# Medicaid Payment Policies and Care Coordination Workgroup

**October 27, 2020**
**3:00 – 5:00 P.M. EST**
**WebEx Meeting Link (Click Here)**
**Meeting 1**

## Agenda

| | | |
|---|---|---|
| 3:00 – 3:05 p.m. | **Welcome/Introductions** | **Ellen Montz** <br> **Chief Deputy, DMAS** |
| 3:05 – 3:10 p.m. | **Guidelines** | **Ellen Montz** <br> **Chief Deputy, DMAS** |
| 3:10 – 3:30 p.m. | **Workgroup Purpose, Strategy, Timeline** | **Ellen Montz** <br> **Chief Deputy, DMAS** |
| 3:30 – 4:45 p.m. | **Emergency Department Utilization and Hospital Readmissions Trends and Discussion** | **Rusty Walker** <br> **Director, DMAS** <br><br> **Kyle Russel** <br> **Director, VHI** <br><br> **Lanette Walker** <br> **Director of Medicaid Access Policy, VHHA** |
| 4:45 – 4:50 p.m. | **Homework and Next Steps** | **Ellen Montz** <br> **Chief Deputy, DMAS** |
| 4:50 p.m. – Close | **Public Comments** | **Ellen Montz** <br> **Chief Deputy, DMAS** |

# MEDICAID PAYMENT POLICIES AND CARE COORDINATION WORKGROUP

Meeting 1

October 27, 2020

# Meeting Agenda

❑ Welcome and Introductions

❑ Guidelines

❑ Workgroup Purpose, Strategy, Timeline

❑ Emergency Department Utilization and Hospital Readmissions Analyses

  ▪ Presentations by DMAS, VHI, and VHHA

❑ Group Discussion

❑ Homework

❑ Adjourn

# Disclaimer

The primary goal of this workgroup is to provide a report to the General Assembly highlighting data, findings, and policy options in the areas of emergency room utilization and hospital readmissions. As a reminder, this meeting is open to the public and all information shared and presented during workgroup activities, may be made public and/or included in this public report to the Virginia General Assembly.

# Workgroup Member Guidelines

- ✓ Robust and meaningful discussion is encouraged, and should be based on a data-driven approach to presentations, findings, and policy options.

- ✓ Discussions should be solution-focused and provide actionable policy options to improve the future state of Virginia health care.

- ✓ The Workgroup must ultimately report policy options to the General Assembly for its consideration. DMAS will construct a report outlining Workgroup efforts, policies discussed, key information from those conversations, and policy options.

# Overview of Workgroup Purpose, Strategy, Timeline

# Overview of Workgroup Purpose

The Department of Medical Assistance Services shall convene a workgroup to evaluate and develop strategies and recommendations to improve payment policies and coordination of care in the Medicaid program to encourage the effective and efficient provision of care by providers and health care systems serving Medicaid members. The workgroup shall include representatives from the Virginia Hospital and Healthcare Association, hospitals, the Virginia Association of Health Plans, managed care organizations, emergency department and primary care physicians, and other stakeholders deemed necessary by the department. The workgroup shall:

(i) evaluate the appropriate coordination of services and cooperation among Medicaid managed care organizations (MCOs), hospitals, physicians, social services organizations, and nonprofit organizations to achieve a **reduction in hospital readmissions, improved health outcomes, and reduced overall costs of care** for conditions with high rates of hospital readmission in the Medicaid program;

(ii) **examine the role of hospital discharge planning and MCO care coordinators** in assisting Medicaid beneficiaries with access to appropriate care and services post-discharge and other factors that may contribute to higher rates of readmission such as social determinants of health that could impact a patient's readmission status;

(iii) assess the effectiveness of past and current mechanisms to **improve outcomes and readmission rates** by hospitals and health care systems and best practices and models from federal programs and other states;

(iv) assess how to prevent inappropriate utilization of emergency department services;

(v) examine the role of MCO care coordinators in assisting Medicaid beneficiaries **access to appropriate care, including Medicaid beneficiary access to and the availability and use of alternative non-emergency care options**, adequacy of MCO provider networks and reimbursement for primary care and alternative non-emergency care options, and the effectiveness of past and current mechanisms to improve the use of alternative non-emergent care by Medicaid beneficiaries;

(vi) evaluate the **impact of freestanding emergency departments and hospital emergency department marketing** on emergency department utilization along with lower-cost options for triage of non-emergency cases to alternative settings;

(vii) consider other states **efforts to address emergency department utilization**, including the use of medical and health homes, alternative primary care sites, and programs to coordinate the health needs of "super-utilizers"; and

(viii) consider strategies to engage **in value-based payment arrangements and other forms of financial incentives to encourage appropriate utilization of services and cooperation by health care providers and systems** in improving health care outcomes, including a review of designated Performance Withhold Program measures, Clinical Efficiency measures, and other existing or potential programs.

The department shall provide data on emergency room utilization and hospital readmissions of Medicaid beneficiaries to the workgroup to assist in its evaluation and analysis. The department shall report on the workgroup's findings and recommendations to the Joint Subcommittee for Health and Human Resources Oversight by December 15, 2020.

# Proposed Workgroup Strategy to address Emergency Department Utilization, Hospital Readmissions, and Care Coordination



- ✓ Convene Workgroup **October 2020 – March 2021**
  - ▪ Review emergency department utilization and hospital readmissions data (October 2020)
  - ▪ Assess stakeholder care coordination activities, discharge practices, and appropriate sites of care to affect positive care outcomes (November 2020)
  - ▪ Review successful federal, state, and provider interventions to address ED utilization and hospital readmissions (December 2020)
  - ▪ Discuss value-based purchasing and other financial incentives for potential policy options in Medicaid (March 2021)
- ✓ Deliver report to General Assembly by **May 1, 2021**.

# Workgroup Meeting Timeline

**1** **Meeting One: October 27, 2020**
- ✓ Overview of workgroup purpose, strategy, and timeline
- ✓ Review ED utilization and hospital readmissions data in Virginia
- ✓ *Homework for Workgroup Members (VHHA/Hospitals, VAHP/MCOs, Primary Care Physicians, and Emergency Department Physicians): Care Coordination Presentations for meeting 2 addressing workgroup topics (i), (ii), and (v).*

**2** **Meeting Two: November 19, 2020**
- ✓ Review of care coordination and discharge practices, as well as access to appropriate sites of care (presentations from workgroup members).
- ✓ *Homework for Workgroup Members:*
  - ▪ *All Members: Provide written feedback on any draft report content provided to date, including any draft policy options*
  - ▪ *VCHI and DMAS (with assistance from DMAS' Actuary): Prepare presentations on past and current efforts to address ED utilization and hospital readmissions nationally and in Virginia. (iii, iv, vii)*

**3** **Meeting Three: December 17, 2020**
- ✓ Review successful federal, state, and provider interventions to address ED utilization and hospital readmissions (presentations from DMAS and VCHI).
- ✓ *Homework for Workgroup Members:*
  - ▪ *All Members: Provide written feedback on any draft report content provided to date, including any draft policy options*
  - ▪ *DMAS: Prepare presentation on existing value based purchasing and other financial incentives.*

**4** **Meeting Four: March 18, 2021**
- ✓ Discuss value-based purchasing and other financial incentives for potential policy options in Medicaid (DMAS presentation).
- ✓ *Homework for Workgroup Members: Provide any written feedback on Meeting 4 content to DMAS.*

# Overview of Emergency Department & Hospital Readmissions Utilization and Trends in Virginia

# DMAS Clinical Efficiency Performance Measures

DMAS evaluates potentially preventable and/or medically unnecessary emergency department utilization, hospital admissions, and hospital readmissions through performance measures designed in consultation with its actuary (Mercer) to focus on managed care organizations. This suite of performance measures are typically referred to as DMAS' "Clinical Efficiency Measures."

# Low-Acuity Non-Emergent (LANE) Emergency Room Utilization Clinical Efficiency

✓ The LANE analysis identifies ER visits that could have occurred in a lower-acuity setting or been avoided through the provision of consistent, evidence-based primary care, proactive care management and/or health education.

✓ The steps and criteria for the LANE ER utilization measure are as follows:
- Identify ER visits associated with a list of ~790 potentially preventable diagnosis codes
- Apply a percent preventable associated with each code using the NYU algorithm (i.e. all instances of a code are not necessarily deemed preventable/avoidable)
- Apply exclusionary criteria for ER visits associated with any of the following:
  • Inpatient encounters or observation stays,
  • Trauma,
  • Delivery of a newborn,
  • Dually eligible members,
  • Members <1 or >64 years of age.
- Adjust final output to track rate of LANE visits per 1,000 member months

✓ More information on the DMAS LANE ER utilization measure can be found on the DMAS website at https://www.dmas.virginia.gov/#/valuebasedpurchasing, including detailed technical specifications, value sets, and output
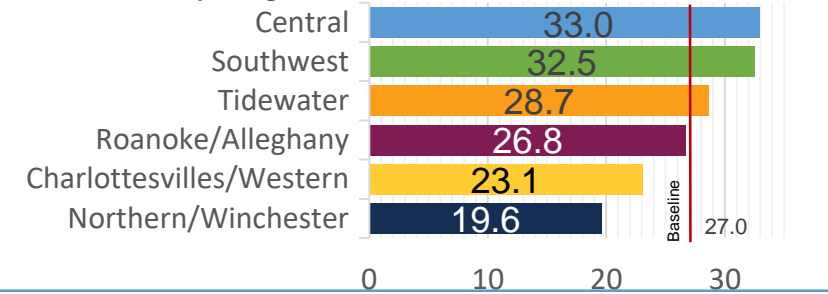
# LANE Results for Medallion 4.0

## Low-Acuity Non-Emergent (LANE) Emergency Room Visits Demographics – Medallion 4.0
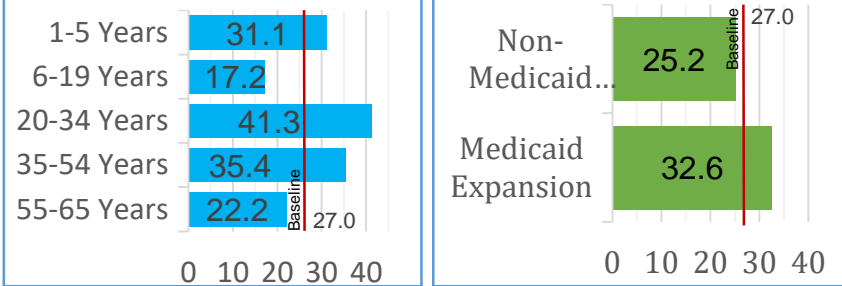
### Medallion 4.0

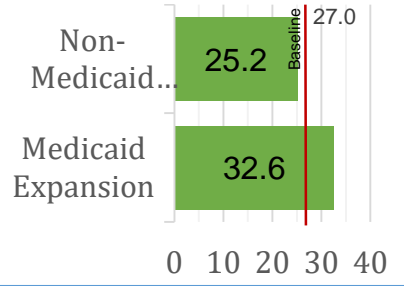| LANE Visits Rate (Baseline)[3] | LANE ER Visits (Baseline)[1] | Member Months (Baseline) |
|---|---|---|
| 27.0 | 313,027 | 11,586,386 |

**LANE Rate by Region**

| Region | Rate |
|---|---|
| Central | 33.0 |
| Southwest | 32.5 |
| Tidewater | 28.7 |
| Roanoke/Alleghany | 26.8 |
| Charlottesvilles/Western | 23.1 |
| Northern/Winchester | 19.6 |

Baseline 27.0 (axis: 0 10 20 30)

**LANE Rate by Age**

| Age | Rate |
|---|---|
| 1-5 Years | 31.1 |
| 6-19 Years | 17.2 |
| 20-34 Years | 41.3 |
| 35-54 Years | 35.4 |
| 55-65 Years | 22.2 |

Baseline 27.0 (axis: 0 10 20 30 40)

**LANE Rate by Expansion**

| Expansion | Rate |
|---|---|
| Non-Medicaid... | 25.2 |
| Medicaid Expansion | 32.6 |

Baseline 27.0 (axis: 0 10 20 30 40)

| Rank | Diagnosis Code | Description | LANE ER Visits[2] |
|---|---|---|---|
| 1 | J06.9 | Acute upper respiratory infection, unspecified | 31,290 |
| 2 | J02.9 | Acute pharyngitis, unspecified | 13,317 |
| 3 | N39.0 | Urinary tract infection, site not specified | 10,907 |
| 4 | R51 | Headache | 9,707 |
| 5 | J02.0 | Streptococcal pharyngitis | 8,891 |
| 6 | R11.2 | Nausea with vomiting, unspecified | 8,710 |
| 7 | J10.1 | Influenza due to other identified influenza virus with other respiratory manifestations | 7,443 |
| 8 | J20.9 | Acute bronchitis, unspecified | 6,729 |
| 9 | R05 | Cough | 6,598 |
| 10 | M54.5 | Low back pain | 5,944 |
| 11 | K52.9 | Noninfective gastroenteritis and colitis, unspecified | 5,889 |
| 12 | R10.9 | Unspecified abdominal pain | 5,403 |
| 13 | J45.901 | Unspecified asthma with (acute) exacerbation | 4,993 |
| 14 | J11.1 | Influenza due to unidentified influenza virus with other respiratory manifestations | 4,981 |
| 15 | R11.10 | Vomiting, unspecified | 4,733 |
| 16 | H66.91 | Otitis media, unspecified, right ear | 4,525 |
| 17 | R21 | Rash and other nonspecific skin eruption | 4,302 |
| 18 | H66.92 | Otitis media, unspecified, left ear | 4,030 |
| 19 | N76.0 | Acute vaginitis | 3,961 |
| 20 | K04.7 | Periapical abscess without sinus | 3,755 |
| 21 | R19.7 | Diarrhea, unspecified | 3,576 |
| 22 | J18.9 | Pneumonia, unspecified organism | 3,493 |
| 23 | R10.84 | Generalized abdominal pain | 3,251 |
| 24 | R42 | Dizziness and giddiness | 3,092 |
| 25 | R1013 | Epigastric pain | 2,797 |
| | | **Total LANE ER Visits from Top 25 Diagnoses** | **172,317** |
| | | **Percent of Top 25 Diagnoses as a percentage of Total LANE ER Visits** | **55%** |

**Notes:**
1. Total LANE ER visits with diagnosis code, after adjusting for preventability (%), and rounded to the nearest whole number.
2. Total LANE ER Visits with diagnosis code, after adjusting for preventability (%), and rounded to the nearest whole number.
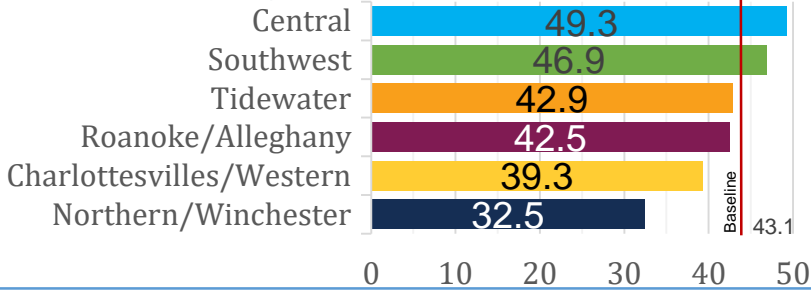3. Baseline rates reflect calendar year 2019 performance.

# LANE Results for CCC+

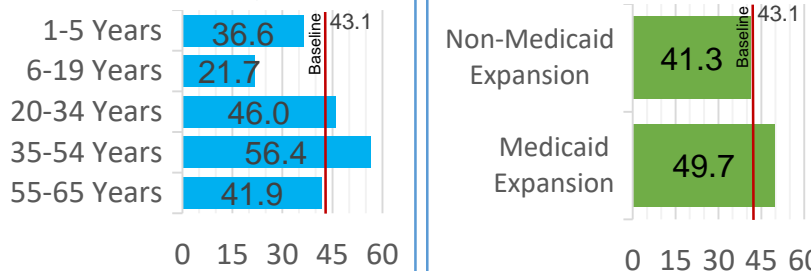## Low-Acuity Non-Emergent (LANE) Emergency Room Visits Demographics – CCC+

### Commonwealth Coordinated Care Plus

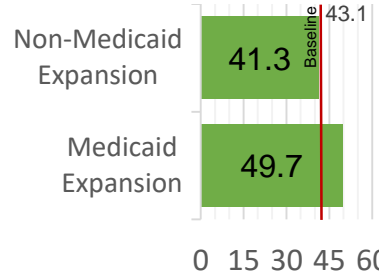| LANE Visits Rate (Baseline)[3] | LANE ER Visits (Baseline)[1] | Member Months (Baseline) |
|---|---|---|
| **43.1** | **62,200** | **1,443,823** |

**LANE Rate by Region**

- Central: 49.3
- Southwest: 46.9
- Tidewater: 42.9
- Roanoke/Alleghany: 42.5
- Charlottesvilles/Western: 39.3
- Northern/Winchester: 32.5

Baseline 43.1

(scale: 0 10 20 30 40 50)

**LANE Rate by Age**

- 1-5 Years: 36.6
- 6-19 Years: 21.7
- 20-34 Years: 46.0
- 35-54 Years: 56.4
- 55-65 Years: 41.9

Baseline 43.1

(scale: 0 15 30 45 60)

**LANE Rate by Expansion**

- Non-Medicaid Expansion: 41.3
- Medicaid Expansion: 49.7

Baseline 43.1

(scale: 0 15 30 45 60)

| Rank | Diagnosis Code | Description | LANE ER Visits[2] |
|---|---|---|---|
| 1 | J06.9 | Acute upper respiratory infection, unspecified | 3,169 |
| 2 | N390 | Urinary tract infection, site not specified | 2,654 |
| 3 | R51 | Headache | 2,406 |
| 4 | M545 | Low back pain | 2,284 |
| 5 | J209 | Acute bronchitis, unspecified | 1,952 |
| 6 | J441 | Chronic obstructive pulmonary disease with (acute) exacerbation | 1,719 |
| 7 | R112 | Nausea with vomiting, unspecified | 1,673 |
| 8 | R109 | Unspecified abdominal pain | 1,550 |
| 9 | J029 | Acute pharyngitis, unspecified | 1,212 |
| 10 | E1165 | Type 2 diabetes mellitus with hyperglycemia | 1,203 |
| 11 | R05 | Cough | 1,117 |
| 12 | R42 | Dizziness and giddiness | 973 |
| 13 | J45901 | Unspecified asthma with (acute) exacerbation | 962 |
| 14 | R1084 | Generalized abdominal pain | 922 |
| 15 | K529 | Noninfective gastroenteritis and colitis, unspecified | 920 |
| 16 | K047 | Periapical abscess without sinus | 884 |
| 17 | J189 | Pneumonia, unspecified organism | 805 |
| 18 | I10 | Essential (primary) hypertension | 756 |
| 19 | M542 | Cervicalgia | 741 |
| 20 | R1013 | Epigastric pain | 720 |
| 21 | J40 | Bronchitis, not specified as acute or chronic | 659 |
| 22 | M25561 | Pain in left knee | 647 |
| 23 | M25562 | Pain in right knee | 620 |
| 24 | R21 | Rash and other nonspecific skin Eruption | 616 |
| 25 | N3000 | Acute cystitis without hematuria | 612 |
| | | **Total LANE ER Visits from Top 25 Diagnoses** | **31,777** |
| | | **Percent of Top 25 Diagnoses as a percentage of Total LANE ER Visits** | **51%** |

**Notes:**
1. Total LANE ER visits with diagnosis code, after adjusting for preventability (%), and rounded to the nearest whole number.
2. Total LANE ER Visits with diagnosis code, after adjusting for preventability (%), and rounded to the nearest whole number.
3. Baseline rates reflect calendar year 2019 performance.

DMAS
VIRGINIA'S MEDICAID PROGRAM
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# Hospital Readmissions Clinical Efficiency

✓ The hospital readmissions CE analysis identifies hospital readmissions that could have been potentially prevented/avoided through improved patient follow up, care coordination, and discharge planning.

✓ The steps and criteria for the hospital readmissions CE PM are as follows:

- Identify admissions to acute medical facilities.
- Look for all readmissions occurring with 30 days of an anchor admission.
- Apply exclusionary criteria associated with any of the following:
  - Cancer diagnoses,
  - Discharge disposition (leaving AMA, transferred, expired),
  - Dually eligible members,
  - Members <1 or >64 years of age,
  - Planned admissions and select pregnancy related admissions.

✓ More information on the DMAS Hospital Readmissions measure can be found on the DMAS website at https://www.dmas.virginia.gov/#/valuebasedpurchasing, including detailed technical specifications, value sets, and output.

# Hospital Readmissions Results for Medallion 4.0

## Hospital Readmissions Demographics – Medallion 4.0

### Medallion 4.0

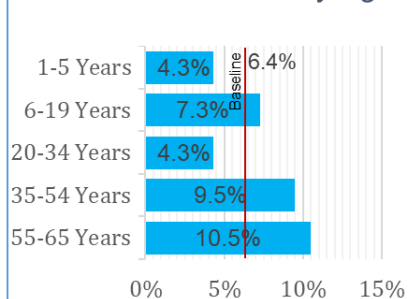| Readmissions Rate (Baseline) **6.4%** | Readmissions (Baseline)[1] **3,942** | Admissions (Baseline) **61,290** |
| --- | --- | --- |
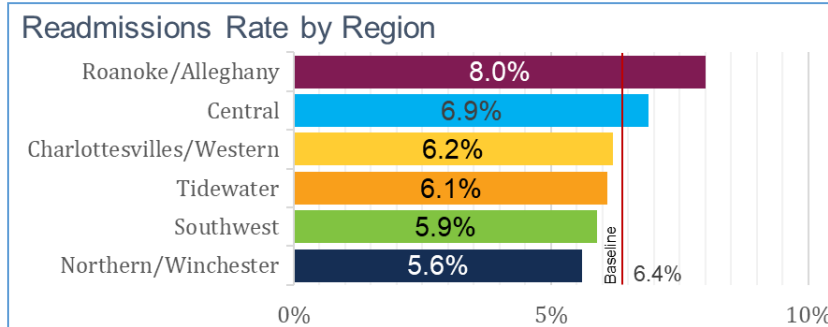
**Readmissions Rate by Region**

| Region | Rate |
| --- | --- |
| Roanoke/Alleghany | 8.0% |
| Central | 6.9% |
| Charlottesvilles/Western | 6.2% |
| Tidewater | 6.1% |
| Southwest | 5.9% |
| Northern/Winchester | 5.6% |

Baseline 6.4%

**Readmissions Rate by Age**

| Age | Rate |
| --- | --- |
| 1-5 Years | 4.3% |
| 6-19 Years | 7.3% |
| 20-34 Years | 4.3% |
| 35-54 Years | 9.5% |
| 55-65 Years | 10.5% |

Baseline 6.4%

**Readmissions Rate by Expansion**

| | Rate |
| --- | --- |
| Non-Medicaid Expansion | 4.4% |
| Medicaid Expansion | 11.0% |

Baseline 6.4%

Notes:
1. Baseline rates reflect calendar year 2019 performance.
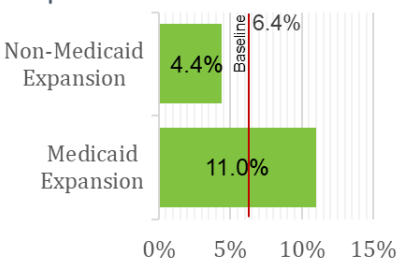
| Rank | Diagnosis Code | Description | Readmissions | Percent of Readmissions |
| --- | --- | --- | --- | --- |
| 1 | F33 | Major depressive disorder, recurrent | 462 | 12% |
| 2 | F31 | Bipolar affective disorder | 202 | 5% |
| 3 | F10 | Alcohol related disorders | 199 | 5% |
| 4 | E10 | Type 1 diabetes mellitus | 158 | 4% |
| 5 | F34 | Persistent mood [affective] disorders | 148 | 4% |
| 6 | F32 | Major depressive disorder, single episode | 147 | 4% |
| 7 | F25 | Schizoaffective disorders | 128 | 3% |
| 8 | A41 | Other Sepsis | 110 | 3% |
| 9 | O99 | Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium | 91 | 2% |
| 10 | T81 | Complications of procedures, not elsewhere classified | 89 | 2% |
| | | **Total from Top 10 Diagnoses** | **1,734** | **44%** |

# Hospital Readmissions Results for CCC+

**Hospital Readmissions Demographics – CCC+**
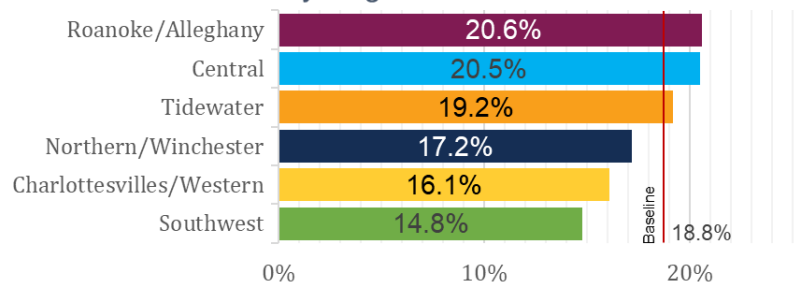
## Commonwealth Coordinated Care Plus

| Readmissions Rate (Baseline) **18.8%** | Readmissions (Baseline)[1] **5,209** | Admissions (Baseline) **27,747** |
|---|---|---|

### Readmissions Rate by Region
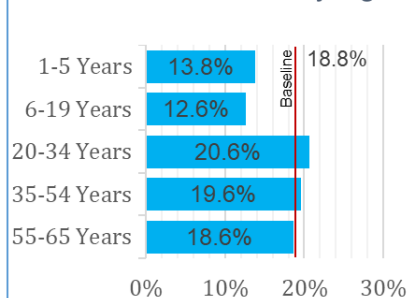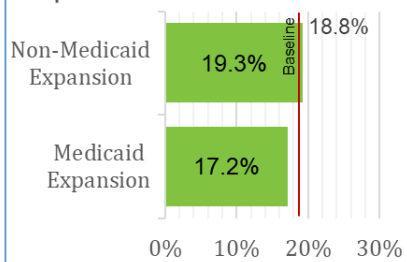
| Region | Rate |
|---|---|
| Roanoke/Alleghany | 20.6% |
| Central | 20.5% |
| Tidewater | 19.2% |
| Northern/Winchester | 17.2% |
| Charlottesvilles/Western | 16.1% |
| Southwest | 14.8% |

Baseline 18.8%

### Readmissions Rate by Age

| Age | Rate |
|---|---|
| 1-5 Years | 13.8% |
| 6-19 Years | 12.6% |
| 20-34 Years | 20.6% |
| 35-54 Years | 19.6% |
| 55-65 Years | 18.6% |

Baseline 18.8%

### Readmissions Rate by Expansion

| Expansion | Rate |
|---|---|
| Non-Medicaid Expansion | 19.3% |
| Medicaid Expansion | 17.2% |

Baseline 18.8%

**Notes:**
1. Baseline rates reflect calendar year 2019 performance.

| Rank | Diagnosis Code | Description | Readmissions | Percent of Readmissions |
|---|---|---|---|---|
| 1 | F25 | Schizoaffective disorders | 549 | 11% |
| 2 | F33 | MDD recurrent moderate | 411 | 8% |
| 3 | F31 | Bipolar affective disorder | 337 | 6% |
| 4 | A41 | Other Sepsis | 286 | 5% |
| 5 | F10 | Alcohol abuse, uncomplicated | 204 | 4% |
| 6 | F20 | Schizophrenia | 179 | 3% |
| 7 | I13 | Hypertensive heart and chronic kidney disease | 171 | 3% |
| 8 | E10 | Type 1 diabetes mellitus | 162 | 3% |
| 9 | E11 | Type 2 diabetes mellitus | 125 | 2% |
| 10 | J96 | Respiratory Failure | 114 | 2% |
| | | **Total from Top 10 Diagnoses** | **2,538** | **49%** |

# Commercial Market ED and Readmission Metrics

**Slides prepared by VHI for October 27th meeting of Medicaid Payment Policies and Care Coordination Work Group**

# Virginia's All Payer Claims Database (APCD)

**Participating Health Insurance Companies[1]**

-Aetna/CVS/Innovation Health
-Anthem
-Carefirst
-Cigna
-CMS
-DMAS
-Humana
-Kaiser Permanente
-Magellan
-Optima Health
-Piedmont
-United Health Group Plans & Optum
-Virginia Premier
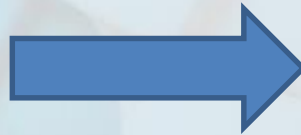
-40-60% of commercially insured individuals depending on the timeframe

-All individual and small group market, Self insured large group is based on Opt-In decision of employer

-COVA and VA municipalities must participate

Data is currently available through Q3 2019

*[1] All plans with at least 1,000 eligible members must submit medical/pharmacy claims to APCD as of July 1, 2019 (via passage of VA Senate Bill 1216)*

FROM NUMBERS TO KNOWLEDGE
VHI
VIRGINIA HEALTH INFORMATION

# Virginia Patient Level Data System (PLD)

- Includes patient demographic, administrative, clinical and financial information on every discharge that occurs in Virginia licensed hospitals

- Patient level data is produced for every calendar quarter since the third quarter of 1993 and is available approximately six months after the end of each calendar quarter.

# Distribution of ED Visit by Age and Region[1]

| Member Age Band | Northwestern | Northern | Southwest | Central | Eastern | Statewide |
|---|---|---|---|---|---|---|
| [0-5] | 7% | 9% | 6% | 6% | 5% | 7% |
| [6-19] | 14% | 16% | 12% | 12% | 11% | 13% |
| [20-34] | **27%** | **25%** | **26%** | **29%** | **28%** | **27%** |
| [35-54] | **33%** | **32%** | **35%** | **35%** | **36%** | **34%** |
| [55-65] | 17% | 14% | 19% | 17% | 18% | 17% |
| [65+] | 2% | 3% | 3% | 2% | 2% | 2% |

[1] *Commercial Market within APCD for Q3 2018- Q2 2019, ED visit defined using 4 digit prefix 9928\*, Age based on DOS*

# Trends in ED Visit Severity Code Level[1]



Trend in Severity Code

Facility — Professional

*Average ED Visit Severity Code*

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Facility | 3.18 | 3.19 | 3.24 | 3.21 | 3.22 |
| Professional | 3.05 | 3.08 | 3.14 | 3.14 | 3.20 |

**Incurred Year**
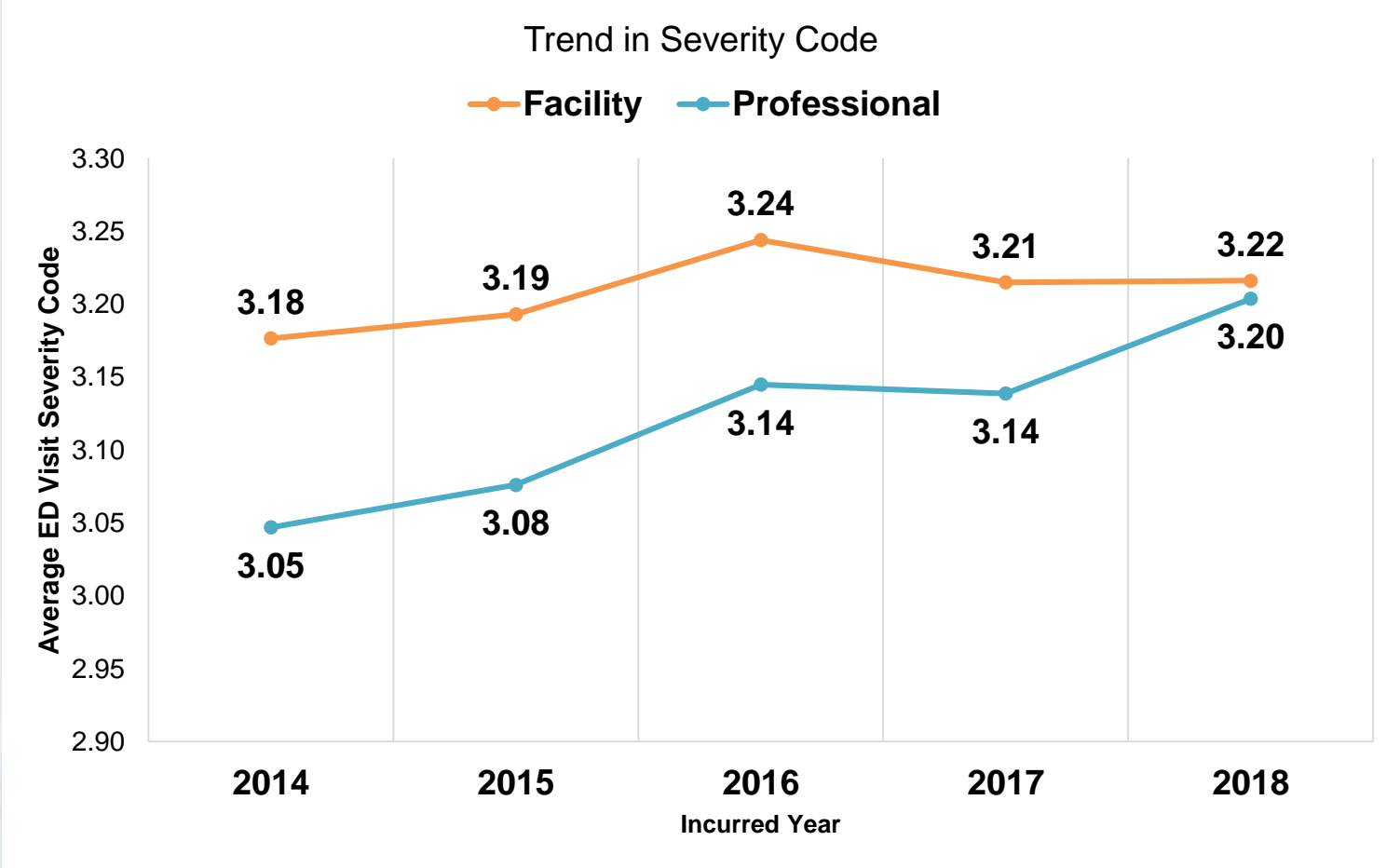
[1] *Commercial Market within APCD, ED visit defined using 4 digit prefix 9928\**

FROM NUMBERS TO KNOWLEDGE

VHI
VIRGINIA HEALTH
INFORMATION

# Average Commercial Reimbursement by ED Visit Severity Code[1]



**Cost by Severity Code (2018)**

■ Facility  ■ Professional

| CPT Code | Facility | Professional |
|---|---|---|
| 99281 | $191 | $34 |
| 99282 | $371 | $71 |
| 99283 | $621 | $106 |
| 99284 | $924 | $197 |
| 99285 | $1,327 | $295 |

*Average Total Allowed* (y-axis), *CPT Code* (x-axis)
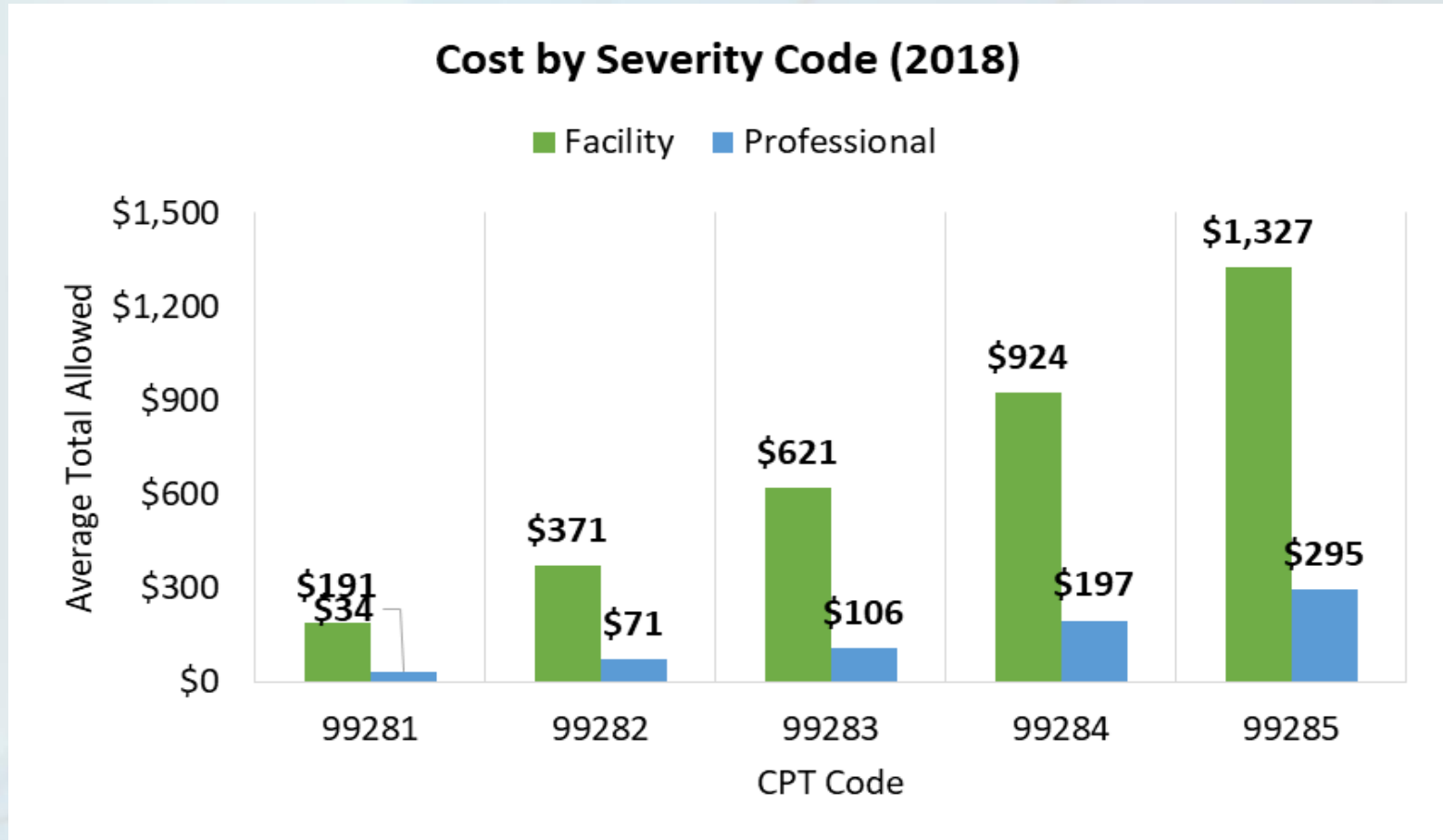
[1] *Commercial Market within APCD for CY 2018- Q2 2019, commercial reimbursement displayed using standardized proxy reimbursement amount, more examples on the average commercial reimbursement for common healthcare services can be found at* http://vhi.org/HealthcarePricing/default.asp

# Most Frequent ED DX Categories[1]

| Diagnosis Category (Primary) | 2013 | | 2018 | |
|---|---|---|---|---|
| | % of Total ED Visits | Rank | % of Total ED Visits | Rank |
| Abdominal pain | 6% | 1 | 5% | 2 |
| Sprains and strains | 5% | 2 | 4% | 3 |
| Superficial injury; contusion | 5% | 3 | 4% | 5 |
| Nonspecific chest pain | 4% | 4 | 5% | 1 |
| Other upper respiratory infections | 4% | 5 | 3% | 6 |
| **Potentially Avoidable** | **11%** | **-** | **10%** | **-** |

[1] *Commercial Market within APCD, DX categories based on AHRQ CCS groupings, Potentially Avoidable ED visits defined used California Dept of Health/OHA methodology, more data about rates of potentially avoidable ED visits can be found at* http://vhi.org/Hospitals/avoidable-ed-visits.asp

# Care Surrounding a Potentially Avoidable ED Visit[1]

**At least 1 PCP or Urgent Care Visit**

31%

**At least 1 other Potentially Avoidable ED Visit**

11%

← 30 Days Before

**Total Number of Individuals that had a Potentially Avoidable ED Visit in 2018**

31,387

30 Days After →
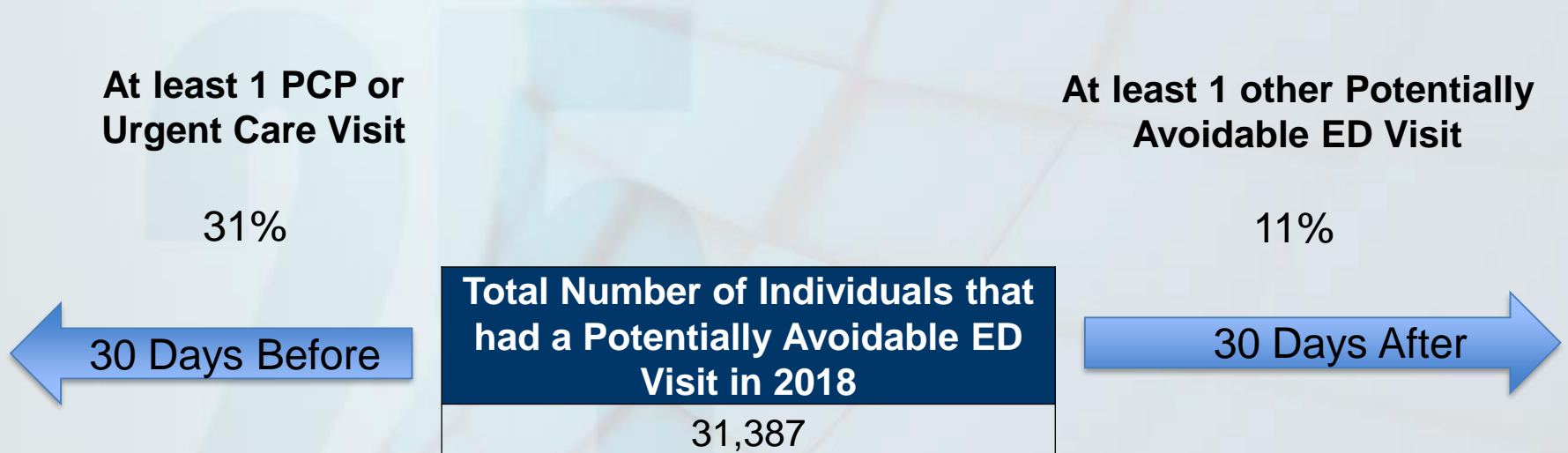
[1] *Commercial Market within APCD, Potentially Avoidable ED visits defined used California Dept of Health/OHA methodology, more data about rates of potentially avoidable ED visits can be found at* http://vhi.org/Hospitals/avoidable-ed-visits.asp

# Inpatient Readmissions as a % of Total Admissions



**Inpatient Readmissions as a % of Total Admissions**
*Source: Virginia Hospital Discharge Database*

| | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 | Q1 2019 | Q2 2019 | Q3 2019 |
|---|---|---|---|---|---|---|---|
| Overall | 13.1% | 12.8% | 12.9% | 12.9% | 13.3% | 13.0% | 13.1% |
| Commercial | 7.8% | 7.6% | 7.8% | 7.9% | 7.9% | 7.6% | 7.9% |
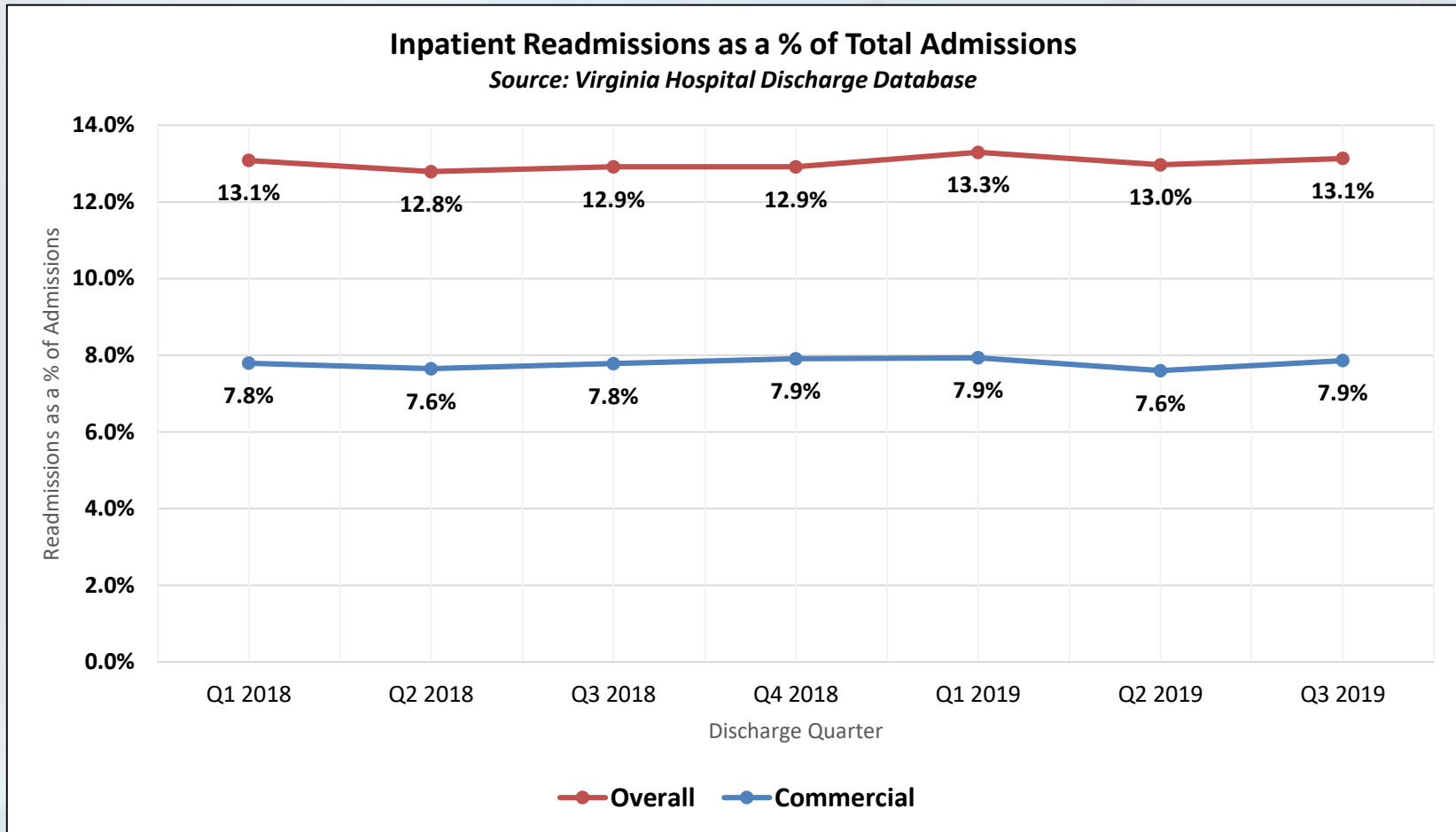
*Readmissions methodology based on DMAS Clinical Efficiency Performance Measure Technical Specifications*

# Inpatient Readmissions as a % of Total Readmissions for Top 5 Diagnoses within the Commercial Population



**Inpatient Readmissions as a % of Total Admissions for Top 5 Diagnoses within the Commercial Population**
*Source: Virginia Hospital Discharge Database*

Legend:
- A419 - Sepsis, unspecified organism
- F332 - Major depressive disorder, recurrent severe without psychotic features
- I110 - Hypertensive heart disease with heart failure
- I130 - Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
- N179 - Acute kidney failure, unspecified

*Readmissions methodology based on DMAS Clinical Efficiency Performance Measure Technical Specifications*

# Thank you

# **Emergency Department Visits by Payer**

## *An Exploratory Analysis*

October 2020

# Overview:

1. About the Data
2. Statewide Trends
3. Payer-Specific Statewide Trends
4. Statewide 30-day Readmission Trends

# About the Data

Emergency Department
- VHHA ED Database
- Most Recent Year of Data (Q2 2019 to Q1 2020)
- Voluntary submission by hospitals
- VHHA estimates its capturing close to 90% of all ED visits in Virginia
- Includes 3,039,308 ED Visits

30-Day Readmissions
- VHHA Readmissions Database
- Timeframe: Q3 2018 to Q2 2020
- CMS-Yale Methodology applied to all payers
- 100% of all acute care hospitals

Statewide Emergency Department Trends

# ED Visits by Payer Category
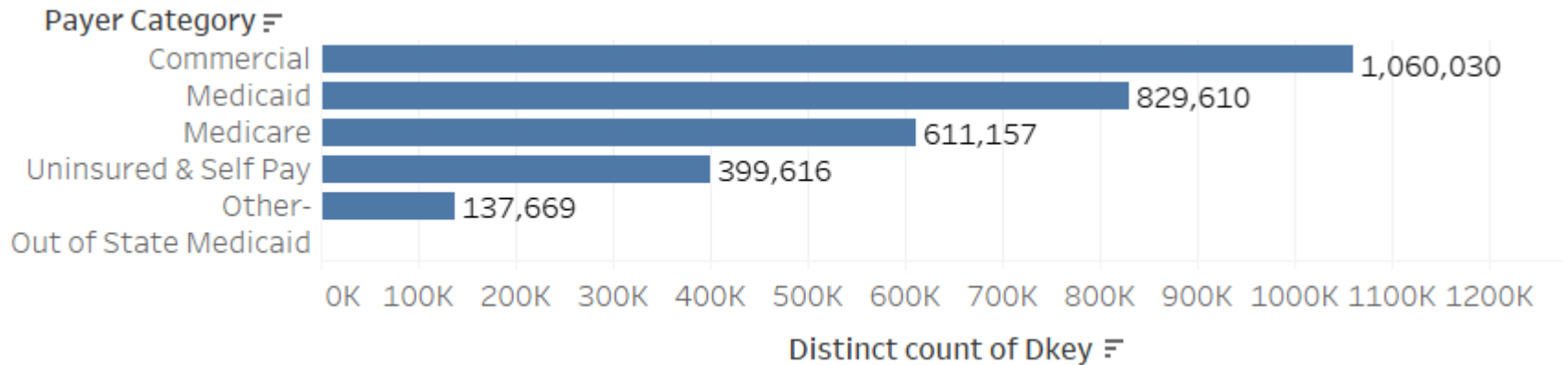
# ED Visit Volumes
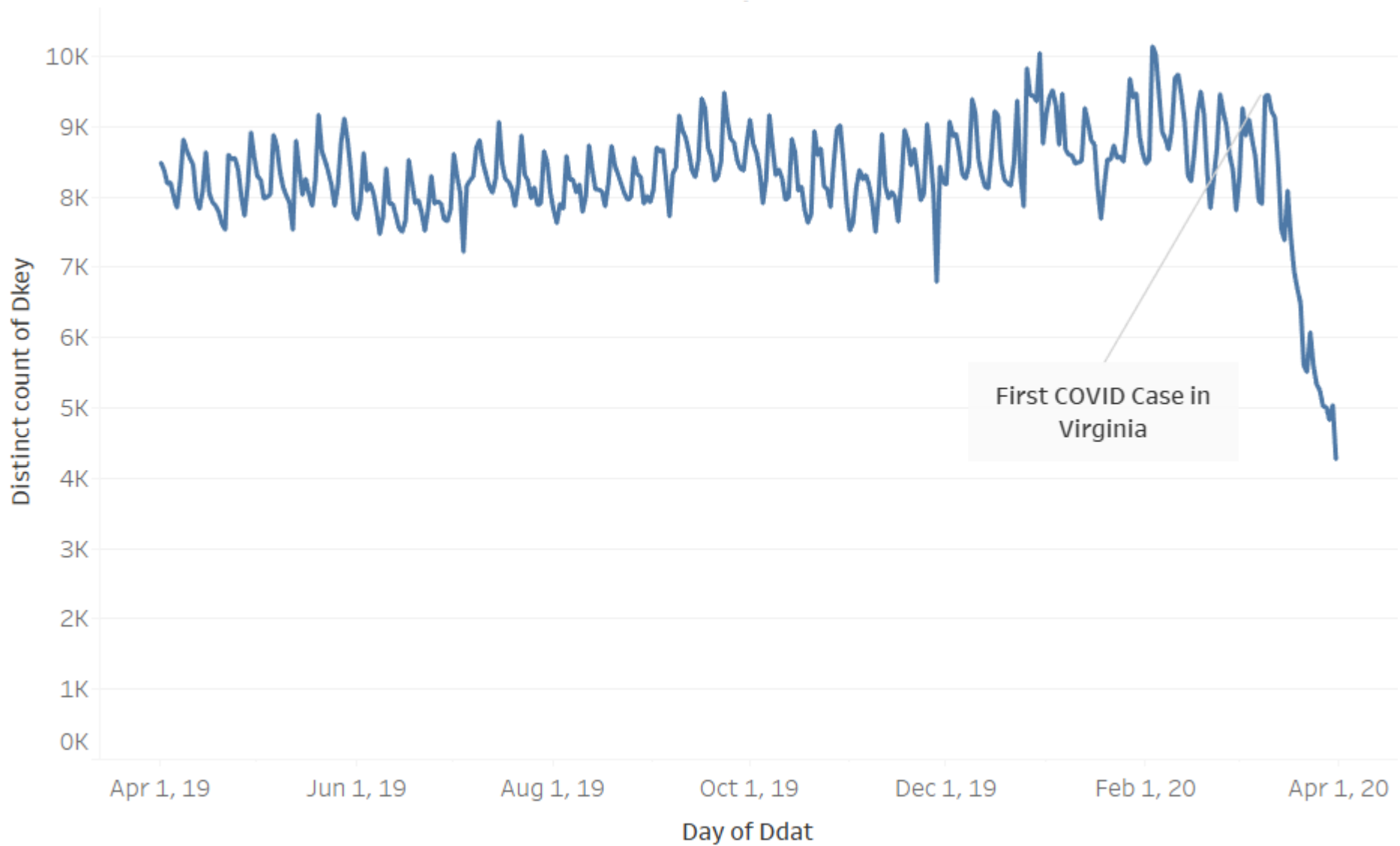
# ED Visits by Age
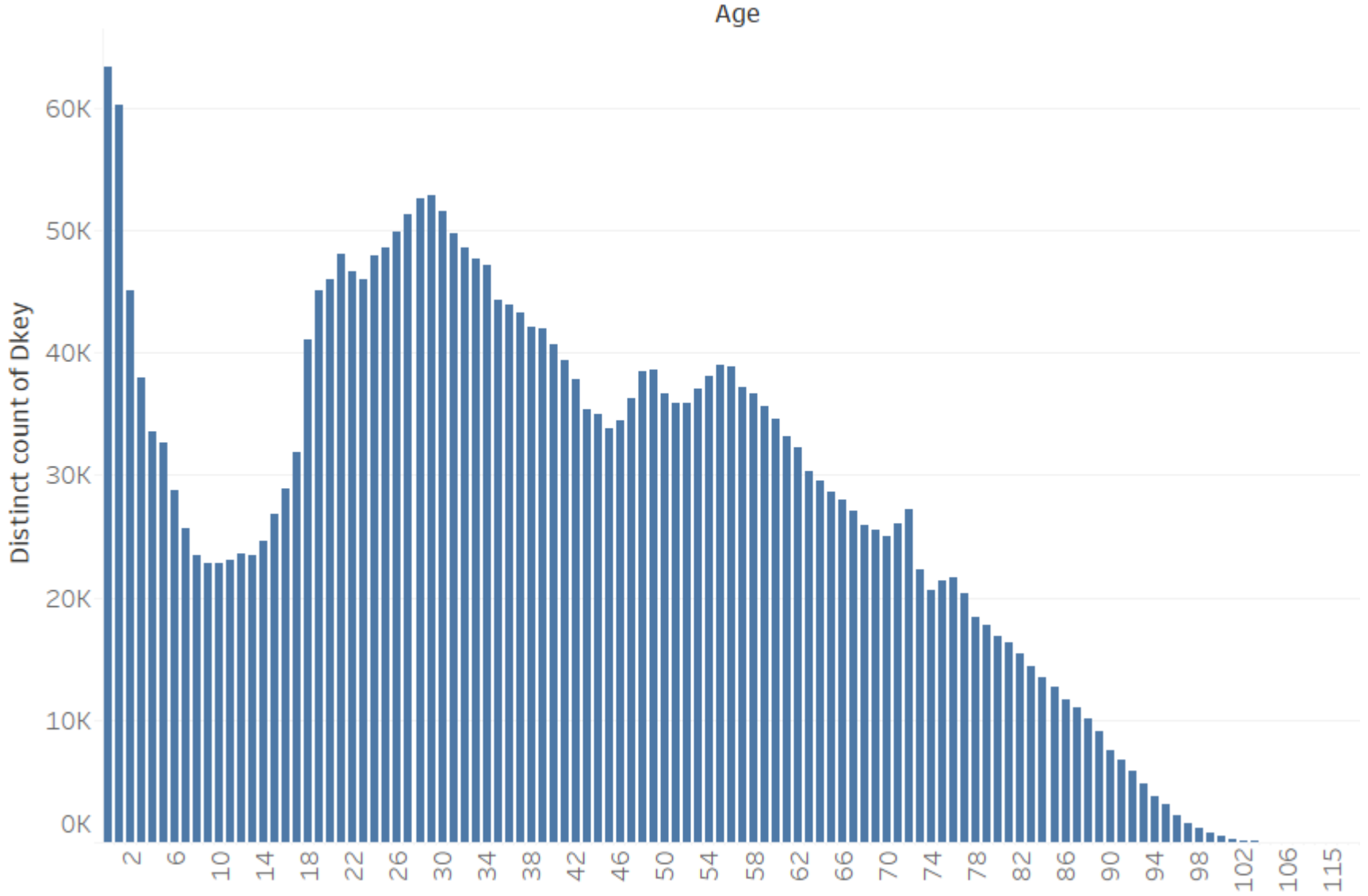
# ED Visits by Race

| Race Desc | ED Visits | % of Total |
|---|---|---|
| American Indian | 4,345 | 0.14% |
| Asian | 60,017 | 1.97% |
| Black | 1,030,525 | 33.91% |
| Hispanic - Black | 3,534 | 0.12% |
| Hispanic - White | 63,892 | 2.10% |
| Other, Specified | 215,764 | 7.10% |
| Unknown, Not Recorded | 64,096 | 2.11% |
| White | 1,597,135 | 52.55% |
| Grand Total | 3,039,308 | 100.00% |

# ED Visits by Top 20 Primary Diagnosis

| Dxdesc | |
|---|---:|
| ACUTE UPPER RESPIRATORY INFECTION, UNSPECIFIED | 79,100 |
| OTHER CHEST PAIN | 78,737 |
| CHEST PAIN, UNSPECIFIED | 56,405 |
| URINARY TRACT INFECTION, SITE NOT SPECIFIED | 47,351 |
| HEADACHE | 46,144 |
| NAUSEA WITH VOMITING, UNSPECIFIED | 37,892 |
| LOW BACK PAIN | 34,209 |
| UNSPECIFIED ABDOMINAL PAIN | 32,811 |
| VIRAL INFECTION, UNSPECIFIED | 31,931 |
| ACUTE PHARYNGITIS, UNSPECIFIED | 30,250 |
| SYNCOPE AND COLLAPSE | 30,150 |
| DIZZINESS AND GIDDINESS | 29,565 |
| FEVER, UNSPECIFIED | 29,027 |
| FLU DUE TO OTH IDENT INFLUENZA VIRUS W OTH RESP .. | 28,232 |
| ACUTE BRONCHITIS, UNSPECIFIED | 27,758 |
| UNSPECIFIED INJURY OF HEAD, INITIAL ENCOUNTER | 26,371 |
| NONINFECTIVE GASTROENTERITIS AND COLITIS, UNSPE.. | 24,279 |
| COUGH | 24,045 |
| ESSENTIAL (PRIMARY) HYPERTENSION | 20,833 |
| CONSTIPATION, UNSPECIFIED | 20,412 |

# Top 20 Chronic Conditions

| Ccwdesc | |
|---|---:|
| HYPERTENSION | 786,763 |
| TOBACCO USE | 534,424 |
| DIABETES | 355,398 |
| HYPERLIPIDEMIA | 269,290 |
| ASTHMA | 202,024 |
| CHRONIC KIDNEY DISEASE | 159,042 |
| ISCHEMIC HEART DISEASE | 153,016 |
| ANXIETY DISORDERS | 151,304 |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND .. | 139,903 |
| FIBROMYALGIA CHRONIC PAIN AND FATIGUE | 124,430 |
| DEPRESSION | 115,119 |
| DEPRESSIVE DISORDERS | 112,394 |
| OBESITY | 93,378 |
| HEART FAILURE | 91,719 |
| ACQUIRED HYPOTHYROIDISM | 91,065 |
| RA/OA (RHEUMATOID ARTHRITIS/OSTEOARTHRITIS) | 83,497 |
| ANEMIA | 69,443 |
| ALCOHOL USE DISORDERS | 50,215 |
| MIGRAINE AND CHRONIC HEADACHE | 48,203 |
| DRUG USE DISORDERS | 47,521 |

Chronic condition categories grouped using the CCW algorithm:
https://www2.ccwdata.org/web/guest/home/

# Payer-Specific Trends

- Medicare
- Medicaid
- Commercial

# ED Visit Volumes by Payer
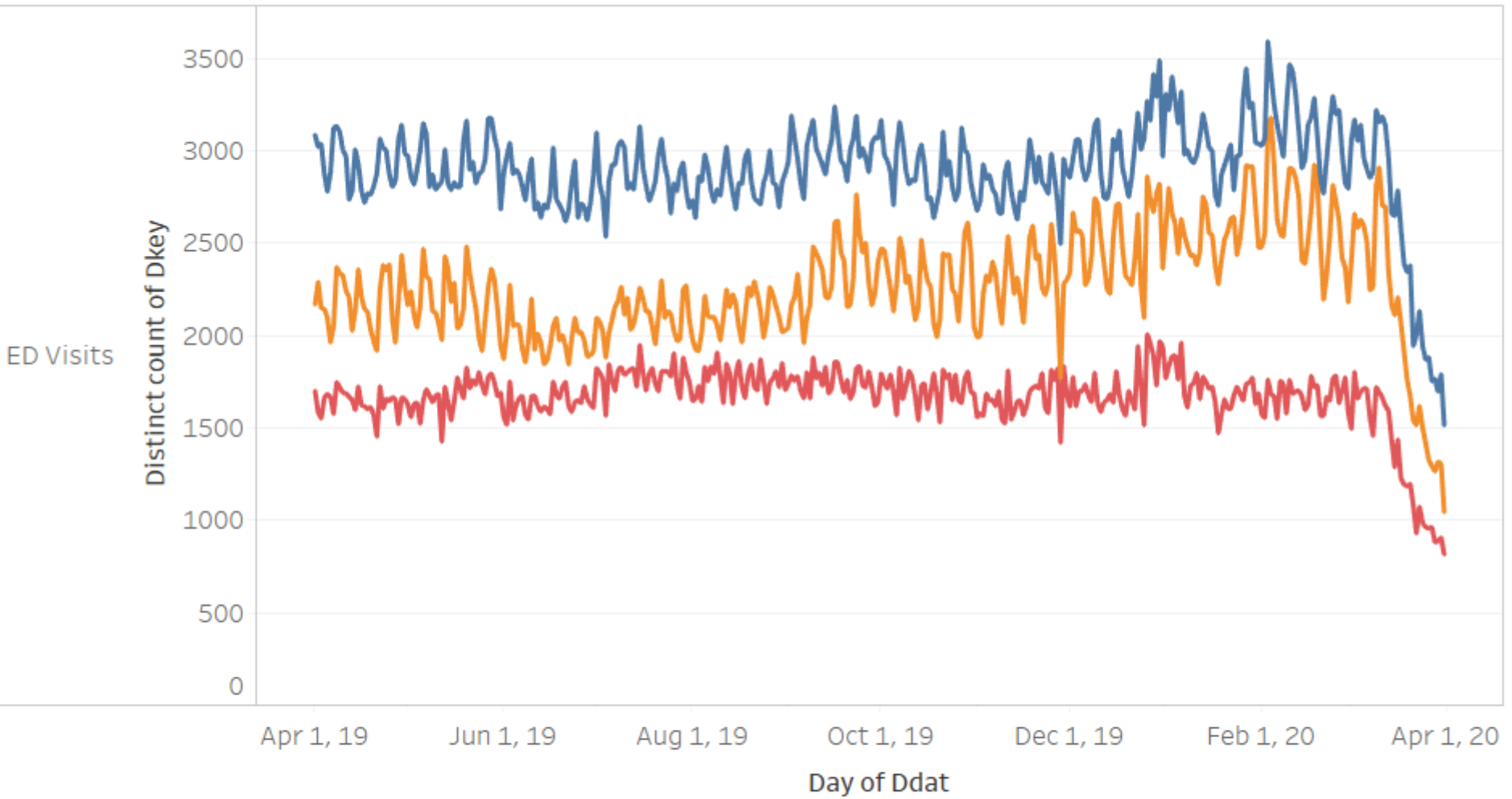
# ED Visits by Age and Payer



Chart: Stacked bar chart showing Distinct count of Dkey (y-axis, 0K to 60K) by Age (x-axis, 1 to 114).

Payer Category:
- Commercial
- Medicaid
- Medicare
- Other-
- Out of State Medicaid
- Uninsured & Self Pay
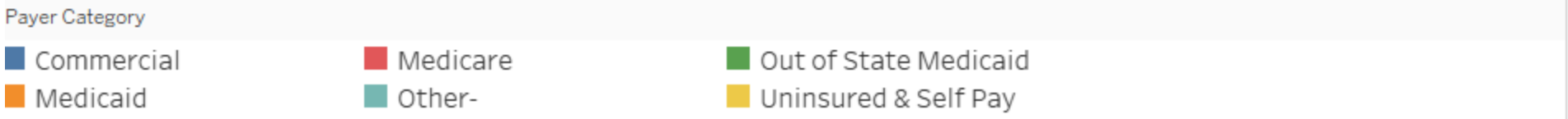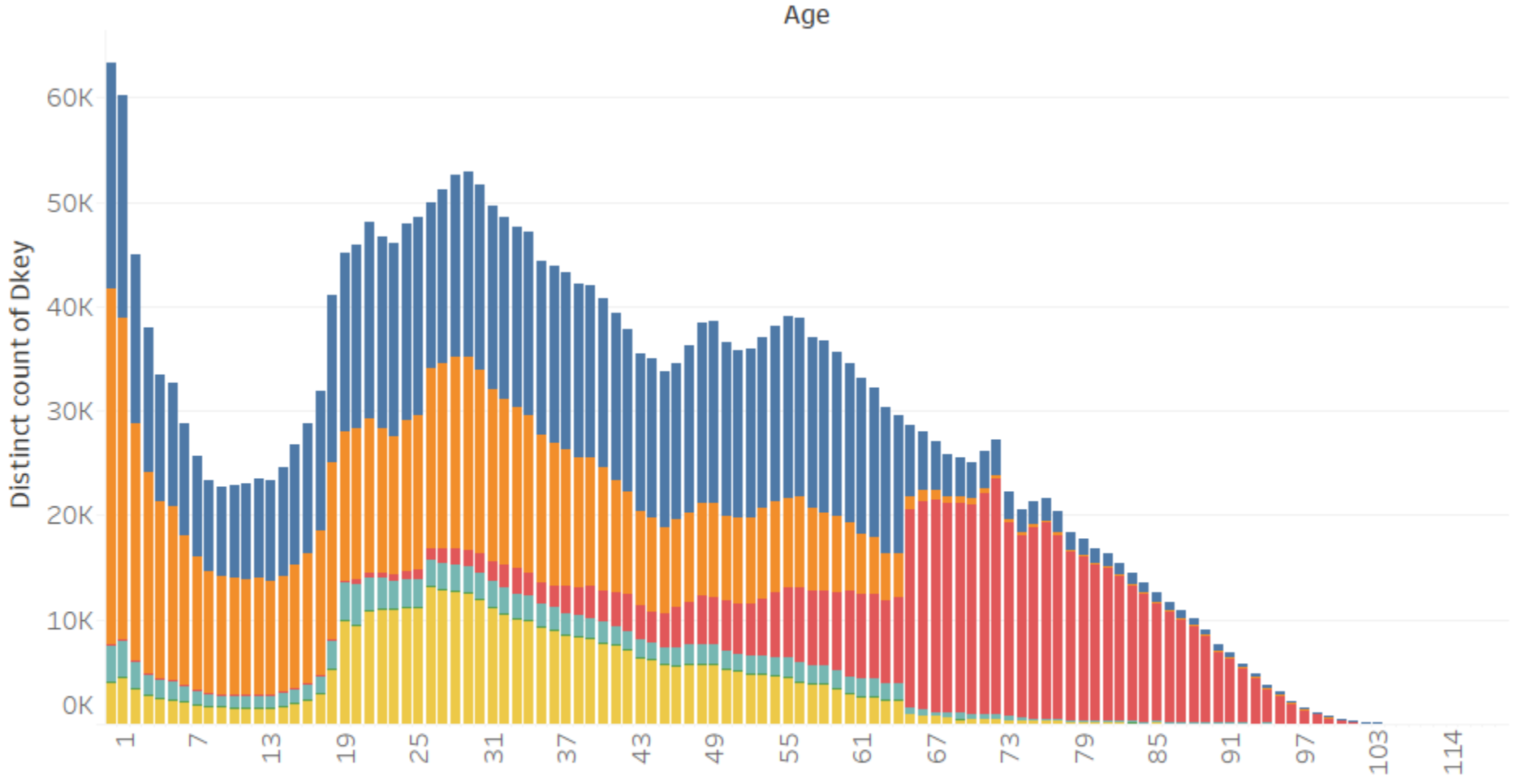
# ED Visits by Race and Payer

| Race Desc | Payer Category Commercial | Medicaid | Medicare | Grand Total |
|---|---|---|---|---|
| American Indian | 1,623 (0.1%) | 1,130 (0.0%) | 782 (0.0%) | 3,535 (0.1%) |
| Asian | 35,016 (1.4%) | 7,229 (0.3%) | 9,423 (0.4%) | 51,668 (2.1%) |
| Black | 275,987 (11.0%) | 390,595 (15.6%) | 165,050 (6.6%) | 831,632 (33.3%) |
| Hispanic - Black | 874 (0.0%) | 1,390 (0.1%) | 257 (0.0%) | 2,521 (0.1%) |
| Hispanic - White | 28,323 (1.1%) | 10,590 (0.4%) | 3,757 (0.2%) | 42,670 (1.7%) |
| Other, Specified | 89,680 (3.6%) | 51,075 (2.0%) | 11,667 (0.5%) | 152,422 (6.1%) |
| Unknown, Not Recorded | 23,946 (1.0%) | 18,424 (0.7%) | 6,502 (0.3%) | 48,872 (2.0%) |
| White | 604,581 (24.2%) | 349,177 (14.0%) | 413,719 (16.5%) | 1,367,477 (54.7%) |
| Grand Total | 1,060,030 (42.4%) | 829,610 (33.2%) | 611,157 (24.4%) | 2,500,797 (100.0%) |

# ED Visits by Top 20 Primary Diagnosis and Payer



**Dxdesc =**

| Diagnosis | ED Visits |
|---|---|
| ACUTE UPPER RESPIRATORY INFECTION, UNSPECIFIED | |
| OTHER CHEST PAIN | |
| HEADACHE | |
| URINARY TRACT INFECTION, SITE NOT SPECIFIED | |
| NAUSEA WITH VOMITING, UNSPECIFIED | |
| CHEST PAIN, UNSPECIFIED | |
| ACUTE PHARYNGITIS, UNSPECIFIED | |
| UNSPECIFIED ABDOMINAL PAIN | |
| LOW BACK PAIN | |
| VIRAL INFECTION, UNSPECIFIED | |
| NONINFECTIVE GASTROENTERITIS AND COLITIS, UNSPECIFI.. | |
| ACUTE BRONCHITIS, UNSPECIFIED | |
| SYNCOPE AND COLLAPSE | |
| FLU DUE TO OTH IDENT INFLUENZA VIRUS W OTH RESP MANI.. | |
| DIZZINESS AND GIDDINESS | |
| COUGH | |
| UNSPECIFIED INJURY OF HEAD, INITIAL ENCOUNTER | |
| CONSTIPATION, UNSPECIFIED | |
| FEVER, UNSPECIFIED | |
| ESSENTIAL (PRIMARY) HYPERTENSION | |

ED Visits axis: 0K, 2K, 4K, 6K, 8K, 10K, 12K

**ED Visits =**

Payer Category

■ Medicare  ■ Medicaid  ■ Commercial

# ED Visits by Top 20 Chronic Conditions and Payer



**Ccwdesc**

| Condition | |
|---|---|
| HYPERTENSION | |
| TOBACCO USE | |
| DIABETES | |
| HYPERLIPIDEMIA | |
| ASTHMA | |
| CHRONIC KIDNEY DISEASE | |
| ISCHEMIC HEART DISEASE | |
| ANXIETY DISORDERS | |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND BRONCHIECTASIS | |
| FIBROMYALGIA CHRONIC PAIN AND FATIGUE | |
| DEPRESSION | |
| DEPRESSIVE DISORDERS | |
| HEART FAILURE | |
| ACQUIRED HYPOTHYROIDISM | |
| OBESITY | |
| RA/OA (RHEUMATOID ARTHRITIS/OSTEOARTHRITIS) | |
| ANEMIA | |
| MIGRAINE AND CHRONIC HEADACHE | |
| ALCOHOL USE DISORDERS | |

0K 100K 200K 300K 400K 500K 600K 700K

**ED Visits**

Payer Category

■ Medicare  ■ Medicaid  ■ Commercial

# ED Visits by Top 20 Chronic Conditions and Payer
*broken down by % of total*



| Ccwdesc | Medicare | Medicaid | Commercial |
|---|---|---|---|
| HYPERTENSION | 52.36% | 18.14% | 29.50% |
| TOBACCO USE | 20.81% | 46.74% | 32.45% |
| DIABETES | 52.32% | 19.70% | 27.98% |
| HYPERLIPIDEMIA | 59.95% | 11.02% | 29.03% |
| ASTHMA | 18.71% | 46.40% | 34.90% |
| CHRONIC KIDNEY DISEASE | 58.36% | 15.47% | 26.17% |
| ISCHEMIC HEART DISEASE | 68.10% | 12.15% | 19.75% |
| ANXIETY DISORDERS | 31.18% | 33.94% | 34.87% |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND BRONCHIECTASIS | 61.14% | 21.27% | 17.59% |
| FIBROMYALGIA CHRONIC PAIN AND FATIGUE | 39.94% | 28.85% | 31.21% |
| DEPRESSION | 33.48% | 35.44% | 31.08% |
| DEPRESSIVE DISORDERS | 33.59% | 35.34% | 31.07% |
| HEART FAILURE | 69.82% | 14.67% | 15.51% |
| ACQUIRED HYPOTHYROIDISM | 56.68% | 12.77% | 30.55% |
| OBESITY | 32.24% | 30.74% | 37.03% |
| RA/OA (RHEUMATOID ARTHRITIS/OSTEOARTHRITIS) | 59.49% | 15.62% | 24.89% |
| ANEMIA | 45.20% | 25.57% | 29.22% |
| MIGRAINE AND CHRONIC HEADACHE | 18.32% | 31.75% | 49.92% |
| ALCOHOL USE DISORDERS | 18.78% | 41.27% | 39.95% |

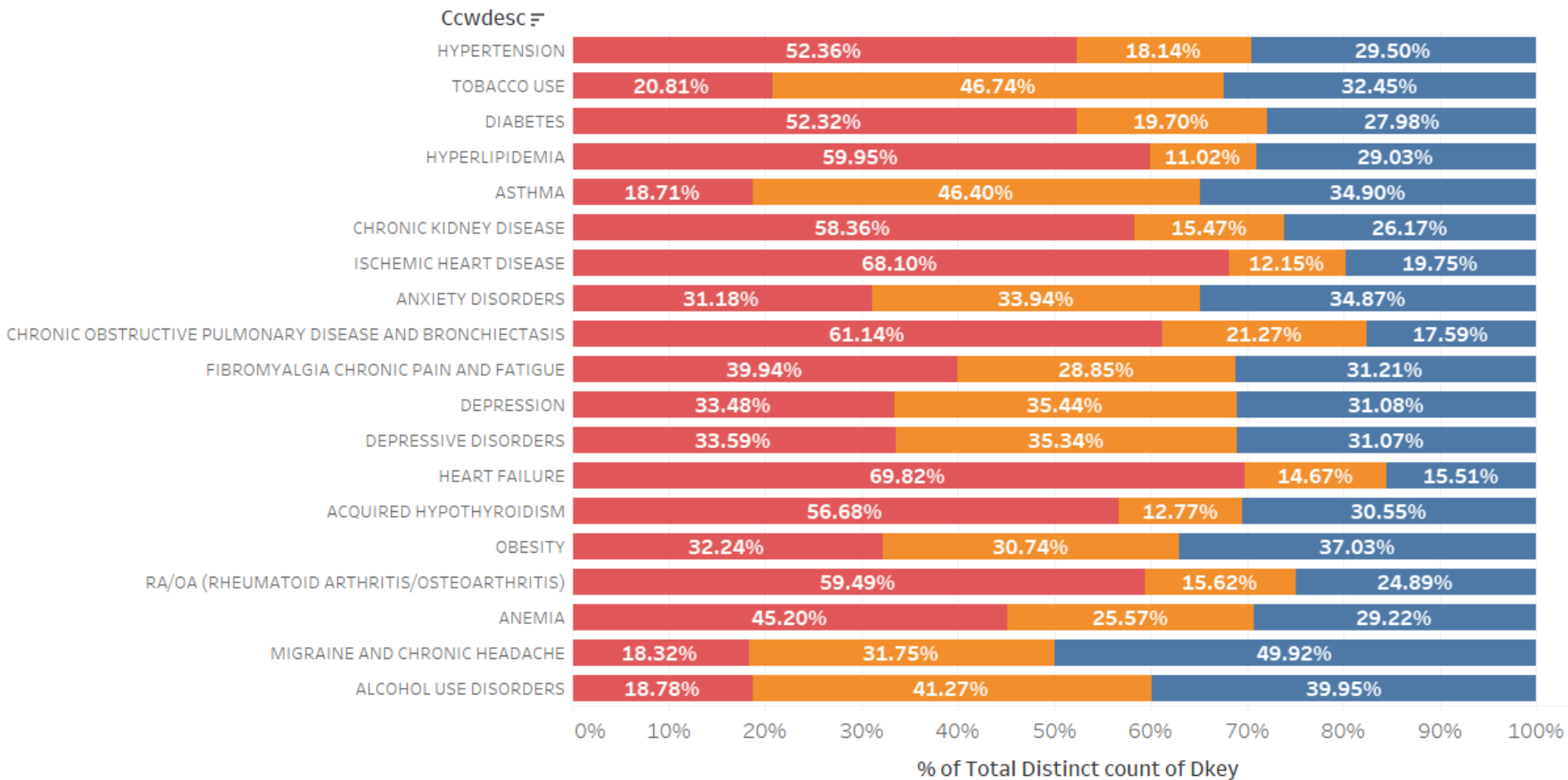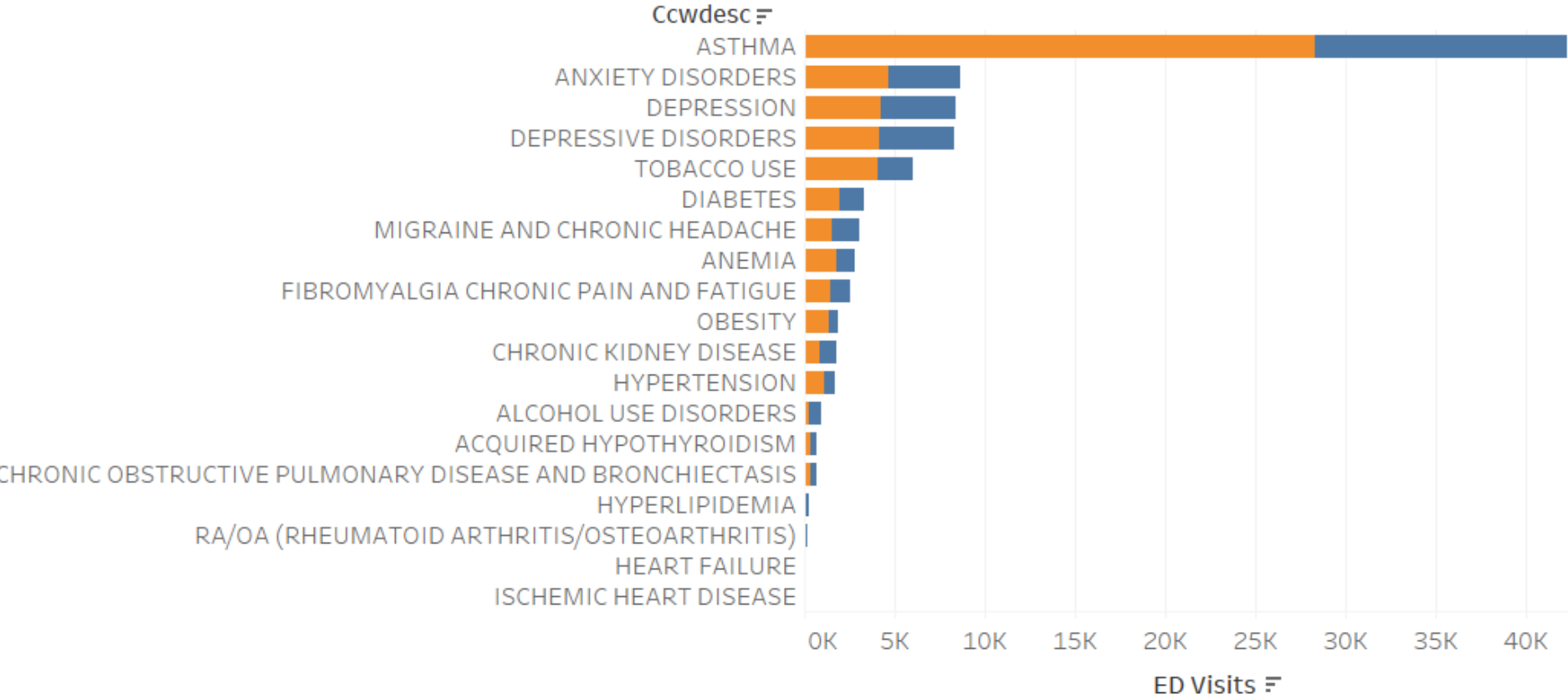% of Total Distinct count of Dkey

Payer Category
■ Medicare  ■ Medicaid  ■ Commercial

# ED Visits by Top 20 Chronic Conditions and Payer

*Broken down by ages 0 to 18*



Ccwdesc ⊒

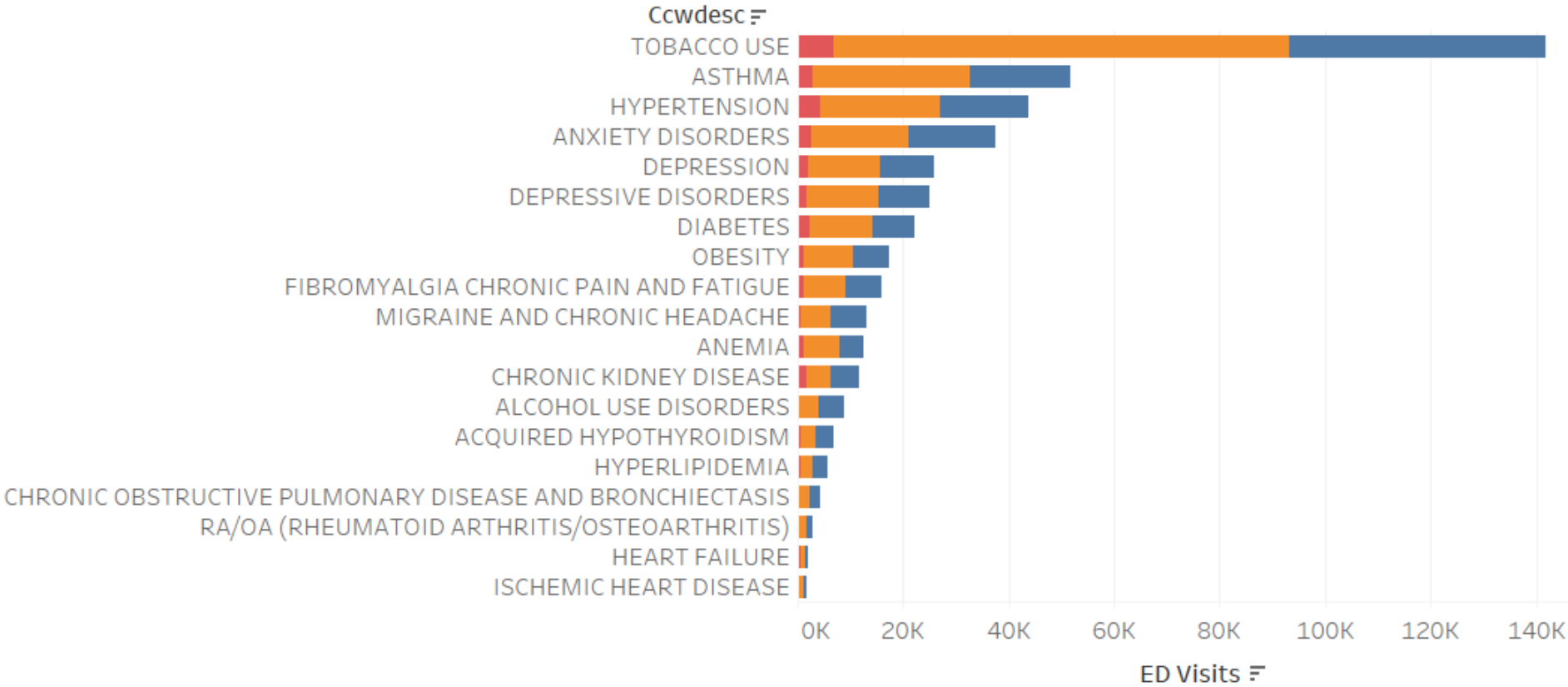| Condition | |
|---|---|
| ASTHMA | |
| ANXIETY DISORDERS | |
| DEPRESSION | |
| DEPRESSIVE DISORDERS | |
| TOBACCO USE | |
| DIABETES | |
| MIGRAINE AND CHRONIC HEADACHE | |
| ANEMIA | |
| FIBROMYALGIA CHRONIC PAIN AND FATIGUE | |
| OBESITY | |
| CHRONIC KIDNEY DISEASE | |
| HYPERTENSION | |
| ALCOHOL USE DISORDERS | |
| ACQUIRED HYPOTHYROIDISM | |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND BRONCHIECTASIS | |
| HYPERLIPIDEMIA | |
| RA/OA (RHEUMATOID ARTHRITIS/OSTEOARTHRITIS) | |
| HEART FAILURE | |
| ISCHEMIC HEART DISEASE | |

0K   5K   10K   15K   20K   25K   30K   35K   40K

ED Visits ⊒

Payer Category

■ Medicare   ■ Medicaid   ■ Commercial

# ED Visits by Top 20 Chronic Conditions and Payer

*Broken down by ages 19 to 35*



Ccwdesc ⊟

| Condition | |
|---|---|
| TOBACCO USE | |
| ASTHMA | |
| HYPERTENSION | |
| ANXIETY DISORDERS | |
| DEPRESSION | |
| DEPRESSIVE DISORDERS | |
| DIABETES | |
| OBESITY | |
| FIBROMYALGIA CHRONIC PAIN AND FATIGUE | |
| MIGRAINE AND CHRONIC HEADACHE | |
| ANEMIA | |
| CHRONIC KIDNEY DISEASE | |
| ALCOHOL USE DISORDERS | |
| ACQUIRED HYPOTHYROIDISM | |
| HYPERLIPIDEMIA | |
| CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND BRONCHIECTASIS | |
| RA/OA (RHEUMATOID ARTHRITIS/OSTEOARTHRITIS) | |
| HEART FAILURE | |
| ISCHEMIC HEART DISEASE | |

0K   20K   40K   60K   80K   100K   120K   140K

ED Visits ⊟

Payer Category

■ Medicare   ■ Medicaid   ■ Commercial

# ED Visits by ZIP Code



CNTD(Dkey)

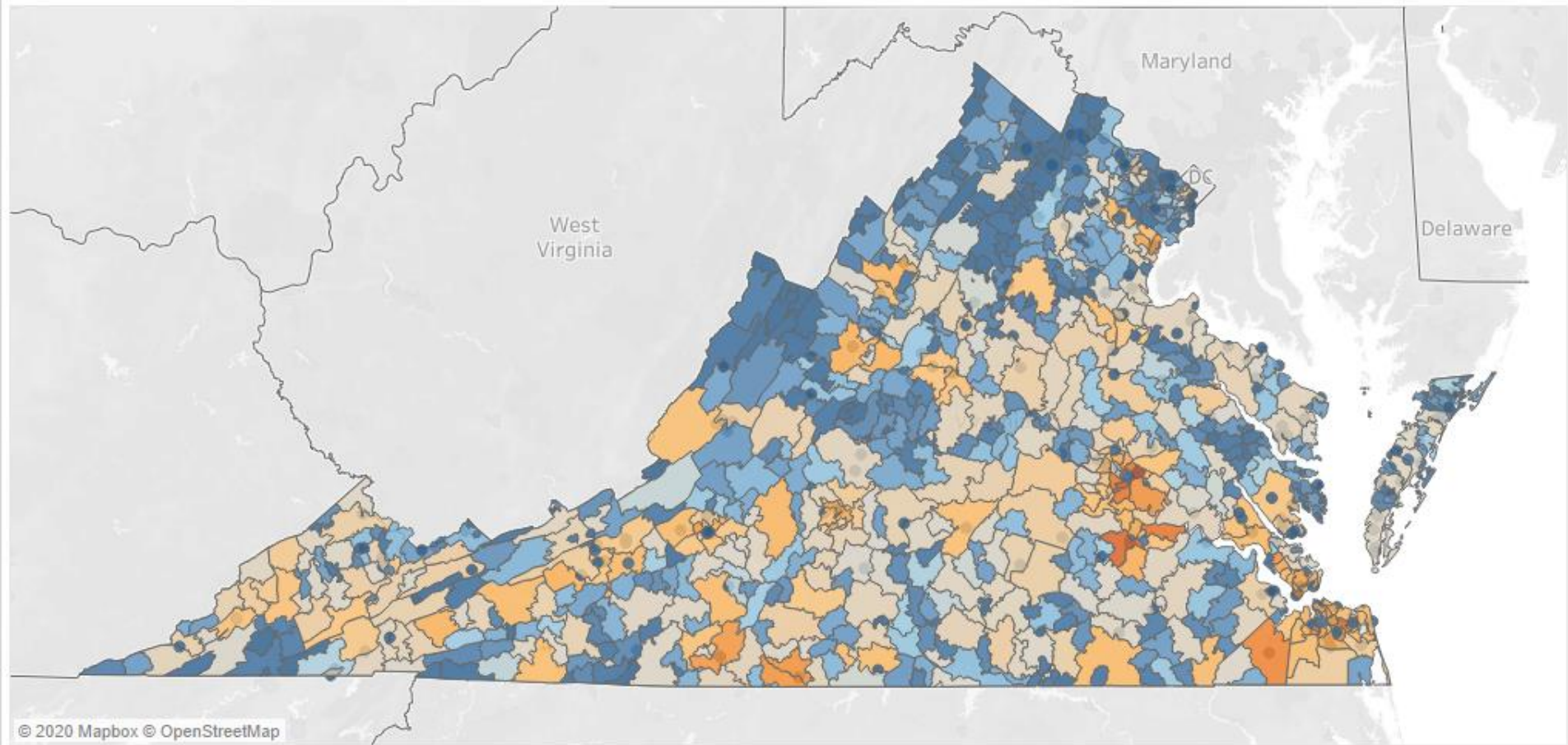1                                                                    42,527

# ED Visits by Zip Code and Payer
## *Medicaid*



CNTD(Dkey)

1                                                                                    22,409

© 2020 Mapbox © OpenStreetMap

# Statewide 30-day Readmissions Trends

# 30-Day Readmissions by Payer (3-years)

|  | Commercial | Medicaid | Medicare | Other Ins | Uninsured | Grand Total |
|---|---|---|---|---|---|---|
| **Eligible Volume** | 322,670 | 95,025 | 741,776 | 30,050 | 67,872 | 1,257,393 |
| **30-day Readmissions** | 26,090 | 13,099 | 97,438 | 2,602 | 5,495 | 144,724 |
| **Raw Readmission Rate** | 8.09% | 13.78% | 13.14% | 8.66% | 8.10% | 11.51% |

# 30-Day Readmissions by Top Readmission DRGs (3-years)

## All Payers

| DRG # | Readmission DRG | Readm30 |
|---|---|---|
| 871 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC | 10,630 |
| 291 | HEART FAILURE AND SHOCK WITH MCC | 9,995 |
| 189 | PULMONARY EDEMA AND RESPIRATORY FAILURE | 3,473 |
| 683 | RENAL FAILURE WITH CC | 2,921 |
| 872 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOUT MCC | 2,881 |

# 30-Day Readmissions by Top Readmission DRGs (3-years)

## Medicare

| DRG # | Readmission DRG | Readm30 |
|---|---|---|
| 871 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC | 8,018 |
| 291 | HEART FAILURE AND SHOCK WITH MCC | 7,977 |
| 189 | PULMONARY EDEMA AND RESPIRATORY FAILURE | 2,586 |
| 683 | RENAL FAILURE WITH CC | 2,172 |
| 190 | CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH MCC | 2,072 |

## Medicaid

| DRG # | Readmission DRG | Readm30 |
|---|---|---|
| 871 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC | 810 |
| 291 | HEART FAILURE AND SHOCK WITH MCC | 687 |
| 638 | DIABETES WITH CC | 400 |
| 812 | RED BLOOD CELL DISORDERS WITHOUT MCC | 381 |
| 189 | PULMONARY EDEMA AND RESPIRATORY FAILURE | 343 |

## Commercial

| DRG # | Readmission DRG | Readm30 |
|---|---|---|
| 871 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC | 1,415 |
| 291 | HEART FAILURE AND SHOCK WITH MCC | 1,033 |
| 392 | ESOPHAGITIS, GASTROENTERISTIS AND MISCELLANEOUS DIGESTIVE D... | 685 |
| 872 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOU... | 618 |
| 683 | RENAL FAILURE WITH CC | 393 |

## Uninsured

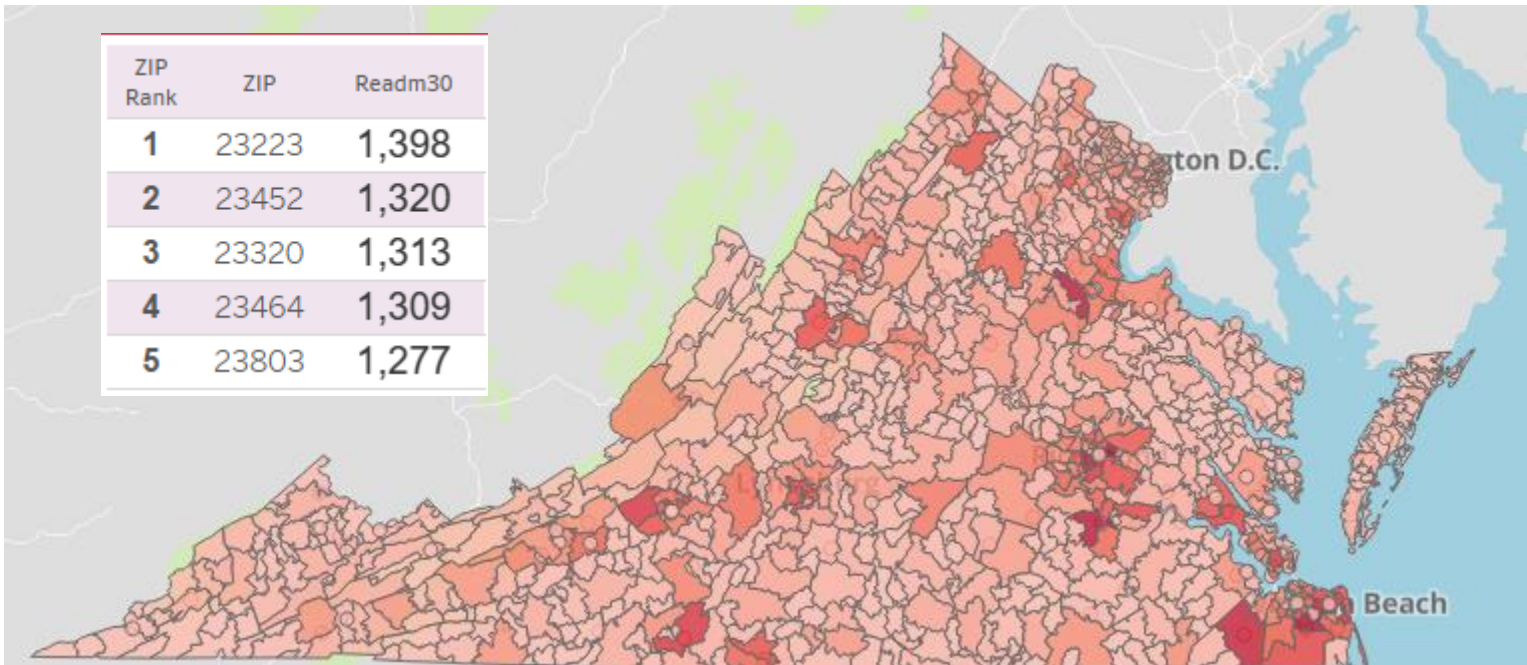| DRG # | Readmission DRG | Readm30 |
|---|---|---|
| 871 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC | 227 |
| 638 | DIABETES WITH CC | 225 |
| 291 | HEART FAILURE AND SHOCK WITH MCC | 194 |
| 392 | ESOPHAGITIS, GASTROENTERISTIS AND MISCELLANEOUS DIGESTIVE D... | 143 |
| 439 | DISORDERS OF PANCREAS EXCEPT MALIGNANCY WITH CC | 118 |

## Other

| DRG # | Readmission DRG | Readm30 |
|---|---|---|
| 871 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC | 160 |
| 291 | HEART FAILURE AND SHOCK WITH MCC | 104 |
| 872 | SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOU... | 68 |
| 392 | ESOPHAGITIS, GASTROENTERISTIS AND MISCELLANEOUS DIGESTIVE D... | 66 |
| 189 | PULMONARY EDEMA AND RESPIRATORY FAILURE | 52 |

# 30-Day Readmissions by Patient ZIP (3-years)

## All Payers



| ZIP Rank | ZIP | Readm30 |
|---|---|---|
| 1 | 23223 | 1,398 |
| 2 | 23452 | 1,320 |
| 3 | 23320 | 1,313 |
| 4 | 23464 | 1,309 |
| 5 | 23803 | 1,277 |

# 30-Day Readmissions by Patient ZIP (3-years)

## Medicaid



| ZIP Rank | ZIP | Readm30 |
|---|---|---|
| 1 | 23223 | 324 |
| 2 | 23224 | 259 |
| 3 | 23803 | 234 |
| 4 | 23222 | 187 |
| 5 | 23607 | 173 |
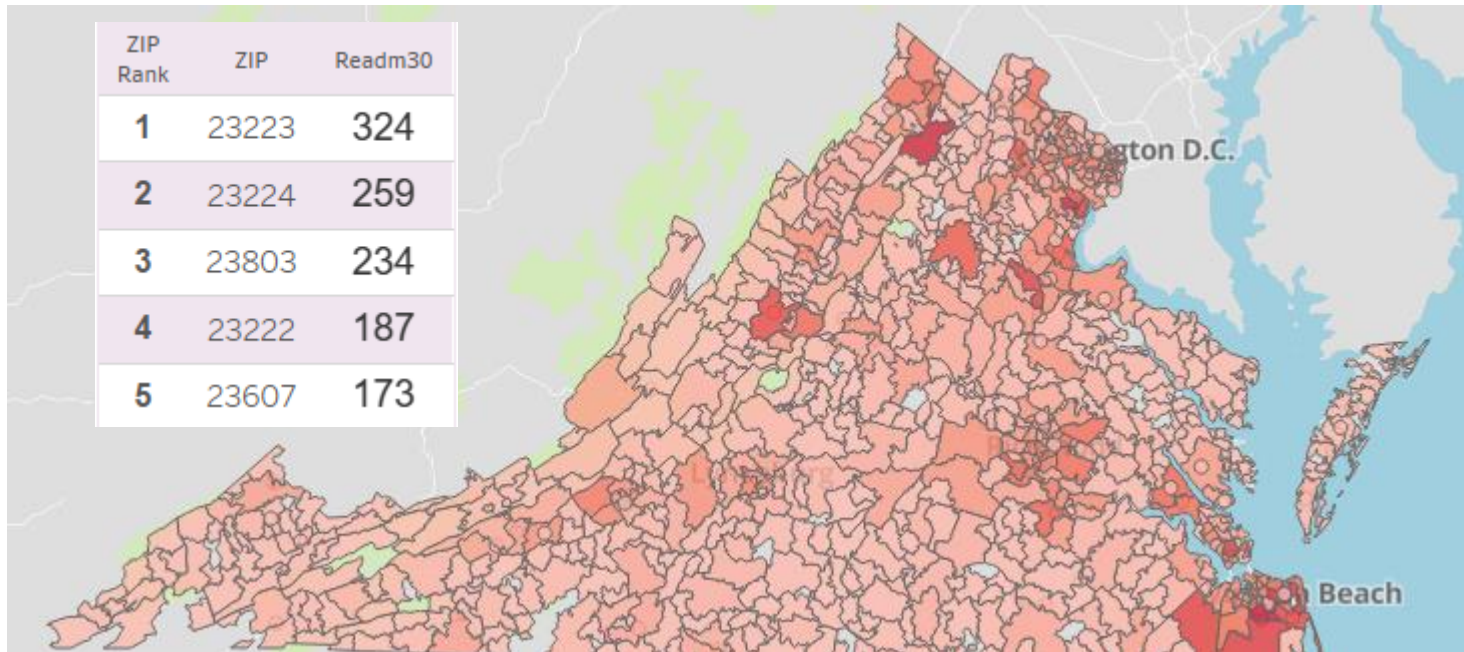
# Questions for Group Discussion

- ✓ What features of the analyses presented today stand out to you as most/least informative?
- ✓ What other data/information would be helpful to further inform this discussion?
- ✓ Given the data shared today, what types of health care or member engagement efforts seem promising to influence use of appropriate levels of care for members with diagnoses driving ER use and hospital readmissions?
- ✓ What questions are important to answer as we turn to a discussion of care coordination in the next meeting?
- ✓ Are there any policy options that appear appropriate to raise at this point?

# Homework

✓ The purpose of meeting 2 is to establish a baseline understanding of **care coordination activities occurring across the health care system**.

✓ Designated workgroup members (i.e. Hospitals/VHHA, MCOs/VAHP, Emergency Physicians, and Primary Care) should prepare presentations related to the care coordination processes/activities from the point of view of their respective stakeholder groups for both emergency department utilization and hospital readmissions (addressing items i, ii, and v of the workgroup mandate). Below are questions to consider in crafting your presentation:

  ▪ How does your group identify people for care coordination?

  ▪ What are the key responsibilities for your group's care coordinators?

  ▪ How would you describe your group's role in the care coordination and discharge planning process?

  ▪ What is the timeframe for care coordination and/or discharge planning initiation? How long do patients receive support?

  ▪ How do your care coordinators and discharge planners coordinate with others across the health system?

  ▪ How does your group promote appropriate sites of care for patients?

  ▪ What patient/member and family support do your care coordinators provide related to ER utilization, discharge planning, and seeking appropriate sites of care?

  ▪ How do you know the patient/member support is successful?

  ▪ Any additional information you wish to share with the group on this topic.

✓ Please note that presentations should be approximately 20 minutes in length and must be submitted to Rusty.walker@dmas.Virginia.gov by November 13, 2020.

# Public Comment

Public comments should be submitted to Rusty Walker ([rusty.walker@dmas.virginia.gov](mailto:rusty.walker@dmas.virginia.gov)) and will be collected for distribution to workgroup members.

# Next Meeting and Timelines

✓ **November 19, 2020**, 3:00-5:00 p.m.

✓ Send slides on care coordination to DMAS (rusty.walker@dmas.virginia.gov) by **November 13, 2020**.

  ▪ Time limit of ~20 minutes per stakeholder group.