**Appendix Table A:** Frequency of ICD-9-CM diagnosticcodes used to define acute gastroenteritis for culture-confirmed cases of *Campylobacter, Salmonella, and E. coli* O157infection among patients **with a pathogen-specific diagnosis** listed on the discharge record

|  |  |
| --- | --- |
|  | **Patients with culture-confirmed infections** |
| **ICD-9 diagnostic codes used to define “acute gastroenteritis”** | ***Campylobacter*** | ***Salmonella*** | ***E. coli* O157** | **Total** |
| **N=38** | **%** | **N=22** | **%** | **N=4** | **%** | **N=64** | **%** |
| **Any gastroenteritis code** | **38** | **100** | **22** | **100** | **4** | **100** | **64** | **100** |
| First 3 diagnosis | 37 | 97 | 19 | 53 | 4 | 100 | 60 | 94 |
| Primary (first) diagnosis | 26 | 68 | 14 | 63 | 3 | 75 | 43 | 67 |
| **Known pathogen gastroenteritis codes** | **38** | **100** | **22** | **100** | **4** | **100** | **64** | **100** |
| Typhoid fever (002) | 0 | 0 | 1 | 5 | 0 | 0 | 1 | 0 |
| *Salmonella* infections (003) | 0 | 0 | 21 | 95 | 0 | 0 | 21 | 33 |
| Intestinal infection due to *E. coli*, unspecified (008.00) | 0 | 0 | 0 | 0 | 2 | 50 | 2 | 3 |
| Intestinal infection due to enterohemorrhagic *E. coli* (008.04)  | 0 | 0 | 0 | 0 | 2 | 50 | 2 | 3 |
| Intestinal infection due to *Campylobacter* (008.43)  | 38 | 100 | 0 | 0 | 0 | 0 | 38 | 59 |
| Intestinal Infection due to *Clostridium difficile* (008.45) | 0 | 0 | 3 | 14 | 0 | 0 | 3 | 5 |
| **Nonspecific gastroenteritis codes** | **4** | **11** | **3** | **14** | **0** | **0** | **7** | **11** |
| Intestinal Infection due to other organism, not elsewhere classified (008.8) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ill-defined infectious gastroenteritis (009) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Infectious colitis, enteritis, and gastroenteritis (009.0) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Colitis, enteritis & gastroenteritis of presumed infectious origin (009.1) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Infectious diarrhea (009.2) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diarrhea of presumed infectious origin (009.3) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other, unspecified noninfectious gastroenteritis & colitis (558.9) | 3 | 8 | 0 | 0 | 0 | 0 | 3 | 5 |
| Diarrhea (787.91) | 1 | 3 | 3 | 14 | 0 | 0 | 4 | 7 |

**Appendix Table B:** Frequency of ICD-9-CM diagnosticcodes used to define acute gastroenteritis for culture-confirmed cases *Campylobacter, Salmonella, and E. coli* O157infection among patients **without a pathogen-specific diagnosis** listed on the discharge record

|  |  |
| --- | --- |
|  | **Patients with culture-confirmed infections** |
| **ICD-9 diagnostic codes used to define “acute gastroenteritis”** | ***Campylobacter*** | ***Salmonella*** | ***E. coli* O157** | **Total** |
| **N=50** | **%** | **N=17** | **%** | **N=7** | **%** | **N=74** | **%** |
| **Any gastroenteritis code** | 36 | 72 | 12 | 71 | 5 | 71 | 53 | 72 |
| First 3 diagnosis | 29 | 58 | 10 | 59 | 5 | 71 | 43 | 58 |
| Primary (first) diagnosis | 19 | 38 | 9 | 53 | 5 | 71 | 32 | 43 |
| **Known gastroenteritis pathogen codes** | **3** |  | **1** |  | **0** |  | **4** | **22** |
| Typhoid fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Salmonella* infections (003) | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| Intestinal infection due to *E. coli*, unspecified (008.00) | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| Intestinal infection due to enterohemorrhagic *E. coli* (008.04)  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Intestinal infection due to *Campylobacter* (008.43)  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Intestinal Infection due to *Clostridium difficile* (008.45) | 1 | 2 | 1 | 6 | 0 | 0 | 2 | 3 |
| **Nonspecific gastroenteritis codes** | **32** | **64** | **8** | **47** | **5** | **71** | **37** | **50** |
| Intestinal Infection due to other organism, not elsewhere classified (008.8) | 8 | 16 | 4 | 23 | 0 | 0 | 12 | 16 |
| Ill-defined infectious gastroenteritis (009) | 10 | 20 | 2 | 12 | 3 | 43 | 15 | 20 |
| Infectious colitis, enteritis, and gastroenteritis (009.0) | 3 | 6 | 2 | 12 | 3 | 43 | 8 | 11 |
| Colitis, enteritis & gastroenteritis of presumed infectious origin (009.1) | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 3 |
| Infectious diarrhea (009.2) | 3 | 6 | 0 | 0 | 0 | 0 | 3 | 4 |
| Diarrhea of presumed infectious origin (009.3) | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 3 |
| Other, unspecified noninfectious gastroenteritis & colitis (558.9) | 9 | 18 | 4 | 24 | 2 | 29 | 15 | 20 |
| Diarrhea (787.91) | 6 | 12 | 2 | 12 | 0 | 0 | 8 | 11 |
| **Both known pathogen and nonspecific gastroenteritis codes** | **1** | **2** | **1** | **6** | **0** | **0** | **2** | **3** |

**Appendix Table C:** Frequency of ICD-9-CM diagnosticcodes for gastroenteritis (intestinal infection diseasesa or nonspecific gastroenteritisb) assigned to patients with culture-confirmed *Campylobacter, Salmonella*, and *E. coli* O157infection, Marshfield Clinic, Wisconsin, January 1, 2004-December 31, 2014

|  |  |
| --- | --- |
|  | **Patients with culture-confirmed infections** |
| **ICD-9 diagnostic code** | ***Campylobacter*** | ***Salmonella*** | ***E. coli* O157** | **Total** |
| **All patients** | **N=88** | **%** | **N=39** | **%** | **N=11** | **%** | **N=138** | **%** |
| Gastroenteritis listed as any diagnosis  | 72 | 82 | 34 | 87 | 9 | 82 | 115 | 83 |
| Gastroenteritis listed as one of the first 3 diagnoses | 65 | 74 | 29 | 74 | 9 | 82 | 103 | 75 |
| Gastroenteritis listed as first diagnosis | 44 | 50 | 23 | 59 | 8 | 73 | 75 | 54 |
| **Patients with culture-confirmed diagnosis listed on discharge record** | **N=38** | **%** | **N=22** | **%** | **N=4** | **%** | **N=64** | **%** |
| Gastroenteritis listed as any diagnosis | 38 | 100 | 22 | 100 | 4 | 100 | 64 | 100 |
| Gastroenteritis listed as one of the first 3 diagnoses | 37 | 97 | 19 | 53 | 4 | 100 | 60 | 94 |
| Gastroenteritis listed as first diagnosis | 26 | 68 | 14 | 63 | 3 | 75 | 43 | 67 |
| **Patients without culture-confirmed diagnosis listed on discharge record** | **N=50** | **%** | **N=17** | **%** | **N=7** | **%** | **N=74** | **%** |
| Gastroenteritis listed as any diagnosis | 34 | 68 | 12 | 71 | 5 | 71 | 51 | 69 |
| Gastroenteritis listed as one of the first 3 diagnoses | 28 | 56 | 10 | 59 | 5 | 71 | 43 | 58 |
| Gastroenteritis listed as first diagnosis | 18 | 36 | 9 | 53 | 5 | 71 | 32 | 43 |

aIntestinal infectious diseases: ICD-9-CM diagnosis codes 001-008.6;

bNonspecific gastroenteritis code: ICD-9-CM diagnosis codes 008.8, intestinal infection due to other organism, not elsewhere classified, 009, ill-defined infectious gastroenteritis, 558.9, other and unspecified noninfectious gastroenteritis and colitis; and 787.91, other symptoms involving digestive system: diarrhea;