### SUPPLEMENTARY MATERIALS

**Supplementary Table 1.** Number of cancer patients (rounded to 100’s) diagnosed between 2000-2012, overall and by cancer site, with Medicare Part A & Part B claims data and enrolled in Medicare Part D between 2007-2013 to contribute to each phase of care cost calculations, SEER-Medicare

| Site                      | Phase of care | Initial | Continuing | End-of-life | Cancer | Other cause |
|---------------------------|---------------|---------|------------|-------------|--------|-------------|
| All sites                 |               | 439,615 | 810,632    | 251,380     | 162,925|
| Bladder                   |               | 26,632  | 43,525     | 8,232       | 10,941 |
| Brain                     |               | 1,568   | 1,565      | 4,250       | 1,000  |
| Breast                    |               | 74,403  | 167,446    | 14,566      | 24,295 |
| Cervix uteri              |               | 1,546   | 3,077      | 1,118       | 561    |
| Colorectal                |               | 45,723  | 86,427     | 24,603      | 21,671 |
| Esophagus                 |               | 2,738   | 2,959      | 4,569       | 951    |
| Hodgkin lymphoma          |               | 796     | 1,573      | 503         | 333    |
| Kidney                    |               | 14,665  | 24,725     | 6,081       | 4,992  |
| Leukemia                  |               | 10,026  | 15,120     | 8,466       | 4,398  |
| AML                       |               | 1,235   | 1,120      | 4,097       | 606    |
| CLL                       |               | 6,385   | 10,639     | 2,172       | 2,589  |
| CML                       |               | 1,458   | 1,954      | 873         | 727    |
| Liver                     |               | 3,593   | 3,360      | 5,771       | 1,494  |
| Lung                      |               | 41,666  | 43,444     | 71,145      | 14,894 |
| NSCLC                     |               | 38,441  | 41,134     | 61,133      | 13,834 |
| SCLC                      |               | 3,225   | 2,310      | 10,012      | 1,060  |
| Melanoma                  |               | 32,528  | 56,870     | 3,745       | 8,555  |
| Myeloma                   |               | 6,779   | 8,939      | 5,715       | 2,296  |
| Non-Hodgkin lymphoma      |               | 18,902  | 33,144     | 10,243      | 6,785  |
| Oral cavity/pharynx       |               | 8,624   | 14,047     | 4,833       | 3,152  |
| Ovary                     |               | 4,683   | 7,575      | 6,157       | 980    |
| Pancreas                  |               | 4,939   | 3,320      | 16,580      | 1,476  |
| Prostate                  |               | 77,630  | 192,248    | 12,559      | 26,657 |
| Stomach                   |               | 5,615   | 6,980      | 7,039       | 2,147  |
| Thyroid                   |               | 6,126   | 12,411     | 1,037       | 1,099  |
| Uterus                    |               | 13,031  | 27,981     | 4,732       | 3,931  |

*Includes patients diagnosed with in-situ and invasive cancers. AML= acute myeloid leukemia; CLL= chronic lymphocytic leukemia; CML= chronic myeloid leukemia; NSCLC= non-small cell lung cancer; SCLC= small cell lung cancer. Source: Mariotto AB, Enewold L, Zeruto C, Zhao J, Yabroff KR. Medical care costs associated with cancer survivorship in the United States. *Cancer Epidemiol Biomarkers and Prev* 2020; 29(7):1304-1312.
## Supplementary Table 2. Net annualized patient responsibility costs associated with cancer in 2019 US dollars (thousands) for medical services (Medicare Parts A & B) by cancer site and phase of care.

| Cancer site                  | Phase of Care                               | Initial Mean Annualized $ | Median Annualized $ | Continuing Mean Annualized $ | Median Annualized $ | End-of-Life Cancer Death Mean Annualized $ | Median Annualized $ |
|------------------------------|---------------------------------------------|---------------------------|---------------------|-------------------------------|---------------------|--------------------------------------------|---------------------|
|                              |                                             |                           |                     |                               |                     |                                            |                     |
| Bladder                      |                                             | $5,095                    | $3,544              | $1,740                        | $1,351              | $11,055                                    | $8,894              |
| Brain                        |                                             | $19,900                   | $16,270             | $3,374                        | $1,637              | $20,419                                    | $17,002             |
| Breast                       |                                             | $7,634                    | $6,395              | $1,328                        | $916                | $9,870                                     | $7,747              |
| Cervix Uteri                 |                                             | $10,513                   | $8,845              | $1,208                        | $732                | $10,892                                    | $8,778              |
| Colorectal                   |                                             | $9,137                    | $5,694              | $2,168                        | $1,256              | $13,464                                    | $9,864              |
| Esophagus                    |                                             | $14,518                   | $11,402             | $2,979                        | $1,584              | $15,431                                    | $12,436             |
| Hodgkin Lymphoma             |                                             | $13,157                   | $12,121             | $2,137                        | $1,376              | $14,538                                    | $12,066             |
| Kidney                       |                                             | $5,860                    | $4,256              | $1,256                        | $1,256              | $11,723                                    | $8,963              |
| Leukemia                     |                                             | $6,826                    | $2,948              | $1,331                        | $1,331              | $17,909                                    | $13,035             |
| AML                          |                                             | $21,082                   | $16,551             | $1,318                        | $1,318              | $24,356                                    | $19,039             |
| CLL                          |                                             | $4,561                    | $2,242              | $1,316                        | $1,316              | $11,740                                    | $8,304              |
| CML                          |                                             | $5,439                    | $3,291              | $1,556                        | $1,556              | $15,026                                    | $9,522              |
| Liver                        |                                             | $9,500                    | $6,381              | $2,161                        | $2,161              | $9,497                                     | $7,336              |
| Lung                         |                                             | $10,866                   | $8,260              | $1,625                        | $1,625              | $13,852                                    | $11,439             |
| NSCLC                        |                                             | $10,553                   | $7,898              | $1,613                        | $1,613              | $13,598                                    | $10,935             |
| SCLC                         |                                             | $15,438                   | $14,438             | $1,890                        | $1,890              | $15,482                                    | $14,084             |
| Melanoma                     |                                             | $2,291                    | $1,715              | $912                          | $912                | $10,310                                    | $7,031              |
| Myeloma                      |                                             | $12,325                   | $8,823              | $3,209                        | $3,209              | $14,298                                    | $12,227             |
| Non-Hodgkin Lymphoma         |                                             | $13,036                   | $10,430             | $1,562                        | $1,562              | $17,093                                    | $13,648             |
| Oral Cavity/Pharynx          |                                             | $10,482                   | $7,096              | $1,050                        | $1,050              | $13,766                                    | $10,172             |
| Ovary                        |                                             | $10,956                   | $9,222              | $1,387                        | $1,387              | $13,519                                    | $11,329             |
| Pancreas                     |                                             | $14,810                   | $13,424             | $1,956                        | $1,956              | $14,388                                    | $12,914             |
| Prostate                     |                                             | $6,295                    | $4,383              | $843                          | $843                | $9,794                                     | $7,101              |
| Stomach                      |                                             | $10,781                   | $7,589              | $1,298                        | $1,298              | $13,866                                    | $10,677             |
| Thyroid                      |                                             | $4,686                    | $3,716              | $1,054                        | $1,054              | $11,582                                    | $8,512              |
| Uterus                       |                                             | $6,727                    | $5,291              | $766                          | $766                | $11,028                                    | $9,282              |
| All sites combined           |                                             | $7,613                    | $5,026              | $1,012                        | $1,012              | $13,228                                    | $10,423             |
aIncludes patients diagnosed with in-situ and invasive cancers. AML= acute myeloid leukemia; CLL= chronic lymphocytic leukemia; CML= chronic myeloid leukemia; NSCLC= non-small cell lung cancer; SCLC= small cell lung cancer.

bAll estimates in 2019 US dollars. Costs associated with cancer are estimated as the difference between cancer cases and matched controls.
**Supplementary Table 3.** Net annualized patient out-of-pocket costs associated with cancer in 2019 US dollars (thousands) for oral prescription drugs (Medicare Part D) by cancer site and phase of care.a

| Cancer site            | Mean Annualized $ | Median Annualized $ | Mean Annualized $ | Median Annualized $ | Mean Annualized $ | Median Annualized $ |
|------------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|
| **Initial**            |                   |                     |                   |                     |                   |                     |
| Bladder                | $154              | $122                | $119              | $106                | $201              | $109                |
| Brain                  | $522              | $231                | $247              | $97                 | $479              | $167                |
| Breast                 | $202              | $125                | $167              | $93                 | $275              | $47                 |
| Cervix Uteri           | -$6               | -$18                | -$36              | -$20                | $29               | -$41                |
| Colorectal             | $336              | $232                | $113              | $84                 | $210              | $104                |
| Esophagus              | $378              | $133                | $75               | $54                 | $384              | $25                 |
| Hodgkin Lymphoma       | $309              | $130                | $222              | $139                | $938              | $155                |
| Kidney                 | $642              | $132                | $413              | $114                | $582              | $121                |
| Leukemia               | $1,267            | $291                | $335              | $116                | $639              | $150                |
| AML                    | $122              | $83                 | $117              | $91                 | $333              | $98                 |
| CML                    | $2,456            | $299                | $2,341            | $474                | $946              | $104                |
| Liver                  | $577              | $37                 | $466              | $40                 | $773              | -$2                 |
| Lung                   | $460              | $200                | $309              | $158                | $546              | $119                |
| NSCLC                  | $470              | $200                | $312              | $161                | $588              | $120                |
| SCLC                   | $325              | $187                | $236              | $97                 | $274              | $112                |
| Melanoma               | $123              | $57                 | $95               | $69                 | $440              | $164                |
| Myeloma                | $2,576            | $435                | $1,593            | $292                | $1,818            | $313                |
| Non-Hodgkin Lymphoma   | $219              | $125                | $88               | $64                 | $297              | $98                 |
| Oral Cavity/Pharynx    | $161              | $110                | $36               | $32                 | $186              | $35                 |
| Ovary                  | $154              | $78                 | $6                | $27                 | $142              | $65                 |
| Pancreas               | $819              | $351                | $519              | $284                | $871              | $257                |
| Prostate               | $95               | $90                 | $48               | $52                 | $533              | $126                |
| Stomach                | $308              | $62                 | $145              | $29                 | $164              | $14                 |
| Thyroid                | $228              | $193                | $177              | $167                | $434              | $133                |
| Uterus                 | $40               | $42                 | $15               | $36                 | $146              | $31                 |
| **End-of-Life Cancer Death** |       |                     |                   |                     |                   |                     |
| All sites combined     | $243              | $114                | $127              | $78                 | $448              | $88                 |
Includes patients diagnosed with in-situ and invasive cancers. AML= acute myeloid leukemia; CLL= chronic lymphocytic leukemia; CML= chronic myeloid leukemia; NSCLC= non-small cell lung cancer; SCLC= small cell lung cancer.

All estimates in 2019 US dollars. Costs associated with cancer are estimated as the difference between cancer cases and matched controls.
**Supplementary Table 4.** Net annualized patient responsibility costs associated with cancer in 2019 US dollars for medical services (Medicare Part A & B) by phase of care, cancer site, and stage at diagnosis.\textsuperscript{a,b}

| Cancer Site                  | SEER historic stage | Initial phase of care | Continuing phase of care |
|------------------------------|---------------------|-----------------------|--------------------------|
|                              | Localized           | Regional              | Distant                  | Localized           | Regional              | Distant                  |
|                              | No.                 | Mean annualized $     | No.                      | Mean annualized $ (SE) | No.                 | Mean annualized $ (SE) |
|                              |                     | (SE)                  |                          |                        |                     |                          |
| Bladder                      | 70,228              | $4,304                | 11,015                   | $10,229               | 878                 | $13,676                 |
| Breast                       | 118,411             | $7,104                | 39,944                   | $10,754               | 7,502               | $12,840                 |
| Cervix uteri                 | 1,285               | $7,685                | 1,742                    | $12,360               | 342                 | $14,186                 |
| Colorectal                   | 61,752              | $6,074                | 45,368                   | $11,361               | 12,111              | $20,600                 |
| Esophagus                    | 2,742               | $11,693               | 2,778                    | $17,620               | 1,397               | $16,881                 |
| Kidney                       | 29,367              | $5,219                | 8,036                    | $6,895                | 2,342               | $10,866                 |
| Liver                        | 5,881               | $9,488                | 1,751                    | $9,788                | 359                 | $12,851                 |
| Lung                         | 44,424              | $7,745                | 35,360                   | $11,786               | 28,114              | $15,804                 |
| NSCLC                        | 43,313              | $7,638                | 32,502                   | $11,463               | 24,247              | $15,715                 |
| SCLC                         | 1,111               | $12,159               | 2,858                    | $15,776               | 3,867               | $16,420                 |
| Melanoma                     | 46,200              | $2,443                | 4,857                    | $5,660                | 1,145               | $9,408                  |
| Oral cavity/pharynx          | 9,383               | $5,957                | 10,346                   | $13,992               | 2,441               | $16,072                 |
| Ovary                        | 2,058               | $6,542                | 1,341                    | $10,457               | 8,775               | $12,336                 |
| Pancreas                     | 2,382               | $10,841               | 6,156                    | $16,899               | 3,266               | $16,075                 |
| Prostate\textsuperscript{c}  | 235,949             | $6,345                | —                        | —                     | 9,476               | $6,317                  |
| Stomach                      | 7,092               | $8,159                | 3,930                    | $14,739               | 1,944               | $16,369                 |
| Thyroid                      | 11,047              | $3,975                | 5,171                    | $5,687                | 742                 | $8,719                  |
| Uterus                       | 24,067              | $5,449                | 7,409                    | $9,583                | 2,424               | $11,867                 |
| All sites combined           | 460,442             | $5,860                | 199,019                  | $11,051               | 136,135             | $12,248                 |

\textsuperscript{a} Costs in 2019 US dollars.  
\textsuperscript{b} Males and females combined.  
\textsuperscript{c} Includes prostate cancer in situ, transitional cell carcinoma, and adenocarcinoma.
| Tumor Site                | Cost 2014 (in USD) | Cost 2015 (in USD) | Cost 2016 (in USD) | Cost 2017 (in USD) | Cost 2018 (in USD) | Cost 2019 (in USD) |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Kidney                   | 109,005            | $2,012             | 23,348             | $2,174             | 3,462              | $4,310             |
| Liver                    | 10,392             | $3,394             | 2,133              | $3,449             | 294                | $2,783             |
| Lung                     | 111,302            | $2,147             | 68,500             | $2,733             | 26,028             | $5,339             |
| NSCLC                    | 109,065            | $2,141             | 63,814             | $2,735             | 23,091             | $5,529             |
| SCLC                     | 2,237              | $2,452             | 4,686              | $2,707             | 2,937              | $3,906             |
| Melanoma                 | 165,636            | $1,167             | 14,202             | $1,769             | 1,835              | $3,092             |
| Oral cavity/pharynx     | 33,484             | $1,541             | 31,908             | $1,618             | 5,164              | $1,922             |
| Ovary                    | 11,819             | $1,167             | 4,916              | $2,437             | 20,936             | $4,581             |
| Pancreas                 | 3,878              | $2,461             | 6,350              | $3,866             | 2,286              | $6,849             |
| Prostatec                | 1,297,460          | $1,119             | —                  | —                  | 17,297             | $3,382             |
| Stomach                  | 20,907             | $1,625             | 9,100              | $1,893             | 2,088              | $3,727             |
| Thyroid                  | 45,948             | $1,379             | 20,045             | $1,461             | 2,022              | $2,583             |
| Uterus                   | 125,429            | $1,063             | 24,478             | $1,507             | 4,723              | $2,291             |
| All sites combined       | 1,826,226          | $1,435             | 651,673            | $1,881             | 260,527            | $4,101             |

End-of-life phase of care, cancer death

| Tumor Site                | Cost 2014 (in USD) | Cost 2015 (in USD) | Cost 2016 (in USD) | Cost 2017 (in USD) | Cost 2018 (in USD) | Cost 2019 (in USD) |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Bladder                  | 10,260             | $9,113             | 8,899              | $12,331            | 2,595              | $16,642            |
| Breast                   | 11,235             | $8,577             | 12,705             | $10,009            | 8,570              | $12,723            |
| Cervix uteri             | 361                | $9,586             | 1,219              | $10,734            | 680                | $12,767            |
| Colorectal               | 12,177             | $10,381            | 21,311             | $12,514            | 23,169             | $17,067            |
| Esophagus                | 2,302              | $13,543            | 3,665              | $15,458            | 4,307              | $17,308            |
| Kidney                   | 4,601              | $10,404            | 4,146              | $11,933            | 5,777              | $13,861            |
| Liver                    | 5,344              | $9,161             | 3,508              | $9,371             | 2,137              | $12,564            |
| Lung                     | 24,116             | $9,825             | 41,167             | $12,474            | 97,612             | $16,458            |
| NSCLC                    | 22,865             | $9,745             | 35,978             | $12,248            | 80,682             | $16,454            |
| SCLC                     | 1,251              | $11,328            | 5,189              | $14,076            | 16,930             | $16,474            |
| Melanoma                 | 4,650              | $8,645             | 2,524              | $10,007            | 1,882              | $15,830            |
| Oral cavity/pharynx     | 2,296              | $10,997            | 6,098              | $14,375            | 2,515              | $15,489            |
| Ovary                    | 521                | $10,260            | 1,029              | $10,718            | 12,364             | $14,138            |
| Pancreas                 | 3,847              | $12,176            | 12,263             | $14,726            | 18,964             | $15,817            |
| Prostatec                | 23,928             | $9,690             | —                  | —                  | 9,707              | $10,543            |
| Site       | Cases | Cost 2019 US Dollars | Cases | Cost 2019 US Dollars | Cases | Cost 2019 US Dollars | Cases | Cost 2019 US Dollars |
|------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|
| Stomach    | 3,358 | $11,381              | 4,565 | $13,875              | 6,283 | $16,894              |
| Thyroid    | 578   | $10,705              | 915   | $12,079              | 843   | $12,043              |
| Uterus     | 3,587 | $9,890               | 3,690 | $11,344              | 3,307 | $12,822              |
| All sites combined | 97,689 | $9,925              | 138,263 | $12,472              | 247,218 | $15,662              |

*a* Includes patients diagnosed with invasive cancers with information about stage at diagnosis; patients diagnosed with in-situ disease or missing information about stage were excluded from stage-specific analyses. NSCLC = non-small cell lung cancer; SCLC = small cell lung cancer.

*b* All estimates in 2019 US dollars. Costs associated with cancer are estimated as the difference between cancer cases and matched controls.

*c* Prostate cancer stage reported as localized/regional during some years of study.
Supplementary Table 5. Net out-of-pocket costs associated with cancer for medical services and prescription drugs covered through pharmacy benefit in the continuing phase of care by stage at diagnosis and cancer site.\textsuperscript{a,b}

| Cancer site         | Medical services (Medicare Part A & Part B) | Prescription drugs covered through pharmacy benefit (Medicare Part D) |
|---------------------|---------------------------------------------|---------------------------------------------------------------------|
|                     | Localized | Regional | Distant | Localized | Regional | Distant |
| Bladder             | $481      | $621     | $942    | $129      | $0       | $50     |
| Breast              | $347      | $471     | $1,451  | $168      | $229     | $295    |
| Cervix uteri        | $310      | $346     | $795    | -$35      | -$47     | $0      |
| Colorectal          | $397      | $529     | $1,930  | $50       | -$3      | -$17    |
| Esophagus           | $628      | $629     | $1,110  | $128      | $59      | $138    |
| Kidney              | $575      | $621     | $1,231  | $203      | $245     | $803    |
| Liver               | $969      | $985     | $795    | $467      | $447     | $1,059  |
| Lung                | $613      | $781     | $1,525  | $273      | $297     | $501    |
| NSCLC               | $612      | $781     | $1,579  | $272      | $297     | $552    |
| SCLC                | $701      | $773     | $1,116  | $288      | $290     | $107    |
| Melanoma            | $333      | $505     | $883    | $98       | $84      | $125    |
| Oral cavity/pharynx | $440      | $462     | $549    | $55       | $4       | $0      |
| Ovary               | $333      | $696     | $1,309  | $36       | -$69     | $14     |
| Pancreas            | $703      | $1,113   | $1,957  | $381      | $579     | $582    |
| Prostate\textsuperscript{c} | $320      | $966     | $42     | $346      | $346     | $346    |
| Stomach             | $464      | $541     | $1,065  | $128      | $82      | $422    |
| Thyroid             | $394      | $417     | $738    | $176      | $172     | $207    |
| Uterus              | $304      | $430     | $654    | $21       | -$5      | -$35    |
| All sites combined  | $410      | $537     | $1,171  | $132      | $128     | $527    |

\textsuperscript{a}Includes patients diagnosed with invasive cancers with information about stage at diagnosis; patients diagnosed with in-situ disease or missing information about stage were excluded from stage-specific analyses. NSCLC= non-small cell lung cancer; SCLC= small cell lung cancer.

\textsuperscript{b}All estimates in 2019 US dollars. Costs associated with cancer are estimated as the difference between cancer cases and matched controls. Out-of-pocket costs estimated from patient responsibility for medical services under Medicare Parts A/B claims. Out-of-pocket costs for oral prescription drugs estimated directly from Medicare Part D claims.

\textsuperscript{c}Prostate cancer stage reported as localized/regional during some years of study.
**Supplementary Table 6.** Health Care Utilization in Cancer Survivors and Individuals Without a Cancer History, Medical Expenditure Panel Survey, 2008–2017

| Service type                  | Percentage with service | Mean service use among individuals with service |  |
|------------------------------|-------------------------|-----------------------------------------------|---|
|                              | Cancer survivor         | No cancer history                             | Cancer survivor | No cancer history | P^b |
|                              | Unadjusted | Adjusted^a | Unadjusted | Adjusted^a | No. | Mean | Predicted marginals^a | No. | Mean | Predicted marginals^a |  |
| Aged 18-64 years             |                       |                                               |               |                |    |      |                       |    |      |                       |  |
| Emergency room visits        | 20.2           | 17.4          | 12.4       | 12.5          | 1866 | 1.6  | 1.6               | 24408 | 1.4  | 1.4               | <0.001 |
| Ambulatory surgery           | 25.3           | 17.9          | 9.4        | 9.6           | 1906 | 1.9  | 1.8               | 14495 | 1.5  | 1.6               | <0.001 |
| Inpatient hospitalization    | 13.2           | 9.8           | 5.8        | 5.9           | 1189 | 8.3  | 7.4               | 11013 | 5.4  | 5.5               | <0.001 |
| Chemotherapy^c               | 4.0            | 3.2           | 0.0        | 0.0           | 190  | 8.6  | 8.6               | 26     | 3.8  | 4.1               | 0.039 |
| Radiation^c                  | 3.0            | 1.9           | 0.1        | 0.1           | 120  | 16.1 | 15.8              | 61     | 8.0  | 8.3               | 0.039 |
| Other office visits          | 89.1           | 80.6          | 68.7       | 69.3          | 7388 | 11.6 | 9.6               | 119149 | 7.1  | 7.2               | <0.001 |
| Aged 65+ years               |                       |                                               |               |                |    |      |                       |    |      |                       |  |
| Emergency room visits        | 23.4           | 22.1          | 18.6       | 19.0          | 2175 | 1.5  | 1.5               | 5858  | 1.4  | 1.5               | 0.06 |
| Ambulatory surgery           | 35.6           | 34.5          | 23.3       | 23.5          | 2940 | 2.3  | 2.3               | 6267  | 1.9  | 2.0               | <0.001 |
| Inpatient hospitalization    | 21.4           | 20.0          | 15.0       | 15.3          | 1900 | 8.8  | 8.7               | 4475  | 8.2  | 8.3               | 0.35 |
| Chemotherapy^c               | 3.8            | 4.1           | 0.1        | 0.1           | 176  | 9.0  | 8.9               | 10    | 9.8  | 11.1              | 0.61 |
| Radiation^c                  | 2.6            | 2.7           | 0.3        | 0.3           | 115  | 16.8 | 17.0              | 32     | 12.9 | 12.3              | 0.19 |
| Other office visits          | 95.8           | 95.2          | 90.8       | 91.1          | 8626 | 15.2 | 14.9              | 28177 | 11.3 | 11.4              | <0.001 |

^a Adjusted for age, sex, educational attainment, and number of comorbid conditions

^b Wald’s F P value, 2-sided

^c Chemotherapy and radiation therapy were restricted to year 2008-2012
**Supplementary Table 7.** Time Traveling, Waiting, and Receiving Care, by Cancer History, Medical Expenditure Panel Survey, 2008-2017

| Age group and service type                      | Patient time (95% CI), h |       |       |
|------------------------------------------------|--------------------------|-------|-------|
|                                                 | Cancer survivors         | No cancer history | $p^b$ |
| Aged 18-64 years                                |                          |       |       |
| All services                                    | 29.61 (27.21 - 32.01)    | 13.71 (13.35 - 14.06) | <0.001 |
| Service-specific estimates                      |                          |       |       |
| Emergency room visits                           | 1.11 (1.01 - 1.2)        | 0.67 (0.64 - 0.69)    | <0.001 |
| Ambulatory surgery                              | 2.08 (1.91 - 2.25)       | 0.78 (0.75 - 0.81)    | <0.001 |
| Inpatient hospitalization                       | 12.75 (10.75 - 14.76)    | 4.60 (4.34 - 4.86)    | <0.001 |
| Chemotherapy$^c$                                | 0.41 (0.94 - 1.52)       | 0.01 (0 - 0.01)       | <0.001 |
| Radiation$^c$                                    | 13.20 (0.49 - 1.07)      | 8.08 (0 - 0.02)       | <0.001 |
| Office visits                                   | 11.52 (10.94 - 12.11)    | 7.06 (6.89 - 7.23)    | <0.001 |
| Aged ≥65 years                                  | 51.35 (48.17 - 54.54)    | 36.76 (35.42 - 38.1)  | <0.001 |
| Service-specific estimates                      |                          |       |       |
| Emergency room visits                           | 1.36 (1.27 - 1.45)       | 1.13 (1.08 - 1.17)    | <0.001 |
| Ambulatory surgery                              | 4.21 (3.88 - 4.54)       | 2.44 (2.32 - 2.57)    | <0.001 |
| Inpatient hospitalization                       | 22.21 (19.7 - 24.72)     | 16.45 (15.34 - 17.57) | <0.001 |
| Chemotherapy$^c$                                | 0.63 (0.81 - 1.57)       | 0.01 (0.00 - 0.02)    | <0.001 |
| Radiation$^c$                                    | 0.35 (0.44 - 0.90)       | 0.03 (0.02 - 0.09)    | <0.001 |
| Office visits                                   | 20.93 (19.95 - 21.91)    | 15.24 (14.79 - 15.68) | <0.001 |

$^a$The results were adjusted for age, sex, educational attainment, and number of comorbid conditions. CI = confidence interval.

$^b$Wald’s F test P value, 2-sided.

$^c$Chemotherapy and radiation therapy were restricted to year 2008-2012.
**Supplementary Table 8.** Relative survival by cancer site and age group.

| Cancer Site                        | Age group | Relative survival, % |
|------------------------------------|-----------|----------------------|
|                                    |           | 1-year               | 5-year               |
| Bladder                            | < 64 years| 93.4                 | 84.0                 |
|                                    | ≥65 years | 87.1                 | 74.1                 |
| Brain and Other Nervous System      | < 64 years| 74.0                 | 45.8                 |
|                                    | ≥65 years | 25.0                 | 6.8                  |
| Female Breast                      | < 64 years| 98.1                 | 89.8                 |
|                                    | ≥65 years | 96.2                 | 89.0                 |
| Cervix Uteri                       | < 64 years| 89.8                 | 72.7                 |
|                                    | ≥65 years | 72.0                 | 47.6                 |
| Colon and Rectum                   | < 64 years| 89.3                 | 68.8                 |
|                                    | ≥65 years | 77.9                 | 61.3                 |
| Esophagus                          | < 64 years| 49.5                 | 19.9                 |
|                                    | ≥65 years | 42.1                 | 16.1                 |
| Hodgkin Lymphoma                   | < 64 years| 96.0                 | 90.6                 |
|                                    | ≥65 years | 66.7                 | 53.7                 |
| Kidney and Renal Pelvis            | < 64 years| 88.6                 | 77.7                 |
|                                    | ≥65 years | 78.1                 | 64.6                 |
| Leukemia                           | < 64 years| 83.7                 | 69.8                 |
|                                    | ≥65 years | 63.7                 | 47.4                 |
| Liver and Intrahepatic Bile Duct   | < 64 years| 45.5                 | 20.6                 |
|                                    | ≥65 years | 35.0                 | 11.1                 |
| Lung and Bronchus                  | < 64 years| 48.3                 | 20.1                 |
|                                    | ≥65 years | 39.5                 | 15.3                 |
| Lung, Non-Small Cell               | < 64 years| 49.7                 | 22.2                 |
|                                    | ≥65 years | 41.2                 | 16.8                 |
| Lung, Small Cell                   | < 64 years| 40.4                 | 8.4                  |
|                                    | ≥65 years | 27.55                | 4.8                  |
| Melanoma of the Skin               | < 64 years| 97.67                | 93.02                |
|                                    | ≥65 years | 96.41                | 88.79                |
| Myeloma                            | < 64 years| 85.57                | 59.27                |
|                                    | ≥65 years | 70.07                | 37.13                |
| Non-Hodgkin Lymphoma               | < 64 years| 87.20                | 77.39                |
|                                    | ≥65 years | 74.02                | 60.67                |
| Oral Cavity and Pharynx            | < 64 years| 87.46                | 67.97                |
|                                    | ≥65 years | 76.40                | 54.33                |
| Ovary                              | < 64 years| 87.24                | 58.78                |
|                                    | ≥65 years | 60.02                | 29.00                |
| Pancreas                           | < 64 years| 36.75                | 11.34                |
|                                    | ≥65 years | 21.43                | 4.95                 |
| Prostate                           | < 64 years| 99.84                | 98.78                |
|                                    | ≥65 years | 99.21                | 98.44                |
| Stomach                            | < 64 years| 58.21                | 32.14                |
|                  | < 64 years | ≥65 years | < 64 years | ≥65 years |
|------------------|------------|-----------|------------|-----------|
| Thyroid          | 99.34      | 92.39     | 98.93      | 91.36     |
| Corpus and Uterus| 94.64      | 87.68     | 86.42      | 74.00     |

≥65 years  48.16  25.99
**Supplementary Table 9. National Prevalence in 2019 by Cancer Site, Age Group and Phase-of-Care**

| Cancer site       | Aged < 65 years |                                      |                                      |                                      |                                      |                                      |                                      |
|-------------------|-----------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                   | Initial         | Continuing                           | End-of-life cancer death            | End-of-life non-cancer death         | Initial                             | Continuing                           | End-of-life cancer death            | End-of-life non-cancer death         |
| Bladder           | 18626           | 131673                               | 1699                                 | 1448                                 | 56087                               | 577645                               | 14437                                | 28006                                |
| Breast            | 123824          | 1224774                              | 12791                                | 5271                                 | 112986                              | 2291622                              | 28837                                | 61415                                |
| Cervix uteri      | 7766            | 134463                               | 1610                                 | 918                                  | 2278                                | 129996                               | 1713                                 | 4378                                 |
| Colorectal        | 43687           | 316333                               | 10491                                | 2668                                 | 80813                               | 1020457                              | 31310                                | 39014                                |
| Hodgkin lymphoma  | 7411            | 172746                               | 532                                  | 951                                  | 1572                                | 48977                                | 919                                  | 1779                                 |
| Kidney            | 21189           | 183731                               | 3331                                 | 1827                                 | 24929                               | 312231                               | 10349                                | 11977                                |
| Leukemia          | 16416           | 204322                               | 3660                                 | 1388                                 | 20771                               | 183699                               | 12214                                | 9232                                 |
| Lung              | 23961           | 88013                                | 18469                                | 2697                                 | 57700                               | 294135                               | 66114                                | 20255                                |
| Melanoma          | 42141           | 566237                               | 2170                                 | 1720                                 | 38080                               | 677487                               | 7742                                 | 21034                                |
| Non-Hodgkin lymphoma | 26380       | 255786                               | 5087                                 | 2751                                 | 36620                               | 397417                               | 16395                                | 17279                                |
| Oral cavity/pharynx | 16913        | 129094                               | 4606                                 | 2176                                 | 14332                               | 194381                               | 8193                                 | 9972                                 |
| Ovary             | 9754            | 91289                                | 4350                                 | 431                                  | 7893                                | 124381                               | 8121                                 | 3010                                 |
| Prostate          | 102499          | 556993                               | 2561                                 | 4007                                 | 182013                              | 2672162                              | 31560                                | 98237                                |
| Thyroid           | 34515           | 523850                               | 396                                  | 924                                  | 10558                               | 320002                               | 2229                                 | 8113                                 |
| Uterus            | 25644           | 198452                               | 3073                                 | 1557                                 | 25656                               | 530444                               | 7176                                 | 15860                                |
| All sites combined | 560928          | 5301184                              | 100393                               | 36184                                | 655831                              | 9659985                              | 264229                               | 341639                                |