SupplementAL material

**Supplementary Figure 1: Study time horizon.**

**Slide1.tif** ICD-10-CA - International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada.

**Supplementary Table 1: Exclusion criteria.**

|  | Exclusion criteria |
| --- | --- |
| Applied to elective admission subjects | Infected subjects were excluded if they did not have an intervention code within the first two days of their index hospital admission |
| Applied to non-elective admission subjects | To remove community-associated CDI, the following infected subjects were excluded:   * Length of stay was ≤2 days * CDI coded as the principal diagnosis and underwent a colectomy within two days of the admission date * CDI coded as a principal diagnosis and abdominal paina, crampsa or diarrheaa coded during a physician visit or suspicious CDIa, abdominal paina, crampsa or diarrheaa coded during an emergency department visit within the two weeks prior to the index hospital admission date |
| Applied to both groups | Infected subjects were excluded if they were missing one or more of the following:   * Sex * Rurality * Neighborhood income quintile * Hospital facility   Infected subjects were excluded if they had one or more of the following:   * Previous diagnosis of CDI (our look back period was ≥8 months prior to the index hospital admission date) * Death date was before their index hospital admission date * Age was ≥110 years |

aOntario Health Insurance Plan and ICD-10-CA codes related to suspicious CDI, abdominal pain, cramps and diarrhea available upon request. CDI – *C.difficile* infection; ICD-10-CA - International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada.

**Supplementary Table 2: Propensity score variables.**

| Propensity score variables | Details |
| --- | --- |
| Rurality | * Obtained from the Rurality Index of Ontario from 2004 and 2008[1](#_ENREF_1),[2](#_ENREF_2) * Measured at the index hospital admission date (for the re-match, 3 months prior to death) |
| Neighborhood income quintile | * Based on 2006 Canadian Census data[3](#_ENREF_3) * Measured at the index hospital admission date (for the re-match, 3 months prior to death) |
| Co-morbidities | * Utilized the John Hopkins Adjusted Clinical Groups® System Aggregated Diagnosis Groups[4](#_ENREF_4),[5](#_ENREF_5) * Measured within the two years of the index hospital admission date (for the re-match, 3 months prior to death) |
| Healthcare utilization | * Defined as the presence or absence of each of the following within the 12 weeks prior to the index hospital admission date:   + Emergency department visit   + Hospital admission   + Same-day surgery   + Long-term care stay |
| Possible prescription for an antibiotic | * Determined by the presence or absence of a condition (determined by ICD-10-CA and/or OHIP code) that would commonly be prescribed an antibiotic (e.g., septicaemia) within the 12 weeks prior to the index hospital admission date * List of conditions upon request |

ICD-10- CA – International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada; OHIP – Ontario Health Insurance Plan.

**Supplementary Table 3: Canadian Classification of Health Interventions (CCI) codes related to a colectomy procedure.**

| Intervention | CCI code |
| --- | --- |
| Excision partial, large intestine | 1NM87^^ (except 1NM87BA) |
| Excision total, large intestine | 1NM89^^ |
| Excision radical, large intestine | 1NM91^^ |
| Excision partial, rectum | 1NQ87^^ (except 1NQ87BA) |
| Excision total, rectum | 1NQ89^^ |
| Excision total with reconstruction, rectum | 1NQ90^^ |

**Supplementary Table 4: How a colectomy procedure was attributed to CDI during the index hospitalization.**

|  |
| --- |
| Criteria |
| * One or more of the intervention codes outlined in Supplementary Table 3 was present * If the colectomy procedure was conducted ≤2 days after the index hospital admission date, it was not attributed to CDI * If CDI was the principal diagnosis (in diagnosis field 1), then the colectomy procedure was assumed to be attributable to CDI * If CDI was a non-principal diagnosis (in diagnosis field 2-25) and the infected subject did not have one of the following conditionsa listed below as the principal diagnosis, then the colectomy procedure was assumed to be attributable to CDI:   + Diverticulitis   + Inflammatory bowel disease   + Injury to abdominal area   + Cancer of the colon   + Cancer of the rectosigmoid junction   + Cancer of the rectum   + Cancer of anus and anal canal   + Polyp   + Other noninfective gastroenteritis   + Vascular disorder of intestine   + Paralytic ileus and intestinal obstruction without hernia   + Other functional intestinal disorders   + Other diseases of anus and rectum   + Other diseases of intestine   + Other disorders of peritoneum   + Disorders of peritoneum in infectious diseases classified elsewhere   + Other diseases of digestive system   + Other congenital malformations of intestine   + Foreign body in alimentary tract |

aICD-10-CA codes available upon request. CDI – *C. difficile* infection; ICD-10-CA - International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada.

**Supplementary Table 5: Selected matching detailsa.**

|  | Infected subjects | Pool of uninfected subjects | Standardized differences | Unmatched infected subjects | Matched infected subjects | Matched uninfected subjects | Standardized differences |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Elective admission subjects* |  |  |  |  |  |  |  |
| n | 2,254 | 10,527 | NA | 783 | 1,471 | 1,471 | NA |
| Hard match variables |  |  |  |  |  |  |  |
| Age, mean±SD | 63.4±20.2 | 64.9±17.7 | 0.08 | 60.5±23.1 | 64.9±18.3 | 64.9±18.2 | 0.01 |
| Female, % | 46.5 | 46.1 | 0.01 | 47.0 | 46.2 | 46.2 | 0.00 |
| Top 5 intervention codesb, % |  |  |  |  |  |  |  |
| 1 | 1NM, 9.2 | 1NM, 11.7 | 0.08 | IZZ, 5.5 | 1NM, 11.4 | 1NM, 11.4 | 0.00 |
| 2 | 1ZZ, 8.7 | 1ZZ, 10.5 | 0.06 | 1NM, 5.1 | 1ZZ, 10.3 | 1ZZ, 10.3 | 0.00 |
| 3 | 1KA, 5.2 | 1KA, 6.6 | 0.06 | 1VG, 3.8 | 1KA, 6.8 | 1KA, 6.8 | 0.00 |
| 4 | 1VG, 4.7 | 1VG, 6.0 | 0.06 | 1IJ, 2.8 | 1VA, 5.6 | 1VA, 5.6 | 0.00 |
| 5 | 1IJ, 4.5 | 1IJ, 5.7 | 0.06 | 1PZ, 2.7 | 1IJ, 5.4 | 1IJ, 5.4 | 0.00 |
| Propensity score variables |  |  |  |  |  |  |  |
| Neighborhood income quintile, % |  |  |  |  |  |  |  |
| 1 (lowest) | 20.5 | 18.4 | 0.05 | 22.1 | 19.7 | 18.1 | 0.04 |
| 2 | 21.7 | 20.2 | 0.04 | 23.0 | 21.0 | 21.4 | 0.01 |
| 3 | 18.2 | 20.1 | 0.05 | 17.6 | 18.5 | 17.9 | 0.02 |
| 4 | 20.8 | 20.0 | 0.02 | 20.1 | 21.2 | 20.3 | 0.02 |
| 5 (highest) | 18.8 | 21.3 | 0.06 | 17.2 | 19.6 | 22.4 | 0.07 |
| Rurality, % |  |  |  |  |  |  |  |
| Major urban | 63.9 | 62.7 | 0.03 | 63.0 | 64.5 | 62.7 | 0.04 |
| Non-major urban | 26.2 | 26.9 | 0.01 | 26.1 | 26.3 | 27.1 | 0.02 |
| Rural | 9.9 | 10.4 | 0.02 | 11.0 | 9.3 | 10.2 | 0.03 |
| Resource utilization bandsc, % |  |  |  |  |  |  |  |
| 0- Non users | - | 0.1 | 0.03 | - | - | - | 0.04 |
| 1- Healthy users | - | 0.0 | 0.02 | - | - | - | . |
| 2- Low morbidity | 0.6 | 0.8 | 0.02 | - | 0.7 | - | 0.02 |
| 3- Moderate | 17.3 | 27.0 | 0.23 | 11.0 | 20.7 | 21.4 | 0.02 |
| 4- High | 27.0 | 32.9 | 0.13 | 23.5 | 28.9 | 33.1 | 0.09 |
| 5- Very high | 54.9 | 39.2 | 0.32 | 64.8 | 49.7 | 45.0 | 0.09 |
| Healthcare utilizationd, % | 64.8 | 58.3 | 0.19 | 76.0 | 58.9 | 60.6 | 0.01 |
| Record of an infection that may have led to an antibiotic prescriptione, % | 26.3 | 18.9 | 0.18 | 41.4 | 18.3 | 17.1 | 0.03 |
| *Non-elective admission subjects* |  |  |  |  |  |  |  |
| n | 26,054 | 232,365 | NA | 2,039 | 24,015 | 24,015 | NA |
| Hard match variables |  |  |  |  |  |  |  |
| Age, mean±SD | 72.2±17.1 | 54.1±29.1 | 0.76 | 77.0±18.3 | 71.8±16.9 | 71.7±16.9 | 0.01 |
| Female, % | 54.6 | 51.9 | 0.06 | 52.9 | 54.8 | 54.8 | 0.00 |
| Propensity score variables |  |  |  |  |  |  |  |
| Neighborhood income quintile, % |  |  |  |  |  |  |  |
| 1 (lowest) | 24.2 | 23.6 | 0.01 | 24.5 | 24.2 | 23.1 | 0.03 |
| 2 | 21.8 | 21.4 | 0.01 | 22.5 | 21.8 | 21.4 | 0.01 |
| 3 | 19.2 | 19.5 | 0.01 | 17.6 | 19.3 | 19.7 | 0.01 |
| 4 | 17.7 | 18.5 | 0.02 | 18.4 | 17.7 | 18.2 | 0.02 |
| 5 (highest) | 17.1 | 17.0 | 0.00 | 17.0 | 17.1 | 17.6 | 0.01 |
| Rurality, % |  |  |  |  |  |  |  |
| Major urban | 66.4 | 63.9 | 0.05 | 65.8 | 66.5 | 66.0 | 0.01 |
| Non-major urban | 25.5 | 24.7 | 0.02 | 29.5 | 25.1 | 25.8 | 0.02 |
| Rural | 8.1 | 11.4 | 0.11 | 4.7 | 8.4 | 8.2 | 0.01 |
| Resource utilization bandsc, % |  |  |  |  |  |  |  |
| 0- Non users | 0.7 | 11.0 | 0.45 | - | 0.8 | 0.8 | 0.01 |
| 1- Healthy users | 0.3 | 0.5 | 0.04 | - | 0.3 | 0.3 | 0.00 |
| 2- Low morbidity | 1.6 | 2.5 | 0.07 | 0.7 | 1.6 | 1.6 | 0.01 |
| 3- Moderate | 17.0 | 17.6 | 0.01 | 12.3 | 17.4 | 18.4 | 0.03 |
| 4- High | 22.4 | 20.1 | 0.05 | 22.7 | 22.4 | 22.5 | 0.00 |
| 5- Very high | 58.0 | 48.2 | 0.20 | 64.2 | 57.5 | 56.5 | 0.02 |
| Healthcare utilizationd, % | 75.5 | 70.1 | 0.12 | 72.9 | 75.7 | 74.6 | 0.03 |
| Record of an infection that may have led to an antibiotic prescriptione, % | 44.3 | 32.1 | 0.26 | 58.7 | 43.1 | 38.3 | 0.10 |

aIndex date was the hospital admission date; bWe hard matched on the first three digits of the intervention code, where the first digit generally describes the type of intervention (e.g., diagnostic) and the next two digits represent intervention groups (often based on anatomy)[6](#_ENREF_6); cAggregated diagnostic groups were used in the match (further details upon request); dOverall presented, however, in the match disaggregated into the presence or absence of an emergency department visit, same day surgery, hospital admission or long-term care stay within 12 weeks prior to the index hospital admission date (further details upon request); eOverall presented, however, in the match disaggregated by the presence or absence of each infection within 12 weeks prior to the index hospital admission date (further details upon request). NA – not applicable; SD – standard deviation; 1NM - Therapeutic interventions on the large intestine; 1ZZ - Therapeutic interventions on the total body; 1KA - Therapeutic interventions on the abdominal aorta; 1VG - Therapeutic interventions on the knee joint; 1IJ - Therapeutic interventions on the coronary arteries; 1PZ - Therapeutic interventions on urinary system NEC; 1VA - Therapeutic interventions on the hip joint; “-“ indicates small cells <6, therefore, not reported.

**Supplementary Table 6: Selected details on the re-matched infected subjects who dieda.**

|  | Infected subjects | Pool of uninfected subjects | Standardized differences | Matched infected subjects | Matched uninfected subjects | Standardized differences |
| --- | --- | --- | --- | --- | --- | --- |
| *Elective admission subjects* |  |  |  |  |  |  |
| n | 643 | 817,620 | NA | 630 | 630 | NA |
| Hard match variables |  |  |  |  |  |  |
| Age, mean±SD | 71.5±15.3 | 74.8±17.1 | 0.20 | 72.5±13.2 | 72.6±13.3 | 0.01 |
| Female, % | 43.9 | 50.2 | 0.13 | 43.8 | 43.8 | 0.00 |
| Propensity score variables |  |  |  |  |  |  |
| Neighborhood income quintile, % |  |  |  |  |  |  |
| 1 (lowest) | 21.0 | 23.5 | 0.06 | 21.1 | 20.8 | 0.01 |
| 2 | 21.6 | 21.3 | 0.01 | 21.8 | 22.5 | 0.02 |
| 3 | 17.6 | 19.1 | 0.04 | 17.8 | 17.9 | 0.00 |
| 4 | 21.3 | 18.5 | 0.07 | 20.6 | 21.3 | 0.02 |
| 5 (highest) | 18.5 | 17.7 | 0.02 | 18.7 | 17.5 | 0.03 |
| Rurality, % |  |  |  |  |  |  |
| Major urban | 62.4 | 64.2 | 0.04 | 62.4 | 62.5 | 0.00 |
| Non-major urban | 29.7 | 26.4 | 0.07 | 29.8 | 29.1 | 0.02 |
| Rural | 7.9 | 9.4 | 0.05 | 7.8 | 8.4 | 0.02 |
| Resource utilization bandsb, % |  |  |  |  |  |  |
| 0- Non users | - | 4.5 | 0.24 | - | - | 0.00 |
| 1- Healthy users | - | 0.9 | 0.14 | - | - | 0.06 |
| 2- Low morbidity | - | 4.2 | 0.26 | - | - | 0.00 |
| 3- Moderate | 10.3 | 28.9 | 0.48 | 10.5 | 8.7 | 0.06 |
| 4- High | 17.7 | 22.1 | 0.11 | 18.1 | 17.5 | 0.02 |
| 5- Very high | 70.9 | 39.4 | 0.67 | 70.3 | 72.5 | 0.05 |
| *Non-elective admission subjects* |  |  |  |  |  |  |
| n | 15,533 | 817,620 | NA | 15,433 | 15,433 | NA |
| Hard match variables |  |  |  |  |  |  |
| Age, mean±SD | 77.5±12.7 | 74.8±17.1 | 0.18 | 77.7±12.2 | 77.7±12.3 | 0.00 |
| Female, % | 53.0 | 50.2 | 0.06 | 53.1 | 53.1 | 0.00 |
| Propensity score variables |  |  |  |  |  |  |
| Neighborhood income quintile, % |  |  |  |  |  |  |
| 1 (lowest) | 24.2 | 23.5 | 0.02 | 24.1 | 23.7 | 0.01 |
| 2 | 21.6 | 21.3 | 0.01 | 21.6 | 22.1 | 0.01 |
| 3 | 19.2 | 19.1 | 0.00 | 19.2 | 19.6 | 0.01 |
| 4 | 17.9 | 18.5 | 0.02 | 17.9 | 17.6 | 0.01 |
| 5 (highest) | 17.2 | 17.7 | 0.01 | 17.2 | 17.0 | 0.01 |
| Rurality, % |  |  |  |  |  |  |
| Major urban | 67.3 | 64.2 | 0.07 | 67.2 | 67.5 | 0.01 |
| Non-major urban | 25.6 | 26.4 | 0.02 | 25.6 | 25.6 | 0.00 |
| Rural | 7.2 | 9.4 | 0.08 | 7.2 | 6.9 | 0.01 |
| Resource utilization bandsb, % |  |  |  |  |  |  |
| 0- Non users | 0.7 | 4.5 | 0.24 | 0.7 | 0.7 | 0.01 |
| 1- Healthy users | 0.2 | 0.9 | 0.10 | 0.2 | 0.2 | 0.02 |
| 2- Low morbidity | 1.0 | 4.2 | 0.21 | 1.0 | 1.0 | 0.01 |
| 3- Moderate | 13.6 | 28.9 | 0.38 | 13.6 | 12.8 | 0.03 |
| 4- High | 16.7 | 22.1 | 0.14 | 16.7 | 16.7 | 0.00 |
| 5- Very high | 67.9 | 39.4 | 0.60 | 67.8 | 68.6 | 0.02 |

aIndex date was three months prior to the death date; bAggregated diagnostic groups were used in the match (further details upon request). NA – not applicable; SD – standard deviation; “-“ indicates small cells <6, therefore, not reported.

**Supplementary Table 7: Overall and stratified mean attributable costs per subject.**

|  | n matched pairs | Costs unadjusted for survival | | | | Costs adjusted for survival | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Index hospitalization costs | Cumulative  30-day costs | Cumulative  180-day costs | Cumulative  1-year costs | Cumulative  1-year  costs, undiscounted | Cumulative  2-year  costs, undiscounted | Cumulative  3-year  costs, undiscounted |
| *Elective admission subjects* |  |  |  |  |  |  |  |  |
| Overall | 1,471 | $37,282 | $20,905 | $44,696 | $48,029 | $32,151 | $34,843 | $37,171 |
| Healthcare services |  |  |  |  |  |  |  |  |
| Inpatient hospitalization | 1,471 | $37,282 | $19,384 | $39,024 | $41,401 | NA | NA | NA |
| Same day surgery procedures | 1,471 | NA | -$7\* | -$21\* | -$65\* | NA | NA | NA |
| ED visits | 1,471 | NA | -$26 | $21\* | $33\* | NA | NA | NA |
| Outpatient medications | 1,471 | NA | -$106 | -$174\* | -$286\* | NA | NA | NA |
| Physician services | 1,471 | NA | $2,187 | $3,468 | $3,247 | NA | NA | NA |
| Non-physician services | 1,471 | NA | $0\* | -$6\* | -$6\* | NA | NA | NA |
| Outpatient laboratory tests | 1,471 | NA | -$5 | -$8\* | $0\* | NA | NA | NA |
| Rehabilitation services | 1,471 | NA | -$224 | $1,328 | $1,529 | NA | NA | NA |
| Complex continuing care admissions | 1,471 | NA | -$11\* | $1,314 | $2,380 | NA | NA | NA |
| Home care services | 1,471 | NA | -$153 | $37\* | $305\* | NA | NA | NA |
| Long-term care admissions | 1,471 | NA | -$16\* | -$43\* | $7\* | NA | NA | NA |
| Dialysis clinic visits | 1,471 | NA | -$34\* | -$150\* | -$298\* | NA | NA | NA |
| Cancer clinic visits | 1,471 | NA | -$86 | -$115\* | -$269\* | NA | NA | NA |
| Assisted devices | 1,471 | NA | $2\* | $20\* | $51 | NA | NA | NA |
| Sex |  |  |  |  |  |  |  |  |
| Female | 680 | $35,697 | $19,324 | $42,010 | $45,251 | $31,432 | $34,633 | $37,131 |
| Male | 791 | $38,644 | $22,264 | $47,005 | $50,416 | $32,739 | $35,033 | $37,234 |
| Age group |  |  |  |  |  |  |  |  |
| Children (≤18 years) | 65 | $33,109 | $19,678 | $37,063 | $29,974\* | $33,362 | $38,737 | $45,908 |
| Adults (19-64 years) | 474 | $36,574 | $20,829 | $39,598 | $43,719 | $29,797 | $31,958 | $34,226 |
| Older adults (≥65 years) | 932 | $37,933 | $21,029 | $47,821 | $51,480 | $32,892 | $35,660 | $37,731 |
| Year of CDI diagnosis |  |  |  |  |  |  |  |  |
| 2003 | 130 | $24,659 | $14,748 | $29,988 | $30,421 | NA | NA | NA |
| 2004 | 206 | $32,369 | $18,404 | $39,910 | $43,481 | NA | NA | NA |
| 2005 | 197 | $26,029 | $17,251 | $27,394 | $30,951 | NA | NA | NA |
| 2006 | 162 | $31,836 | $20,548 | $39,864 | $43,578 | NA | NA | NA |
| 2007 | 220 | $37,105 | $22,173 | $45,129 | $45,593 | NA | NA | NA |
| 2008 | 210 | $51,280 | $23,765 | $57,738 | $64,512 | NA | NA | NA |
| 2009 | 173 | $43,979 | $25,014 | $54,232 | $61,187 | NA | NA | NA |
| 2010 | 173 | $47,067 | $23,810 | $59,756 | $60,220 | NA | NA | NA |
| CDI attributable colectomy |  |  |  |  |  |  |  |  |
| No | 1,453 | $36,744 | $20,432 | $44,179 | $47,572 | $32,176 | $34,934 | $37,270 |
| Yes | 18 | $80,711 | $59,050 | $86,400 | $84,852 | $36,080 | $37,102 | $36,845 |
| Survivorship |  |  |  |  |  |  |  |  |
| Short-term | 353 | $54,666 | $28,109 | $63,417 | $58,625 | $64,503 | NA | NA |
| Long-term | 1,118 | $31,793 | $18,630 | $38,785 | $44,683 | $43,394 | $45,401 | $46,656 |
| *Non-elective admission subjects* |  |  |  |  |  |  |  |  |
| Overall | 24,015 | $25,993 | $12,350 | $35,457 | $40,889 | $21,909 | $26,074 | $29,944 |
| Healthcare services |  |  |  |  |  |  |  |  |
| Inpatient hospitalization | 24,015 | $25,993 | $11,774 | $30,014 | $32,621 | NA | NA | NA |
| Same day surgery procedures | 24,015 | NA | -$111 | -$149 | -$166 | NA | NA | NA |
| ED visits | 24,015 | NA | $14 | $150 | $171 | NA | NA | NA |
| Outpatient medications | 24,015 | NA | -$34 | -$68 | -$129 | NA | NA | NA |
| Physician services | 24,015 | NA | $1,018 | $2,180 | $2,300 | NA | NA | NA |
| Non-physician services | 24,015 | NA | -$2 | $0\* | $10 | NA | NA | NA |
| Outpatient laboratory tests | 24,015 | NA | -$7 | -$10 | -$17 | NA | NA | NA |
| Rehabilitation services | 24,015 | NA | -$226 | $994 | $1,181 | NA | NA | NA |
| Complex continuing care admissions | 24,015 | NA | -$71 | $1,555 | $2,941 | NA | NA | NA |
| Home care services | 24,015 | NA | -$66 | $185 | $421 | NA | NA | NA |
| Long-term care admissions | 24,015 | NA | $30 | $272 | $750 | NA | NA | NA |
| Dialysis clinic visits | 24,015 | NA | $38 | $378 | $818 | NA | NA | NA |
| Cancer clinic visits | 24,015 | NA | -$8 | -$53 | -$80 | NA | NA | NA |
| Assisted devices | 24,015 | NA | $1\* | $8\* | $69 | NA | NA | NA |
| Sex |  |  |  |  |  |  |  |  |
| Female | 13,155 | $22,847 | $10,991 | $31,388 | $36,364 | $20,588 | $24,703 | $28,426 |
| Male | 10,860 | $29,671 | $13,996 | $40,386 | $46,372 | $23,355 | $27,637 | $31,716 |
| Age group |  |  |  |  |  |  |  |  |
| Children (≤18 years) | 406 | $27,137 | $18,420 | $57,168 | $75,752 | $58,955 | $71,389 | $84,347 |
| Adults (19-64 years) | 5,569 | $32,724 | $16,200 | $47,098 | $58,085 | $35,008 | $41,527 | $47,540 |
| Older adults (≥65 years) | 18,040 | $23,809 | $11,025 | $31,375 | $34,797 | $18,506 | $22,456 | $26,118 |
| Year of CDI diagnosis |  |  |  |  |  |  |  |  |
| 2003 | 2,493 | $23,175 | $11,598 | $33,064 | $37,629 | NA | NA | NA |
| 2004 | 3,138 | $22,475 | $11,932 | $31,809 | $35,561 | NA | NA | NA |
| 2005 | 3,377 | $22,073 | $11,107 | $30,918 | $35,457 | NA | NA | NA |
| 2006 | 2,760 | $24,926 | $11,934 | $33,475 | $38,527 | NA | NA | NA |
| 2007 | 3,430 | $27,380 | $12,266 | $35,327 | $40,432 | NA | NA | NA |
| 2008 | 3,247 | $29,922 | $12,667 | $38,196 | $44,661 | NA | NA | NA |
| 2009 | 2,727 | $30,533 | $13,845 | $40,456 | $47,191 | NA | NA | NA |
| 2010 | 2,843 | $27,016 | $13,655 | $41,135 | $48,578 | NA | NA | NA |
| CDI attributable colectomy |  |  |  |  |  |  |  |  |
| No | 23,787 | $25,427 | $12,046 | $34,902 | $40,338 | $21,652 | $25,808 | $29,663 |
| Yes | 228 | $78,765 | $44,045 | $93,410 | $98,410 | $47,093 | $52,409 | $57,272 |
| Survivorship |  |  |  |  |  |  |  |  |
| Short-term | 10,572 | $29,854 | $15,403 | $35,518 | $31,692 | $35,605 | NA | NA |
| Long-term | 13,443 | $22,849 | $9,949 | $35,409 | $48,122 | $44,998 | $48,987 | $52,963 |

\*Confidence interval crossed zero. CDI – C.*difficile* infection; NA - not applicable.

**Supplementary Table 8: Sensitivity analyses.**

|  | n matched pairs | Baseline | n matched pairs | Excluding those with CDI coded as a pre-admit comorbidity | n matched pairs | Acute infection length = 1 month | Acute infection length = 12 months | Final care length = 1 month | Final care length = 12 months |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Elective admission subjects* |  |  |  |  |  |  |  |  |  |
| Mean cost outcomes unadjusted for survival |  |  |  |  |  |  |  |  |  |
| Index hospitalization costs | 1,471 | $37,282 | 1,377 | $38,905 | NA | NA | NA | NA | NA |
| 30-day cumulative costs | 1,471 | $20,905 | 1,377 | $21,847 | NA | NA | NA | NA | NA |
| 180-day cumulative costs | 1,471 | $44,696 | 1,377 | $46,603 | NA | NA | NA | NA | NA |
| 1-year cumulative costs | 1,471 | $48,029 | 1,377 | $50,256 | NA | NA | NA | NA | NA |
| Mean cost outcomes adjusted for survival |  |  |  |  |  |  |  |  |  |
| 1-year cumulative costs | 1,471 | $32,151 | 1,377 | $33,276 | 1,471 | $27,535 | $39,040 | $43,730 | $27,516 |
| 2-year cumulative costs, undiscounted | 1,471 | $34,843 | 1,377 | $36,063 | NA | NA | NA | NA | NA |
| 3-year cumulative costs, undiscounted | 1,471 | $37,171 | 1,377 | $38,256 | NA | NA | NA | NA | NA |
| *Non-elective admission subjects* |  |  |  |  |  |  |  |  |  |
| Mean cost outcomes unadjusted for survival |  |  |  |  |  |  |  |  |  |
| Index hospitalization costs | 24,015 | $25,933 | 18,468 | $29,570 | NA | NA | NA | NA | NA |
| 30-day cumulative costs | 24,015 | $12,350 | 18,468 | $13,294 | NA | NA | NA | NA | NA |
| 180-day cumulative costs | 24,015 | $35,457 | 18,468 | $38,837 | NA | NA | NA | NA | NA |
| 1-year cumulative costs | 24,015 | $40,889 | 18,468 | $44,733 | NA | NA | NA | NA | NA |
| Mean cost outcomes adjusted for survival |  |  |  |  |  |  |  |  |  |
| 1-year cumulative costs | 24,015 | $21,909 | 18,468 | $23,500 | 24,015 | $20,365 | $26,571 | $28,411 | $18,775 |
| 2-year cumulative costs, undiscounted | 24,015 | $26,074 | 18,468 | $27,637 | NA | NA | NA | NA | NA |
| 3-year cumulative costs, undiscounted | 24,015 | $29,944 | 18,468 | $31,518 | NA | NA | NA | NA | NA |

\*Confidence interval crossed zero. CDI – C.*difficile* infection. NA – not applicable.

**ReferenceS for THE SUPPLEMENTAL MATERIAL**

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