[Supplementary online-only material for Nelson RE, Xie Y, DuVall SL: Multiple sclerosis and risk of infection-related hospitalization and death in US veterans. *Int J MS Care*. 2015;17(5):221–230.]

## Supplementary Table 1. Definitions for identifying infections

| Infection  | ICD-9-CM code |
|--|---------------|
| Infection definitions  |               |
| Intestinal infectious diseases, tuberculosis, zoonotic bacterial | 001–104       |
| diseases, other bacterial diseases, HIV, poliomyelitis, viral    |               |
| diseases accompanied by exanthema, arthropod-borne viral         |               |
| diseases, other diseases due to viruses and chlamydiae,          |               |
| rickettsioses, syphilis and other venereal diseases, other       |               |
| spirochetal diseases   |               |
| Mycoses  | 110–118       |
| Toxoplasmosis, trichomoniasis                                    | 130–131       |
| Pneumocyotosis, psorospermiasis, sarcosporidiosis                | 136.2–136.5   |
| Bacterial meningitis   | 320           |
| Meningitis   | 321           |
| Intracranial and intraspinal abscess                             | 324           |
| Purulent endophthalmitis   | 360.0         |
| Acute conjunctivitis   | 372.0         |
| Cellulitis, orbital  | 376.01        |
| Osteomyelitis, orbital   | 376.03        |

| Eustachian salpingitis                      | 381.5         |
|---|---------------|
| Suppurative and unspecified otitis media    | 382           |
| Mastoiditis                                 | 383.0         |
| Chronic mastoiditis                         | 383.1         |
| Unspecified mastoiditis                     | 383.9         |
| Endocarditis                                | 421           |
| Septic myocarditis                          | 422.92        |
| Acute respiratory infections                | 460–466       |
| Chronic pharyngitis and nasopharyngitis     | 472           |
| Chronic sinusitis                           | 473           |
| Peritonsillar abscess                       | 475           |
| Pneumonia                                   | 480–486       |
| Influenza                                   | 487.0–487.8   |
| Influenza                                   | 488.01–488.19 |
| Empyema                                     | 510           |
| Abscess of lung and mediastinum             | 513           |
| Inflammatory conditions of the jaw          | 526.4         |
| Cellulitis and abscess of oral soft tissues | 528.3         |
| Acute appendicitis                          | 540           |
| Abscesses of anal and rectal regions        | 566           |
| Peritonitis and retroperitoneal infections  | 567           |

| Abscess of intestine                                | 569.5                 |
|---|-----------------------|
| Infection of colostomy or enterostomy               | 569.61                |
| Liver abscess and sequelae of chronic liver disease | 572                   |
| Hepatitis in viral diseases                         | 573.1                 |
| Hepatitis in other infectious diseases              | 573.2                 |
| Infections of kidney                                | 590                   |
| Cystitis  | 595.xx                |
| Urethritis  | 597                   |
| UTI   | 599.0                 |
| Acute prostatitis                                   | 601.0                 |
| Abscess of prostate                                 | 601.2                 |
| Prostatitis in diseases classified elsewhere        | 601.4                 |
| Other inflammatory disorders of male genital organs | 608.4                 |
| Inflammatory disease of breast                      | 611.0                 |
| Acute parametrititis and pelvic cellulitis          | 614.3                 |
| Chronic parametrititis and pelvic cellulitis        | 614.4                 |
| Skin and soft tissue infections                     | 680–686               |
| Erythematous  | 695.81                |
| Arthropathy associated with infections              | 711 (excluding 711.7) |
| Necrotizing fasciitis                               | 728.86                |
| Periostitis without osteomyelitis                   | 730.3                 |
|   |                       |

| Chronic osteomyelitis                                      | 730.1         |
|--|---------------|
| Unspecified osteomyelitis                                  | 730.2         |
| Undiagnosed cardiac murmurs                                | 785.4         |
| Bacteremia   | 790.7         |
| Viremia  | 790.8         |
| Posttraumatic wound infection                              | 958.3         |
| Infection due to prosthetic device implant and graft       | 996.6         |
| Postoperative infection not elsewhere classified           | 998.5         |
| Definitions for identifying opportunistic infections       |               |
| Tuberculosis-mycobacterium                                 | 010.xx-018.xx |
| Nontuberculosis mycobacteria                               | 031.x         |
| Histoplasmosis-fungus                                      | 115.xx        |
| Blastomycosis-fungus                                       | 116.x         |
| Coccidioidomycosis-fungus                                  | 114.xx        |
| Cryptococcosis-fungus + antigen + antibodies               | 117.5, 321.0  |
| Endemic mycosis (non-specific outcome of all endemic fungi | 484.7         |
| above)   |               |
| Nocardiosis/actinomycosis                                  | 039.x         |
| Listeriosis  | 027.0         |
| Toxoplasmosis  | 130.x         |
| Pneumocystosis   | 136.3         |
| Legionellosis  | 482.84        |

| Salmonellosis  | 003.xx                               |
|--|--------------------------------------|
| Aspergillosis  | 117.3, 484.6                         |
| Candidemia/Candidiasis                                     | 112.xx                               |
| Zoster   | 053.xx                               |
| Progressive multifocal leukoencephalopathy (PML)           | 046.3                                |
| Definitions for identifying respiratory, urinary tract, s  | skin and soft tissue, and septicemia |
| infections   |                                      |
| Respiratory  | 011.xx-012.xx, 460.xx-               |
|  | 466.xx, 480.xx–488.xx, 473.x         |
| Infection of urinary system                                | 595.xx, 590.xx, 599.0; 595.xx        |
| Infections of the skin and subcutaneous tissue             | 027.1, 050.xx-059.xx, 695.81,        |
|  | 684, 680.x, 686.0x, 039.0,           |
|  | 686.8, 686.9, 695.81                 |
| Septicemia   | 038.xx                               |
| Definitions for identifying infections–Roche Swedish study |                                      |
| definitions  |                                      |

| 001.xx-139.xx, 320.xx-        |
|-------------------------------|
| 321.xx, 324.x, 460.xx–466.xx, |
| 480.xx-488.xx, 473.xx-        |
| 476.xx, 003.23, 056.71,       |
| 711.xx, 098.5x, 695.81, 684,  |
| 680.x, 686.0x, 039.0, 686.8,  |
| 686.9, 382.xx, 590.1x, 595.0  |
| 011.xx-012.xx, 460.xx-        |
| 466.xx, 480.xx–488.xx, 473.x, |
| 476.x                         |
| 001.xx-009.xx                 |
| 027.1, 050.xx-059.xx, 695.81, |
| 684, 680.x, 686.0x, 039.0,    |
| 686.8, 686.9                  |
| 003.23, 056.71, 711.xx,       |
| 098.5x                        |
| 038.xx                        |
| 595.xx, 590.xx, 599.0         |
| 008.xx                        |
| 487.x                         |
| 481, 482.xx, 483.x            |
| 003.22, 021.2, 039.1, 484.x   |
|                               |

| Viral pneumonia                            | 480.x |
|--|-------|
| Progressive multifocal leucoencephalopathy | 046.3 |
| Infectious mononucleosis                   | 075   |
| Pneumocystis pneumonia                     | 136.3 |

## Supplementary Table 2. Definitions of independent variables

| Variable                     | Definition                 |
|------------------------------|----------------------------|
| KEY INDEPENDENT<br>VARIABLES |                            |
| MS                           | ICD-9 code: 340            |
| MS subtype                   | Non-MS                     |
|                              | Relapsing-remitting        |
|                              | Progressive                |
|                              | Progressive-relapsing      |
|                              | Unknown                    |
| DEMOGRAPHIC CHARACTERISTICS  |                            |
| Age                          | Clinical trial age (18–55) |
| Gender                       | Male                       |
| ВМІ                          | <18.5 = underweight        |
|                              | 18.5–24.9 = normal weight  |
|                              | 25–29.9 = overweight       |
|                              | 30-34.5 = obese            |
|                              | 35+ = severely obese       |

| Race                  | White  |
|-----------------------|--|
|                       | Black  |
|                       | Native American  |
|                       |  |
|                       | Hispanic   |
|                       | Asian  |
|                       | Unknown  |
| Marital status        | Married  |
|                       | Not married  |
|                       | Divorced   |
|                       | Separated  |
|                       | Widowed  |
|                       | Unknown  |
| DISABILITY            |  |
| Wheelchair assistance | See Supplementary Table 3  |
| Bilateral assistance  | See Supplementary Table 3  |
| COMORBID DIAGNOSES    | 5  |
| Alcohol               | ICD-9 codes: 303.0–303.9   |
| Autoimmune disease    | ICD-9 codes: 714 (rheumatoid arthritis), 556 (ulcerative colitis), |
|                       | 555.x (Crohn's disease), 710.0 (systemic lupus erythematosus),     |
|                       | 446.4 (Wegener's granulomatosis), 710.1 (scleraderma), 710.2       |
|                       | (Sjögren's disease), 710.4 (polymyositis), 694.4 (pemphigus),      |
|                       | 358.0 (myasthenia gravis), 696.0-696.1 (psoriasis).                |
|                       |  |

| Cardiovascular disease        | ICD-9 codes: 430–438  |
|-------------------------------|---|
| COPD                          | ICD-9 codes: 490–496  |
| Diabetes                      | ICD-9 codes: 249, 250                                       |
| Drug dependence               | ICD-9 codes: 410–414  |
| Ischemic heart disease        | ICD-9 codes: 584, 585, 586                                  |
| Kidney disease                | ICD-9 codes: 304  |
| Malignant diseases            | ICD-9 codes: 140–208 (malignant neoplasms), 209             |
|                               | (neuroendocrine tumors), 230–234 (carcinoma in situ)        |
| Other heart disease           | ICD-9 codes: 420–429  |
| Pulmonary circulation disease | ICD-9 codes: 415–417  |
| Smoking                       | ICD-9 codes: 305.1, 649.00, 649.01, 649.02, 649.03, 649.04, |
|                               | 989.84, V15.82  |
| 1+ comorbidity                | More than one of the above                                  |
| CONCOMITANT                   |   |
| MEDICATIONS                   |   |
| Alcohol                       | Prescription for: disulfiram, naltrexone or acamprosate     |
| Cardiovascular disease        | Prescription for: nimodipine                                |
| COPD                          | Prescription for: tiotropium, ipratropium/albuterol, and    |
|                               | ipratropium   |

| Prescription for: pioglitazone, rosiglitazone, glimepiride,       |
|---|
| exenatide, glipizide, glyburide, saxagliptin, repaglinide,        |
| acarbose, nateglinide, liraglutide, sitagliptin, linagliptin,     |
| miglitol, pramlintide, chlorpropamide,                            |
| glimepiride/rosiglitazone, glimepiride/pioglitazone,              |
| glipizide/metformin, glyburide/metformin, insulin, insulin        |
| aspartate protamine/insulin aspartate recombinant, insulin        |
| aspartate recombinant, insulin detemir, insulin glargine          |
| recombinant, insulin glulisine, insulin lispro, protamine/insulin |
| lispro recombinant, insulin lispro recombinant, metformin,        |
| metformin/pioglitazone, metformin/rosiglitazone,                  |
| metformin/repaglinide, metformin/sitagliptin, tolazamide,         |
| tolbutamide, troglitazone, and glucose test strips                |
| Prescription for: buprenorphine/naloxone and naltrexone           |
| Prescription for: nitroglycerin, isosorbide dinitrate, isosorbide |
| mononitrate and ranolazine  |
| Prescription for: sevelamer, lanthanum (fosrenol), calcium        |
| acetate   |
| Prescription for: antihypertensives (including diuretics),        |
| antiarrhythmics and digoxin; and drugs for acute coronary         |
| syndrome including prasugrel                                      |
| Prescription for: ambresentan, bosentan, treprostinil, iloprost   |
| and epoprostenol  |
|   |

Immunosuppressive drugs

Prescription for: abatacept, adalimumab (humira), alimta (pemetrexid), amevive (alefacept), anagrelide, anakinra, antithymocyte globulin, avastin (bevacizumab), azacitidine (vidaza), azathioprine, bendamustine, betameth, bleomycin, bortezomib, busulfan, capecitabine, carboplatin, carmustine, celecoxib, certolizumab, cetuximab (erbitux), chlorambucil, cisplatin, cladribine, cortizone, cyclophosphamide, cyclosporine (gengraf, sandimmune), cytarabine, dacarbazine, daclizumab, dasatinib (sprycel), daunorubicin, decitabine, dexomethasone, docetaxel, doxorubicin, efalizumab, enbrel (etanercept), epirubicin, erlotinib (tarceva), estramustine, etoposide, fingolimod, fludarabine, fluorouracil, gefitinib, gemcitabine, gemtuzumab, gleevec (imatinib), golimumab, hydrocortisone, hydroxyurea, idarubicin, ifosfamide, infliximab, irinotecan, lapatinib, leflunomide, lenalidomide (revlimid), mechlorethamine, mercaptopurine, methotrexate, methylprednisolone, mitomycin, mitoxantrone, mycophenolate (myfortic), mycophenolic acid, natalizumab (tysabri), nilotinib, oxaliplatin, paclitaxel, pemetrexed, pentostat, prednisolone, prednisone, procarbazine, rapamune, rituximab, sirolimus, sorafenib, streptomycin, sunitinib, tacrolimus (prograf), temozolamide, temsirolimus, thalidomide, thioguanine, thiotepa, topotecan, trastuzumab, tretinoin, triamcinolone, ustekinumab, panitumumab (vectibix), vinblastine, vincristine, vinorelbine, vorinostat (zolinza)

| IV methylprednisolone       | Prescription for: IV methylprednisolone                    |
|-----------------------------|--|
| HEALTH-CARE                 |  |
| RESOURCE UTILIZATION        |  |
| Days of hospitalization     | Sum of total length of stay in hospital                    |
| Number of outpatient visits | Total number of outpatient visits                          |
| Number of distinct INN      | Total number of distinct International Nonproprietary Name |
| prescribed                  | (INN) generic drugs prescribed                             |

## Supplementary Table 3. Definitions for identifying infections—Montgomery et al.

| Infection                               | ICD-9 codes   |
|---|---|
| All infections                          | 001.xx-139.xx, 320.xx-321.xx, 324.x, 460.xx-466.xx, |
|   | 480.xx-488.xx, 473.xx-476.xx, 003.23, 056.71,       |
|   | 711.xx, 098.5x, 695.81, 684, 680.x, 686.0x, 039.0,  |
|   | 686.8, 686.9, 382.xx, 590.1x, 595.0                 |
| Respiratory infections                  | 011.xx-012.xx, 460.xx-466.xx, 480.xx-488.xx, 473.x, |
|   | 476.x   |
| Intestinal infectious diseases          | 001.xx-009.xx                                       |
| Infections of the skin and subcutaneous | 027.1, 050.xx-059.xx, 695.81, 684, 680.x, 686.0x,   |
| tissue                                  | 039.0, 686.8, 686.9                                 |
| Infectious arthropathies                | 003.23, 056.71, 711.xx, 098.5x                      |
| Septicemia                              | 038.xx  |
| Infection of urinary system             | 595.xx, 590.xx, 599.0                               |
| Viral and other specified intestinal    | 008.xx  |
| infections                              |   |
| Influenza                               | 487.x   |
| Bacterial pneumonia                     | 481, 482.xx, 483.x                                  |
| Pneumonia in bacterial diseases         | 003.22, 021.2, 039.1, 484.x                         |
| Viral pneumonia                         | 480.x   |
| Progressive multifocal                  | 046.3   |
| leucoencephalopathy                     |   |

| Infectious mononucleosis | 075   |
|--------------------------|-------|
| Pneumocystis pneumonia   | 136.3 |

## Supplementary Table 4. HCPCS codes for wheelchair assistance and bilateral assistance

| HCPCS  | Description  |
|--------|--|
| code   |  |
| WHEELC | HAIR ASSISTANCE  |
| A0130  | Non-emergency transportation: wheelchair van                                     |
| E0950  | Wheelchair accessory, tray, each   |
| E0955  | Wheelchair accessory, headrest, cushioned, any type, including fixed mounting    |
|        | hardware, each   |
| E0956  | Wheelchair accessory, lateral trunk or hip support, any type, including fixed    |
|        | mounting hardware, each  |
| E0957  | Wheelchair accessory, medial thigh support, any type, including fixed mounting   |
|        | hardware, each   |
| E0958  | Manual wheelchair accessory, one-arm drive attachment, each                      |
| E0959  | Manual wheelchair accessory, adapter for amputee, each                           |
| E0960  | Wheelchair accessory, shoulder harness/straps or chest strap, including any type |
|        | mounting hardware  |
| E0961  | Manual wheelchair accessory, wheel lock brake extension (handle), each           |
| E0966  | Manual wheelchair accessory, headrest extension, each                            |
| E0967  | Manual wheelchair accessory, hand rim with projections, any type, each           |
| E0968  | Commode seat, wheelchair   |
| E0969  | Narrowing device, wheelchair   |
| E0971  | Manual wheelchair accessory, anti-tipping device, each                           |

| E0973 | Wheelchair accessory, adjustable height, detachable armrest, complete assembly,   |
|-------|---|
|       | each  |
| E0974 | Manual wheelchair accessory, anti-rollback device, each                           |
| E0978 | Wheelchair accessory, positioning belt/safety belt/pelvic strap, each             |
| E0980 | Safety vest, wheelchair   |
| E0981 | Wheelchair accessory, seat upholstery, replacement only, each                     |
| E0982 | Wheelchair accessory, back upholstery, replacement only, each                     |
| E0983 | Manual wheelchair accessory, power add-on to convert manual wheelchair to         |
|       | motorized wheelchair, joystick control  |
| E0984 | Manual wheelchair accessory, power add-on to convert manual wheelchair to         |
|       | motorized wheelchair, tiller control  |
| E0985 | Wheelchair accessory, seat lift mechanism   |
| E0986 | Manual wheelchair accessory, push activated power assist, each                    |
| E0990 | Wheelchair accessory, elevating leg rest, complete assembly, each                 |
| E0992 | Manual wheelchair accessory, solid seat insert                                    |
| E0995 | Wheelchair accessory, calf rest/pad, each   |
| E1002 | Wheelchair accessory, power seating system, tilt only                             |
| E1003 | Wheelchair accessory, power seating system, recline only, without shear reduction |
| E1004 | Wheelchair accessory, power seating system, recline only, with mechanical shear   |
|       | reduction   |
| E1005 | Wheelchair accessory, power seating system, recline only, with power shear        |
|       | reduction   |
|       |   |

| E1006 | Wheelchair accessory, power seating system, combination tilt and recline, without   |
|-------|---|
|       | shear reduction   |
| E1007 | Wheelchair accessory, power seating system, combination tilt and recline, with      |
|       | mechanical shear reduction  |
| E1008 | Wheelchair accessory, power seating system, combination tilt and recline, with      |
|       | power shear reduction   |
| E1009 | Wheelchair accessory, addition to power seating system, mechanically linked leg     |
|       | elevation system, including pushrod and leg rest, each                              |
| E1010 | Wheelchair accessory, addition to power seating system, power leg elevation system, |
|       | including leg rest, pair  |
| E1011 | Modification to pediatric size wheelchair, width adjustment package (not to be      |
|       | dispensed with initial chair)   |
| E1014 | Reclining back, addition to pediatric size wheelchair                               |
| E1015 | Shock absorber for manual wheelchair, each  |
| E1016 | Shock absorber for power wheelchair, each   |
| E1017 | Heavy duty shock absorber for heavy duty or extra heavy duty manual wheelchair,     |
|       | each  |
| E1018 | Heavy duty shock absorber for heavy duty or extra heavy duty power wheelchair,      |
|       | each  |
| E1020 | Residual limb support system for wheelchair   |
| E1028 | Wheelchair accessory, manual swingaway, retractable or removable mounting           |
|       | hardware for joystick, other control interface or positioning accessory             |

| E1029 | Wheelchair accessory, ventilator tray, fixed  |
|-------|---|
| E1030 | Wheelchair accessory, ventilator tray, gimbaled                                     |
| E1050 | Fully-reclining wheelchair, fixed full length arms, swing away detachable elevating |
|       | leg rests   |
| E1060 | Fully-reclining wheelchair, detachable arms, desk or full length, swing away        |
|       | detachable elevating leg rests  |
| E1070 | Fully-reclining wheelchair, detachable arms (desk or full length) swing away        |
|       | detachable footrest   |
| E1083 | Hemi-wheelchair, fixed full length arms, swing away detachable elevating leg rest   |
| E1084 | Hemi-wheelchair, detachable arms desk or full length arms, swing away detachable    |
|       | elevating leg rests   |
| E1085 | Hemi-wheelchair, fixed full length arms, swing away detachable foot rests           |
| E1086 | Hemi-wheelchair detachable arms desk or full length, swing away detachable          |
|       | footrests   |
| E1087 | High strength lightweight wheelchair, fixed full length arms, swing away detachable |
|       | elevating leg rests   |
| E1088 | High strength lightweight wheelchair, detachable arms desk or full length, swing    |
|       | away detachable elevating leg rests   |
| E1089 | High strength lightweight wheelchair, fixed length arms, swing away detachable      |
|       | footrest  |
| E1090 | High strength lightweight wheelchair, detachable arms desk or full length, swing    |
|       | away detachable foot rests  |
|       |   |

| E1092 | Wide heavy duty wheelchair, detachable arms (desk or full length), swing away      |
|-------|--|
|       | detachable elevating leg rests   |
| E1093 | Wide heavy duty wheelchair, detachable arms desk or full length arms, swing aw     |
|       | detachable footrests   |
| E1100 | Semi-reclining wheelchair, fixed full length arms, swing away detachable elevati   |
|       | leg rests  |
| E1110 | Semi-reclining wheelchair, detachable arms (desk or full length) elevating leg res |
| E1130 | Standard wheelchair, fixed full length arms, fixed or swing away detachable foot   |
| E1161 | Manual adult size wheelchair, includes tilt in space                               |
| E1170 | Amputee wheelchair, fixed full length arms, swing away detachable elevating leg    |
|       | rests  |
| E1171 | Amputee wheelchair, fixed full length arms, without footrests or leg rest          |
| E1172 | Amputee wheelchair, detachable arms (desk or full length) without footrests or le  |
|       | rest   |
| E1180 | Amputee wheelchair, detachable arms (desk or full length) swing away detachab      |
|       | footrests  |
| E1190 | Amputee wheelchair, detachable arms (desk or full length) swing away detachab      |
|       | elevating leg rests  |
| E1195 | Heavy duty wheelchair, fixed full length arms, swing away detachable elevating     |
|       | rests  |
| E1200 | Amputee wheelchair, fixed full length arms, swing away detachable footrest         |

| rests  ating leg rests  s, footrests s, elevating leg rests |
|---|
| ating leg rests s, footrests                                |
| s, footrests  |
|   |
| s, elevating leg rests                                      |
|   |
| emi-reclining back (recline greater than 15 degrees,        |
|   |
| ally reclining back (recline greater than 80 degrees),      |
|   |
| iir   |
| iir   |
| herwise specified   |
| -space, rigid, adjustable, with seating system              |
| -space, folding, adjustable, with seating system            |
| -space, rigid, adjustable, without seating system           |
| -space, folding, adjustable, without seating system         |
| adjustable, with seating system                             |
| g, adjustable, with seating system                          |
| adjustable, without seating system                          |
| g, adjustable, without seating system                       |
| not otherwise specified                                     |
|   |

| E1240 | Lightweight wheelchair, detachable arms (desk or full length) swing away            |
|-------|---|
|       | detachable, elevating leg rest  |
| E1250 | Lightweight wheelchair, fixed full length arms, swing away detachable footrest      |
| E1260 | Lightweight wheelchair, detachable arms (desk or full length) swing away            |
|       | detachable footrest   |
| E1270 | Lightweight wheelchair, fixed full length arms, swing away detachable elevating leg |
|       | rests   |
| E1280 | Heavy duty wheelchair, detachable arms (desk or full length) elevating leg rests    |
| E1285 | Heavy duty wheelchair, fixed full length arms, swing away detachable footrest       |
| E1290 | Heavy duty wheelchair, detachable arms (desk or full length) swing away detachable  |
|       | footrest  |
| E1295 | Heavy duty wheelchair, fixed full length arms, elevating leg rest                   |
| E1296 | Special wheelchair seat height from floor   |
| E1297 | Special wheelchair seat depth, by upholstery  |
| E1298 | Special wheelchair seat depth and/or width, by construction                         |
| E2201 | Manual wheelchair accessory, nonstandard seat frame, width greater than or equal to |
|       | 20 inches and less than 24 inches   |
| E2202 | Manual wheelchair accessory, nonstandard seat frame width, 24–27 inches             |
| E2203 | Manual wheelchair accessory, nonstandard seat frame depth, 20 to less than 22       |
|       | inches  |
| E2204 | Manual wheelchair accessory, nonstandard seat frame depth, 22 to 25 inches          |
|       | I   |

| E2205 | Manual wheelchair accessory, handrim without projections (includes ergonomic or        |
|-------|--|
|       | contoured), any type, replacement only, each   |
| E2206 | Manual wheelchair accessory, wheel lock assembly, complete, each                       |
| E2207 | Wheelchair accessory, crutch and cane holder, each                                     |
| E2208 | Wheelchair accessory, cylinder tank carrier, each                                      |
| E2209 | Accessory, arm trough, with or without hand support, each                              |
| E2210 | Wheelchair accessory, bearings, any type, replacement only, each                       |
| E2211 | Manual wheelchair accessory, pneumatic propulsion tire, any size, each                 |
| E2212 | Manual wheelchair accessory, tube for pneumatic propulsion tire, any size, each        |
| E2213 | Manual wheelchair accessory, insert for pneumatic propulsion tire (removable), any     |
|       | type, any size, each   |
| E2214 | Manual wheelchair accessory, pneumatic caster tire, any size, each                     |
| E2215 | Manual wheelchair accessory, tube for pneumatic caster tire, any size, each            |
| E2216 | Manual wheelchair accessory, foam filled propulsion tire, any size, each               |
| E2217 | Manual wheelchair accessory, foam filled caster tire, any size, each                   |
| E2218 | Manual wheelchair accessory, foam propulsion tire, any size, each                      |
| E2219 | Manual wheelchair accessory, foam caster tire, any size, each                          |
| E2220 | Manual wheelchair accessory, solid (rubber/plastic) propulsion tire, any size, each    |
| E2221 | Manual wheelchair accessory, solid (rubber/plastic) caster tire (removable), any size, |
|       | each   |
| E2222 | Manual wheelchair accessory, solid (rubber/plastic) caster tire with integrated wheel, |
|       | any size, each   |
| L     |  |

| Deleted 12/31/2009: Manual wheelchair accessory, valve, any type, replacement        |
|--|
| only, each   |
| Manual wheelchair accessory, propulsion wheel excludes tire, any size, each          |
| Manual wheelchair accessory, caster wheel excludes tire, any size, replacement only, |
| each   |
| Manual wheelchair accessory, caster fork, any size, replacement only, each           |
| Manual wheelchair accessory, gear reduction drive wheel, each                        |
| Manual wheelchair accessory, wheel braking system and lock, complete, each           |
| Manual wheelchair accessory, manual standing system                                  |
| Manual wheelchair accessory, solid seat support base (replaces sling seat), includes |
| any type mounting hardware   |
| Back, planar, for pediatric size wheelchair including fixed attaching hardware       |
| Seat, planar, for pediatric size wheelchair including fixed attaching hardware       |
| Back, contoured, for pediatric size wheelchair including fixed attaching hardware    |
| Seat, contoured, for pediatric size wheelchair including fixed attaching hardware    |
| Manual wheelchair accessory, for pediatric size wheelchair, dynamic seating frame,   |
| allows coordinated movement of multiple positioning features                         |
| Power wheelchair accessory, power seat elevation system                              |
| Power wheelchair accessory, power standing system                                    |
| Power wheelchair accessory, electronic connection between wheelchair controller      |
| and one power seating system motor, including all related electronics, indicator     |
| feature, mechanical function selection switch, and fixed mounting hardware           |
|  |

| E2311 | Power wheelchair accessory, electronic connection between wheelchair controller       |
|-------|---|
|       | and two or more power seating system motors, including all related electronics,       |
|       | indicator feature, mechanical function selection switch, and fixed mounting hardware  |
| E2312 | Power wheelchair accessory, hand or chin control interface, mini-proportional         |
|       | remote joystick, proportional, including fixed mounting hardware                      |
| E2313 | Power wheelchair accessory, harness for upgrade to expandable controller, including   |
|       | all fasteners, connectors and mounting hardware, each                                 |
| E2321 | Power wheelchair accessory, hand control interface, remote joystick,                  |
|       | nonproportional, including all related electronics, mechanical stop switch, and fixed |
|       | mounting hardware   |
| E2322 | Power wheelchair accessory, hand control interface, multiple mechanical switches,     |
|       | nonproportional, including all related electronics, mechanical stop switch, and fixed |
|       | mounting hardware   |
| E2323 | Power wheelchair accessory, specialty joystick handle for hand control interface,     |
|       | prefabricated   |
| E2324 | Power wheelchair accessory, chin cup for chin control interface                       |
| E2325 | Power wheelchair accessory, sip and puff interface, nonproportional, including all    |
|       | related electronics, mechanical stop switch, and manual swingaway mounting            |
|       | hardware  |
| E2326 | Power wheelchair accessory, breath tube kit for sip and puff interface                |
|       |   |

| E2327 | Power wheelchair accessory, head control interface, mechanical, proportional,        |
|-------|--|
|       | including all related electronics, mechanical direction change switch, and fixed     |
|       | mounting hardware  |
| E2328 | Power wheelchair accessory, head control or extremity control interface, electronic, |
|       | proportional, including all related electronics and fixed mounting hardware          |
| E2329 | Power wheelchair accessory, head control interface, contact switch mechanism,        |
|       | nonproportional, including all related electronics, mechanical stop switch,          |
|       | mechanical direction change switch, head array, and fixed mounting hardware          |
| E2330 | Power wheelchair accessory, head control interface, proximity switch mechanism,      |
|       | nonproportional, including all related electronics, mechanical stop switch,          |
|       | mechanical direction change switch, head array, and fixed mounting hardware          |
| E2331 | Power wheelchair accessory, attendant control, proportional, including all related   |
|       | electronics and fixed mounting hardware  |
| E2340 | Power wheelchair accessory, nonstandard seat frame width, 20–23 inches               |
| E2341 | Power wheelchair accessory, nonstandard seat frame width, 24–27 inches               |
| E2342 | Power wheelchair accessory, nonstandard seat frame depth, 20 or 21 inches            |
| E2343 | Power wheelchair accessory, nonstandard seat frame depth, 22–25 inches               |
| E2351 | Power wheelchair accessory, electronic interface to operate speech generating device |
|       | using power wheelchair control interface   |
| E2358 | Power wheelchair accessory, group 34 non-sealed lead acid battery, each              |
| E2359 | Power wheelchair accessory, group 34 sealed lead acid battery, each (eg, gel cell,   |
|       | absorbed glassmat)   |

| E2360 | Power wheelchair accessory, 22 nf non-sealed lead acid battery, each                   |
|-------|--|
| E2361 | Power wheelchair accessory, 22 nf sealed lead acid battery, each (eg, gel cell,        |
|       | absorbed glassmat)   |
| E2362 | Power wheelchair accessory, group 24 non-sealed lead acid battery, each                |
| E2363 | Power wheelchair accessory, group 24 sealed lead acid battery, each (eg, gel cell,     |
|       | absorbed glassmat)   |
| E2364 | Power wheelchair accessory, u-1 non-sealed lead acid battery, each                     |
| E2365 | Power wheelchair accessory, u-1 sealed lead acid battery, each (eg, gel cell, absorbed |
| 1     | glassmat)  |
| E2366 | Power wheelchair accessory, battery charger, single mode, for use with only one        |
|       | battery type, sealed or non-sealed, each   |
| E2367 | Power wheelchair accessory, battery charger, dual mode, for use with either battery    |
|       | type, sealed or non-sealed, each   |
| E2368 | Power wheelchair component, motor, replacement only                                    |
| E2369 | Power wheelchair component, gear box, replacement only                                 |
| E2370 | Power wheelchair component, motor and gear box combination, replacement only           |
| E2371 | Power wheelchair accessory, group 27 sealed lead acid battery (eg, gel cell, absorbed  |
|       | glassmat), each  |
| E2372 | Power wheelchair accessory, group 27 non-sealed lead acid battery, each                |
| E2373 | Power wheelchair accessory, hand or chin control interface, compact remote             |
|       | joystick, proportional, including fixed mounting hardware                              |

| E2374 | Power wheelchair accessory, hand or chin control interface, standard remote joystick  |
|-------|---|
|       | (not including controller), proportional, including all related electronics and fixed |
|       | mounting hardware, replacement only   |
| E2375 | Power wheelchair accessory, non-expandable controller, including all related          |
|       | electronics and mounting hardware, replacement only                                   |
| E2376 | Power wheelchair accessory, expandable controller, including all related electronics  |
|       | and mounting hardware, replacement only   |
| E2377 | Power wheelchair accessory, expandable controller, including all related electronics  |
|       | and mounting hardware, upgrade provided at initial issue                              |
| E2381 | Power wheelchair accessory, pneumatic drive wheel tire, any size, replacement only,   |
|       | each  |
| E2382 | Power wheelchair accessory, tube for pneumatic drive wheel tire, any size,            |
|       | replacement only, each  |
| E2383 | Power wheelchair accessory, insert for pneumatic drive wheel tire (removable), any    |
|       | type, any size, replacement only, each  |
| E2384 | Power wheelchair accessory, pneumatic caster tire, any size, replacement only, each   |
| E2385 | Power wheelchair accessory, tube for pneumatic caster tire, any size, replacement     |
|       | only, each  |
| E2386 | Power wheelchair accessory, foam filled drive wheel tire, any size, replacement only, |
|       | each  |
| E2387 | Power wheelchair accessory, foam filled caster tire, any size, replacement only, each |
| E2388 | Power wheelchair accessory, foam drive wheel tire, any size, replacement only, each   |

| E2389 | Power wheelchair accessory, foam caster tire, any size, replacement only, each        |
|-------|---|
| E2390 | Power wheelchair accessory, solid (rubber/plastic) drive wheel tire, any size,        |
|       | replacement only, each  |
| E2391 | Power wheelchair accessory, solid (rubber/plastic) caster tire (removable), any size, |
|       | replacement only, each  |
| E2392 | Power wheelchair accessory, solid (rubber/plastic) caster tire with integrated wheel, |
|       | any size, replacement only, each  |
| E2393 | Deleted 12/31/2009: Power wheelchair accessory, valve for pneumatic tire tube, any    |
|       | type, replacement only, each  |
| E2394 | Power wheelchair accessory, drive wheel excludes tire, any size, replacement only,    |
|       | each  |
| E2395 | Power wheelchair accessory, caster wheel excludes tire, any size, replacement only,   |
|       | each  |
| E2396 | Power wheelchair accessory, caster fork, any size, replacement only, each             |
| E2397 | Power wheelchair accessory, lithium-based battery, each                               |
| E2605 | Positioning wheelchair seat cushion, width less than 22 inches, any depth             |
| E2606 | Positioning wheelchair seat cushion, width 22 inches or greater, any depth            |
| E2609 | Custom fabricated wheelchair seat cushion, any size                                   |
| E2610 | Wheelchair seat cushion, powered  |
| E2619 | Replacement cover for wheelchair seat cushion or back cushion, each                   |
| K0001 | Standard wheelchair   |
| K0002 | Standard hemi (low seat) wheelchair   |
| L     |   |

| K0003 | Lightweight wheelchair  |
|-------|---|
| K0004 | High strength, lightweight wheelchair   |
| K0005 | Ultralightweight wheelchair   |
| K0006 | Heavy duty wheelchair   |
| K0007 | Extra heavy duty wheelchair   |
| K0009 | Other manual wheelchair/base  |
| K0010 | Standard-weight frame motorized/power wheelchair                                      |
| K0011 | Standard-weight frame motorized/power wheelchair with programmable control            |
|       | parameters for speed adjustment, tremor dampening, acceleration control and           |
|       | braking   |
| K0012 | Lightweight portable motorized/power wheelchair                                       |
| K0014 | Other motorized/power wheelchair base   |
| K0098 | Drive belt for power wheelchair   |
| K0669 | Wheelchair accessory, wheelchair seat or back cushion, does not meet specific code    |
|       | criteria or no written coding verification from dme pdac                              |
| K0733 | Power wheelchair accessory, 12 to 24 amp hour sealed lead acid battery, each (eg,     |
|       | gel cell, absorbed glassmat)  |
| K0813 | Power wheelchair, group 1 standard, portable, sling/solid seat and back, patient      |
|       | weight capacity up to and including 300 pounds  |
| K0814 | Power wheelchair, group 1 standard, portable, captains chair, patient weight capacity |
|       | up to and including 300 pounds  |

| K0815 | Power wheelchair, group 1 standard, sling/solid seat and back, patient weight         |
|-------|---|
|       | capacity up to and including 300 pounds   |
| K0816 | Power wheelchair, group 1 standard, captains chair, patient weight capacity up to and |
|       | including 300 pounds  |
| K0820 | Power wheelchair, group 2 standard, portable, sling/solid seat/back, patient weight   |
|       | capacity up to and including 300 pounds   |
| K0821 | Power wheelchair, group 2 standard, portable, captains chair, patient weight capacity |
|       | up to and including 300 pounds  |
| K0822 | Power wheelchair, group 2 standard, sling/solid seat/back, patient weight capacity up |
|       | to and including 300 pounds   |
| K0823 | Power wheelchair, group 2 standard, captains chair, patient weight capacity up to and |
|       | including 300 pounds  |
| K0824 | Power wheelchair, group 2 heavy duty, sling/solid seat/back, patient weight capacity  |
|       | 301 to 450 pounds   |
| K0825 | Power wheelchair, group 2 heavy duty, captains chair, patient weight capacity 301 to  |
|       | 450 pounds  |
| K0826 | Power wheelchair, group 2 very heavy duty, sling/solid seat/back, patient weight      |
|       | capacity 451 to 600 pounds  |
| K0827 | Power wheelchair, group 2 very heavy duty, captains chair, patient weight capacity    |
|       | 451 to 600 pounds   |
| K0828 | Power wheelchair, group 2 extra heavy duty, sling/solid seat/back, patient weight     |
|       | capacity 601 pounds or more   |

| K0829 | Power wheelchair, group 2 extra heavy duty, captains chair, patient weight 601     |
|-------|--|
|       | pounds or more   |
| K0830 | Power wheelchair, group 2 standard, seat elevator, sling/solid seat/back, patient  |
|       | weight capacity up to and including 300 pounds                                     |
| K0831 | Power wheelchair, group 2 standard, seat elevator, captains chair, patient weight  |
|       | capacity up to and including 300 pounds  |
| K0835 | Power wheelchair, group 2 standard, single power option, sling/solid seat/back,    |
|       | patient weight capacity up to and including 300 pounds                             |
| K0836 | Power wheelchair, group 2 standard, single power option, captains chair, patient   |
|       | weight capacity up to and including 300 pounds                                     |
| K0837 | Power wheelchair, group 2 heavy duty, single power option, sling/solid seat/back,  |
|       | patient weight capacity 301 to 450 pounds  |
| K0838 | Power wheelchair, group 2 heavy duty, single power option, captains chair, patient |
|       | weight capacity 301 to 450 pounds  |
| K0839 | Power wheelchair, group 2 very heavy duty, single power option sling/solid         |
|       | seat/back, patient weight capacity 451 to 600 pounds                               |
| K0840 | Power wheelchair, group 2 extra heavy duty, single power option, sling/solid       |
|       | seat/back, patient weight capacity 601 pounds or more                              |
| K0841 | Power wheelchair, group 2 standard, multiple power option, sling/solid seat/back,  |
|       | patient weight capacity up to and including 300 pounds                             |
| K0842 | Power wheelchair, group 2 standard, multiple power option, captains chair, patient |
|       | weight capacity up to and including 300 pounds                                     |

| K0843 | Power wheelchair, group 2 heavy duty, multiple power option, sling/solid seat/back,   |
|-------|---|
|       | patient weight capacity 301 to 450 pounds   |
| K0848 | Power wheelchair, group 3 standard, sling/solid seat/back, patient weight capacity up |
|       | to and including 300 pounds   |
| K0849 | Power wheelchair, group 3 standard, captains chair, patient weight capacity up to and |
|       | including 300 pounds  |
| K0850 | Power wheelchair, group 3 heavy duty, sling/solid seat/back, patient weight capacity  |
|       | 301 to 450 pounds   |
| K0851 | Power wheelchair, group 3 heavy duty, captains chair, patient weight capacity 301 to  |
|       | 450 pounds  |
| K0852 | Power wheelchair, group 3 very heavy duty, sling/solid seat/back, patient weight      |
|       | capacity 451 to 600 pounds  |
| K0853 | Power wheelchair, group 3 very heavy duty, captains chair, patient weight capacity    |
|       | 451 to 600 pounds   |
| K0854 | Power wheelchair, group 3 extra heavy duty, sling/solid seat/back, patient weight     |
|       | capacity 601 pounds or more   |
| K0855 | Power wheelchair, group 3 extra heavy duty, captains chair, patient weight capacity   |
|       | 601 pounds or more  |
| K0856 | Power wheelchair, group 3 standard, single power option, sling/solid seat/back,       |
|       | patient weight capacity up to and including 300 pounds                                |
| K0857 | Power wheelchair, group 3 standard, single power option, captains chair, patient      |
|       | weight capacity up to and including 300 pounds  |

| K0858 | Power wheelchair, group 3 heavy duty, single power option, sling/solid seat/back,     |
|-------|---|
|       | patient weight 301 to 450 pounds  |
| K0859 | Power wheelchair, group 3 heavy duty, single power option, captains chair, patient    |
|       | weight capacity 301 to 450 pounds   |
| K0860 | Power wheelchair, group 3 very heavy duty, single power option, sling/solid           |
|       | seat/back, patient weight capacity 451 to 600 pounds                                  |
| K0861 | Power wheelchair, group 3 standard, multiple power option, sling/solid seat/back,     |
|       | patient weight capacity up to and including 300 pounds                                |
| K0862 | Power wheelchair, group 3 heavy duty, multiple power option, sling/solid seat/back,   |
|       | patient weight capacity 301 to 450 pounds   |
| K0863 | Power wheelchair, group 3 very heavy duty, multiple power option, sling/solid         |
|       | seat/back, patient weight capacity 451 to 600 pounds                                  |
| K0864 | Power wheelchair, group 3 extra heavy duty, multiple power option, sling/solid        |
|       | seat/back, patient weight capacity 601 pounds or more                                 |
| K0868 | Power wheelchair, group 4 standard, sling/solid seat/back, patient weight capacity up |
|       | to and including 300 pounds   |
| K0869 | Power wheelchair, group 4 standard, captains chair, patient weight capacity up to and |
|       | including 300 pounds  |
| K0870 | Power wheelchair, group 4 heavy duty, sling/solid seat/back, patient weight capacity  |
|       | 301 to 450 pounds   |
| K0871 | Power wheelchair, group 4 very heavy duty, sling/solid seat/back, patient weight      |
|       | capacity 451 to 600 pounds  |

| K0877  | Power wheelchair, group 4 standard, single power option, sling/solid seat/back,     |
|--------|---|
|        | patient weight capacity up to and including 300 pounds                              |
| K0878  | Power wheelchair, group 4 standard, single power option, captains chair, patient    |
|        | weight capacity up to and including 300 pounds                                      |
| K0879  | Power wheelchair, group 4 heavy duty, single power option, sling/solid seat/back,   |
|        | patient weight capacity 301 to 450 pounds   |
| K0880  | Power wheelchair, group 4 very heavy duty, single power option, sling/solid         |
|        | seat/back, patient weight 451 to 600 pounds   |
| K0884  | Power wheelchair, group 4 standard, multiple power option, sling/solid seat/back,   |
|        | patient weight capacity up to and including 300 pounds                              |
| K0885  | Power wheelchair, group 4 standard, multiple power option, captains chair, patient  |
|        | weight capacity up to and including 300 pounds                                      |
| K0886  | Power wheelchair, group 4 heavy duty, multiple power option, sling/solid seat/back, |
|        | patient weight capacity 301 to 450 pounds   |
| K0890  | Power wheelchair, group 5 pediatric, single power option, sling/solid seat/back,    |
|        | patient weight capacity up to and including 125 pounds                              |
| K0891  | Power wheelchair, group 5 pediatric, multiple power option, sling/solid seat/back,  |
|        | patient weight capacity up to and including 125 pounds                              |
| K0898  | Power wheelchair, not otherwise classified  |
| BILATE | CRAL ASSISTANCE   |
| E2207  | Wheelchair accessory, crutch and cane holder, each                                  |
| A4635  | Underarm pad, crutch, replacement, each   |
| L      | I   |

| Replacement, tip, cane, crutch, walker, each  |
|---|
|   |
| Cane, includes canes of all materials, adjustable or fixed, with tip                  |
| Cane, quad or three prong, includes canes of all materials, adjustable or fixed, with |
| tips  |
| Crutches, forearm, includes crutches of various materials, adjustable or fixed, pair, |
| complete with tips and handgrips  |
| Crutch forearm, includes crutches of various materials, adjustable or fixed, each,    |
| with tip and handgrips  |
| Crutches underarm, wood, adjustable or fixed, pair, with pads, tips and handgrips     |
| Crutch underarm, wood, adjustable or fixed, each, with pad, tip and handgrip          |
| Crutches underarm, other than wood, adjustable or fixed, pair, with pads, tips and    |
| handgrips   |
| Crutch, underarm, other than wood, adjustable or fixed, with pad, tip, handgrip, with |
| or without shock absorber, each   |
| Crutch, underarm, articulating, spring assisted, each                                 |
| Crutch substitute, lower leg platform, with or without wheels, each                   |
| Walker, rigid (pickup), adjustable or fixed height                                    |
| Walker, folding (pickup), adjustable or fixed height                                  |
| Walker, with trunk support, adjustable or fixed height, any type                      |
| Walker, rigid, wheeled, adjustable or fixed height                                    |
| Walker, folding, wheeled, adjustable or fixed height                                  |
|   |

| E0144 | Walker, enclosed, four sided framed, rigid or folding, wheeled with posterior seat |
|-------|--|
| E0147 | Walker, heavy duty, multiple braking system, variable wheel resistance             |
| E0148 | Walker, heavy duty, without wheels, rigid or folding, any type, each               |
| E0149 | Walker, heavy duty, wheeled, rigid or folding, any type                            |