**Supplemental Table 1.** *International Classification of Disease, Ninth Revision, Clinical Modification* (*ICD-9-CM)* diagnosis codes.

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| **Illness category** | **ICD-9-CM codes** |
| *Excluded patients* |  |
| Pregnancy | 630-679, V22, V23, V27, V28 |
| Injury or poisoning diagnoses | 800-997 (except 995.9, 996.8, 997.3) |
| Diagnoses unrelated to influenza | 331.4, 373.13, 375.30, 376.01, 519.09, 530.3, 536.49, 537.0, 537.4, 540.0, 540.9, 560.9, 564.00, 578.1, 592.0, 616.4, 681.00, 681.10, 682.0-682.7,692.9, 693.1, 706.2, 729.72, 736.81, 750.5, 751.0, 751.3, 751.4, 753.21, 753.29, 756.79, 765.02, 765.03, 765.14-765.18, 771.4, 784.2, 786.6, V54.11, V55.0, V55.3, V57.89 |
| *ACIP-defined chronic health conditions* |  |
| Influenza | 487, 488.1 |
| Asthma | 493 |
| Non-asthma chronic pulmonary disease | 010-012, 031.0, 277.0, 446.21, 446.4, 491, 492, 494-496, 500-505, 506.4, 508, 515-517, 518.3, 518.6, 518.83, 518.84, 519.4, 519.9, 748.3-748.6, 750.3, 756.6, 770.7, V44.0, V45.76, V46.1, V46.2, V55.0 |
| Cardiovascular disease | 093, 393-398, 412-416, 425, 428, 429 (except 429.0), 745 (except 745.5), 746, 747, (except 747.5, 747.6, 747.9), V43.3 |
| Renal disease | 403, 404, 588.0, 581, 582, 585, 587, 756.71, V45.1 |
| Hepatic disease | 456.0-456.2, 571, 572, 751.61 |
| Hematologic disease | 282.4, 282.6, 282.7 |
| Metabolic disease | 249, 250, 270-273, 275.0, 275.1, 277 (except 277.0), 756.5, 759.81 |
| Neurological and neuromuscular disease | 094, 310.8, 310.9, 317-319, 330-337 (except 331.4, 331.81), 340-345, 348.1, 348.3, 348.4, 348.8, 357.0-357.4, 358, 359.0-359.2, 359.5, 741, 742, 758 768.7, 856.5 |
| Immunosuppression | 042, 117.5, 118, 136.3, 140-200 (except 173), 238.7 (except 238.71), 261, 262, 279, 284, 288.0, 288.1, 288.2, 288.4, 695.4, 710, 714.3, 996.8, V08, V42.0, V42.1, V42.6-V42.9, V58.11, V58.44 |
| Chronic aspirin use | V58.66 |
| *Non-ACIP conditions* |  |
| Prematurity | Among patients <1 year: 765.00-765.08, 765.11-765.18, 765.21-765.28, V21.3 (except V21.30) |
| Other conditions | 123.1, 211.3, 211.8, 212.7, 215.0, 228.00, 228.02, 228.04, 228.09, 228.1, 237.0, 237.70, 237.71, 238.1, 238.71, 243, 244.2, 245.9, 246.9, 252.1, 253.0, 253.2, 253.3, 253.6, 253.7, 253.8, 253.9, 255.0, 255.13, 255.2, 255.4, 255.5, 256.4, 259.4, 263.0, 263.8, 263.9, 266.2, 268.0, 269.2, 269.9, 278.00, 278.01, 278.02, 280.0, 280.1, 280.8, 280.9, 282.0, 282.2, 282.5, 283.0, 285.29, 286.0, 286.1, 286.3, 286.4, 286.7, 287.30, 287.31, 287.33, 296.20, 296.33, 305.00, 305.1, 305.20, 310.2, 331.4, 348.0, 348.2, 369.00, 369.4, 417.9, 424.0, 424.1, 424.2, 426.0, 426.10, 426.3, 426.4, 426.7, 426.82, 438.20, 443.89, 474.02, 478.74, 474.8, 519.09, 530.10, 530.11, 530.13, 530.6, 530.89, 531.40, 533.40, 536.41, 536.42, 536.49, 553.3, 556.0, 556.8, 556.9, 560.81, 564.81, 565.0, 569.2, 569.69, 569.81, 577.1, 579.0, 590.00, 596.1, 596.2, 596.54, 614.4, 686.01, 701.2, 703.2, 718.44, 718.89, 721.3, 728.11, 730.11, 730.15, 730.17, 733.00, 733.13, 733.16, 733.6, 737.30, 745.5, 748.0, 749.00, 749.02, 749.10, 749.20, 750.5, 751.1, 751.2, 751.3, 753.0, 753.10, 753.11, 753.14, 753.15, 753.19, 753.21, 753.22, 753.23, 753.29, 753.5, 753.6, 753.7, 754.81, 756.12, 756.16, 756.17, 756.3, 756.4, 756.79, 756.83, 759.0, 759.3, 759.5, 759.82, 759.83, 759.89, 760.8, 761.2, 761.8, 764.99, 770.0, 770.2, 771.1, 771.2, 771.4, 774.2, 783.21, 783.22, 783.3, 783.40, 783.41, 783.42, 783.7, 789.1, 789.2, 807.08, 807.2, 909, 995.52, 995.54, E849.7, V04.82, V10.09, V10.62, V10.81, V10.83, V10.85, V10.86, V10.88, V12.3, V15.1, V15.2, V15.3, V15.5, V15.59, V42.2, V43.0, V44.1, V44.2, V44.3, V44.4, V44.59, V44.6, V45.01, V45.2, V45.3, V45.4, V45.72, V45.73, V45.79, V45.81, V46.3, V49.83, V55.1, V58.61, V58.65, V85.51, V85.53, V85.54 |
| *Chronic mechanical ventilation* | V46.1 |
| *Tracheostomy* | 519.0, V44.0, V55.0 |
| *Bacterial pneumonia* |  |
| *Streptococcus pneumoniae* | 481 |
| *Staphylococcus aureus* | 482.41, 482.42 |
| Other Gram-positive organisms | 482.3, 482.40, 482.49 |
| Pseudomonas | 482.1 |
| Other Gram-negative organisms | 482.0, 482.2, 482.81-3 |
| *Mycoplasma pneumoniae* | 483.0 |
| Legionella | 482.84 |
| Other | 482.89, 482.9 |