**Supplemental Digital Content 1.** Comorbidity Diagnosis Codes

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| **Comorbidity** | **Diagnosis code(s)** |
| Depression  | 2962, 2963, 311, F33, F32 |
| Anxiety | 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, F423, F429, F422, F428, F341, F488, F481, F4522, F4521 |
| Insomnia | 30742, 30741, 3270, 78051, 78052, F5102, F5109, F5103, F5101, F5109, G4730, G4700 |
| Stroke | 430, 431, 432, 433, 434, 436 |
| Hypertension | 401, 402, 403, 404, 405 |
| Multiple sclerosis | 340 |
| Diabetes | 250 |
| ***Pain conditions*** |
| Diabetic neuropathy | 2506, 3572  |
| Postherpetic neuropathy | 05310, 05311, 05312, 05313, 05314, 05319 |
| Stroke-associated pain | 430, 431, 432, 433, 434, 436, 437, 3380  |
| Lumbar radiculopathy | 7244 |
| Cervical radiculopathy | 7234 |
| Multiple sclerosis–associated pain | 340, 3380 |
| Fibromyalgia | 7291 |
| Osteoarthritis | 7150, 7151, 7152, 7158, 7159, 7210, 7211, 7212, 7213, 72141, 72142 |
| Lower back pain | 72283, 72402, 7242, 7245, 7248 |
| Migraine | 3460, 3461, 3462, 3468, 3469  |
| Rheumatoid arthritis | 7140, 7141, 7142, 71430, 71431, 71432, 71433, 7144, 71481 |
| Ankylosing spondylitis | 7200, 7201, 7202, 72081, 72089 |
| Psoriatic arthropathy | 696 |
| Cancer pain | 3383  |
| Irritable bowel syndrome | 5641 |
| Interstitial cystitis | 5951 |