		With any examined HAI	30.5	22.1	\$100,767	
		Without any examined HAI	6.0	8.1	\$14,040	
Diseases & Disorders of the Respiratory System (MDC 4)		With any examined HAI	28.0	49.9	\$101,629	
		Without any examined HAI	5.0	10.8	\$11,667	
Diseases & Disorders of the Digestive System (MDC 6)		With any examined HAI	24.0	22.2	\$63,855	
		Without any examined HAI	4.0	4.5	\$10,407	
2021, Without COVID-19		Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With any examined HAI	20.0	19.3	\$59,506
			Without any examined HAI	5.0	9.1	\$12,181
	Diseases & Disorders of the Circulatory System (MDC 5)	With any examined HAI	19.0	18.5	\$68,883	
		Without any examined HAI	3.0	2.8	\$12,001	
	Diseases & Disorders of the Nervous System (MDC 1)	With any examined HAI	24.0	14.7	\$86,907	
		Without any examined HAI	4.0	3.6	\$11,265	
	Diseases & Disorders of the Respiratory System (MDC 4)	With any examined HAI	20.0	20.9	\$64,712	
		Without any examined HAI	4.0	4.5	\$9,314	
	Diseases & Disorders of the Digestive System (MDC 6)	With any examined HAI	17.0	10.7	\$44,232	
		Without any examined HAI	3.0	1.5	\$9,710	

Abbreviations: MDC, Major Diagnostic Category; HAI, healthcare-associated infection; COVID-19, coronavirus disease 2019.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.5. Details to support Figure 3. Median length of stay, in-hospital mortality rate, and median total hospital cost for adult inpatient stays with central line-associated bloodstream infection (CLABSI) among top diagnostic categories, 2019 and 2021

Year, COVID-19 Status	Major Diagnostic Category	Presence of CLABSI	Median inpatient length of stay (days)	In-hospital mortality (%)	Median total hospital cost (\$)	
2019	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With CLABSI	31.0	19.5	\$88,685	
		Without CLABSI	5.0	7.8	\$11,489	
	Diseases & Disorders of the Circulatory System (MDC 5)	With CLABSI	25.0	15.9	\$82,697	
		Without CLABSI	3.0	2.5	\$10,907	
	Diseases & Disorders of the Nervous System (MDC 1)	With CLABSI	29.0	8.6	\$87,086	
		Without CLABSI	3.0	3.4	\$10,319	
	Diseases & Disorders of the Respiratory System (MDC 4)	With CLABSI	29.0	25.2	\$99,896	
		Without CLABSI	4.0	3.6	\$8,491	
	Diseases & Disorders of the Digestive System (MDC 6)	With CLABSI	25.0	8.1	\$62,272	
		Without CLABSI	3.0	1.4	\$8,820	
	2021, With COVID-19	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With CLABSI	34.0	45.4	\$131,394
			Without CLABSI	8.0	24.5	\$17,635
Diseases & Disorders of the Circulatory System (MDC 5)		With CLABSI	42.5	*	\$110,286	
		Without CLABSI	4.0	7.9	\$12,318	
Diseases & Disorders of the Nervous System (MDC 1)		With CLABSI	41.0	*	\$146,884	
		Without CLABSI	6.0	8.3	\$14,350	
Diseases & Disorders of the Respiratory System (MDC 4)		With CLABSI	34.5	50.9	\$125,528	
		Without CLABSI	5.0	11.3	\$11,802	
Diseases & Disorders of the Digestive System (MDC 6)		With CLABSI	25.0	*	\$73,431	
		Without CLABSI	4.0	4.7	\$10,529	
2021, Without COVID-19		Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With CLABSI	36.0	22.3	\$104,849
			Without CLABSI	5.0	9.2	\$12,586
	Diseases & Disorders of the Circulatory System (MDC 5)	With CLABSI	26.0	21.0	\$89,178	
		Without CLABSI	3.0	2.8	\$12,054	
	Diseases & Disorders of the Nervous System (MDC 1)	With CLABSI	30.0	11.2	\$98,696	
		Without CLABSI	4.0	3.6	\$11,342	
	Diseases & Disorders of the Respiratory System (MDC 4)	With CLABSI	28.0	29.2	\$100,803	
		Without CLABSI	4.0	4.5	\$9,397	
	Diseases & Disorders of the Digestive System (MDC 6)	With CLABSI	27.0	8.9	\$67,094	
		Without CLABSI	3.0	1.6	\$9,706	

Abbreviations: MDC, Major Diagnostic Category; CLABSI, central line-associated bloodstream infection; COVID-19, coronavirus disease 2019.

Note: Statistics based on a sample size less than or equal to 10 are suppressed (denoted with an ***).

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.6. Details to support Figure 4. Median length of stay, in-hospital mortality rate, and median total hospital cost for adult inpatient stays with catheter-associated urinary tract infection (CAUTI) among top diagnostic categories, 2019 and 2021

Year, COVID-19 Status	Major Diagnostic Category	Presence of CAUTI	Median inpatient length of stay (days)	In-hospital mortality (%)	Median total hospital cost (\$)	
2019	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With CAUTI	24.0	11.8	\$61,831	
		Without CAUTI	5.0	7.8	\$11,974	
	Diseases & Disorders of the Circulatory System (MDC 5)	With CAUTI	14.0	7.8	\$43,717	
		Without CAUTI	3.0	2.5	\$10,957	
	Diseases & Disorders of the Nervous System (MDC 1)	With CAUTI	18.0	5.5	\$49,888	
		Without CAUTI	3.0	3.4	\$10,269	
	Diseases & Disorders of the Respiratory System (MDC 4)	With CAUTI	17.0	10.7	\$44,977	
		Without CAUTI	4.0	3.6	\$8,403	
	Diseases & Disorders of the Digestive System (MDC 6)	With CAUTI	14.0	5.6	\$35,620	
		Without CAUTI	3.0	1.4	\$8,810	
	2021, With COVID-19	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With CAUTI	33.0	40.8	\$106,264
			Without CAUTI	8.0	24.5	\$17,714
Diseases & Disorders of the Circulatory System (MDC 5)		With CAUTI	25.0	*	\$71,706	
		Without CAUTI	4.0	7.9	\$12,342	
Diseases & Disorders of the Nervous System (MDC 1)		With CAUTI	25.0	*	\$61,797	
		Without CAUTI	6.0	8.3	\$14,216	
Diseases & Disorders of the Respiratory System (MDC 4)		With CAUTI	27.0	37.6	\$84,370	
		Without CAUTI	5.0	11.3	\$11,725	
Diseases & Disorders of the Digestive System (MDC 6)		With CAUTI	17.0	*	\$32,878	
		Without CAUTI	4.0	4.7	\$10,376	
2021, Without COVID-19		Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With CAUTI	25.0	16.9	\$71,037
			Without CAUTI	5.0	9.2	\$13,216
	Diseases & Disorders of the Circulatory System (MDC 5)	With CAUTI	16.0	8.3	\$44,307	
		Without CAUTI	3.0	2.8	\$12,138	
	Diseases & Disorders of the Nervous System (MDC 1)	With CAUTI	20.0	5.3	\$54,127	
		Without CAUTI	4.0	3.6	\$11,286	
	Diseases & Disorders of the Respiratory System (MDC 4)	With CAUTI	21.0	13.6	\$56,893	
		Without CAUTI	4.0	4.5	\$9,301	
	Diseases & Disorders of the Digestive System (MDC 6)	With CAUTI	15.0	6.2	\$38,580	
		Without CAUTI	3.0	1.6	\$9,691	

Abbreviation: MDC, Major Diagnostic Category; CAUTI, catheter-associated urinary tract infection; COVID-19, coronavirus disease 2019.

*Statistics based on a sample size less than or equal to 10 are suppressed.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.7. Details to support Figure 5. Median length of stay, in-hospital mortality rate, and median total hospital cost for adult inpatient stays with ventilator-associated pneumonia (VAP) among top diagnostic categories, 2019 and 2021

Year, COVID-19 Status	Major Diagnostic Category	Presence of VAP	Median inpatient length of stay (days)	In-hospital mortality (%)	Median total hospital cost (\$)	
2019	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With VAP	27.0	31.4	\$113,015	
		Without VAP	5.0	7.8	\$11,474	
	Diseases & Disorders of the Circulatory System (MDC 5)	With VAP	25.0	28.8	\$137,440	
		Without VAP	3.0	2.5	\$10,948	
	Diseases & Disorders of the Nervous System (MDC 1)	With VAP	25.0	18.3	\$112,793	
		Without VAP	3.0	3.4	\$10,305	
	Diseases & Disorders of the Respiratory System (MDC 4)	With VAP	24.0	27.1	\$98,894	
		Without VAP	4.0	3.6	\$8,482	
	Diseases & Disorders of the Digestive System (MDC 6)	With VAP	26.0	24.0	\$109,220	
		Without VAP	3.0	1.4	\$8,822	
	2021, With COVID-19	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With VAP	30.0	56.2	\$130,156
			Without VAP	7.0	24.1	\$17,354
Diseases & Disorders of the Circulatory System (MDC 5)		With VAP	31.5	48.1	\$171,407	
		Without VAP	4.0	7.8	\$12,455	
Diseases & Disorders of the Nervous System (MDC 1)		With VAP	32.0	27.5	\$131,883	
		Without VAP	6.0	8.2	\$14,247	
Diseases & Disorders of the Respiratory System (MDC 4)		With VAP	31.0	55.6	\$127,452	
		Without VAP	5.0	11.0	\$11,745	
Diseases & Disorders of the Digestive System (MDC 6)		With VAP	37.0	50.0	\$154,890	
		Without VAP	4.0	4.6	\$10,525	
2021, Without COVID-19		Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With VAP	28.0	34.3	\$117,682
			Without VAP	5.0	9.2	\$12,554
	Diseases & Disorders of the Circulatory System (MDC 5)	With VAP	27.0	30.6	\$151,163	
		Without VAP	3.0	2.8	\$12,108	
	Diseases & Disorders of the Nervous System (MDC 1)	With VAP	28.0	20.0	\$122,492	
		Without VAP	4.0	3.6	\$11,320	
	Diseases & Disorders of the Respiratory System (MDC 4)	With VAP	27.0	29.8	\$112,510	
		Without VAP	4.0	4.5	\$9,382	
	Diseases & Disorders of the Digestive System (MDC 6)	With VAP	29.0	31.3	\$129,732	
		Without VAP	3.0	1.5	\$9,707	

Abbreviations: MDC, Major Diagnostic Category; COVID-19, coronavirus disease 2019; VAP, ventilator-associated pneumonia.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.8. Details to support Figure 6. Median length of stay, in-hospital mortality rate, and median total hospital cost for adult inpatient stays with methicillin-resistant *Staphylococcus aureus* (MRSA) infection in top diagnostic categories, 2019 and 2021

Year, COVID-19 Status	Major Diagnostic Category	Presence of MRSA infection	Median inpatient length of stay (days)	In-hospital mortality (%)	Median total hospital cost (\$)	
2019	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With MRSA infection	20.0	19.7	\$58,987	
		Without MRSA infection	5.0	7.8	\$11,278	
	Diseases & Disorders of the Circulatory System (MDC 5)	With MRSA infection	18.0	20.7	\$56,093	
		Without MRSA infection	3.0	2.5	\$10,904	
	Diseases & Disorders of the Nervous System (MDC 1)	With MRSA infection	23.0	15.1	\$77,947	
		Without MRSA infection	3.0	3.4	\$10,294	
	Diseases & Disorders of the Respiratory System (MDC 4)	With MRSA infection	19.0	19.1	\$55,608	
		Without MRSA infection	4.0	3.6	\$8,446	
	Diseases & Disorders of the Digestive System (MDC 6)	With MRSA infection	20.0	15.7	\$54,214	
		Without MRSA infection	3.0	1.4	\$8,812	
	2021, With COVID-19	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With MRSA infection	27.0	56.4	\$97,880
			Without MRSA infection	8.0	24.4	\$17,361
Diseases & Disorders of the Circulatory System (MDC 5)		With MRSA infection	29.5	40.8	\$89,826	
		Without MRSA infection	4.0	7.8	\$12,364	
Diseases & Disorders of the Nervous System (MDC 1)		With MRSA infection	32.0	23.8	\$98,088	
		Without MRSA infection	6.0	8.3	\$14,251	
Diseases & Disorders of the Respiratory System (MDC 4)		With MRSA infection	26.0	58.6	\$87,027	
		Without MRSA infection	5.0	11.1	\$11,750	
Diseases & Disorders of the Digestive System (MDC 6)		With MRSA infection	24.0	31.3	\$64,522	
		Without MRSA infection	4.0	4.6	\$10,489	
2021, Without COVID-19		Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With MRSA infection	22.0	22.3	\$70,118
			Without MRSA infection	5.0	9.2	\$12,370
	Diseases & Disorders of the Circulatory System (MDC 5)	With MRSA infection	19.0	24.7	\$63,849	
		Without MRSA infection	3.0	2.8	\$12,065	
	Diseases & Disorders of the Nervous System (MDC 1)	With MRSA infection	25.0	19.2	\$86,052	
		Without MRSA infection	4.0	3.6	\$11,312	
	Diseases & Disorders of the Respiratory System (MDC 4)	With MRSA infection	20.0	21.1	\$65,630	
		Without MRSA infection	4.0	4.5	\$9,355	
	Diseases & Disorders of the Digestive System (MDC 6)	With MRSA infection	21.0	16.2	\$58,677	
		Without MRSA infection	3.0	1.5	\$9,698	

Abbreviations: MDC, Major Diagnostic Category; COVID-19, coronavirus disease 2019; MRSA, methicillin-resistant *Staphylococcus aureus*.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States

Table A.9. Details to support Figure 7. Median length of stay, in-hospital mortality rate, and median total hospital cost for adult inpatient stays with *Clostridioides difficile* (*C. difficile*) infection among top diagnostic categories, 2019 and 2021

Year, COVID-19 Status	Major Diagnostic Category	Presence of <i>C. difficile</i> infection	Median inpatient length of stay (days)	In-hospital mortality (%)	Median total hospital cost (\$)	
2019	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With <i>C. difficile</i> infection	14.0	12.6	\$36,220	
		Without <i>C. difficile</i> infection	5.0	7.8	\$11,396	
	Diseases & Disorders of the Circulatory System (MDC 5)	With <i>C. difficile</i> infection	15.0	10.9	\$43,034	
		Without <i>C. difficile</i> infection	3.0	2.5	\$10,932	
	Diseases & Disorders of the Nervous System (MDC 1)	With <i>C. difficile</i> infection	19.0	9.1	\$47,916	
		Without <i>C. difficile</i> infection	3.0	3.4	\$10,297	
	Diseases & Disorders of the Respiratory System (MDC 4)	With <i>C. difficile</i> infection	13.0	11.9	\$31,471	
		Without <i>C. difficile</i> infection	4.0	3.6	\$8,473	
	Diseases & Disorders of the Digestive System (MDC 6)	With <i>C. difficile</i> infection	13.0	5.3	\$29,667	
		Without <i>C. difficile</i> infection	3.0	1.4	\$8,853	
	2021, With COVID-19	Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With <i>C. difficile</i> infection	23.0	36.8	\$67,059
			Without <i>C. difficile</i> infection	8.0	24.5	\$17,582
		Diseases & Disorders of the Circulatory System (MDC 5)	With <i>C. difficile</i> infection	24.0	20.6	\$58,028
			Without <i>C. difficile</i> infection	4.0	7.9	\$12,419
Diseases & Disorders of the Nervous System (MDC 1)		With <i>C. difficile</i> infection	29.0	14.2	\$76,057	
		Without <i>C. difficile</i> infection	6.0	8.3	\$14,287	
Diseases & Disorders of the Respiratory System (MDC 4)		With <i>C. difficile</i> infection	23.0	33.7	\$60,874	
		Without <i>C. difficile</i> infection	5.0	11.3	\$11,790	
Diseases & Disorders of the Digestive System (MDC 6)		With <i>C. difficile</i> infection	22.0	10.3	\$43,917	
		Without <i>C. difficile</i> infection	4.0	4.6	\$10,480	
2021, Without COVID-19		Infectious & Parasitic Diseases, Systemic or Unspecified Sites (MDC 18)	With <i>C. difficile</i> infection	15.0	13.6	\$39,046
			Without <i>C. difficile</i> infection	5.0	9.2	\$12,504
		Diseases & Disorders of the Circulatory System (MDC 5)	With <i>C. difficile</i> infection	16.0	12.9	\$48,183
			Without <i>C. difficile</i> infection	3.0	2.8	\$12,097
	Diseases & Disorders of the Nervous System (MDC 1)	With <i>C. difficile</i> infection	20.0	10.4	\$60,035	
		Without <i>C. difficile</i> infection	4.0	3.6	\$11,319	
	Diseases & Disorders of the Respiratory System (MDC 4)	With <i>C. difficile</i> infection	15.0	15.1	\$37,141	
		Without <i>C. difficile</i> infection	4.0	4.5	\$9,379	
	Diseases & Disorders of the Digestive System (MDC 6)	With <i>C. difficile</i> infection	14.0	7.1	\$33,763	
		Without <i>C. difficile</i> infection	3.0	1.5	\$9,726	

Abbreviations: MDC, Major Diagnostic Category; *C. difficile*, *Clostridioides difficile*; COVID-19, coronavirus disease 2019.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), 2016-2021, State Inpatient Databases, 2019, 38 States