**SUPPLEMENTARY TABLES**

**Supplementary Table 1. List of ICD 10 diagnostic codes for included infectious diagnoses grouped by HCUP CCSR categories.**

|  |  |
| --- | --- |
| **Infectious Diagnosis** | **List of included diagnosis codes *(ICD 10; inclusive of subcodes)*** |
| **Acute sinusitis (AS)** | J01 Acute sinusitis |
| **Acute pharyngitis (AP)** | J02 Acute pharyngitis |
| **Acute otitis media (AOM)** | H65 Acute serous otitis media |
| H66 Acute suppurative otitis media |
| H67 Otitis media in diseases classified elsewhere |
| **Acute upper respiratory tract infection (AURI)** | J00 Acute nasopharyngitis [common cold] |
|  |
| J03 Acute tonsillitis |
| J04 Acute laryngitis and tracheitis |
| J05 Acute obstructive laryngitis [croup] and epiglottitis |
| J06 Acute upper respiratory infections of multiple and unspecified sites |
| **Acute lower respiratory tract infection (ALRI)** | J12 Viral pneumonia, not elsewhere classified |
| J13 Pneumonia due to Streptococcus pneumoniae |
| J14 Pneumonia due to Hemophilus influenzae |
| J15 Bacterial pneumonia, not elsewhere classified |
| J16 Pneumonia due to other infectious organisms, not elsewhere classified |
| J17 Pneumonia in diseases classified elsewhere |
| J18 Pneumonia, unspecified organism *(CAP included in theis DX)* |
| J20 Acute bronchitis |
| J21 Acute bronchiolitis |
| J22 Unspecified acute lower respiratory infection |
| **Urinary tract infection (UTI)** | N10 Acute pyelonephritis |
| N11 Chronic tubulo-interstitial nephritis |
| N15.9 Renal tubule-interstitial disease, unspecified |
| N30.0 Acute cystitis |
| N30.1 Interstitial cystitis (chronic) |
| N30.2 Other chronic cystitis |
| N30.3 Trigonitis |
| N30.8 Other cystitis |
| N30.9 Cystitis, unspecified |
| N34.0 Urethral abscess |
| N34.1 Nonspecific urethritis |
| N34.2 Other urethritis |
| N34.3 Urethral syndrome, unspecified |
| N39.0 Urinary tract infection, site not specified |
| P39.3 Neonatal urinary tract infection |
| **Skin and soft tissue infection (SSTI)** | L00 Staphylococcal scalded skin syndrome |
| L01 Impetigo |
| L02 Cutaneous abscess, furuncle and carbuncle |
| L03 Cellulitis and acute lymphangitis |
| L04 Acute lymphadenitis |
| L05 Pilonidal cyst and sinus |
| L08 Other local infections of skin and subcutaneous tissue |

**Supplementary Table 2. Total WV Medicaid spending (USD $) by CY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Calendar year (CY)** | **Total Spending,**  **oral antibiotics only (USD $)** | **Total spending,**  **all antibioticsd (USD $)** | **Average spending per Rx,**  **oral antibiotics only (USD $)** |
| CY 2018 | $4,366,091 | $7,796,701 | $18.62 |
| CY 2019 | $4,041,687 | $7,731,375 | $17.98 |

d Includes oral, otic, ophthalmic, other topicals, intravenous (IV) & intramuscular (IM) antibiotics.

**Supplementary Table 3. Review of top 10 most prescribed oral antibiotics (descending frequency), CY 2018 & 2019**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Top 10 most prescribed oral antibiotics** | **Prescription frequency (% annual total)** | | **Total spending (USD $), (% annual total)** | |
| **CY 2018** | **CY 2019** | **CY 2018** | **CY 2019** |
| Amoxicillin | 83,286 (35.5) | 81,632 (36.3) | $1,017,390 (23.3) | $1,025,222 (25.4) |
| Cefdinir | 39,167 (16.7) | 39,096 (17.4) | $906,407 (20.8) | $758,034 (18.8) |
| Azithromycin | 33,821 (14.4) | 29,950 (13.3) | $528,174 (12.1) | $450,242 (11.1) |
| Amoxicillin clavulanate | 28,789 (12.3) | 27,579 (12.3) | $680,053 (15.6) | $599,090 (14.8) |
| Trimethoprim-sulfamethoxazole (TMP-SMX) | 14,689 (6.3) | 13,170 (5.9) | $327,323 (7.5) | $267,202 (6.6) |
| Cephalexin | 12,798 (5.5) | 12,849 (5.7) | $250,034 (5.7) | $245,155 (6.1) |
| Doxycycline | 4,812 (2.1) | 5,212 (2.3) | $96,117 (2.2) | $82,583 (2.0) |
| Minocycline | 3,774 (1.6) | 3,465 (1.5) | $77,592 (1.8) | $69,744 (1.7) |
| Nitrofurantoin | 3,393 (1.4) | 3,054 (1.4) | $166,435 (3.8) | $315,968 (7.8) |
| Clindamycin | 3,188 (1.4) | 2,963 (1.3) | $110,366 (2.5) | $102,666 (2.5) |
|  | **CY 2018** | **CY 2019** | **CY 2018** | **CY 2019** |
| Total 10 most prescribed oral antibiotics, total (%) | 227,717 (97.1) | 218,970 (97.4) | $4,159,891 (95.3) | $3,915,906 (96.9) |
| All oral antibiotics, total (100%) | 234,465 | 224,828 | $4,365,719 | $4,041,143 |