

CMS Qualified Entity Phase 3 Reporting Calculation Methodology

Initial Reporting Period, Prepared April 2019

Alternative Measure Selected

Potentially Avoidable Emergency Department Visits

Numerator

The numerator of the potentially avoidable ED visits rate represents the volume of ED visits in Virginia from 2015-2017 containing a primary ICD-9 or ICD-10 diagnosis code categorized as being potentially avoidable. The numerator was defined using the Oregon Health Authority's (OHA) methodology on avoidable emergency department visits, derived from the Medi-Cal potentially avoidable ED visits methodology (See Appendix, Exhibit 1). Per the OHA methodology, the query elements and construction logic for the numerator are as follows:

Figure A – Numerator Construction Logic

Field (Figure A, Columns)	Description/Rationale
Incurred Year	The year during which the ED visit occurred. Used to break out the data for volume trends over time
Payer LOB	Line of business (LOB) or insurance type of the patient containing a value of Commercial, Medicaid, or Medicare. Used to break out the data for observing trends in volume across payer types
Member County	The county associated with the patient based on the patient's street address. Used to distinguish between geographical areas based on patient's residence
Primary ICD Diagnosis Code	The main or principal diagnosis ICD (International Statistical Classification of Diseases and Related Health Problems) code associated with the service. Used to identify potentially avoidable ED visits
Total Utilization	A summation of the count of distinct services. Utilization counts differ according to the defined HCG (Health Cost Guideline) Line Code grouping system created by Milliman to rollup services into groups. Using Milliman's methodology for the HCG Line grouping <i>O11 = Emergency Room</i> , Total Utilization represents the number of unique ED visits. Used to represent the volume of ED visits

Condition (Figure A, Line Level Filters)	Description/Rationale
Incurred Year = 2015, 2016, 2017	Only data for years 2015, 2016, and 2017 will be used to ensure the proper reporting period.
Payer LOB ≠ Unknown	Claims for individuals without an identified insurance type will not be included.
HCG Line = O11 – Emergency Room	Only claims categorized as containing an ED visit not resulting in an admission will be used.
Primary ICD Diagnosis Code = OHA Avoidable ED Numerator Diagnosis Code Set (See Appendix, Exhibit 1, Pages 3-10)	(See Appendix, Exhibit 1, Pages 1-3)
CPT Procedure Code ≠ OHA Psychiatry Value Set specifications (See Appendix, Exhibit 1, Page 10)	(See Appendix, Exhibit 1, Page 10)

ICD Procedure Code ≠ OHA Electroconvulsive Therapy Value Set specifications (See Appendix, Exhibit 1, Page 10)	(See Appendix, Exhibit 1, Page 10)
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Denominator

The denominator of the potentially avoidable ED visits rate represents the volume of ED visits in Virginia from 2015-2017 that did not result in an admission. ED visits not resulting in an admission were defined using Milliman’s HCG Line grouping *O11 = Emergency Room*, which corresponds to the HEDIS 2018 specifications for identifying emergency department visits. The following tables outline the fields and conditions used to query the data:

Figure B – Denominator Construction Logic

Field (Figure B, Columns)	Rationale
Incurred Year	(See Figure A)
Payer LOB	(See Figure A)
Member County	(See Figure A)
Primary ICD Diagnosis Code	(See Figure A)
Total Utilization	(See Figure A)

Condition (Figure B, Line Level Filters)	Rationale
Incurred Year = 2015, 2016, 2017	(See Figure A)
Payer LOB ≠ Unknown	(See Figure A)
HCG Line = O11 – Emergency Room	(See Figure A)

Post-Export Data Manipulations and QA

After exporting the data as shown above, the following manipulations were performed to prepare the data for the consumer and to ensure statistical validity:

1. Category Assignment
 - A. The potentially avoidable primary ICD-9 and ICD-10 diagnosis codes with the highest values for Total Utilization statewide for ED visits not resulting in an admission were categorized by visit type. VHI based these category assignments on Milliman’s Primary ICD Diagnosis Code Rollup methodology. (See Appendix, Exhibit 2)
2. Potentially Avoidable ED Visits Rate Calculation
 - A. Potentially Avoidable ED Visits Rate = Total Utilization for Potentially Avoidable ED Visits (Numerator) / Total Utilization for All ED Visits (Denominator)
3. Data Suppression
 - A. Records containing a county outside of Virginia were removed from the analysis in order to ensure statistical validity regarding the target population.
 - B. Per CMS requirements, records containing a county representing a numerator of less than 30 individuals were removed from the analysis to ensure statistical validity by eliminating small sample sizes.
 - C. In order to assess the impact of the suppression mentioned above, the data was broken out by Incurred Year and Payer LOB to compare pre-suppressed and post-suppressed total values. Based on this analysis, the removal of these records did not have a significant effect on overall rate calculations, as seen in Figure D below:

Figure D – Impact of Suppression on Overall Data Set Totals

Incurred Year / Payer LOB	Unsuppressed Totals			Suppressed Totals			Difference in Rate After Suppression
	Numerator	Denominator	Rate	Suppressed Numerator	Suppressed Denominator	Suppressed Rate	
2015	249,236	1,739,827	14.33%	248,300	1,731,501	14.34%	0.01%
Commercial	50,327	461,611	10.90%	50,309	461,402	10.90%	0.00%
Medicaid	146,950	797,196	18.43%	146,926	797,016	18.43%	0.00%
Medicare	51,959	481,020	10.80%	51,065	473,083	10.79%	-0.01%
2016	220,746	1,561,910	14.13%	219,624	1,552,154	14.15%	0.02%
Commercial	38,388	363,517	10.56%	38,331	363,053	10.56%	0.00%
Medicaid	130,448	707,914	18.43%	130,430	707,760	18.43%	0.00%
Medicare	51,910	490,479	10.58%	50,863	481,341	10.57%	-0.02%
2017	206,726	1,519,442	13.61%	206,532	1,517,351	13.61%	0.01%
Commercial	38,190	371,937	10.27%	38,107	371,080	10.27%	0.00%
Medicaid	116,887	655,549	17.83%	116,873	655,456	17.83%	0.00%
Medicare	51,649	491,956	10.50%	51,552	490,815	10.50%	0.00%
Total	676,708	4,821,179	14.04%	674,456	4,801,006	14.05%	0.01%

D. An additional analysis was conducted to investigate the effect of the suppression on the breakout of potentially avoidable ED visit volumes by category in 2017. These percentages also endured minimal impact, as shown in Figure E below:

Figure E – Impact of Suppression on Potentially Avoidable Category Volumes

Potentially Avoidable Category	Volume of Potentially Avoidable ED Visits	% of All Potentially Avoidable ED Visits	Suppressed Volume of Potentially Avoidable ED Visits	Suppressed % of All Potentially Avoidable ED Visits	Difference in % of Potentially Avoidable ED Visits After Suppression
Back Problem	23,169	11.21%	20,367	10.56%	-0.64%
Ear Infection	18,213	8.81%	16,123	8.36%	-0.45%
Headache	23,240	11.24%	20,138	10.45%	-0.80%
Other Potentially Avoidable	21,475	10.39%	18,708	9.70%	-0.68%
Respiratory Infection	78,784	38.11%	77,446	40.17%	2.06%
Urinary Tract Infection	41,845	20.24%	40,015	20.75%	0.51%
Grand Total	206,726	100.00%	192,797	100.00%	0.00%

4. Outlier Detection

- A. The statewide mean and standard deviation were calculated for each Payer LOB within each Incurred Year. (See Appendix, Exhibit 3A)
- B. Each county-specific rate considered for inclusion was then compared against these statewide mean and standard deviation figures. Any county-specific rates that exceeded +/- two standard deviations from the statewide mean for the same Incurred Year and Payer LOB were flagged for additional analysis. (See Appendix, Exhibit 3B)
- C. All flagged county-specific rates were checked for consistency across underlying data sources. (See Appendix, Exhibit 3C)

Dashboard/Interface

After finalizing values to be included, a dashboard was created via Tableau to interactively display the rates by county. A draft of the full dashboard is available at:

<http://v2.vhi.org/APCD/avoidable-ed-visits.asp> (See Figure F)

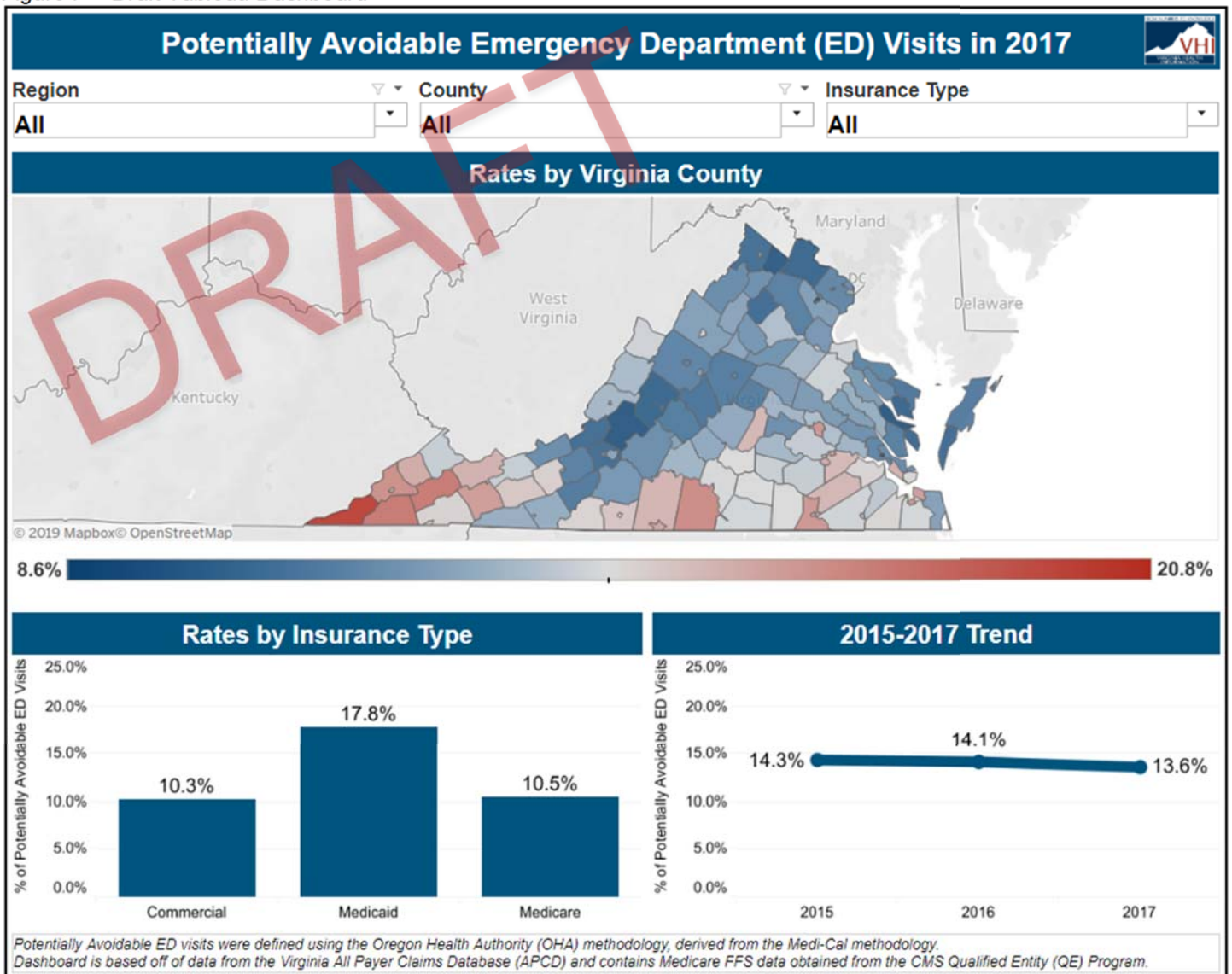
The key features of the interface include:

1. Overall Filters

- A. Region: allows the user to select a particular Health Planning Region of interest to narrow down the population included in the content displayed. (See Appendix, Exhibit 4 for the Health Planning Region assignment to each Member County)
- B. County: allows the user to select a particular Member County of interest by name to narrow down the population included in the content displayed
- C. Insurance Type - allows the user to select a particular Payer LOB of interest to narrow down the population included in the content displayed

2. Map - a dynamic map of counties in Virginia and associated regions that displays each county's name and overall potentially avoidable ED rate and interacts with the user's filter selection(s). When the user's cursor hovers over any given county, the following elements are displayed in a pop-up window, or "Tool Tip":
 - A. County Name
 - B. County Overall Potentially Avoidable ED Rate
 - C. County Distribution of Potentially Avoidable ED Visits by Category
3. Rates by Insurance Type - a bar graph displaying the overall potentially avoidable ED rates for Commercial, Medicaid, or Medicare patients based on the user's filter and/or map selection(s)
4. Three-Year Trend - a line graph displaying the overall potentially avoidable ED rates for 2015-2017 based on the user's filter and/or map selection(s)

Figure F – Draft Tableau Dashboard



APPENDIX - EXHIBIT 1 - OHA METHODOLOGY

Ambulatory Care: Avoidable Emergency Department Visits

Measure Basic Information

Name and date of specifications used: HEDIS® 2018 Technical Specifications for Health Plans, Volume 2, and California Department of Health Care Services Medi-Cal Managed Care Division's statewide collaborative quality improvement project on avoidable ER visits. The Medi-Cal Managed Care Division has stopped maintaining the measurement specification, and in order to accommodate the transition from ICD-9 to ICD-10 coding since October 2015, OHA utilized CMS General Equivalence Mappings (GEMs) to create the ICD-10 code set for identify qualifying numerator ED visits.

URL of Specifications:

http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/EQRO_QIPs/CA201112_QIP_Coll_ER_Re_meaure_Report.pdf (Appendix A-1). <https://www.cms.gov/Medicare/Coding/ICD10/2016-ICD-10-CM-and-GEMs.html>

Measure Type:

HEDIS PQI Survey Other Specify: California Department of Health Care Services Medi-Cal Managed Care Division with OHA updates to ICD-10 codes

Measure Utility:

CCO Incentive State Quality Measure CMS Adult Core Set CMS Child Core Set Other Specify:

Data Source: MMIS/DSSURS

Measurement Period: January 1, 2018 – December 31, 2018

2018 Benchmark: N/A

Measure changes in specifications from 2017 to 2018:

OHA is using HEDIS 2018 specifications for all 2018 measures. Changes from HEDIS 2017 to 2018 include:

- HEDIS 2018 further clarifies the methods to identify an ED visit that resulted in an inpatient stay for exclusion: When an ED visit and an inpatient stay are billed on separate claims, the visit results in an inpatient stay when the admission date for the inpatient stay occurs on the ED date of service, or on calendar day after. An ED visit billed on the same claim as an inpatient stay is considered a visit that resulted in an inpatient stay.
- HEDIS 2018 removed 'AOD Rehab and Detox Value Set' from required exclusion; this value set only contained ICD-PCS inpatient procedure codes, and these services may still be identified for exclusion based on chemical dependency diagnosis codes (included in the Mental and Behavioral Disorders Value Set).
- HEDIS 2018 Ambulatory Outpatient Visits value set deleted one CPT code 99420.
- HEDIS 2018 Mental and Behavioral Disorders Value Set added 13 ICD10 diagnosis codes: F32.81, F32.89, F34.81, F34.89, F42.2, F42.3, F42.4, F42.8, F42.9, F50.81, F50.89, F64.0, F80.82.
- HEDIS 2018 ED Procedure Code Value Set added 51 and deleted 22 CPT codes.

OHA continues to use the ICD-10 'Avoidable ED Numerator Diagnosis Code Set' from measurement year 2018, which is based on the Medi-Cal defined ICD-9 codes, and crossed-walked with CMS General Equivalence Mappings (GEMs).

Member type: CCO A CCO B CCO G

Specify claims used in the calculation:

AVOID_ED	Only use claims from matching CCO that a member is enrolled with	Denied claims included
Numerator event	Y	N

Measure Details

Data elements required denominator: 1,000 member months. The measure is based on the Ambulatory Care: Emergency Department Utilization measure.

Required exclusions for denominator: None.

Deviations from cited specifications for denominator: N/A

Data elements required numerator: Step 1, Identify all ED visits:

See HEDIS® 2018 Technical Specifications for Health Plans (Volume 2) and Value Set Dictionary for details on identifying emergency department visits.

Count each visit to an ED that does not result in an inpatient encounter once; count multiple ED visits on the same date of service as one visit. Emergency Department visits are specified by the following codes:

ED Value Set	
CPT	UB Revenue
99281-99285	0450, 0451, 0452, 0456, 0459, 0981

OR

ED Procedure Code Value Set		ED POS Value Set
CPT	With	POS
10021-69990* See HEDIS 2018 for details.		23

*Total of 5,777 CPT codes are included in the HEDIS 2018 'ED Procedure Code' Value Set.

Do not include ED visits that result in an inpatient stay (Inpatient Stay Value Set). When an ED visit and an inpatient stay are billed on separate claims, the visit results in an inpatient stay when the admission date for the inpatient stay occurs on the ED date of service, or on calendar day after. An ED visit billed on the same claim as an inpatient stay is considered a visit that resulted in an inpatient stay.

Inpatient Stay Visits Value Set	
UBREV	0100, 0101, 0110 – 0114, 0116 – 0124, 0126 – 0134, 0136 – 0144, 0146 – 0154, 0156 – 0160, 0164, 0167, 0169 – 0174, 0179, 0190 – 0194, 0199 – 0204, 0206 – 0214, 0219, 1000 – 1002

Step2: Identify a subset of avoidable ED visits:

Avoidable ED visits are identified as those visits with a primary diagnosis that matches a list of ICD-9 diagnosis codes defined by the California Department of Health Services¹. OHA utilized CMS 2016 General Equivalence Mappings (GEMs) to update numerator avoidable ED visits into ICD-10 codes:

Avoidable ED Numerator Diagnosis Code Set	
ICD10-CM	ICD10_Desc
B354	Tinea corporis
B355	Tinea imbricata
B370	Candidal stomatitis
B372	Candidiasis of skin and nail
B373	Candidiasis of vulva and vagina
B3741	Candidal cystitis and urethritis
B3742	Candidal balanitis
B3749	Other urogenital candidiasis
B3781	Candidal esophagitis
B3782	Candidal enteritis
B3783	Candidal cheilitis
B3784	Candidal otitis externa
B3789	Other sites of candidiasis
B379	Candidiasis, unspecified
B86	Scabies
B880	Other acariasis
B889	Infestation, unspecified
G441	Vascular headache, not elsewhere classified
H01141	Xeroderma of right upper eyelid
H01142	Xeroderma of right lower eyelid
H01143	Xeroderma of right eye, unspecified eyelid
H01144	Xeroderma of left upper eyelid
H01145	Xeroderma of left lower eyelid
H01146	Xeroderma of left eye, unspecified eyelid
H01149	Xeroderma of unspecified eye, unspecified eyelid
H10011	Acute follicular conjunctivitis, right eye
H10012	Acute follicular conjunctivitis, left eye

H10013	Acute follicular conjunctivitis, bilateral
H10019	Acute follicular conjunctivitis, unspecified eye
H10021	Other mucopurulent conjunctivitis, right eye
H10022	Other mucopurulent conjunctivitis, left eye
H10023	Other mucopurulent conjunctivitis, bilateral
H10029	Other mucopurulent conjunctivitis, unspecified eye
H1010	Acute atopic conjunctivitis, unspecified eye
H1011	Acute atopic conjunctivitis, right eye
H1012	Acute atopic conjunctivitis, left eye
H1013	Acute atopic conjunctivitis, bilateral
H10221	Pseudomembranous conjunctivitis, right eye
H10222	Pseudomembranous conjunctivitis, left eye
H10223	Pseudomembranous conjunctivitis, bilateral
H10229	Pseudomembranous conjunctivitis, unspecified eye
H10231	Serous conjunctivitis, except viral, right eye
H10232	Serous conjunctivitis, except viral, left eye
H10233	Serous conjunctivitis, except viral, bilateral
H10239	Serous conjunctivitis, except viral, unspecified eye
H1030	Unspecified acute conjunctivitis, unspecified eye
H1031	Unspecified acute conjunctivitis, right eye
H1032	Unspecified acute conjunctivitis, left eye
H1033	Unspecified acute conjunctivitis, bilateral
H10401	Unspecified chronic conjunctivitis, right eye
H10402	Unspecified chronic conjunctivitis, left eye
H10403	Unspecified chronic conjunctivitis, bilateral
H10409	Unspecified chronic conjunctivitis, unspecified eye
H10411	Chronic giant papillary conjunctivitis, right eye
H10412	Chronic giant papillary conjunctivitis, left eye
H10413	Chronic giant papillary conjunctivitis, bilateral
H10419	Chronic giant papillary conjunctivitis, unspecified eye
H10421	Simple chronic conjunctivitis, right eye
H10422	Simple chronic conjunctivitis, left eye
H10423	Simple chronic conjunctivitis, bilateral
H10429	Simple chronic conjunctivitis, unspecified eye

H10431	Chronic follicular conjunctivitis, right eye
H10432	Chronic follicular conjunctivitis, left eye
H10433	Chronic follicular conjunctivitis, bilateral
H10439	Chronic follicular conjunctivitis, unspecified eye
H1044	Vernal conjunctivitis
H1045	Other chronic allergic conjunctivitis
H10501	Unspecified blepharoconjunctivitis, right eye
H10502	Unspecified blepharoconjunctivitis, left eye
H10503	Unspecified blepharoconjunctivitis, bilateral
H10509	Unspecified blepharoconjunctivitis, unspecified eye
H10511	Ligneous conjunctivitis, right eye
H10512	Ligneous conjunctivitis, left eye
H10513	Ligneous conjunctivitis, bilateral
H10519	Ligneous conjunctivitis, unspecified eye
H10521	Angular blepharoconjunctivitis, right eye
H10522	Angular blepharoconjunctivitis, left eye
H10523	Angular blepharoconjunctivitis, bilateral
H10529	Angular blepharoconjunctivitis, unspecified eye
H10531	Contact blepharoconjunctivitis, right eye
H10532	Contact blepharoconjunctivitis, left eye
H10533	Contact blepharoconjunctivitis, bilateral
H10539	Contact blepharoconjunctivitis, unspecified eye
H1089	Other conjunctivitis
H109	Unspecified conjunctivitis
H66001	Acute suppr otitis media w/o spon rupt ear drum, right ear
H66002	Acute suppr otitis media w/o spon rupt ear drum, left ear
H66003	Acute suppr otitis media w/o spon rupt ear drum, bilateral
H66004	Ac suppr otitis media w/o spon rupt ear drum, recur, r ear
H66005	Ac suppr otitis media w/o spon rupt ear drum, recur, l ear
H66006	Acute suppr otitis media w/o spon rupt ear drum, recur, bi
H66007	Ac suppr otitis media w/o spon rupt ear drum, recur, unsp ear
H66009	Acute suppr otitis media w/o spon rupt ear drum, unsp ear
H66011	Acute suppr otitis media w spon rupt ear drum, right ear
H66012	Acute suppr otitis media w spon rupt ear drum, left ear

H66013	Acute suppr otitis media w spon rupt ear drum, bilateral
H66014	Acute suppr otitis media w spon rupt ear drum, recur, r ear
H66015	Acute suppr otitis media w spon rupt ear drum, recur, l ear
H66016	Acute suppr otitis media w spon rupt ear drum, recurrent, bi
H66017	Ac suppr otitis media w spon rupt ear drum, recur, unsp ear
H66019	Acute suppr otitis media w spon rupt ear drum, unsp ear
H6610	Chronic tubotympanic suppurative otitis media, unspecified
H6611	Chronic tubotympanic suppurative otitis media, right ear
H6612	Chronic tubotympanic suppurative otitis media, left ear
H6613	Chronic tubotympanic suppurative otitis media, bilateral
H6620	Chronic atticoantral suppurative otitis media, unsp ear
H6621	Chronic atticoantral suppurative otitis media, right ear
H6622	Chronic atticoantral suppurative otitis media, left ear
H6623	Chronic atticoantral suppurative otitis media, bilateral
H663X1	Other chronic suppurative otitis media, right ear
H663X2	Other chronic suppurative otitis media, left ear
H663X3	Other chronic suppurative otitis media, bilateral
H663X9	Other chronic suppurative otitis media, unspecified ear
H6640	Suppurative otitis media, unspecified, unspecified ear
H6641	Suppurative otitis media, unspecified, right ear
H6642	Suppurative otitis media, unspecified, left ear
H6643	Suppurative otitis media, unspecified, bilateral
H6690	Otitis media, unspecified, unspecified ear
H6691	Otitis media, unspecified, right ear
H6692	Otitis media, unspecified, left ear
H6693	Otitis media, unspecified, bilateral
H70091	Acute mastoiditis with other complications, right ear
H70092	Acute mastoiditis with other complications, left ear
H70093	Acute mastoiditis with other complications, bilateral
H70099	Acute mastoiditis with other complications, unspecified ear
J00	Acute nasopharyngitis [common cold]
J028	Acute pharyngitis due to other specified organisms
J029	Acute pharyngitis, unspecified
J060	Acute laryngopharyngitis

J069	Acute upper respiratory infection, unspecified
J208	Acute bronchitis due to other specified organisms
J209	Acute bronchitis, unspecified
J310	Chronic rhinitis
J311	Chronic nasopharyngitis
J312	Chronic pharyngitis
J320	Chronic maxillary sinusitis
J321	Chronic frontal sinusitis
J322	Chronic ethmoidal sinusitis
J323	Chronic sphenoidal sinusitis
J324	Chronic pansinusitis
J328	Other chronic sinusitis
J329	Chronic sinusitis, unspecified
J3501	Chronic tonsillitis
J3502	Chronic adenoiditis
J3503	Chronic tonsillitis and adenoiditis
J351	Hypertrophy of tonsils
J352	Hypertrophy of adenoids
J353	Hypertrophy of tonsils with hypertrophy of adenoids
J358	Other chronic diseases of tonsils and adenoids
J359	Chronic disease of tonsils and adenoids, unspecified
L298	Other pruritus
L299	Pruritus, unspecified
L740	Miliaria rubra
L741	Miliaria crystallina
L742	Miliaria profunda
L743	Miliaria, unspecified
M532x8	Spinal instabilities, sacral and sacrococcygeal region
M533	Sacrococcygeal disorders, not elsewhere classified
M5403	Panniculitis aff regions of neck/bk, cervicothor region
M5404	Panniculitis affecting regions of neck/bk, thoracic region
M5405	Panniculitis affecting regions of neck/bk, thoracolum region
M5406	Panniculitis affecting regions of neck/bk, lumbar region
M5407	Panniculitis affecting regions of neck/bk, lumbosacr region

M5408	Panniculitis aff regions of neck/bk, sacr/sacrocygl region
M5409	Panniculitis aff regions, neck/bk, multiple sites in spine
M545	Low back pain
M5489	Other dorsalgia
M549	Dorsalgia, unspecified
M62830	Muscle spasm of back
N3000	Acute cystitis without hematuria
N3001	Acute cystitis with hematuria
N3010	Interstitial cystitis (chronic) without hematuria
N3011	Interstitial cystitis (chronic) with hematuria
N3020	Other chronic cystitis without hematuria
N3021	Other chronic cystitis with hematuria
N3030	Trigonitis without hematuria
N3031	Trigonitis with hematuria
N3040	Irradiation cystitis without hematuria
N3041	Irradiation cystitis with hematuria
N3080	Other cystitis without hematuria
N3081	Other cystitis with hematuria
N3090	Cystitis, unspecified without hematuria
N3091	Cystitis, unspecified with hematuria
N390	Urinary tract infection, site not specified
N72	Inflammatory disease of cervix uteri
N760	Acute vaginitis
N761	Subacute and chronic vaginitis
N762	Acute vulvitis
N763	Subacute and chronic vulvitis
N771	Vaginitis, vulvitis and vulvovaginitis in diseases classified elsewhere
N978	Female infertility of other origin
R51	Headache
Z0000	Encntr for general adult medical exam w/o abnormal findings
Z0000	Encounter for general adult medical examination without abnormal findings
Z0001	Encounter for general adult medical exam w abnormal findings
Z005	Encounter for exam of potential donor of organ and tissue
Z006	Encntr for exam for nrml cmprsn and ctrl in clncl rsrch prog
Z0070	Encntr for exam for delay growth in chldhd w/o abn findings

Z0071	Encntr for exam for delay growth in chldhd w abn findings
Z0100	Encounter for exam of eyes and vision w/o abnormal findings
Z0101	Encounter for exam of eyes and vision w abnormal findings
Z0110	Encounter for exam of ears and hearing w/o abnormal findings
Z01110	Encounter for hearing exam following failed hear screening
Z01118	Encntr for exam of ears and hearing w oth abnormal findings
Z0112	Encounter for hearing conservation and treatment
Z0120	Encounter for dental exam and cleaning w/o abnormal findings
Z0121	Encounter for dental exam and cleaning w abnormal findings
Z0130	Encounter for exam of blood pressure w/o abnormal findings
Z0131	Encounter for exam of blood pressure w abnormal findings
Z01411	Encntr for gyn exam (general) (routine) w abnormal findings
Z01419	Encntr for gyn exam (general) (routine) w/o abn findings
Z0142	Encntr for cerv smear to cnfrm norm smr fol init abn smear
Z01810	Encounter for preprocedural cardiovascular examination
Z01811	Encounter for preprocedural respiratory examination
Z01812	Encounter for preprocedural laboratory examination
Z01818	Encounter for other preprocedural examination
Z0182	Encounter for allergy testing
Z0183	Encounter for blood typing
Z0184	Encounter for antibody response examination
Z0189	Encounter for other specified special examinations
Z020	Encounter for exam for admission to educational institution
Z021	Encounter for pre-employment examination
Z022	Encounter for exam for admission to residential institution
Z023	Encounter for examination for recruitment to armed forces
Z024	Encounter for examination for driving license
Z025	Encounter for examination for participation in sport
Z026	Encounter for examination for insurance purposes
Z0271	Encounter for disability determination
Z0279	Encounter for issue of other medical certificate
Z0281	Encounter for paternity testing
Z0282	Encounter for adoption services
Z0283	Encounter for blood-alcohol and blood-drug test
Z0289	Encounter for other administrative examinations
Z029	Encounter for administrative examinations, unspecified

Z046	Encntr for general psychiatric exam, requested by authority
Z008	Encounter for other general examination
Z048	Encounter for examination and observation for oth reasons
Z049	Encounter for examination and observation for unspecified reason
Z08	Encntr for follow-up exam after trtmt for malignant neoplasm
Z09	Encntr for f/u exam aft trtmt for cond oth than malig neoplasm
Z09	Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm
Z3200	Encounter for pregnancy test, result unknown
Z3201	Encounter for pregnancy test, result positive
Z3202	Encounter for pregnancy test, result negative
Z760	Encounter for issue of repeat prescription

¹ For reference, see Appendix A for the original list of ICD-9 diagnosis codes here:
http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/EQRO_QIPs/CA2011-12_QIP_Coll_ER_Remeasure_Report.pdf

Required exclusions for numerator: Mental health and chemical dependency services are excluded, using the following codes. Note OHA applies the exclusions at the claim line level. OHA keeps all paid claim lines, as a result, unless the entire claim was denied, the paid lines without mental health and chemical dependency services may still pass through the algorithm and be count towards qualifying visits.

Mental and Behavioral Disorders Value Set	
Principal ICD-9 CM Diagnosis	Principal ICD-10 CM Diagnosis
See HEDIS 2018 for details (Total of 1,181 diagnosis codes are included in the HEDIS 2018 Mental and Behavioral Disorders Value Set)	

OR

Psychiatry Value Set
CPT
90785, 90791, 90792, 90832 - 90834, 90836 - 90840, 90845 - 90847, 90849, 90853, 90863, 90865, 90867 - 90870, 90875, 90876, 90880, 90882, 90885, 90887, 90889, 90899

OR

Electroconvulsive Therapy Value Set
ICD-10 PCS Procedure
GZB0ZZZ, GZB1ZZZ, GZB2ZZZ, GZB3ZZZ, GZB4ZZZ

Deviations from cited specifications for numerator: None.
What are the continuous enrollment criteria: None.
What are allowable gaps in enrollment: N/A.
Define Anchor Date (if applicable): None.

APPENDIX - EXHIBIT 2 - VHI CATEGORY ASSIGNMENTS

Potentially Avoidable ED Category by VHI	Primary ICD Diagnosis Code Rollup by Milliman	Primary ICD Diagnosis Code
Back Problem	<ul style="list-style-type: none"> ▪ Spondylosis intervertebral disc disorders other back problems ▪ Other back problems 	7242, 7245, 72470, 72471, 72479, 7248, M545, M5489, M549, M533, M532x8, M5403, M5404, M5405, M5406, M5407, M5408, M5409, M62830
Ear Infection	<ul style="list-style-type: none"> ▪ Otitis media and related conditions 	38200, 38201, 3821, 3822, 3823, 3824, 3829, 38302, H66001, H66002, H66003, H66004, H66005, H66006, H66007, H66009, H66011, H66012, H66013, H66014, H66015, H66016, H66017, H66019, H6610, H6611, H6612, H6613, H6620, H6621, H6622, H6623, H663X1, H663X2, H663X3, H663X9, H6640, H6641, H6642, H6643, H6690, H6691, H6692, H6693, H70091, H70092, H70093, H70099
Headache	<ul style="list-style-type: none"> ▪ Headache including migraine ▪ Other headache 	7840, G441, R51
Respiratory Infection	<ul style="list-style-type: none"> ▪ Acute bronchitis ▪ Acute and chronic tonsillitis ▪ Other upper respiratory disease ▪ Other upper respiratory infections 	460, 462, 4650, 4658, 4659, 4660, 4720, 4721, 4722, 4730, 4731, 4732, 4733, 4738, 4739, 47400, 47401, 47402, 47410, 47411, 47412, 4742, 4748, 4749, J00, J028, J029, J060, J069, J208, J209, J310, J312, J311, J320, J321, J322, J323, J324, J328, J329, J3501, J3502, J3503, J353, J351, J352, J358, J359
Urinary Tract Infection	<ul style="list-style-type: none"> ▪ Urinary tract infections 	5950, 5951, 5952, 5953, 5954, 59581, 59582, 59589, 5959, 5990, N3000, N3001, N3010, N3011, N3020, N3021, N3030, N3031, N3081, N3080, N3040, N3041, N3090, N3091, N390
Other Potentially Avoidable	<ul style="list-style-type: none"> ▪ Administrative/social admission ▪ Allergic reactions ▪ Candidiasis of the mouth (thrush) ▪ Chemotherapy ▪ Codes related to mental health disorders ▪ Disorders of teeth and jaw ▪ Female infertility ▪ Inflammation infection of eye (except that caused by TB or STD) ▪ Inflammation infection of eye (except that caused by tuberculosis or sexually transmitted disease) 	V681, V682, V6881, V6889, V689, Z0271, Z0279, Z760, Z048, Z049, Z0289, Z029, Z020, Z022, Z024, Z025, Z026, Z0282, Z0281, Z0283, Z021, Z023, V727, 1120, V672, V701, V702, V722, 6288, N978, 37200, 37201, 37202, 37203, 37204, 37205, 37210, 37211, 37212, 37213, 37214, 37215, 37220, 37221, 37222, 37230, 37231, 37239, 37333, H1030, H1031, H1032, H1033, H10231, H10232, H10233, H10239, H10011, H10012, H10013, H10019, H10021, H10022, H10023, H10029, H10221,

<p>Other Potentially Avoidable (cont.)</p>	<ul style="list-style-type: none"> ▪ Inflammatory diseases of female pelvic organs ▪ Medical examination/evaluation ▪ Mycoses ▪ Normal pregnancy and/or delivery ▪ Other aftercare ▪ Other ear and sense organ disorders ▪ Other eye disorders ▪ Other fractures ▪ Other infections including parasitic ▪ Other inflammatory condition of skin ▪ Other miscellaneous mental conditions ▪ Other mycoses ▪ Other screening for suspected conditions (not mental disorders or infectious disease) ▪ Other skin disorders ▪ Outcome of delivery (V codes) ▪ Radiotherapy ▪ Screening and history of mental health and substance abuse codes 	<p>H10222, H10223, H10229, H1010, H1011, H1012, H1013, H10401, H10402, H10403, H10409, H10421, H10422, H10423, H10429, H10431, H10432, H10433, H10439, H1044, H10411, H10412, H10413, H10419, H1045, H1089, H10501, H10502, H10503, H10509, H10521, H10522, H10523, H10529, H10531, H10532, H10533, H10539, H109, H10511, H10512, H10513, H10519, H01141, H01142, H01143, H01144, H01145, H01146, H01149, 6160, 61610, 61611, N72, N760, N761, N762, N763, N771, V6801, V6809, V700, V703, V704, V705, V706, V707, V708, V709, V7231, V7232, V725, V7260, V7261, V7262, V7263, V7269, V7281, V7282, V7283, V7284, V7285, V7286, V729, Z0000, Z0001, Z008, Z006, Z005, Z0070, Z0071, Z0100, Z0101, Z01110, Z0112, Z0110, Z01118, Z0120, Z0121, Z01411, Z01419, Z0142, Z0189, Z0184, Z01812, Z0182, Z01810, Z01811, Z01818, Z0130, Z0131, Z0183, B354, B355, B370, B3783, B373, B3741, B3742, B3749, B372, B3784, B3781, B3782, B3789, B379, Z3201, V6700, V6701, V6709, V6751, V6759, V676, V679, Z09, Z08, V7211, V7212, V7219, V720, V674, 1330, 1338, 1339, B86, B880, B889, 6988, 6989, L298, L299, V673, 1105, 1121, 1122, 1123, 11282, 11284, 11285, 11289, 1129, v7240, v7241, z320D, Z3202, 7051, L740, L741, L742, L743, V7242, V671, Z046</p>
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APPENDIX – EXHIBIT 3 – OUTLIER DETECTION ANALYSIS

3A – Statewide Mean and Standard Deviation Calculations

Incurred Year	Payer LOB	Statewide Mean Potentially Avoidable ED Rate	Standard Deviation
2015	Commercial	10.90%	0.03
2015	Medicaid	18.43%	0.03
2015	Medicare	10.79%	0.04
2016	Commercial	10.56%	0.03
2016	Medicaid	18.43%	0.04
2016	Medicare	10.57%	0.04
2017	Commercial	10.27%	0.03
2017	Medicaid	17.83%	0.04
2017	Medicare	10.50%	0.05

3B – County-Specific Rate Analysis

Incurred Year	Payer LOB	Member County	Potentially Avoidable ED Visits Rate	Absolute Value of Standard Deviations From Statewide Mean
2015	Commercial	Greenville	18.50%	2.93
2017	Medicaid	Lee	26.32%	2.34
2017	Medicaid	Middlesex	10.43%	2.04
2017	Commercial	Franklin City	15.87%	1.94
2017	Commercial	Lee	15.83%	1.92
2016	Commercial	Russell	15.58%	1.85
2015	Commercial	Sussex	15.50%	1.77
2015	Commercial	Portsmouth City	15.44%	1.75
2017	Commercial	Russell	15.31%	1.75
2017	Commercial	Greenville	15.23%	1.72
2016	Medicaid	Lee	24.44%	1.71
2016	Commercial	Botetourt	5.90%	1.71
2015	Commercial	Charles City	15.34%	1.71
2017	Medicaid	Northampton	11.70%	1.69
2015	Medicaid	Nelson	12.67%	1.66
2016	Commercial	Portsmouth City	15.07%	1.66
2016	Medicaid	Charles City	24.22%	1.65
2016	Commercial	Cumberland	14.99%	1.63
2016	Medicaid	Botetourt	12.72%	1.63
2016	Commercial	Lee	14.95%	1.62
2017	Commercial	Smyth	14.87%	1.59
2015	Commercial	Lee	14.97%	1.57
2015	Medicaid	Fluvanna	13.06%	1.55
2016	Commercial	Buchanan	14.72%	1.53
2016	Commercial	Halifax	14.63%	1.50
2015	Medicaid	Mathews	13.24%	1.50
2017	Medicaid	Rockbridge	12.41%	1.50
2016	Commercial	Smyth	14.49%	1.45
2017	Commercial	Lexington City	6.10%	1.44

2017	Medicaid	Botetourt	12.62%	1.44
2015	Commercial	Prince Edward	14.65%	1.45
2015	Commercial	Smyth	14.63%	1.44
2015	Medicaid	Botetourt	13.48%	1.43
2016	Medicaid	Frederick	13.43%	1.42
2015	Commercial	Newport News City	14.56%	1.41
2015	Medicaid	Staunton City	13.55%	1.41
2015	Medicaid	Clarke	13.55%	1.41
2015	Commercial	Richmond City	14.54%	1.40
2015	Commercial	Cumberland	14.54%	1.40
2015	Commercial	Falls Church City	7.27%	1.40
2017	Medicaid	Nelson	12.78%	1.39
2016	Medicaid	Floyd	13.55%	1.39
2015	Commercial	Russell	14.50%	1.39
2016	Commercial	Emporia City	14.30%	1.38
2016	Medicare	Russell	15.86%	1.38
2015	Commercial	Albemarle	7.37%	1.36
2017	Commercial	Portsmouth City	14.21%	1.36
2016	Commercial	Clarke	6.87%	1.36
2016	Medicaid	Nelson	13.73%	1.34
2017	Commercial	Norton City	14.14%	1.34
2015	Medicaid	Charlottesville City	13.81%	1.33
2016	Commercial	Richmond City	14.16%	1.32
2015	Commercial	Madison	7.47%	1.32
2016	Medicaid	Winchester City	13.79%	1.32
2016	Medicaid	Mathews	13.81%	1.32
2017	Medicaid	Buena Vista City	13.07%	1.31
2015	Medicaid	Accomack	13.90%	1.31
2017	Commercial	Buchanan	14.02%	1.30
2016	Medicaid	Orange	13.89%	1.29
2015	Medicaid	Orange	13.95%	1.29
2017	Commercial	Clarke	6.54%	1.29
2016	Commercial	Mecklenburg	14.03%	1.28
2017	Medicaid	Dickenson	22.40%	1.26
2016	Commercial	Bland	7.14%	1.26
2017	Medicaid	Accomack	13.30%	1.25
2017	Medicaid	Halifax	22.31%	1.24
2016	Medicaid	Accomack	14.09%	1.24
2017	Commercial	Richmond City	13.84%	1.23
2016	Commercial	Hopewell City	13.90%	1.23
2017	Medicaid	Clarke	13.45%	1.21
2016	Medicaid	Salem	14.19%	1.21
2016	Medicaid	Staunton City	14.23%	1.20
2016	Commercial	Nottoway	13.77%	1.18

2017	Commercial	Nottoway	13.68%	1.18
2015	Commercial	Wise	13.95%	1.18
2015	Medicaid	Rockbridge	14.35%	1.18
2017	Commercial	Scott	13.65%	1.17
2016	Commercial	Petersburg City	13.72%	1.16
2015	Commercial	Norfolk City	13.92%	1.16
2015	Medicaid	Frederick	14.41%	1.16
2015	Medicaid	Rappahannock	14.44%	1.15
2017	Commercial	Lancaster	6.95%	1.15
2016	Medicaid	Gloucester	14.43%	1.14
2017	Medicaid	Russell	21.95%	1.14
2015	Medicaid	Greensville	22.38%	1.14
2015	Commercial	Buchanan	13.84%	1.13
2016	Medicare	Halifax	14.92%	1.13
2017	Medicaid	Fluvanna	13.72%	1.13
2017	Commercial	Prince Edward	13.54%	1.13
2016	Commercial	Wise	13.63%	1.13
2015	Commercial	Clarke	7.98%	1.13
2015	Medicaid	Waynesboro City	14.53%	1.12
2015	Medicaid	Franklin City	22.33%	1.12
2017	Medicaid	Amherst	13.78%	1.12
2017	Medicaid	Augusta	13.78%	1.12
2016	Medicaid	Fluvanna	14.52%	1.11
2015	Medicaid	Middlesex	14.58%	1.11
2016	Commercial	Lancaster	7.57%	1.10
2016	Medicaid	Lunenburg	22.29%	1.10
2015	Medicaid	Winchester City	14.63%	1.10
2016	Commercial	Dickenson	13.53%	1.09
2017	Medicaid	Westmoreland	13.88%	1.09
2015	Medicare	Washington	15.24%	1.09
2016	Commercial	Scott	13.52%	1.09
2015	Commercial	Tazewell	13.71%	1.08
2017	Medicaid	Floyd	13.92%	1.08
2015	Commercial	Carroll	13.70%	1.08
2015	Medicaid	Roanoke	14.70%	1.08
2016	Medicaid	Middlesex	14.66%	1.07
2016	Commercial	Hampton City	13.47%	1.07
2015	Commercial	Hampton City	13.67%	1.07
2015	Commercial	Dickenson	13.66%	1.06
2017	Commercial	Lunenburg	13.34%	1.06
2015	Medicaid	Lee	22.11%	1.06
2016	Commercial	Suffolk City	13.43%	1.06
2015	Medicaid	Augusta	14.79%	1.05
2017	Commercial	Sussex	13.30%	1.05
2017	Medicaid	Frederick	14.05%	1.04
2016	Commercial	Newport News City	13.39%	1.04

2017	Commercial	Middlesex	7.26%	1.04
2016	Commercial	Fairfax City	7.73%	1.04
2016	Medicaid	Halifax	22.07%	1.04
2015	Commercial	Craig	13.58%	1.03
2015	Commercial	Northampton	8.23%	1.03
2016	Medicaid	Roanoke	14.82%	1.03
2017	Commercial	Grayson	13.23%	1.03
2017	Medicaid	Roanoke	14.14%	1.02
2017	Commercial	Halifax	13.22%	1.02
2016	Medicaid	Wise	22.00%	1.02
2015	Commercial	Surry	13.54%	1.02
2017	Commercial	Rockbridge	7.35%	1.01
2015	Medicaid	Alleghany	14.94%	1.01
2017	Medicaid	Mathews	14.19%	1.01
2015	Commercial	Suffolk City	13.50%	1.00
2015	Commercial	Emporia City	13.50%	1.00
2015	Commercial	Bristol City	13.49%	1.00
2016	Commercial	Albemarle	7.86%	0.99
2015	Commercial	Augusta	8.33%	0.99
2017	Medicaid	Loudoun	14.24%	0.99
2015	Commercial	Mecklenburg	13.47%	0.99
2017	Commercial	Frederick	7.43%	0.98
2015	Commercial	Frederick	8.37%	0.98
2017	Medicaid	Craig	14.29%	0.98
2015	Medicaid	Charles City	21.82%	0.97
2015	Commercial	Grayson	8.38%	0.97
2016	Medicaid	Charlottesville City	15.02%	0.97
2017	Medicaid	Staunton City	14.32%	0.97
2015	Medicare	Rappahannock	6.85%	0.97
2017	Commercial	Mecklenburg	13.07%	0.97
2016	Medicaid	Clarke	15.04%	0.97
2016	Medicaid	Lexington City	15.05%	0.96
2017	Commercial	Southampton	13.04%	0.96
2016	Medicare	Smyth	14.24%	0.96
2016	Medicare	Lancaster	6.92%	0.95
2016	Commercial	Lunenburg	13.14%	0.95
2017	Medicaid	Bland	21.26%	0.95
2016	Commercial	Louisa	7.98%	0.95
2017	Commercial	Petersburg City	13.00%	0.94
2016	Medicaid	Brunswick	21.73%	0.94
2017	Medicaid	Wise	21.24%	0.94
2015	Medicaid	Arlington	15.18%	0.94
2015	Commercial	Nelson	8.48%	0.94
2017	Commercial	Hampton City	12.98%	0.94
2017	Commercial	Prince George	12.97%	0.94
2017	Commercial	Brunswick	12.96%	0.93

2017	Commercial	Newport News City	12.96%	0.93
2016	Medicaid	Northampton	15.17%	0.93
2015	Medicaid	Louisa	15.22%	0.93
2016	Commercial	Nelson	8.04%	0.92
2016	Commercial	New Kent	8.06%	0.92
2015	Medicare	Russell	14.55%	0.92
2017	Commercial	Botetourt	7.62%	0.92
2017	Medicaid	Scott	21.14%	0.91
2016	Medicare	Lexington City	7.07%	0.91
2017	Commercial	Falls Church City	7.64%	0.91
2017	Commercial	Suffolk City	12.88%	0.90
2016	Medicaid	Franklin	15.27%	0.90
2016	Medicaid	Augusta	15.27%	0.90
2015	Commercial	Hopewell City	13.23%	0.90
2016	Medicare	Wise	14.01%	0.90
2017	Medicaid	Bath	21.08%	0.90
2017	Medicaid	Montgomery	14.58%	0.90
2015	Commercial	Westmoreland	13.22%	0.89
2015	Medicaid	Hopewell City	21.53%	0.89
2016	Commercial	Prince Edward	12.97%	0.89
2017	Medicare	Smyth	15.24%	0.88
2016	Medicaid	Warren	15.35%	0.88
2017	Medicaid	Gloucester	14.70%	0.86
2017	Medicaid	York	14.70%	0.86
2016	Commercial	Amelia	12.90%	0.86
2016	Commercial	Greensville	12.88%	0.85
2015	Commercial	Arlington	8.70%	0.85
2017	Medicaid	Poquoson City	20.90%	0.85
2015	Medicaid	Albemarle	15.49%	0.85
2015	Medicare	Smyth	14.24%	0.84
2017	Commercial	Norfolk City	12.71%	0.84
2017	Commercial	King And Queen	12.71%	0.84
2016	Medicare	Washington	13.81%	0.84
2017	Commercial	Emporia City	12.71%	0.84
2016	Medicaid	Rockbridge	15.48%	0.84
2017	Commercial	Charlotte	12.70%	0.84
2016	Medicare	Norton City	13.79%	0.84
2017	Commercial	Mathews	7.85%	0.84
2015	Medicaid	Gloucester	15.53%	0.84
2017	Medicaid	Waynesboro City	14.82%	0.83
2015	Medicaid	Northampton	15.56%	0.83
2017	Commercial	Wise	12.66%	0.83
2017	Medicaid	Cumberland	20.81%	0.82
2015	Commercial	Bedford	8.77%	0.82
2016	Commercial	Pittsylvania	12.79%	0.82
2016	Commercial	Carroll	8.33%	0.82

2017	Medicaid	Winchester City	14.86%	0.82
2017	Commercial	Danville City	12.64%	0.82
2016	Medicaid	Dickenson	21.29%	0.82
2016	Commercial	Alleghany	12.78%	0.82
2016	Commercial	Brunswick	12.77%	0.81
2015	Medicaid	Surry	21.25%	0.81
2017	Medicaid	Lexington City	14.90%	0.81
2015	Commercial	Alleghany	8.81%	0.81
2015	Medicare	Norton City	14.09%	0.81
2017	Commercial	Loudoun	7.93%	0.81
2016	Commercial	Isle Of Wight	12.75%	0.81
2016	Medicaid	Montgomery	15.60%	0.81
2015	Commercial	Norton City	13.00%	0.81
2015	Medicare	Lee	14.09%	0.81
2016	Commercial	Tazewell	12.75%	0.81
2016	Medicaid	Loudoun	15.60%	0.81
2017	Commercial	Henry	12.59%	0.80
2017	Medicare	Scott	14.82%	0.80
2015	Medicare	Staunton City	7.53%	0.80
2015	Medicaid	Radford	15.66%	0.80
2016	Commercial	Frederick	8.39%	0.80
2017	Medicaid	Charlottesville City	14.94%	0.80
2016	Medicaid	Franklin City	21.23%	0.80
2016	Medicare	Amelia	13.62%	0.80
2016	Medicare	Pittsylvania	13.62%	0.79
2016	Medicare	Botetourt	7.52%	0.79
2016	Medicare	Scott	13.61%	0.79
2017	Medicaid	Lancaster	14.97%	0.79
2016	Commercial	Rockbridge	8.41%	0.79
2015	Commercial	Caroline	12.94%	0.79
2016	Medicaid	Amherst	15.67%	0.79
2015	Medicaid	Amelia	15.71%	0.79
2017	Commercial	Fairfax City	8.00%	0.78
2015	Medicaid	Culpeper	15.72%	0.78
2016	Medicaid	Waynesboro City	15.69%	0.78
2017	Commercial	Dickenson	12.51%	0.78
2015	Medicaid	Bedford	15.74%	0.78
2015	Medicare	Fairfax City	7.64%	0.77
2017	Medicaid	Radford	15.03%	0.77
2016	Medicaid	Craig	15.72%	0.77
2017	Medicare	Lexington City	6.36%	0.77
2016	Medicaid	Lancaster	15.74%	0.77
2015	Medicaid	Amherst	15.78%	0.77
2017	Medicaid	Fauquier	15.08%	0.76
2017	Medicaid	Colonial Heights City	20.58%	0.76

2015	Medicaid	Wythe	21.06%	0.76
2015	Commercial	Lunenburg	12.86%	0.76
2015	Commercial	Botetourt	8.94%	0.76
2017	Medicaid	Greensville	20.57%	0.76
2016	Medicaid	Caroline	21.07%	0.75
2015	Medicare	King George	13.87%	0.75
2017	Medicaid	Prince George	20.56%	0.75
2016	Commercial	Charlotte	12.60%	0.75
2016	Commercial	Fredericksburg City	8.52%	0.75
2017	Medicaid	Surry	20.55%	0.75
2017	Medicaid	Norfolk City	20.54%	0.75
2015	Medicaid	Norton City	21.03%	0.75
2016	Medicaid	Hopewell City	21.05%	0.75
2016	Commercial	Covington City	12.59%	0.75
2017	Commercial	Roanoke	8.11%	0.75
2015	Medicare	Wise	13.83%	0.74
2016	Commercial	Montgomery	8.54%	0.74
2015	Commercial	Loudoun	8.99%	0.74
2015	Medicaid	Bristol City	15.87%	0.74
2015	Medicaid	Emporia City	20.99%	0.74
2015	Medicaid	Salem	15.88%	0.74
2017	Medicaid	Wythe	20.49%	0.73
2016	Medicare	Lee	13.37%	0.73
2017	Medicare	Washington	14.40%	0.72
2017	Medicare	Russell	14.38%	0.72
2015	Commercial	Nottoway	12.77%	0.72
2016	Commercial	Northampton	12.52%	0.72
2017	Medicaid	Salem	15.23%	0.72
2017	Medicaid	Hopewell City	20.43%	0.72
2015	Medicaid	Lancaster	15.95%	0.72
2017	Medicare	Highland	14.35%	0.72
2015	Medicare	Sullivan	13.71%	0.71
2016	Commercial	Loudoun	8.63%	0.71
2015	Medicaid	Fairfax City	15.97%	0.71
2017	Medicaid	Roanoke City	15.26%	0.71
2017	Commercial	Bristol City	8.22%	0.71
2016	Medicare	Northumberland	7.85%	0.71
2017	Medicaid	Portsmouth City	20.39%	0.71
2015	Commercial	Halifax	12.74%	0.71
2016	Medicaid	Scott	20.91%	0.71
2016	Medicaid	Colonial Heights City	20.90%	0.71
2016	Medicare	Galax City	7.86%	0.71
2015	Commercial	Brunswick	12.73%	0.70
2016	Medicare	Franklin City	13.26%	0.70
2015	Medicare	Dickenson	13.64%	0.70

2017	Commercial	Northampton	8.26%	0.70
2015	Commercial	Fredericksburg City	12.70%	0.69
2017	Commercial	Shenandoah	8.26%	0.69
2016	Medicaid	Madison	15.99%	0.69
2017	Commercial	Isle Of Wight	12.27%	0.69
2015	Commercial	Patrick	9.12%	0.69
2016	Commercial	Rappahannock	8.69%	0.69
2015	Medicaid	Montgomery	16.05%	0.69
2016	Medicaid	Norfolk City	20.83%	0.69
2015	Commercial	Petersburg City	12.68%	0.69
2015	Medicaid	Prince George	20.81%	0.68
2016	Commercial	Buena Vista City	12.42%	0.68
2015	Medicaid	Lexington City	16.07%	0.68
2016	Medicaid	Northumberland	16.04%	0.68
2017	Medicaid	Tazewell	20.29%	0.68
2015	Medicaid	Greene	16.09%	0.68
2016	Commercial	Franklin	8.72%	0.68
2016	Commercial	Charlottesville City	8.72%	0.67
2016	Medicaid	Fairfax City	16.08%	0.67
2015	Commercial	Fluvanna	9.17%	0.67
2016	Commercial	Fauquier	8.74%	0.67
2016	Medicare	Radford	8.02%	0.66
2015	Medicare	Orange	8.10%	0.66
2015	Commercial	Greene	9.20%	0.66
2017	Medicaid	Warren	15.45%	0.66
2015	Commercial	Amherst	9.20%	0.66
2016	Commercial	Washington	12.34%	0.65
2016	Commercial	Goochland	8.78%	0.65
2015	Medicaid	Southampton	20.70%	0.65
2016	Medicaid	Surry	20.72%	0.65
2016	Commercial	Norfolk City	12.32%	0.65
2015	Medicaid	Northumberland	16.20%	0.64
2016	Medicaid	Prince William	16.17%	0.64
2015	Commercial	Chesapeake City	12.56%	0.64
2015	Commercial	Mathews	9.25%	0.64
2017	Medicaid	Orange	15.52%	0.64
2016	Medicaid	Mecklenburg	20.67%	0.64
2015	Medicaid	Wise	20.65%	0.64
2015	Medicare	Alleghany	13.39%	0.64
2017	Commercial	Greene	8.44%	0.63
2017	Medicaid	Pittsylvania	20.11%	0.63
2017	Medicaid	New Kent	15.56%	0.63
2015	Medicaid	Warren	16.27%	0.62
2017	Medicaid	Norton City	20.09%	0.62
2017	Medicare	Halifax	13.84%	0.62

2016	Commercial	Giles	8.87%	0.62
2017	Commercial	Gloucester	8.47%	0.62
2016	Medicaid	Pittsylvania	20.61%	0.62
2015	Commercial	Isle Of Wight	12.50%	0.62
2017	Commercial	Fairfax	8.49%	0.61
2017	Commercial	Washington	12.04%	0.61
2017	Commercial	Cumberland	12.04%	0.61
2016	Medicaid	Falls Church City	20.57%	0.61
2017	Medicaid	Albemarle	15.63%	0.61
2017	Medicaid	Prince William	15.64%	0.60
2015	Commercial	Goochland	9.34%	0.60
2017	Commercial	Hopewell City	12.01%	0.60
2015	Medicare	Bland	8.33%	0.60
2015	Medicare	Wythe	13.25%	0.60
2017	Commercial	Winchester City	8.53%	0.60
2017	Commercial	Stafford	8.55%	0.60
2015	Commercial	Wythe	12.44%	0.59
2016	Medicare	Rockbridge	8.29%	0.59
2017	Commercial	Poquoson City	8.55%	0.59
2015	Commercial	King And Queen	12.44%	0.59
2016	Medicaid	Amelia	16.36%	0.59
2015	Medicare	Frederick	8.39%	0.59
2015	Commercial	Page	12.43%	0.59
2016	Medicaid	Bath	20.49%	0.59
2017	Medicaid	Franklin	15.71%	0.58
2017	Commercial	Montgomery	8.58%	0.58
2017	Commercial	Fauquier	8.59%	0.58
2015	Medicaid	Mecklenburg	20.44%	0.58
2016	Medicaid	Norton City	20.45%	0.58
2015	Commercial	Roanoke	9.42%	0.57
2017	Medicaid	Northumberland	15.76%	0.57
2017	Commercial	Colonial Heights City	11.92%	0.57
2017	Medicare	Wise	13.57%	0.57
2016	Medicaid	King George	16.43%	0.57
2015	Medicare	Halifax	13.12%	0.57
2017	Medicaid	King And Queen	15.77%	0.57
2017	Medicaid	Lynchburg City	15.77%	0.57
2015	Medicaid	Norfolk City	20.41%	0.57
2015	Commercial	Washington	12.38%	0.57
2017	Medicaid	Louisa	15.78%	0.56
2016	Medicaid	Manassas City	16.45%	0.56
2016	Medicare	Arlington	8.40%	0.56
2015	Medicare	Bedford	8.49%	0.56
2015	Commercial	Fairfax	9.44%	0.56
2016	Commercial	Page	12.08%	0.56

2017	Commercial	Richmond	8.65%	0.56
2015	Medicaid	Richmond City	20.37%	0.56
2015	Medicaid	Appomattox	16.51%	0.55
2017	Commercial	Charles City	11.87%	0.55
2016	Commercial	Fairfax	9.06%	0.55
2017	Medicare	Lancaster	7.53%	0.55
2016	Commercial	Greene	9.06%	0.55
2015	Medicare	Lancaster	8.55%	0.55
2016	Medicaid	Portsmouth City	20.36%	0.55
2016	Commercial	Charles City	12.05%	0.55
2017	Medicaid	Buckingham	15.84%	0.55
2015	Medicaid	Roanoke City	16.53%	0.55
2015	Medicare	Albemarle	8.55%	0.55
2016	Commercial	Sussex	12.04%	0.55
2016	Medicare	Newport News City	12.66%	0.55
2016	Commercial	Roanoke	9.07%	0.55
2015	Medicaid	Fauquier	16.55%	0.54
2015	Commercial	Poquoson City	9.51%	0.54
2017	Medicaid	Falls Church City	15.88%	0.54
2016	Medicaid	Roanoke City	16.56%	0.53
2016	Commercial	Shenandoah	9.11%	0.53
2017	Medicare	Pittsylvania	13.36%	0.53
2016	Medicare	Fluvanna	8.53%	0.53
2016	Medicaid	Louisa	16.57%	0.53
2017	Medicare	Falls Church City	7.66%	0.53
2015	Medicaid	Dickenson	20.27%	0.53
2015	Medicaid	Floyd	16.60%	0.53
2016	Commercial	Bedford	9.13%	0.53
2017	Medicaid	Giles	15.92%	0.53
2015	Medicaid	Loudoun	16.61%	0.53
2017	Medicare	Greensville	13.33%	0.53
2016	Medicare	King And Queen	12.58%	0.52
2016	Commercial	Galax City	9.13%	0.52
2015	Medicare	Augusta	8.67%	0.52
2015	Medicare	Clarke	8.67%	0.52
2017	Medicaid	Virginia Beach City	15.95%	0.52
2017	Commercial	Page	11.77%	0.52
2017	Medicaid	Fairfax City	15.95%	0.52
2016	Medicaid	Russell	20.25%	0.52
2015	Medicaid	Lynchburg City	16.64%	0.52
2017	Commercial	Albemarle	8.78%	0.52
2015	Medicare	Giles	8.69%	0.52
2016	Medicaid	Emporia City	20.23%	0.51
2015	Commercial	Lynchburg City	9.57%	0.51
2016	Commercial	Chesapeake City	11.95%	0.51
2017	Medicare	Northumberland	7.76%	0.51

2017	Medicaid	Rappahannock	15.99%	0.51
2015	Medicare	Bristol City	12.87%	0.51
2016	Commercial	Northumberland	9.18%	0.51
2015	Medicaid	Stafford	16.67%	0.51
2017	Commercial	Nelson	8.80%	0.51
2017	Commercial	Accomack	8.81%	0.51
2016	Medicaid	Petersburg City	20.20%	0.51
2017	Commercial	Wythe	11.73%	0.51
2016	Medicaid	Arlington	16.66%	0.50
2015	Medicaid	Buckingham	20.19%	0.50
2017	Medicaid	Petersburg City	19.65%	0.50
2016	Medicaid	Sussex	20.19%	0.50
2016	Medicare	Giles	8.64%	0.50
2016	Commercial	Pulaski	11.92%	0.50
2017	Medicaid	Rockingham	16.02%	0.50
2015	Medicaid	Dinwiddie	16.71%	0.50
2015	Medicaid	Galax City	20.16%	0.50
2016	Commercial	Grayson	9.22%	0.49
2015	Commercial	Culpeper	9.62%	0.49
2015	Commercial	Louisa	9.63%	0.49
2015	Medicaid	Bath	16.73%	0.49
2015	Medicaid	Newport News City	20.14%	0.49
2017	Commercial	Arlington	8.85%	0.49
2017	Medicare	Essex	7.87%	0.49
2016	Commercial	Fluvanna	9.23%	0.49
2016	Medicare	Frederick	8.69%	0.49
2015	Medicare	Tazewell	12.79%	0.49
2016	Commercial	Lexington City	9.23%	0.49
2015	Commercial	Winchester City	9.64%	0.49
2017	Medicaid	Sussex	19.59%	0.49
2015	Commercial	Pulaski	12.16%	0.49
2016	Commercial	Bath	11.88%	0.49
2015	Commercial	Bland	9.64%	0.49
2017	Medicare	Richmond	7.89%	0.49
2017	Medicaid	Emporia City	19.59%	0.49
2016	Medicare	Fredericksburg City	12.43%	0.49
2016	Medicare	Fairfax	8.71%	0.48
2016	Medicare	Nelson	8.71%	0.48
2015	Medicaid	Cumberland	20.11%	0.48
2017	Medicare	Botetourt	7.91%	0.48
2017	Medicaid	Richmond City	19.58%	0.48
2015	Medicare	Madison	8.83%	0.48
2015	Commercial	Waynesboro City	9.66%	0.48
2017	Medicaid	Lunenburg	19.57%	0.48
2017	Medicaid	James City	16.09%	0.48

2016	Medicaid	Charlotte	16.75%	0.48
2015	Medicare	Buckingham	12.75%	0.48
2016	Medicare	Shenandoah	8.73%	0.48
2016	Commercial	Bristol City	9.26%	0.48
2016	Commercial	Radford	9.26%	0.48
2015	Medicaid	Falls Church City	16.77%	0.48
2015	Commercial	Orange	9.66%	0.48
2017	Medicare	King George	13.07%	0.48
2016	Medicare	Southampton	8.74%	0.47
2016	Medicare	Tazewell	12.38%	0.47
2015	Commercial	Fauquier	9.68%	0.47
2017	Medicare	Patrick	13.04%	0.47
2015	Medicaid	Halifax	20.06%	0.47
2016	Commercial	Campbell	11.83%	0.47
2017	Medicaid	Essex	16.14%	0.47
2015	Medicaid	Madison	16.82%	0.47
2016	Medicare	Roanoke	8.78%	0.46
2015	Medicare	Colonial Heights City	8.90%	0.46
2015	Commercial	Staunton City	9.71%	0.46
2016	Commercial	Caroline	11.81%	0.46
2015	Commercial	Buckingham	12.10%	0.46
2017	Medicaid	Pulaski	19.50%	0.46
2015	Medicare	Lexington City	8.92%	0.46
2015	Medicare	Mecklenburg	12.67%	0.46
2016	Medicaid	Wythe	20.04%	0.46
2017	Medicaid	Danville City	19.49%	0.46
2017	Commercial	Charlottesville City	8.95%	0.46
2016	Commercial	Arlington	9.32%	0.46
2016	Commercial	Hanover	9.32%	0.46
2016	Commercial	Surry	11.80%	0.46
2016	Medicare	Albemarle	8.81%	0.46
2015	Medicare	Fluvanna	8.94%	0.46
2017	Medicare	Lee	12.95%	0.45
2016	Medicare	Essex	8.82%	0.45
2017	Medicaid	Page	16.20%	0.45
2015	Medicaid	Carroll	19.99%	0.45
2016	Commercial	Culpeper	9.34%	0.45
2015	Medicare	Newport News City	12.62%	0.45
2017	Medicare	Tazewell	12.91%	0.45
2016	Commercial	Amherst	9.34%	0.45
2016	Medicare	Henry	12.28%	0.45
2016	Medicaid	Albemarle	16.87%	0.45
2016	Medicaid	Poquoson City	16.87%	0.45
2016	Medicaid	New Kent	16.87%	0.44
2015	Medicare	Appomattox	12.61%	0.44

2016	Commercial	Warren	9.36%	0.44
2016	Commercial	Manassas City	9.36%	0.44
2015	Commercial	Middlesex	9.76%	0.44
2017	Commercial	Patrick	11.54%	0.44
2017	Commercial	Fredericksburg City	9.01%	0.44
2016	Medicaid	Carroll	19.96%	0.44
2017	Commercial	Chesapeake City	11.52%	0.43
2015	Medicare	Manassas City	9.04%	0.43
2016	Medicare	Rappahannock	8.92%	0.43
2016	Commercial	Middlesex	9.39%	0.43
2017	Medicaid	Bedford	16.28%	0.43
2017	Commercial	Covington City	11.51%	0.43
2017	Medicaid	Stafford	16.28%	0.43
2015	Medicare	Arlington	9.05%	0.43
2017	Medicaid	Bristol City	19.38%	0.43
2015	Medicaid	Fairfax	16.96%	0.43
2016	Medicare	Bedford	8.93%	0.43
2015	Commercial	Lexington City	9.80%	0.42
2015	Medicare	Rockbridge	9.06%	0.42
2015	Medicaid	Pulaski	19.91%	0.42
2015	Medicare	Richmond City	12.52%	0.42
2017	Commercial	Surry	11.49%	0.42
2017	Medicaid	Chesterfield	19.36%	0.42
2017	Medicaid	Shenandoah	16.31%	0.42
2015	Medicare	Greene	9.08%	0.42
2017	Medicare	Danville City	12.76%	0.42
2017	Medicare	Amherst	8.24%	0.42
2016	Medicaid	Harrisonburg City	19.90%	0.42
2016	Medicaid	Newport News City	19.90%	0.42
2016	Medicare	King George	12.18%	0.42
2016	Medicare	Goochland	8.96%	0.42
2016	Medicare	Winchester City	8.97%	0.42
2015	Medicaid	Tazewell	19.88%	0.42
2015	Commercial	Colonial Heights City	11.98%	0.42
2017	Commercial	Tazewell	11.47%	0.41
2015	Medicaid	Essex	19.87%	0.41
2017	Commercial	Amelia	11.46%	0.41
2017	Commercial	Orange	9.08%	0.41
2017	Medicaid	Smyth	19.32%	0.41
2016	Medicare	Dickenson	12.14%	0.41
2015	Medicare	Fairfax	9.12%	0.41
2017	Medicare	Sussex	12.70%	0.41
2015	Commercial	Alexandria City	9.85%	0.41
2015	Medicare	Buchanan	12.46%	0.41
2016	Medicare	Bland	9.00%	0.41

2016	Medicare	Franklin	9.00%	0.41
2016	Medicare	Alleghany	12.13%	0.41
2016	Commercial	Falls Church City	9.46%	0.41
2017	Commercial	Alexandria City	9.10%	0.41
2017	Medicare	Franklin City	12.68%	0.41
2016	Commercial	Winchester City	9.46%	0.40
2015	Medicare	Franklin City	12.42%	0.40
2015	Medicare	Culpeper	9.17%	0.40
2015	Commercial	Salem	9.87%	0.40
2016	Medicare	York	12.09%	0.40
2016	Commercial	Patrick	11.63%	0.40
2016	Medicare	Middlesex	9.06%	0.39
2015	Commercial	Montgomery	9.89%	0.39
2016	Medicaid	Fauquier	17.05%	0.39
2015	Medicare	James City	9.20%	0.39
2015	Commercial	Galax City	9.90%	0.39
2016	Medicaid	Alexandria City	17.07%	0.39
2016	Medicaid	Richmond City	19.78%	0.39
2016	Medicare	Prince Edward	12.05%	0.39
2016	Medicare	Westmoreland	9.09%	0.39
2015	Medicare	Henry	12.37%	0.39
2016	Medicaid	Fairfax	17.08%	0.38
2016	Commercial	Augusta	9.52%	0.38
2017	Medicare	Frederick	8.44%	0.38
2015	Commercial	Northumberland	9.91%	0.38
2016	Medicare	Wythe	12.03%	0.38
2017	Commercial	Madison	9.17%	0.38
2015	Medicare	Lunenburg	9.24%	0.38
2017	Commercial	New Kent	9.17%	0.38
2015	Medicaid	Charlotte	17.13%	0.38
2016	Commercial	Franklin City	11.58%	0.38
2016	Medicare	Buena Vista City	9.12%	0.38
2015	Medicaid	New Kent	17.13%	0.38
2016	Medicaid	Radford	17.11%	0.38
2016	Medicaid	Covington City	17.12%	0.37
2016	Medicare	Hopewell City	12.00%	0.37
2015	Medicaid	Pittsylvania	19.72%	0.37
2016	Medicare	Alexandria City	9.14%	0.37
2016	Medicare	Madison	9.15%	0.37
2017	Commercial	Louisa	9.21%	0.37
2017	Commercial	Galax City	9.21%	0.37
2017	Medicaid	Fairfax	16.50%	0.37
2017	Commercial	Salem	9.21%	0.37
2015	Medicaid	York	19.70%	0.37
2017	Medicare	Norton City	12.46%	0.36
2015	Medicaid	Petersburg City	19.69%	0.36

2016	Medicare	Campbell	11.96%	0.36
2017	Medicare	Loudoun	8.56%	0.36
2017	Medicaid	Campbell	16.52%	0.36
2015	Medicare	Loudoun	9.32%	0.36
2016	Medicare	Danville City	11.95%	0.36
2015	Medicare	Roanoke	9.32%	0.36
2016	Medicare	Pulaski	11.95%	0.36
2017	Medicare	Bedford	8.57%	0.36
2016	Commercial	King George	11.53%	0.36
2015	Medicare	Amherst	9.34%	0.36
2017	Medicaid	Buchanan	16.55%	0.35
2016	Medicare	Richmond	9.21%	0.35
2015	Medicare	Prince Edward	12.24%	0.35
2016	Medicaid	Virginia Beach City	17.19%	0.35
2017	Commercial	Franklin	9.25%	0.35
2017	Commercial	Northumberland	9.25%	0.35
2017	Medicare	Floyd	8.61%	0.35
2017	Medicare	Roanoke	8.62%	0.35
2017	Commercial	Warren	9.26%	0.35
2016	Medicaid	Pulaski	19.65%	0.35
2015	Commercial	Charlottesville City	10.00%	0.35
2015	Commercial	Rockingham	10.00%	0.35
2015	Medicare	Martinsville City	12.21%	0.35
2016	Commercial	Buckingham	9.62%	0.35
2017	Commercial	Martinsville City	11.27%	0.35
2015	Medicare	Scott	12.20%	0.35
2015	Commercial	Prince George	11.80%	0.35
2016	Commercial	Stafford	9.62%	0.34
2016	Medicare	Mecklenburg	11.89%	0.34
2016	Commercial	Alexandria City	9.62%	0.34
2015	Medicare	Pittsylvania	12.20%	0.34
2017	Medicaid	Goochland	19.07%	0.34
2017	Medicaid	Hanover	19.07%	0.34
2017	Medicare	Warren	8.67%	0.34
2015	Commercial	Buena Vista City	10.02%	0.34
2015	Medicare	Charles City	12.19%	0.34
2016	Medicaid	Fredericksburg City	19.62%	0.34
2017	Commercial	Amherst	11.25%	0.34
2017	Medicaid	Charles City	19.06%	0.34
2016	Medicaid	Alleghany	17.24%	0.34
2015	Medicare	Falls Church City	9.41%	0.34
2016	Medicaid	Rappahannock	17.24%	0.34
2016	Medicare	Nottoway	9.27%	0.34
2016	Medicare	Clarke	9.27%	0.34
2016	Medicare	Covington City	11.86%	0.34

2017	Medicaid	Richmond	16.61%	0.34
2015	Medicaid	Colonial Heights City	19.60%	0.34
2016	Medicare	Buchanan	11.84%	0.33
2015	Medicare	Winchester City	9.45%	0.33
2017	Medicare	Fairfax City	8.73%	0.33
2015	Medicare	Cumberland	12.14%	0.33
2017	Medicare	Rockbridge	8.74%	0.33
2015	Medicaid	Westmoreland	19.57%	0.33
2016	Commercial	Mathews	11.45%	0.33
2015	Medicare	Waynesboro City	9.46%	0.33
2016	Commercial	Richmond	11.45%	0.33
2017	Medicare	Middlesex	8.75%	0.33
2015	Commercial	Scott	11.75%	0.33
2016	Medicaid	Shenandoah	17.29%	0.33
2016	Commercial	Harrisonburg City	9.67%	0.32
2017	Medicare	Giles	8.76%	0.32
2016	Commercial	Poquoson City	9.68%	0.32
2017	Medicaid	Brunswick	19.00%	0.32
2016	Commercial	Madison	9.68%	0.32
2017	Medicaid	Alleghany	16.67%	0.32
2017	Medicare	Bland	12.22%	0.32
2015	Medicaid	Patrick	19.54%	0.32
2015	Medicaid	King And Queen	19.53%	0.32
2015	Medicare	Fredericksburg City	12.08%	0.32
2016	Medicaid	York	17.33%	0.31
2017	Commercial	Pulaski	11.18%	0.31
2017	Medicaid	Manassas City	16.70%	0.31
2015	Medicare	Spotsylvania	12.07%	0.31
2016	Medicare	Warren	9.37%	0.31
2017	Medicare	Westmoreland	8.85%	0.31
2017	Commercial	King George	9.38%	0.31
2015	Medicare	Alexandria City	9.54%	0.31
2017	Medicaid	Appomattox	16.72%	0.31
2017	Medicaid	Henrico	18.94%	0.31
2015	Commercial	Floyd	10.11%	0.31
2017	Medicaid	King William	16.72%	0.31
2015	Commercial	Pittsylvania	11.69%	0.30
2016	Medicaid	Chesterfield	19.49%	0.30
2016	Medicare	Brunswick	11.72%	0.30
2017	Medicare	Northampton	8.90%	0.30
2017	Medicaid	Spotsylvania	16.75%	0.30
2015	Medicare	Northumberland	9.58%	0.30
2016	Medicaid	Bedford	17.39%	0.30
2016	Medicare	Montgomery	9.43%	0.30
2017	Medicaid	Charlotte	18.90%	0.30

2017	Medicare	Fairfax	8.92%	0.29
2017	Medicare	Roanoke City	8.93%	0.29
2015	Medicaid	Isle Of Wight	19.45%	0.29
2015	Commercial	James City	10.15%	0.29
2015	Medicare	Isle Of Wight	11.98%	0.29
2016	Commercial	Appomattox	9.77%	0.29
2016	Medicaid	Southampton	19.45%	0.29
2017	Medicare	Staunton City	8.95%	0.29
2017	Commercial	Pittsylvania	11.11%	0.29
2015	Commercial	Franklin City	11.65%	0.29
2017	Medicare	Henry	12.06%	0.29
2015	Medicaid	Nottoway	17.43%	0.29
2015	Medicaid	Russell	19.44%	0.29
2017	Medicaid	Mecklenburg	18.87%	0.29
2015	Medicaid	Henrico	19.43%	0.29
2017	Commercial	James City	9.44%	0.29
2017	Medicare	Mathews	8.97%	0.29
2015	Medicare	Shenandoah	9.63%	0.28
2017	Medicare	Alexandria City	8.97%	0.28
2016	Medicare	Loudoun	9.48%	0.28
2017	Medicare	Bath	12.03%	0.28
2015	Medicaid	Martinsville City	17.45%	0.28
2017	Medicaid	Chesapeake City	18.86%	0.28
2017	Medicare	Portsmouth City	12.02%	0.28
2015	Commercial	Covington City	11.63%	0.28
2015	Medicare	Hampton City	11.94%	0.28
2015	Medicaid	Portsmouth City	19.41%	0.28
2015	Medicare	King William	11.93%	0.28
2016	Medicaid	Appomattox	17.45%	0.28
2017	Medicare	Poquoson City	9.01%	0.28
2015	Medicaid	Chesterfield	19.40%	0.28
2017	Medicaid	Washington	16.82%	0.28
2015	Medicaid	Washington	17.47%	0.28
2017	Medicare	Accomack	9.01%	0.28
2017	Commercial	Floyd	9.47%	0.28
2016	Medicaid	Buckingham	17.46%	0.28
2016	Medicare	Culpeper	9.50%	0.28
2016	Medicare	Bath	9.51%	0.28
2015	Medicare	Patrick	11.91%	0.27
2017	Medicare	Richmond City	11.97%	0.27
2017	Commercial	King William	9.48%	0.27
2015	Medicare	Bath	9.68%	0.27
2016	Medicaid	Richmond	17.48%	0.27
2016	Medicare	Portsmouth City	11.61%	0.27
2016	Medicare	Buckingham	11.60%	0.27
2016	Medicare	James City	9.53%	0.27

2015	Commercial	Accomack	10.21%	0.27
2015	Commercial	Rockbridge	10.21%	0.27
2017	Commercial	Giles	9.50%	0.26
2016	Medicare	Spotsylvania	11.58%	0.26
2015	Medicare	Hopewell City	11.87%	0.26
2017	Medicare	Buena Vista City	9.09%	0.26
2017	Medicare	Winchester City	9.09%	0.26
2015	Medicare	Amelia	11.86%	0.26
2016	Medicare	Grayson	9.56%	0.26
2017	Medicare	Salem	9.10%	0.26
2017	Medicare	Harrisonburg City	11.90%	0.26
2015	Medicaid	Grayson	19.33%	0.26
2015	Medicaid	Hampton City	19.33%	0.26
2015	Medicaid	Hanover	19.33%	0.26
2017	Medicaid	Southampton	18.76%	0.26
2016	Medicaid	Danville City	19.33%	0.26
2017	Medicaid	Fredericksburg City	16.90%	0.26
2015	Commercial	Giles	10.24%	0.26
2017	Medicare	Bristol City	9.13%	0.25
2015	Medicaid	Prince William	17.55%	0.25
2015	Medicare	Page	9.76%	0.25
2017	Commercial	Prince William	9.54%	0.25
2015	Medicaid	Campbell	17.56%	0.25
2016	Commercial	King And Queen	9.88%	0.25
2015	Medicare	Nottoway	11.82%	0.25
2015	Medicare	Sussex	11.81%	0.25
2015	Medicaid	Virginia Beach City	17.57%	0.25
2017	Commercial	Bath	10.99%	0.25
2017	Medicaid	Caroline	18.73%	0.25
2017	Commercial	Dinwiddie	10.99%	0.25
2017	Commercial	Campbell	10.98%	0.25
2017	Medicare	Dickenson	11.83%	0.25
2016	Commercial	Lynchburg City	9.89%	0.25
2017	Medicare	Goochland	11.83%	0.25
2017	Commercial	Culpeper	10.98%	0.25
2017	Medicare	Colonial Heights City	9.18%	0.25
2015	Medicaid	Danville City	17.58%	0.25
2017	Medicare	James City	9.18%	0.25
2016	Medicaid	Washington	17.57%	0.25
2016	Commercial	Danville City	11.23%	0.25
2015	Commercial	Richmond	11.54%	0.24
2017	Medicare	Manassas City	11.82%	0.24
2017	Medicare	Albemarle	9.19%	0.24
2015	Medicare	Fauquier	9.81%	0.24
2017	Medicare	Franklin	9.20%	0.24

2015	Medicare	Prince George	11.78%	0.24
2017	Commercial	Bland	9.57%	0.24
2017	Medicaid	Greene	16.96%	0.24
2015	Commercial	Harrisonburg City	10.29%	0.24
2016	Medicare	Hampton City	11.48%	0.24
2015	Commercial	Southampton	11.52%	0.24
2017	Commercial	Powhatan	9.59%	0.24
2017	Medicaid	Arlington	16.97%	0.24
2017	Medicare	Charles City	9.24%	0.24
2016	Medicare	Suffolk City	11.46%	0.23
2016	Medicare	Dinwiddie	11.46%	0.23
2015	Medicaid	Bland	19.24%	0.23
2015	Medicare	Dinwiddie	11.74%	0.23
2015	Medicaid	Buchanan	19.23%	0.23
2016	Medicare	Fauquier	9.68%	0.23
2016	Medicare	Northampton	9.68%	0.23
2015	Medicare	Salem	9.86%	0.23
2015	Medicare	Carroll	11.73%	0.23
2016	Medicare	Fairfax City	9.69%	0.23
2015	Medicaid	Henry	17.65%	0.23
2016	Medicare	Emporia City	11.44%	0.23
2015	Medicaid	Brunswick	19.22%	0.23
2015	Medicare	Brunswick	11.71%	0.22
2015	Medicaid	Franklin	17.66%	0.22
2017	Medicare	Shenandoah	9.30%	0.22
2015	Medicare	Middlesex	9.89%	0.22
2015	Medicare	Richmond	9.89%	0.22
2017	Medicaid	Powhatan	17.03%	0.22
2016	Medicare	Accomack	9.72%	0.22
2016	Medicaid	Stafford	17.66%	0.22
2017	Medicaid	Carroll	17.04%	0.22
2016	Commercial	Staunton City	9.97%	0.22
2017	Medicare	Wythe	11.67%	0.22
2015	Medicaid	Suffolk City	19.19%	0.22
2017	Medicare	Rappahannock	9.34%	0.22
2016	Medicare	Roanoke City	9.74%	0.22
2016	Medicaid	Page	19.17%	0.21
2016	Medicaid	Prince Edward	17.68%	0.21
2016	Medicare	Prince George	9.75%	0.21
2016	Medicare	Charlottesville City	9.76%	0.21
2015	Medicaid	Caroline	19.16%	0.21
2016	Medicaid	Cumberland	19.17%	0.21
2015	Medicaid	Sussex	19.16%	0.21
2016	Commercial	Orange	9.99%	0.21
2015	Medicaid	Buena Vista City	17.71%	0.21
2017	Medicare	Clarke	9.39%	0.21

2017	Medicaid	Newport News City	18.58%	0.21
2017	Medicaid	Nottoway	17.09%	0.21
2015	Medicare	Rockingham	9.96%	0.20
2015	Medicaid	Harrisonburg City	19.14%	0.20
2016	Medicaid	Lynchburg City	17.71%	0.20
2017	Medicare	Surry	11.60%	0.20
2015	Commercial	Bath	10.38%	0.20
2016	Medicaid	Chesapeake City	19.14%	0.20
2016	Medicare	Patrick	11.34%	0.20
2016	Commercial	Accomack	10.01%	0.20
2017	Medicare	Charlottesville City	9.43%	0.20
2015	Commercial	Fairfax City	10.39%	0.20
2015	Medicare	Northampton	9.99%	0.20
2017	Commercial	Virginia Beach City	10.84%	0.20
2015	Medicare	Suffolk City	11.60%	0.20
2015	Commercial	Essex	11.41%	0.20
2015	Commercial	Chesterfield	11.41%	0.20
2017	Medicare	Newport News City	11.55%	0.19
2017	Medicare	Gloucester	9.46%	0.19
2016	Medicaid	James City	17.75%	0.19
2015	Medicare	Mathews	10.01%	0.19
2015	Medicare	Powhatan	11.58%	0.19
2016	Medicare	Richmond City	11.30%	0.19
2016	Medicaid	Henry	17.77%	0.19
2016	Commercial	Waynesboro City	11.07%	0.19
2017	Medicare	New Kent	11.51%	0.19
2016	Commercial	Spotsylvania	11.07%	0.19
2016	Medicare	Hanover	9.85%	0.19
2016	Commercial	Westmoreland	11.07%	0.19
2016	Commercial	Wythe	11.07%	0.19
2016	Medicare	Page	9.85%	0.19
2016	Medicaid	Hampton City	19.08%	0.19
2016	Medicare	Martinsville City	11.28%	0.18
2016	Medicare	Colonial Heights City	9.86%	0.18
2017	Medicare	Fauquier	9.52%	0.18
2016	Medicare	King William	9.87%	0.18
2015	Medicaid	Covington City	19.07%	0.18
2016	Commercial	Salem	10.07%	0.18
2015	Commercial	Powhatan	11.37%	0.18
2017	Commercial	Manassas City	10.79%	0.18
2017	Medicare	Martinsville City	11.47%	0.18
2015	Commercial	Lancaster	10.44%	0.18
2016	Medicare	Mathews	11.25%	0.18
2015	Commercial	Campbell	10.44%	0.18
2017	Commercial	Fluvanna	9.75%	0.18

2016	Medicare	Amherst	9.89%	0.18
2017	Medicaid	Martinsville City	17.20%	0.18
2015	Medicare	Chesapeake City	10.09%	0.17
2015	Medicare	Stafford	11.50%	0.17
2016	Medicaid	Galax City	19.03%	0.17
2017	Medicare	Prince Edward	11.43%	0.17
2016	Medicaid	Powhatan	17.83%	0.17
2016	Medicare	Gloucester	9.92%	0.17
2016	Medicare	Louisa	9.92%	0.17
2016	Commercial	Prince George	10.10%	0.17
2016	Medicare	Greene	9.92%	0.17
2015	Medicaid	Smyth	17.86%	0.17
2017	Medicare	Charlotte	11.39%	0.17
2015	Medicare	Goochland	10.12%	0.16
2015	Medicare	Floyd	11.47%	0.16
2017	Medicare	Alleghany	11.37%	0.16
2017	Medicaid	Dinwiddie	18.42%	0.16
2015	Commercial	Spotsylvania	10.48%	0.16
2015	Commercial	Warren	10.49%	0.16
2017	Medicare	Cumberland	11.37%	0.16
2017	Commercial	Waynesboro City	9.81%	0.16
2017	Medicare	Montgomery	9.64%	0.16
2016	Medicare	Orange	9.95%	0.16
2017	Medicare	Arlington	9.65%	0.16
2015	Medicaid	King William	18.98%	0.16
2015	Medicare	Nelson	10.15%	0.16
2017	Medicare	Pulaski	11.35%	0.16
2015	Medicaid	Manassas City	18.98%	0.16
2015	Medicaid	Richmond	18.98%	0.16
2015	Commercial	Hanover	10.50%	0.16
2015	Medicare	Surry	11.43%	0.16
2015	Medicare	Accomack	10.15%	0.16
2017	Commercial	Harrisonburg City	9.82%	0.16
2016	Medicaid	Culpeper	17.88%	0.16
2016	Medicaid	Henrico	18.97%	0.16
2017	Medicare	Madison	9.67%	0.15
2016	Medicare	Caroline	11.16%	0.15
2016	Medicare	Falls Church City	9.98%	0.15
2015	Commercial	Martinsville City	11.30%	0.15
2015	Commercial	Dinwiddie	11.29%	0.15
2016	Commercial	Gloucester	10.15%	0.15
2017	Medicare	Petersburg City	11.31%	0.15
2017	Medicare	Prince George	11.30%	0.15
2017	Medicare	Fluvanna	9.71%	0.15
2015	Medicare	Virginia Beach City	10.19%	0.15

2017	Medicare	Fredericksburg City	9.71%	0.15
2017	Medicaid	Patrick	18.36%	0.15
2015	Medicare	Harrisonburg City	10.19%	0.15
2016	Medicare	Isle Of Wight	10.00%	0.15
2017	Medicaid	Galax City	17.30%	0.15
2016	Commercial	Colonial Heights City	10.16%	0.15
2017	Commercial	Hanover	9.85%	0.15
2017	Medicare	Nelson	9.72%	0.15
2015	Medicaid	Craig	17.93%	0.14
2015	Medicare	New Kent	10.21%	0.14
2016	Medicare	Manassas City	11.12%	0.14
2016	Commercial	Rockingham	10.95%	0.14
2016	Medicare	Charles City	11.11%	0.14
2016	Medicare	Lunenburg	11.11%	0.14
2016	Medicaid	King And Queen	18.92%	0.14
2017	Medicare	Suffolk City	11.25%	0.14
2015	Medicare	Caroline	11.36%	0.14
2016	Commercial	Floyd	10.19%	0.14
2016	Medicaid	Patrick	18.90%	0.14
2015	Commercial	Charlotte	10.55%	0.13
2015	Medicare	Portsmouth City	11.34%	0.13
2015	Medicare	Campbell	11.34%	0.13
2017	Commercial	Bedford	9.88%	0.13
2017	Commercial	Lynchburg City	9.89%	0.13
2016	Commercial	Essex	10.92%	0.13
2015	Medicare	Botetourt	11.33%	0.13
2017	Commercial	Chesterfield	10.64%	0.13
2016	Medicaid	Giles	17.97%	0.13
2016	Medicaid	Prince George	18.88%	0.13
2015	Medicare	Hanover	11.32%	0.13
2016	Medicare	Rockingham	11.06%	0.13
2015	Medicare	Warren	10.27%	0.13
2016	Medicare	Stafford	10.08%	0.13
2015	Commercial	King George	11.23%	0.13
2015	Medicare	Poquoson City	11.30%	0.12
2015	Medicaid	Page	18.01%	0.12
2015	Medicaid	Spotsylvania	18.86%	0.12
2015	Medicare	Emporia City	11.29%	0.12
2015	Medicare	Chesterfield	10.30%	0.12
2017	Medicare	Grayson	9.85%	0.12
2017	Medicaid	Henry	18.27%	0.12
2017	Medicaid	Isle Of Wight	18.26%	0.12
2017	Commercial	Augusta	10.61%	0.12
2016	Medicaid	Tazewell	18.85%	0.12
2016	Medicare	Waynesboro City	10.12%	0.12

2016	Medicare	Lynchburg City	10.12%	0.12
2016	Medicaid	Greensville	18.03%	0.11
2017	Medicare	Hopewell City	11.12%	0.11
2016	Medicaid	Nottoway	18.83%	0.11
2017	Medicare	Hampton City	11.11%	0.11
2017	Medicare	Henrico	9.89%	0.11
2017	Commercial	Rockingham	9.94%	0.11
2017	Medicare	Augusta	9.90%	0.11
2017	Commercial	Appomattox	9.94%	0.11
2016	Medicaid	Essex	18.82%	0.11
2016	Medicaid	Bristol City	18.04%	0.11
2017	Medicare	Covington City	11.10%	0.11
2016	Medicaid	Greene	18.04%	0.11
2016	Medicare	Harrisonburg City	10.98%	0.11
2017	Medicaid	Culpeper	17.44%	0.11
2015	Medicaid	Poquoson City	18.81%	0.11
2015	Commercial	Radford	11.18%	0.11
2017	Medicare	Stafford	9.94%	0.10
2016	Commercial	James City	10.27%	0.10
2015	Medicaid	Lunenburg	18.07%	0.10
2015	Medicare	Lynchburg City	10.37%	0.10
2017	Medicaid	Suffolk City	18.21%	0.10
2017	Commercial	Buckingham	10.57%	0.10
2015	Medicare	Pulaski	11.21%	0.10
2016	Medicare	Powhatan	10.17%	0.10
2017	Medicare	Emporia City	11.05%	0.10
2017	Medicare	Caroline	11.05%	0.10
2017	Commercial	Goochland	10.56%	0.10
2015	Medicare	Charlottesville City	10.38%	0.10
2017	Medicare	Buckingham	11.04%	0.10
2016	Medicare	Surry	10.95%	0.10
2017	Medicare	King And Queen	9.97%	0.10
2017	Medicare	Galax City	11.03%	0.10
2015	Medicaid	Shenandoah	18.77%	0.10
2016	Commercial	Chesterfield	10.82%	0.10
2015	Commercial	Rappahannock	11.16%	0.10
2015	Commercial	Virginia Beach City	11.16%	0.10
2016	Medicaid	Goochland	18.77%	0.10
2016	Medicare	Cumberland	10.94%	0.10
2016	Medicare	Henrico	10.20%	0.10
2017	Commercial	Henrico	10.55%	0.10
2017	Medicaid	Madison	17.48%	0.10
2015	Commercial	Henrico	11.15%	0.09
2015	Medicaid	Giles	18.11%	0.09
2017	Medicare	Radford	11.00%	0.09
2016	Commercial	Henry	10.31%	0.09

2015	Medicare	Radford	10.42%	0.09
2017	Medicare	Buchanan	10.98%	0.09
2017	Commercial	Caroline	10.01%	0.09
2016	Medicaid	Smyth	18.12%	0.09
2017	Medicare	Nottoway	10.97%	0.09
2016	Medicaid	Isle Of Wight	18.73%	0.09
2015	Medicaid	James City	18.13%	0.09
2016	Medicaid	Buena Vista City	18.13%	0.09
2016	Medicaid	King William	18.73%	0.09
2017	Commercial	Buena Vista City	10.02%	0.09
2016	Medicare	Chesapeake City	10.25%	0.08
2015	Medicare	York	10.46%	0.08
2015	Medicaid	Chesapeake City	18.72%	0.08
2017	Medicare	Campbell	10.94%	0.08
2015	Commercial	Danville City	10.69%	0.08
2016	Commercial	Martinsville City	10.34%	0.08
2015	Medicare	Prince William	10.46%	0.08
2016	Medicaid	Buchanan	18.15%	0.08
2015	Medicare	Buena Vista City	11.12%	0.08
2017	Medicare	York	10.08%	0.08
2015	Medicare	Grayson	11.11%	0.08
2017	Medicaid	Harrisonburg City	18.11%	0.08
2017	Medicare	Southampton	10.92%	0.08
2016	Medicare	Bristol City	10.86%	0.08
2016	Commercial	Prince William	10.35%	0.08
2016	Medicare	Norfolk City	10.28%	0.08
2015	Medicaid	Prince Edward	18.69%	0.07
2017	Medicare	Mecklenburg	10.90%	0.07
2015	Medicare	Westmoreland	10.50%	0.07
2015	Commercial	Henry	11.09%	0.07
2017	Medicare	Rockingham	10.88%	0.07
2015	Commercial	York	11.08%	0.07
2015	Medicaid	King George	18.67%	0.07
2016	Medicaid	Grayson	18.19%	0.07
2017	Medicaid	Alexandria City	18.07%	0.07
2017	Medicare	Page	10.15%	0.07
2017	Commercial	Spotsylvania	10.08%	0.07
2017	Medicare	Dinwiddie	10.86%	0.07
2017	Commercial	Westmoreland	10.08%	0.07
2017	Medicare	Appomattox	10.15%	0.07
2016	Medicaid	Spotsylvania	18.20%	0.06
2015	Commercial	Appomattox	11.07%	0.06
2015	Medicaid	Fredericksburg City	18.65%	0.06
2017	Commercial	Essex	10.09%	0.06
2017	Medicare	Isle Of Wight	10.83%	0.06

2016	Commercial	King William	10.72%	0.06
2016	Medicare	Salem	10.33%	0.06
2017	Medicaid	King George	18.05%	0.06
2016	Medicare	Poquoson City	10.33%	0.06
2015	Medicaid	Scott	18.23%	0.06
2015	Medicare	Gloucester	10.56%	0.06
2017	Medicare	Hanover	10.19%	0.06
2015	Commercial	Stafford	11.05%	0.06
2016	Medicare	Charlotte	10.79%	0.06
2017	Commercial	Staunton City	10.11%	0.05
2016	Medicare	Carroll	10.36%	0.05
2015	Medicare	Galax City	10.58%	0.05
2016	Medicare	Virginia Beach City	10.37%	0.05
2015	Medicaid	Alexandria City	18.61%	0.05
2017	Medicare	Powhatan	10.23%	0.05
2017	Medicare	Virginia Beach City	10.24%	0.05
2016	Medicaid	Rockingham	18.26%	0.05
2015	Medicare	Covington City	10.99%	0.05
2016	Commercial	Norton City	10.43%	0.05
2015	Commercial	King William	11.03%	0.05
2016	Medicaid	Bland	18.26%	0.05
2016	Medicaid	Westmoreland	18.60%	0.05
2015	Commercial	Prince William	10.78%	0.05
2017	Medicaid	Grayson	18.00%	0.05
2016	Medicare	Floyd	10.39%	0.05
2017	Commercial	Alleghany	10.40%	0.05
2016	Commercial	Dinwiddie	10.68%	0.04
2016	Medicaid	Suffolk City	18.58%	0.04
2015	Commercial	Shenandoah	10.79%	0.04
2016	Medicaid	Hanover	18.28%	0.04
2015	Commercial	Amelia	11.01%	0.04
2017	Medicaid	Hampton City	17.68%	0.04
2016	Commercial	York	10.45%	0.04
2015	Medicare	Southampton	10.96%	0.04
2015	Commercial	Roanoke City	10.80%	0.04
2017	Medicaid	Prince Edward	17.97%	0.04
2015	Medicare	Charlotte	10.95%	0.04
2016	Medicare	Chesterfield	10.42%	0.04
2016	Medicare	Petersburg City	10.71%	0.04
2015	Medicare	Franklin	10.65%	0.04
2017	Medicaid	Amelia	17.70%	0.04
2016	Medicare	Prince William	10.44%	0.03
2016	Medicaid	Martinsville City	18.55%	0.03
2017	Medicare	Louisa	10.33%	0.03
2017	Commercial	York	10.36%	0.03
2017	Medicare	Waynesboro City	10.66%	0.03

2017	Medicare	Chesapeake City	10.66%	0.03
2017	Medicare	King William	10.35%	0.03
2016	Medicare	Augusta	10.68%	0.03
2016	Medicare	Appomattox	10.46%	0.03
2017	Commercial	Radford	10.19%	0.03
2015	Medicare	Louisa	10.91%	0.03
2017	Medicaid	Covington City	17.93%	0.03
2015	Medicare	Henrico	10.69%	0.03
2017	Commercial	Carroll	10.34%	0.03
2015	Commercial	New Kent	10.84%	0.03
2016	Commercial	Southampton	10.63%	0.02
2017	Medicare	Culpeper	10.63%	0.02
2015	Medicare	Montgomery	10.89%	0.02
2017	Commercial	Roanoke City	10.21%	0.02
2017	Medicare	Prince William	10.40%	0.02
2016	Medicare	Sussex	10.50%	0.02
2016	Medicare	Staunton City	10.64%	0.02
2015	Medicare	Danville City	10.72%	0.02
2015	Medicare	Petersburg City	10.72%	0.02
2016	Medicaid	Campbell	18.49%	0.02
2017	Medicare	Chesterfield	10.60%	0.02
2016	Medicaid	Dinwiddie	18.49%	0.02
2017	Medicare	Brunswick	10.59%	0.02
2017	Medicare	Lynchburg City	10.42%	0.02
2017	Medicare	Carroll	10.58%	0.01
2015	Commercial	Franklin	10.94%	0.01
2017	Medicare	Spotsylvania	10.44%	0.01
2016	Commercial	Powhatan	10.53%	0.01
2015	Commercial	Manassas City	10.93%	0.01
2015	Medicare	King And Queen	10.83%	0.01
2016	Medicare	New Kent	10.54%	0.01
2016	Commercial	Roanoke City	10.58%	0.01
2017	Medicare	Norfolk City	10.47%	0.01
2017	Medicare	Lunenburg	10.54%	0.01
2017	Medicare	Amelia	10.53%	0.01
2017	Medicare	Greene	10.47%	0.01
2016	Commercial	Henrico	10.57%	0.01
2016	Commercial	Virginia Beach City	10.57%	0.01
2015	Commercial	Gloucester	10.89%	0.01
2015	Medicare	Norfolk City	10.81%	0.00
2017	Medicare	Orange	10.48%	0.00
2015	Medicaid	Rockingham	18.42%	0.00
2015	Medicare	Roanoke City	10.80%	0.00
2017	Medicaid	Franklin City	17.83%	0.00
2015	Medicare	Essex	10.79%	0.00
2015	Medicaid	Powhatan	18.44%	0.00

2015	Medicaid	Goochland	18.43%	0.00
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3C – Analysis of Underlying Data Sources for County-Specific Rates

Greenville County					
Data Source Code	2015 Commercial Denominator	% Composition	2015 Commercial Rate	Difference from Overall County Rate	Notes
VAC0065 - Anthem Health Plans of Virginia Inc.	146	67%	18.49%	-0.01%	
VAC0066 - Health Keepers Inc.	38	17%	21.05%	2.55%	
VAC0025 - Cigna Health and Life Insurance Company	25	11%	20.00%	1.50%	
VAC0423 - United Health Care	4	2%	-	-	
VAC0002 - CareFirst Group Hospitalization and Medical Services Inc.	3	1%	66.67%	48.17%	Rate is high due to low volume.
VAC0004 - Optima Health	2	1%	-	-	

Lee County				
Data Source Code	2017 Medicaid Denominator	% Composition	2017 Medicaid Rate	Difference from Overall County Rate
VAC0005 - Virginia Premier Health Plan Inc.	1,942	44%	25.33%	-0.99%
VAC0066 - Health Keepers Inc.	929	21%	28.09%	1.77%
VAC0001 - INTotal Health LLC	906	20%	26.71%	0.39%
VAG1000 - DMAS - Virginia Medicaid	368	8%	24.46%	-1.86%
VAC0004 - Optima Health	310	7%	27.74%	1.42%

Middlesex County				
Data Source Code	2017 Medicaid Denominator	% Composition	2017 Medicaid Rate	Difference from Overall County Rate
VAC0066 - Health Keepers Inc.	745	62%	11.01%	0.58%
VAC0004 - Optima Health	292	24%	10.62%	0.19%
VAG1000 - DMAS - Virginia Medicaid	160	13%	9.38%	-1.06%

APPENDIX - EXHIBIT 4 - MEMBER COUNTY TO REGION ASSIGNMENT

Member County	Health Planning Region
Accomack	Eastern
Albemarle	Northwestern
Alexandria City	Northern
Alleghany	Southwest
Amelia	Central
Amherst	Southwest
Appomattox	Southwest
Arlington	Northern
Augusta	Northwestern
Bath	Northwestern
Bedford	Southwest
Bland	Southwest
Botetourt	Southwest
Bristol City	Southwest
Brunswick	Central
Buchanan	Southwest
Buckingham	Central
Buena Vista City	Northwestern
Campbell	Southwest
Caroline	Northwestern
Carroll	Southwest
Charles City	Central
Charlotte	Central
Charlottesville City	Northwestern
Chesapeake City	Eastern
Chesterfield	Central
Clarke	Northern
Colonial Heights City	Central
Covington City	Southwest
Craig	Southwest
Culpeper	Northwestern
Cumberland	Central
Danville City	Southwest
Dickenson	Southwest
Dinwiddie	Central
Emporia City	Central
Essex	Eastern
Fairfax	Northern
Fairfax City	Northern
Falls Church City	Northern
Fauquier	Northwestern
Floyd	Southwest
Fluvanna	Northwestern
Franklin	Southwest
Franklin City	Eastern

Frederick	Northwestern
Fredericksburg City	Northwestern
Galax City	Southwest
Giles	Southwest
Gloucester	Eastern
Goochland	Central
Grayson	Southwest
Greene	Northwestern
Greensville	Central
Halifax	Central
Hampton City	Eastern
Hanover	Central
Harrisonburg City	Northwestern
Henrico	Central
Henry	Southwest
Highland	Northwestern
Hopewell City	Central
Isle Of Wight	Eastern
James City	Eastern
King And Queen	Eastern
King George	Northwestern
King William	Eastern
Lancaster	Eastern
Lee	Southwest
Lexington City	Northwestern
Loudoun	Northern
Louisa	Northwestern
Lunenburg	Central
Lynchburg City	Southwest
Madison	Northwestern
Manassas City	Northern
Manassas Park City	Northern
Martinsville City	Southwest
Mathews	Eastern
Mecklenburg	Central
Middlesex	Eastern
Montgomery	Southwest
Nelson	Northwestern
New Kent	Central
Newport News City	Eastern
Norfolk City	Eastern
Northampton	Eastern
Northumberland	Eastern
Norton City	Southwest
Nottoway	Central
Orange	Northwestern

Page	Northwestern
Patrick	Southwest
Petersburg City	Central
Pittsylvania	Southwest
Poquoson City	Eastern
Portsmouth City	Eastern
Powhatan	Central
Prince Edward	Central
Prince George	Central
Prince William	Northern
Pulaski	Southwest
Radford	Southwest
Rappahannock	Northwestern
Richmond	Eastern
Richmond City	Central
Roanoke	Southwest
Roanoke City	Southwest
Rockbridge	Northwestern
Rockingham	Northwestern
Russell	Southwest
Salem	Southwest
Scott	Southwest
Shenandoah	Northwestern
Smyth	Southwest
Southampton	Eastern
Spotsylvania	Northwestern
Stafford	Northwestern
Staunton City	Northwestern
Suffolk City	Eastern
Surry	Central
Sussex	Central
Tazewell	Southwest
Virginia Beach City	Eastern
Warren	Northwestern
Washington	Southwest
Waynesboro City	Northwestern
Westmoreland	Eastern
Williamsburg City	Eastern
Winchester City	Northwestern
Wise	Southwest
Wythe	Southwest
York	Eastern