Analysis of Potentially Preventable Healthcare Events of Florida Medicaid Enrollees 2016-2017 and 2017-2018

Quarterly Statewide Medicaid Managed Care Report

Business Intelligence Unit
Medicaid Data Analytics

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Agency for Health Care Administration

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Executive Summary

Background

The Agency for Health Care Administration oversees the provision of healthcare for about 3.8 million low-income children, adults, seniors, and individuals with disabilities who would otherwise have limited or no health insurance. Since 2014, the Agency has contracted for the provision of medical services through the Statewide Medicaid Managed Care (SMMC) program. Most recipients eligible for Medicaid are required to enroll in an SMMC Managed Medical Assistance (MMA) plan to receive medical care. Managed care plans contract with providers for healthcare services, including preventive healthcare, and are required to enact procedures to promote disease management and report on quality metrics related to health outcomes. The Agency continually seeks to improve access to quality healthcare services for Medicaid recipients and identify opportunities for healthcare efficiencies that do not compromise quality of care.

One such opportunity lies in identifying and reducing potentially preventable healthcare events (PPEs). PPEs are healthcare services including hospital admissions, readmissions, and emergency department visits that might have been prevented with better access to primary care, improved medication management, or better coordination of care[1].

This report examines three types of PPEs:

- Potentially Preventable Hospital Admissions (PPAs);
- Potentially Preventable Hospital Readmissions (PPRs); and
- Potentially Preventable Emergency Department Visits (PPVs).

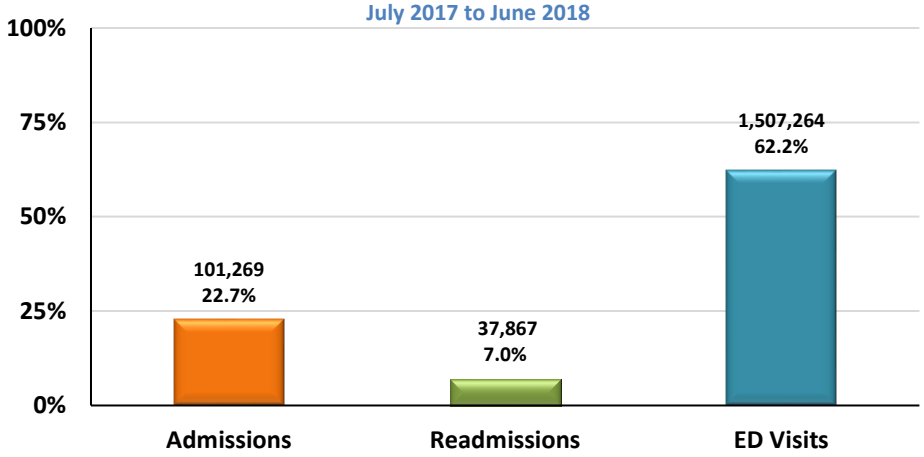
This report uses data from July 2017 to June 2018, the fourth year of the MMA program, to analyze PPEs. For comparison, the report includes data from July 2016 to June 2017, the third year of the MMA program, and displays risk-adjusted rates, the top ten conditions contributing to each PPE, and the reasons PPEs are considered potentially preventable. Risk-adjusted rates and the top ten conditions contributing to PPEs are also broken out by plan, region, age, and eligibility group. Differences in the results between the third and fourth year of the MMA program are also shown. Rounding may affect totals throughout this report.

[1] The Agency has contract requirements in place to prevent overpayment for hospital admissions such as case management (Model contract, Attachment II, Section V.E.1.a) and Event Notification Service (ENS) (Model contract, Attachment II, Exhibit II-A, Section VI.A.10.c). The Agency also engages in post payment audits to identify and recoup overpayments (Model contract, Attachment II, Section II.C.12).

Total Events and Percentage of Potentially Preventable Events

Results show over 22 percent of all hospital admissions, seven percent of all hospital readmissions, and over 62 percent of all emergency department visits have some potential to be prevented by managing healthcare.

Percentage and Number of Each Event Identified as Potentially Preventable, July 2017 to June 2018

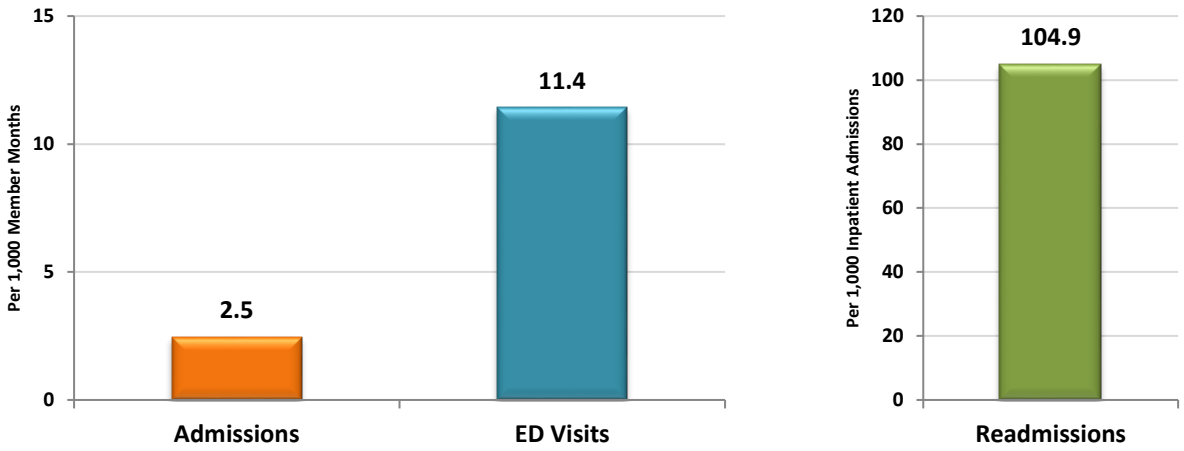


Rates of Potentially Preventable Events

The chart above shows the percentage of PPEs to the total number of events for each category. The remaining charts show the PPE rates. Risk-adjusted PPA and PPV rates are the number of potentially preventable admissions and emergency department visits for every 1,000 member months of Medicaid enrollment. Risk-adjusted PPR rates are the number of potentially preventable readmissions for every 1,000 hospital admissions.

Statewide risk-adjusted rates indicated that for every 1,000 member months, three hospital admissions and 11 emergency department visits had some potential to be prevented. For every 1,000 hospital admissions, 105 readmissions had some potential to be prevented.*

Risk-adjusted Rates of Potentially Preventable Events, July 2017 to June 2018



*See the technical appendix for changes to the methodology for identifying potentially preventable emergency department visits as compared to prior issues of this report.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

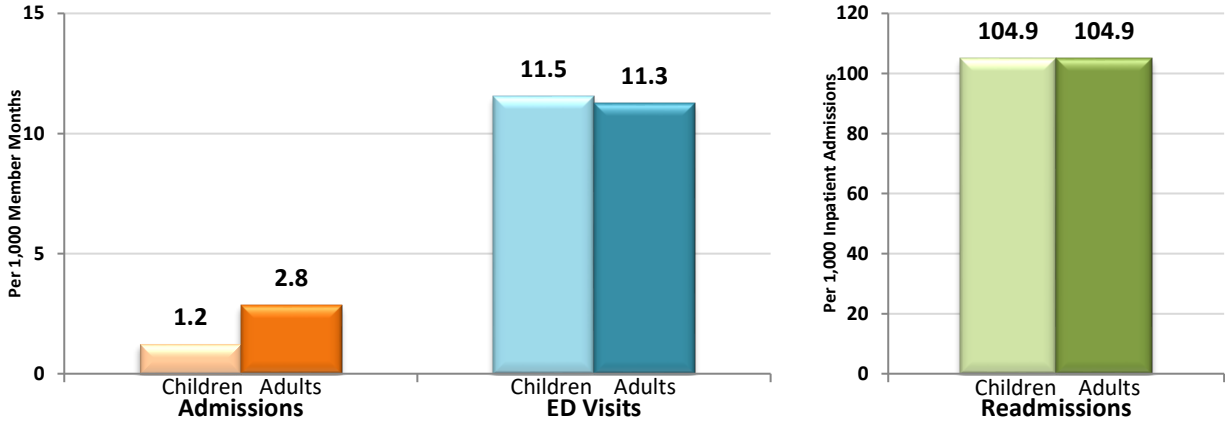
Risk-Adjusted Rates

Risk-adjusted rates allow different groups such as plans, regions, and eligibility groups to be compared by adjusting for differences in the disease burden of each group's population. Risk adjustment for PPAs and PPVs also adjusts for differences in cost and resource use among hospital admissions and among emergency department visits by using national weights that assess the relative value of each event.

By Age

Adults (21 years of age and older) have higher rates of PPAs and slightly lower rates of PPVs than children. The rates of PPRs are the same for children and adults due to risk-adjustments.

Risk-adjusted Rates of Potentially Preventable Events for Children and Adults, July 2017 to June 2018

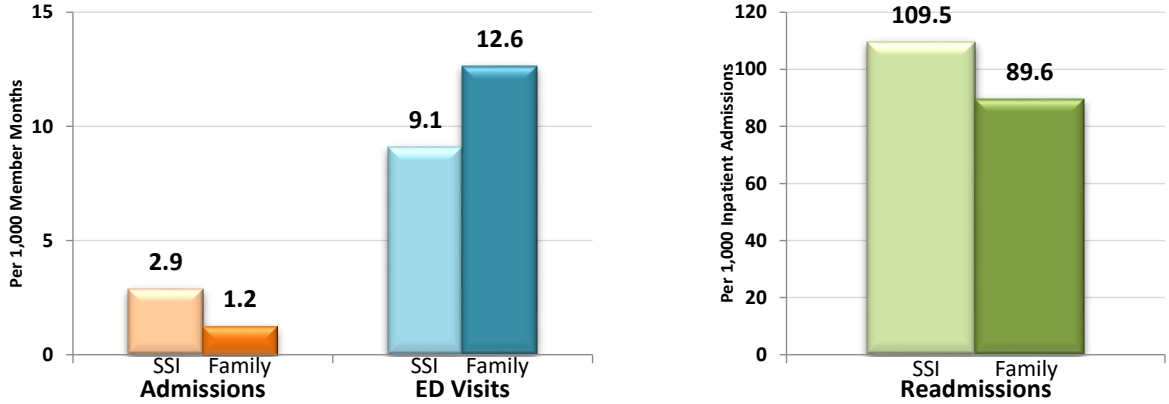


By Eligibility Category

The Medicaid population is divided into two main types of eligibility groups. The SSI–Related eligibility group consists of individuals who meet the age, income, and/or disability standards for Supplemental Security Income (SSI). The Family-Related eligibility group consists of children and families who meet state Medicaid eligibility standards. The largest percentage of Medicaid recipients are in the Family-Related group.

Recipients in a Supplemental Security Income (SSI)-Related eligibility category have higher rates of PPAs and PPRs, and lower PPV rates, than recipients in a Family-Related eligibility category.

Risk Adjusted Rates of Potentially Preventable Events for Recipients in a Family-Related Eligibility Group and Recipients in an SSI-Related Eligibility Group, July 2017 to June 2018



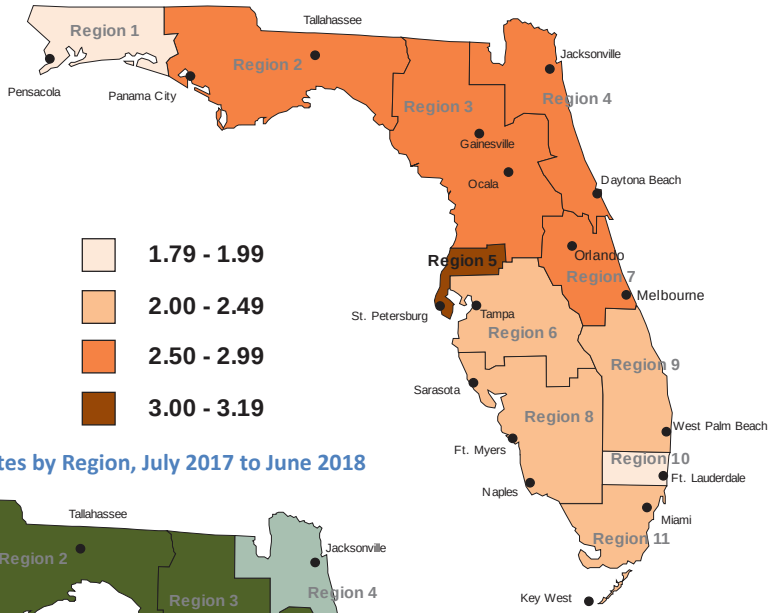
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

By Region

The Agency for Health Care Administration delivers Medicaid care on a regional basis, with health plans being procured by region.

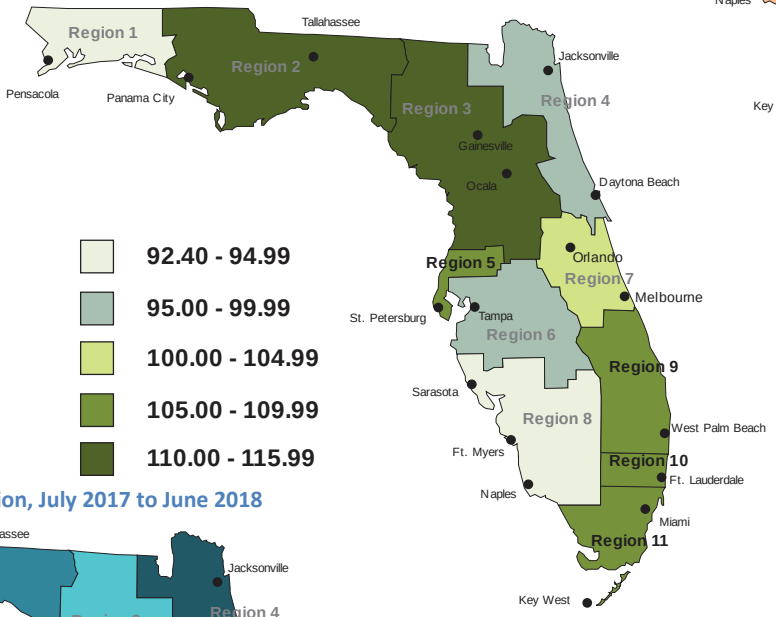
Region 5 had the highest rate of PPAs at 3.1 per 1,000 enrollee months.

Risk-adjusted PPA Rates by Region, July 2017 to June 2018

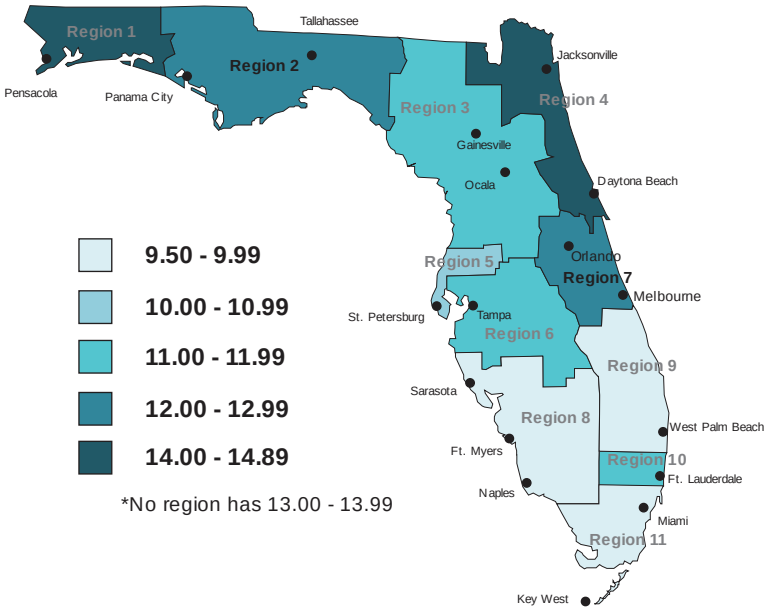


Region 2 had the highest rate of PPRs at 115.7 per 1,000 hospital admissions.

Risk-adjusted PPR Rates by Region, July 2017 to June 2018



Risk-adjusted PPV Rates by Region, July 2017 to June 2018



*No region has 13.00 - 13.99

Region 4 had the highest rate of PPVs at 14.8 per 1,000 enrollee months.

*See the technical appendix for changes to the methodology for identifying potentially preventable emergency department visits as compared to prior issues of this report.

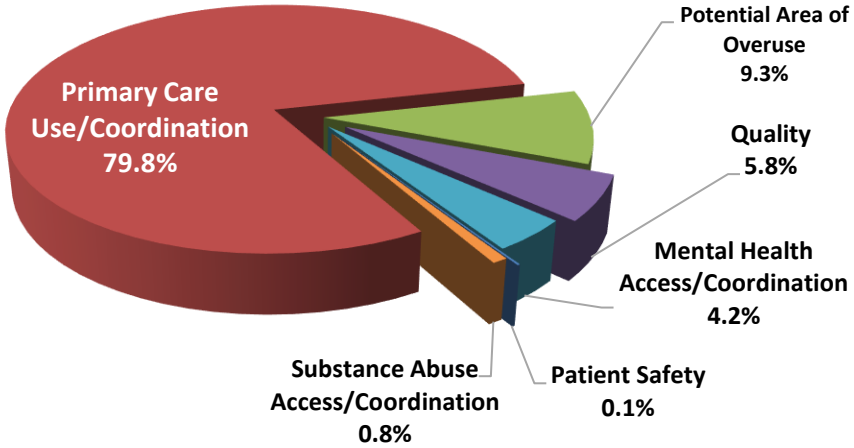
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Potentially Preventable Reasons

Reasons identify the rationale for defining some admissions, readmissions, and emergency department visits as potentially preventable. The rankings of PPA and PPV reasons are based on the most numerous and costliest conditions associated with each reason. PPR reasons are ranked based on the most numerous conditions associated with each reason.

Conditions that might be managed through outpatient care or treated in a primary care setting were the reason almost 80 percent of all PPAs were considered potentially preventable.

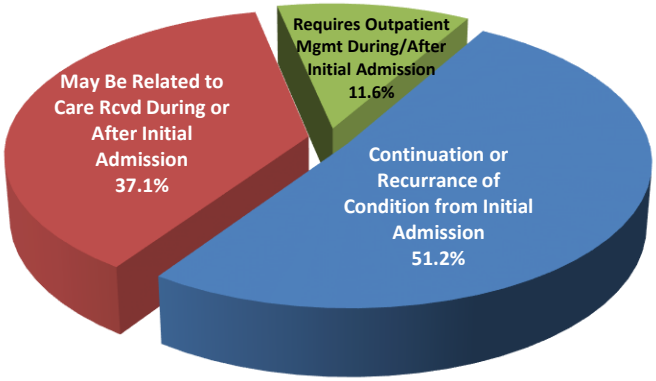
Reasons PPAs were Considered Potentially Preventable, July 2017 to June 2018



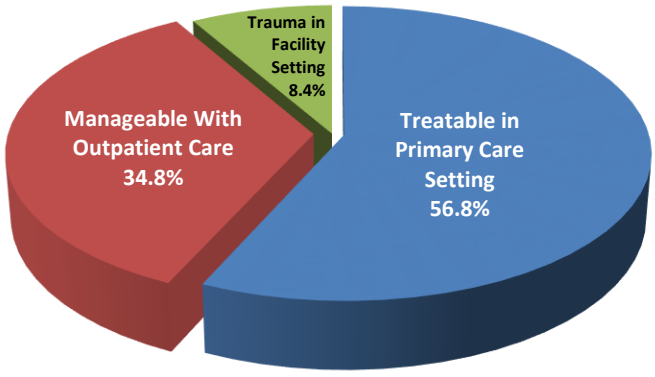
Over half (51%) of all PPRs were considered potentially preventable because they involved a continuation or recurrence of a condition from the initial hospital admission. Another 37 percent of PPRs were considered potentially preventable because they involved a condition that might have been related to the care received during or after the initial hospitalization.

More than half (57%) of all PPVs were considered potentially preventable because they were Emergency Department (ED) visits for conditions that might be treated in a primary care setting. Another 35 percent of PPVs were considered potentially preventable because they were ED visits for conditions that might be managed through outpatient care. Over eight percent resulted from trauma while residing in a facility.

Reasons PPRs were Considered Potentially Preventable, July 2017 to June 2018



Reasons PPVs were Considered Potentially Preventable, July 2017 to June 2018



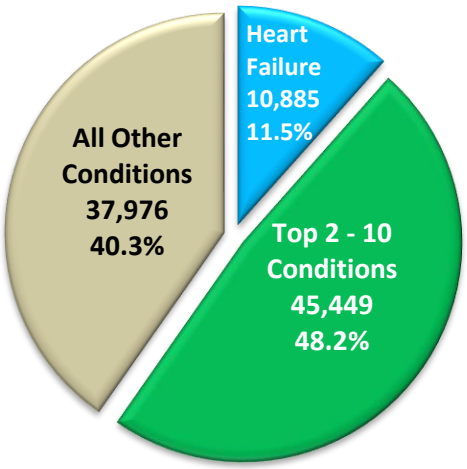
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Results for the top conditions contributing to PPAs and PPVs identify the most numerous and costliest conditions. For PPRs, the top conditions contributing to PPRs identify the most numerous conditions.

Potentially Preventable Conditions

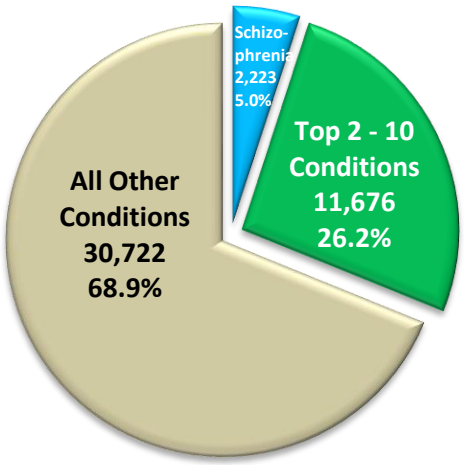
The top condition contributing to PPAs statewide during the review period was heart failure. Heart failure accounted for 12 percent of all PPAs in the state. The top ten conditions accounted for 60 percent of all PPAs.

Top Conditions Contributing to PPAs Statewide, July 2017 to June 2018



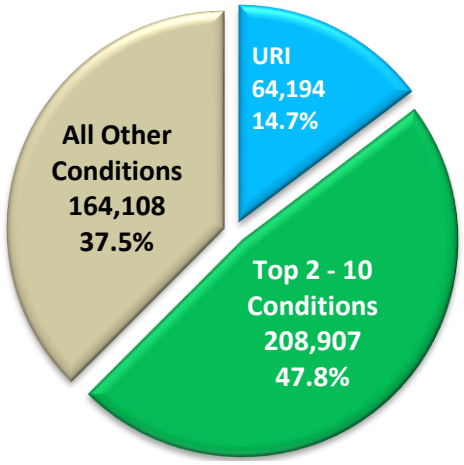
The top condition contributing to PPRs statewide, schizophrenia, accounted for 5 percent of all PPRs. The top ten conditions accounted for 31 percent of PPRs.

Top Conditions Contributing to a PPR Statewide, July 2017 to June 2018



Upper respiratory infections (URI) were the most common condition leading to PPVs accounting for 15 percent of all PPVs. The top ten conditions accounted for 63 percent of all PPVs.

Top Conditions Contributing to a PPV Statewide, July 2017 to June 2018

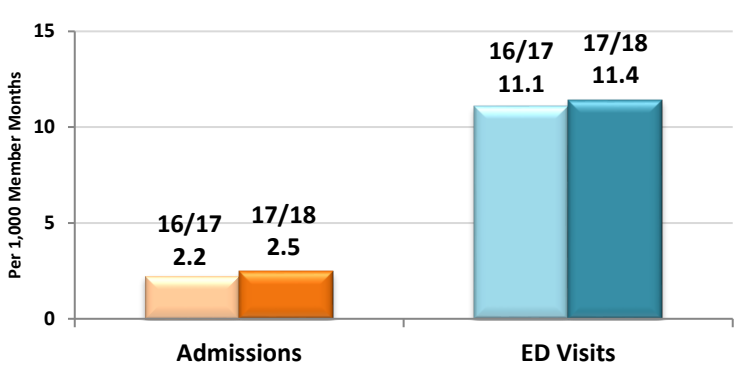


Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

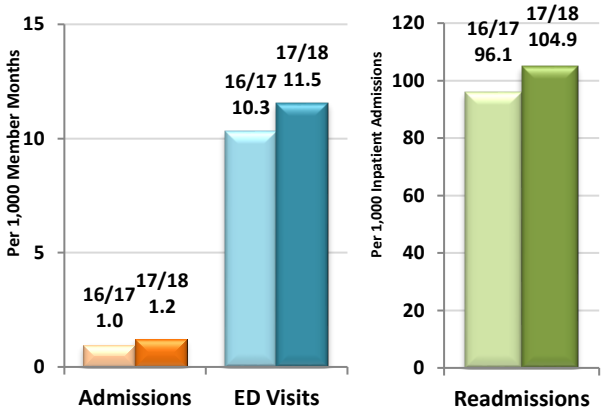
Changes in Risk-Adjusted Rates From FY16/17 to FY17/18

This section compares PPEs from the third and fourth years of the MMA program. See the technical appendix (Appendix 1: Technical Specifications) for changes to the methodology for identifying potentially preventable ED visits as compared to prior issues of this report.

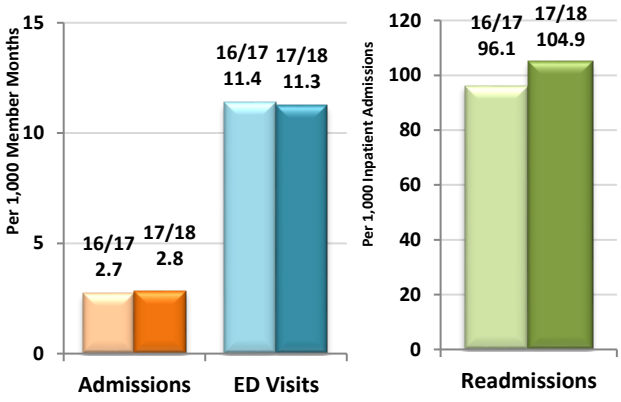
Statewide Risk-adjusted Rates from FY2016/2017 to FY2017/2018



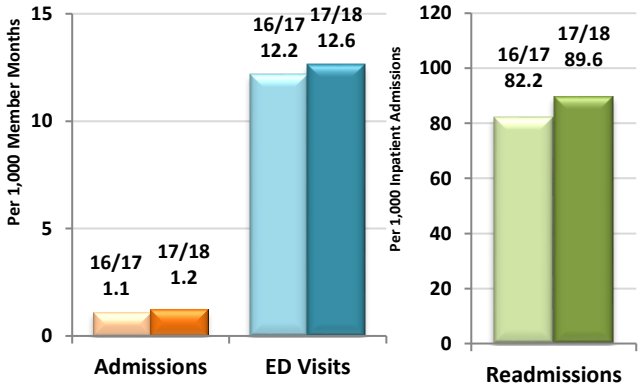
Risk-adjusted Rates for Children from FY2016/2017 to FY2017/2018



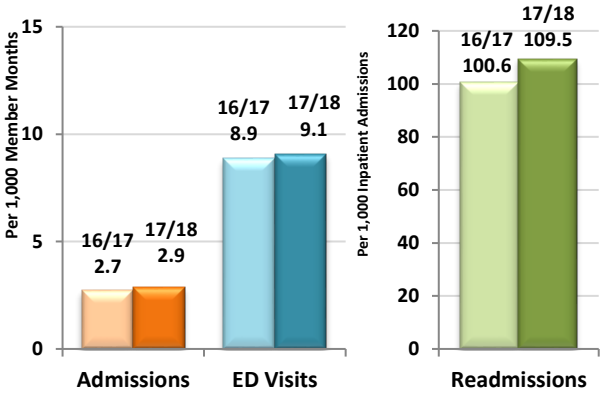
Risk-adjusted Rates for Adults from FY2016/2017 to FY2017/2018



Risk-adjusted Rates for Family-Related Eligibility Category from FY2016/2017 to FY2017/2018



Risk-adjusted Rates for SSI–Related Eligibility Category from FY2016/2017 to FY2017/2018



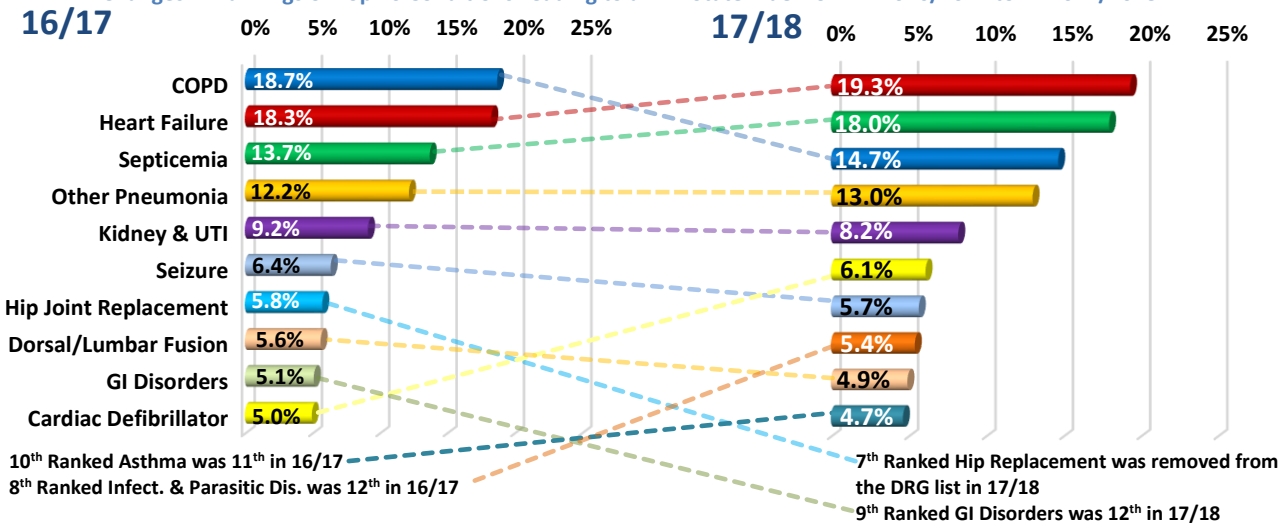
Statewide rates increased slightly from FY16/17 to FY17/18 for all three types of PPEs, with the largest increase seen in the PPRs. Changes in rates varied by age and eligibility category.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

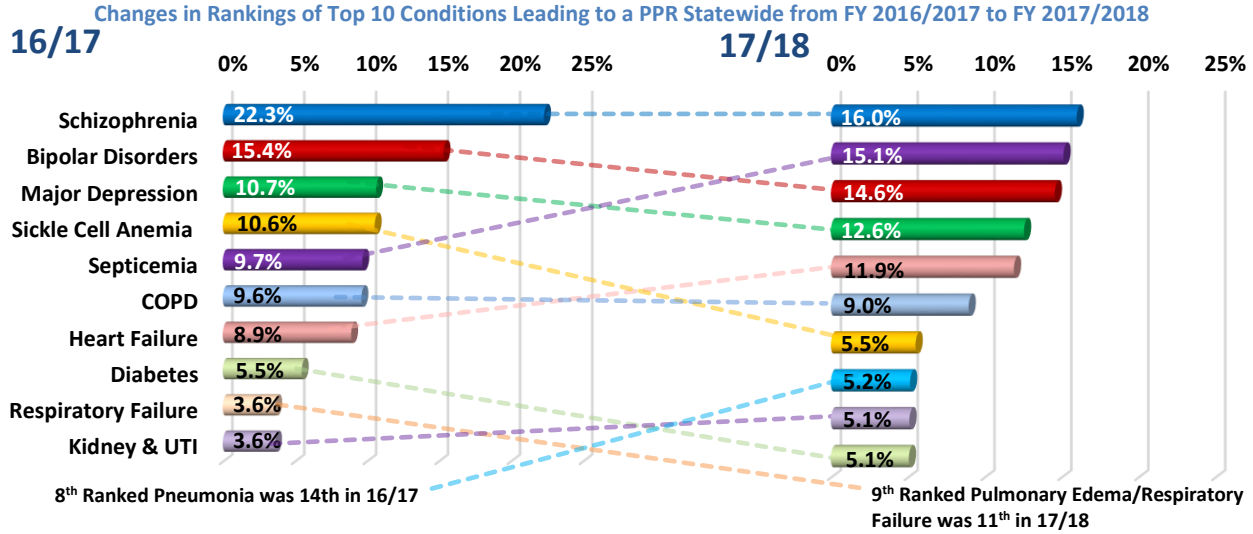
Changes in Potentially Preventable Conditions From FY16/17 to FY17/18

Except for three conditions, the top ten conditions contributing to PPAs, PPRs, and PPVs were consistent from FY16/17 to FY17/18. Between FY16/17 and FY17/18, septicemia and heart failure became more common in PPAs and PPRs and COPD became less common in PPAs.

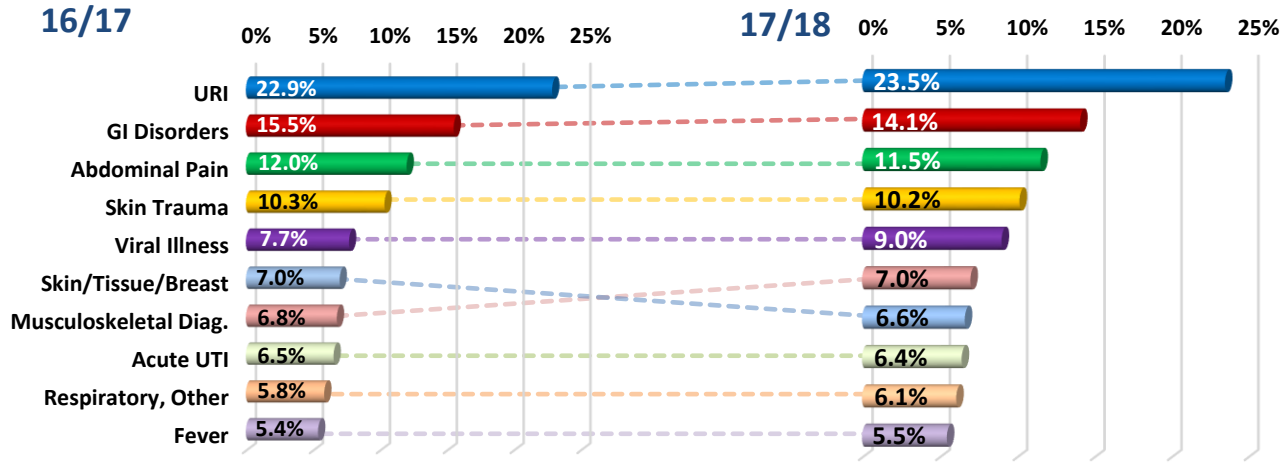
Changes in Rankings of Top 10 Conditions Leading to a PPA Statewide from FY 2016/2017 to FY 2017/2018



Changes in Rankings of Top 10 Conditions Leading to a PPR Statewide from FY 2016/2017 to FY 2017/2018



Changes in Rankings of Top 10 Conditions Leading to a PPV Statewide from FY 2016/2017 to FY 2017/2018



Percentages show each condition's percentage of all top ten conditions.
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Introduction

The Agency for Health Care Administration oversees the provision of healthcare for about 3.8 million low-income children, adults, seniors, and individuals with disabilities who would otherwise have limited or no health insurance. Since 2014, the Agency has contracted for the provision of medical services through the Statewide Medicaid Managed Care (SMMC) program.

The Agency is responsible for paying for and ensuring that Medicaid recipients receive appropriate and necessary quality medical services in a timely manner. The Agency must ensure access to healthcare amid growing healthcare costs in the U.S. and is continually seeking efficiencies and savings that do not compromise the quality of care.

The Agency has focused on reductions in potentially preventable healthcare events (PPEs) as an area with the potential to improve care management and reduce waste in healthcare spending. Potentially preventable events are hospital admissions, readmissions, and emergency department visits that might have been prevented through accessing primary care, improved medication management, or improved coordination of care. Some hospital readmissions occur due to premature discharges, quality concerns during a previous hospital stay, or a lack of necessary services after discharge. By improving care during a hospital stay or improving the continuity of care after release, patient health can be improved and some hospital readmissions can be prevented. One of the benefits of managed care is the potential it offers to make healthcare more efficient by coordinating healthcare for enrollees. By improving access to primary care, managing medication, coordinating care transitions, and monitoring the use of healthcare resources, managed care has the potential to improve quality of care and reduce unnecessary use of healthcare resources.

Although not all potentially preventable events can be avoided, PPE rates in populations can be used as a gauge of failure to access primary care, missed opportunities to manage chronic conditions, and the quality of care available. Hospitalizations and emergency department visits tend to be costlier than outpatient or primary care visits. To the extent that hospitalizations and emergency department visits can be reduced by ensuring primary care is utilized when appropriate and chronic conditions are monitored and managed, healthcare can be more efficient and less costly.

This report examines three potentially preventable healthcare events: Potentially Preventable Hospital Admissions (PPAs), Potentially Preventable Hospital Readmissions (PPRs), and Potentially Preventable Emergency Department Visits (PPVs). Claims and encounter data from the fourth year of Florida's Statewide Medicaid Managed Care Managed Medical Assistance program from July 2017 to June 2018 were analyzed for the three types of events. Risk-adjusted rates, the top ten conditions contributing to each potentially preventable event, and the reasons that events are considered preventable are included in results, and risk-adjusted rates and top ten conditions are also analyzed separately by age, eligibility group, plan, and region. Results from the fourth year of the program are compared to results from the third year of the program. Changes in PPE rates from the third to the fourth year of the program are shown and changes in top ten rankings are indicated.

Data Sources

The results in this report are based on analyses of data from sources detailed in the table below and cited with relevant tables and figures.

Data	Period	Source
Enrollment Information	July 1, 2016-June 30, 2018 as of April 2019	Florida Medicaid Management Information System (FMMIS) Eligibility Information
MMA Encounter and Claims Information for History Period	July 1, 2016-June 30, 2017 as of April 2019	FMMIS Claims and Encounter Information
MMA Encounter and Claims Information for Analysis Period	July 1, 2017-June 30, 2018 as of April 2019	FMMIS Claims and Encounter Information

Medicaid recipients whose medical billing data is incomplete in the Florida Medicaid Management Information System (FMMIS) are excluded from analyses. This includes recipients dually eligible for Medicaid and Medicare for whom Medicaid does not receive complete medical billing information, women enrolled only for Family Planning services, and other recipients without full Medicaid coverage. In addition, recipients who have full Medicaid coverage for less than 6 months in the analysis period from July 1, 2017 through June 30, 2018, or less than 3 months in the history period from July 1, 2016 through June 30, 2017 are excluded from the analyses. Analyses utilized managed care encounters that are paid and submitted to FMMIS and fee-for-service claims that are paid.

The fee-for-service (FFS) population is included in the data for the calculation of the statewide norms for risk-adjusted rates. Most of the FFS population consists of Medicaid recipients who are dually eligible for Medicare and Medicaid and whose medical care is managed by Medicare and are not separately displayed in this report.

Methodology for PPEs

Potentially Preventable Admissions

PPAs are hospital admissions that might have resulted from a failure to access primary care or a failure of ambulatory care coordination. PPAs include ambulatory sensitive conditions and nursing sensitive conditions. Ambulatory sensitive conditions are health conditions that require regular treatment that can be managed in an outpatient setting. Ambulatory sensitive conditions, such as asthma, might be avoided with adequate monitoring and follow-up care, such as medication management. Nursing sensitive conditions are health conditions, such as pressure ulcers and urinary tract infections, that rely on quality nursing care for management or prevention. Nursing sensitive conditions occur in skilled nursing facilities, inpatient psychiatric facilities, intermediate care facilities, residential substance abuse treatment facilities, psychiatric residential treatment centers, and comprehensive inpatient rehabilitation facilities.

PPAs are identified by first assigning an All Patient Refined Diagnosis Related Group (APR DRG) to inpatient claims and encounters for acute care hospitals. If the admission is an APR DRG for one of 43 ambulatory sensitive conditions or 126 nursing sensitive conditions for patients admitted from a facility, the admission is considered potentially preventable.

Each ambulatory sensitive condition and nursing sensitive condition is associated with a reason that the condition is defined as potentially preventable. For instance, asthma is defined as potentially preventable because it is possible to treat it in a primary care setting. Diabetes and COPD are defined as potentially preventable because they are chronic conditions that may be managed through outpatient coordination.

The reasons below define why ambulatory sensitive conditions and nursing sensitive conditions are considered potentially preventable. An example of a specific condition that is considered potentially preventable for each reason is provided.

- Primary Care Accessibility, Coordination and Management: Failure to access primary care resulted in a hospital admission (e.g., asthma) or lack of care management of a health condition resulted in a hospital admission (e.g., chronic obstructive pulmonary disease).
- Potential Area of Overuse: Hospital admission for a procedure which may not be effective (e.g., dorsal and lumbar fusion except for curvature of the back).
- Not Clinically Related: Hospital admission for a procedure not clinically related to the diagnosis (e.g., tonsil and adenoid procedures to address hearing loss).
- Patient Safety: Lack of patient safety in a facility resulted in a hospital admission (e.g., contusion, open wound and other trauma to the skin).
- Mental Health Accessibility, Coordination and Management: Lack of management of a mental health condition in a facility resulted in a hospital admission (e.g., schizophrenia).
- Substance Abuse Accessibility, Coordination and Management: Lack of management of a substance abuse condition in a facility resulted in a hospital admission (e.g., opioid abuse and dependence).

Potentially Preventable Readmissions

A PPR is a return hospitalization within 30 days of an initial hospital discharge that is clinically related to the initial hospital admission and may have resulted from the process of care and treatment during the prior admission (e.g., infection of a surgical wound) or from lack of follow up after discharge. PPRs are identified by first assigning an APR DRG to inpatient claims and encounters for acute care hospitals. For any admission that follows another admission within 30 days, the APR DRG of each admission is used to determine if the 2 admissions are clinically related. If an admission follows within 30 days of a prior admission and is clinically related to the initial admission, it is considered potentially preventable.

An admission may be associated with multiple readmissions if a second (or third or more) admission falls within 30 days of the readmission and is clinically related to the initial admission. A chain with multiple readmissions that are clinically related to an initial admission counts as only one PPR.

Readmissions are considered potentially preventable when the readmission addresses a condition that is likely to be related to care received during or following a prior hospital admission. The following reasons define why readmissions are considered potentially preventable:

- The readmission was for a continuation or recurrence of a medical condition addressed in the initial admission.
- The readmission was for an ambulatory care sensitive condition such as designated by Agency for Healthcare Research and Quality (ARHQ) (e.g., asthma).

- The readmission was for a chronic problem related to care received during or after the initial admission.
- The readmission was for an acute medical condition or complication related to care received during or after the initial admission.
- The readmission was for a surgical procedure to address a continuation or recurrence of the problem addressed in the initial admission.
- The readmission was for a surgical procedure to address a complication related to or resulting from care received during the initial admission.
- The readmission was for a mental health condition following an initial admission for a medical reason.
- The readmission was for a substance abuse condition following an initial admission for a medical reason.
- The readmission was for a mental health or substance abuse condition following an initial admission for a substance abuse or mental health condition.

Potentially Preventable Emergency Department Visits

PPVs are emergency department visits that may result from a failure to access primary care or a lack of ambulatory care coordination. PPVs are ambulatory sensitive conditions, such as asthma, which might be avoided with adequate monitoring and follow-up, or nursing sensitive conditions, such as skin ulcers, which might be avoided with adequate nursing care. When a PPV occurs shortly after a hospitalization, it may be the result of actions taken or omitted during the hospital stay or a lack of coordination with physicians after release.

Outpatient claims and encounters for emergency department visits are assigned an Enhanced Ambulatory Patient Group (EAPG). If an emergency department visit is an EAPG for one of 194 ambulatory sensitive conditions, or 201 nursing sensitive conditions or 6,617 trauma codes for patients admitted from a nursing facility, the visit is considered potentially preventable.

The following reasons define why PPVs are considered potentially preventable. An example of a specific condition that is considered potentially preventable for each reason is provided.

- The ED visit was for an acute illness that might be treatable in a primary care setting (e.g., abdominal pain).
- The ED visit was for an acute infection that might be treatable in primary care setting (e.g., upper respiratory tract infections).
- The ED visit was for a malignancy-related chronic illness that might be manageable via outpatient coordination (e.g., lymphoma, myeloma, and non-acute leukemia).
- The ED visit was for a chronic illness (not mental health, substance abuse, or malignancy) that might be manageable via outpatient coordination (e.g., hypertension).
- The ED visit was for a mental health or substance abuse condition that might be manageable via outpatient coordination (e.g., acute anxiety).
- The ED visit was to treat trauma received while residing in a facility (e.g., contusion, open wound, and other trauma to the skin).
- The ED visit was to treat a condition that might not be appropriate for the emergency department (e.g., splint, strapping, and cast removal).

Risk Adjustment

Clinical Risk Groups (CRGs) are used to compare actual and expected rates across plans, regions, age groups, and eligibility groups. CRGs are a categorical clinical model in which each recipient is assigned to a single mutually exclusive risk category that measures the recipient's chronic burden of illness. CRGs are constructed using

claims and encounter data for the year prior to the analysis year to assess each enrollee's medical history and determine the amount and type of healthcare resources the enrollee is likely to consume in the future. The history year for analyses is July 2016 to June 2017.

The CRG uses diagnosis codes, procedure codes, and national drug codes, singularly or in combination, to build a disease profile for each person. It also uses information such as the place of service, recency of the service, persistence of an illness, and the demographic characteristics of the individual. Since CRGs are clinically-based, they allow a link between the clinical care needed and financial resources required to address health conditions. Each enrollee is assigned to one of 1,474 CRGs. CRGs are aggregated into 54 predefined categories for risk adjustment. For more detailed information about CRGs, see the Winter 2017 Quarterly Statewide Medicaid Managed Care Report.

Some hospital admissions use more medical resources and are costlier than other hospital admissions. The same dynamic holds for emergency department visits. Using a set of national weights for APR DRGs and EAPGs provides a measure of relative resource use for hospitalizations and emergency department visits and allows more resource intensive and costly events to be weighted more heavily.

PPAs and PPVs use a weighted sum in the numerator and the number of enrollee months in the denominator when calculating the risk-adjusted rate. The population-based rate indicates the number of PPAs or PPVs per 1,000 enrollee months.

Since weights are used to calculate rates for PPAs and PPVs, the top ten conditions contributing to PPAs and PPVs are calculated by multiplying the frequency of each APR DRG or EAPG times its weight. The top ten conditions indicate the most frequent, costliest APR DRGs or EAPGs that lead to a potentially preventable event. Likewise, reasons for PPAs and PPVs are calculated by multiplying the frequency of each reason times the weight of the APR DRGs or EAPGs of each condition.

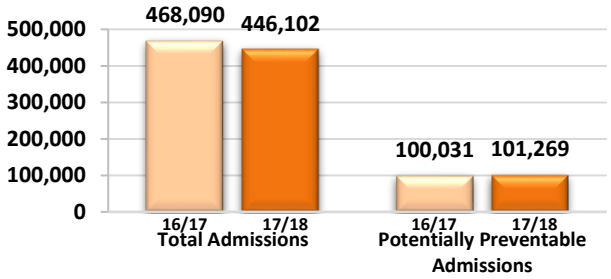
PPRs use APR DRG, severity of illness, age, and mental health status for risk adjustment to compare actual and expected rates across plans, regions, age groups, and eligibility groups. The PPR rate is calculated by using the number of initial admissions with one or more clinically-related readmissions in the numerator and the number of initial admissions at risk for a readmission in the denominator. The PPR rate indicates the number of PPRs per 1,000 hospital admissions.

Potentially Preventable Hospital Admissions (PPA)

A potentially preventable hospital admission (PPA) is a hospital admission that might have resulted from a failure to access care or a lack of ambulatory care coordination. PPAs involving ambulatory sensitive conditions, such as asthma or diabetes, might be avoided with more effective monitoring and follow-up care, including medication management. PPAs involving nursing sensitive conditions, such as urinary tract infections or trauma, might be prevented with more effective quality of care at a nursing facility. These facilities include not only skilled nursing facilities, but also inpatient psychiatric facilities, intermediate care facilities, residential substance abuse treatment facilities, psychiatric residential treatment centers, and comprehensive inpatient rehabilitation facilities.

There were 38,269,093 member months from July 2017 to June 2018.

Figure 1: Total Number of Admissions and Total Number of Admissions Identified as Potentially Preventable from FY2016/2017 to FY2017/2018



Twenty-three percent (101,269/446,102) of all hospital admissions during the FY17/18 review period were identified as potentially preventable.

Region 5 had the highest rate of PPAs across all Florida regions.

Figure 2: Risk-Adjusted PPA Rates per 1,000 Enrollee Months by Region, July 2017 to June 2018

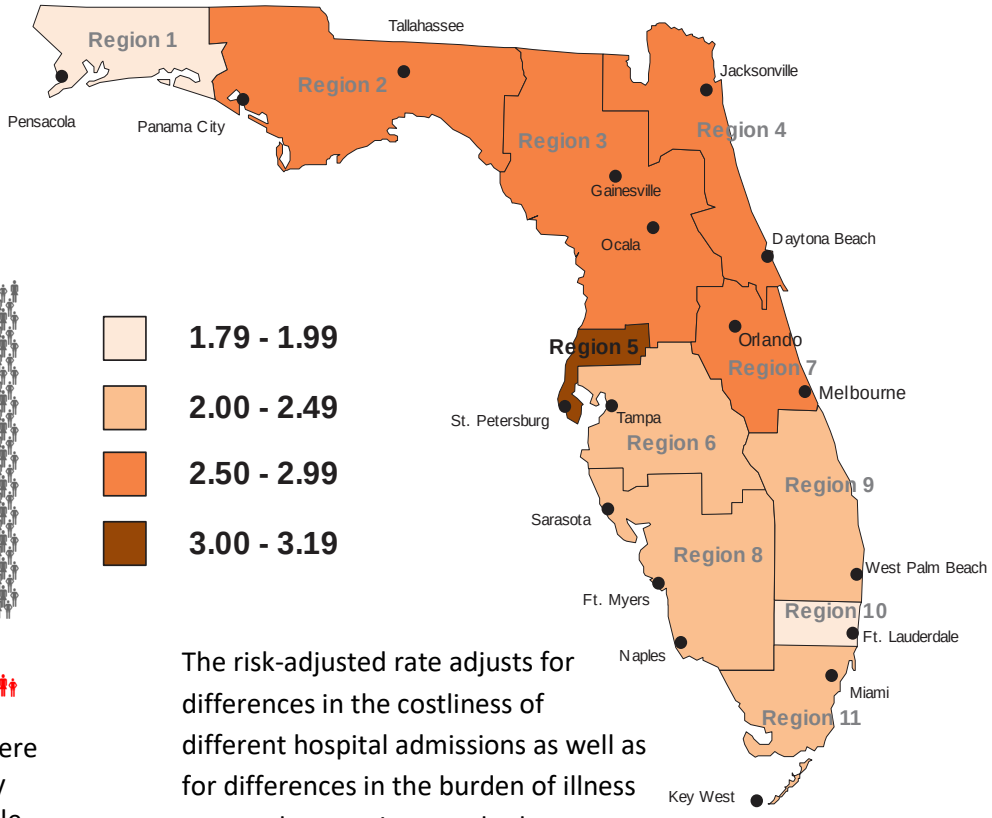
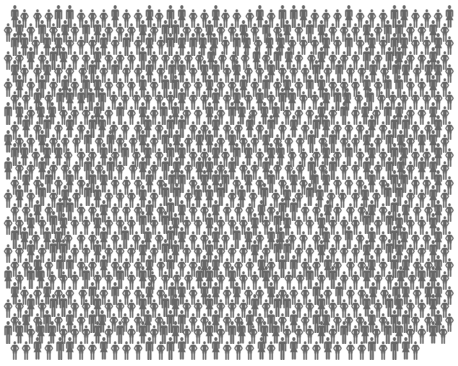


Figure 3: Risk-adjusted PPA Rate per 1,000 Enrollee Months Statewide, July 2017 to June 2018



2.5
Hospital Admissions

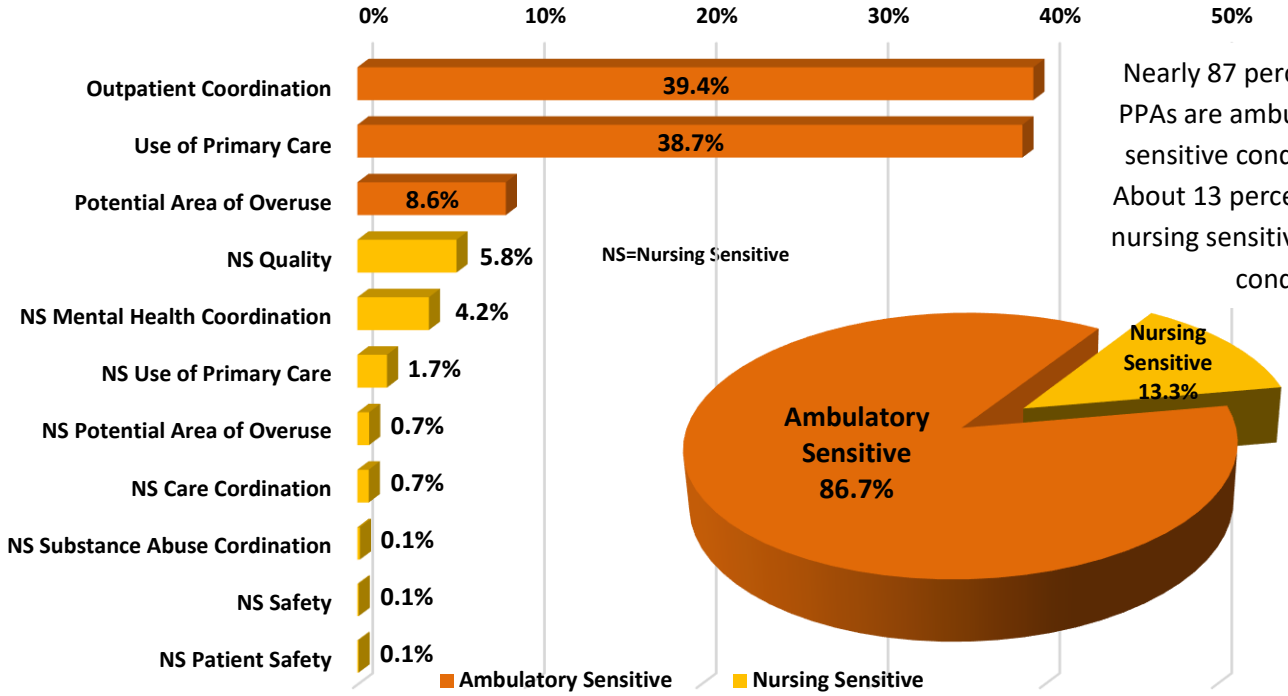
Per 1,000 Enrollee Months were Potentially Preventable

The risk-adjusted rate adjusts for differences in the costliness of different hospital admissions as well as for differences in the burden of illness across plans, regions, and other populations.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Over 39 percent of PPAs were identified as potentially preventable because they were related to outpatient coordination and over 38 percent were related to the use of primary care.

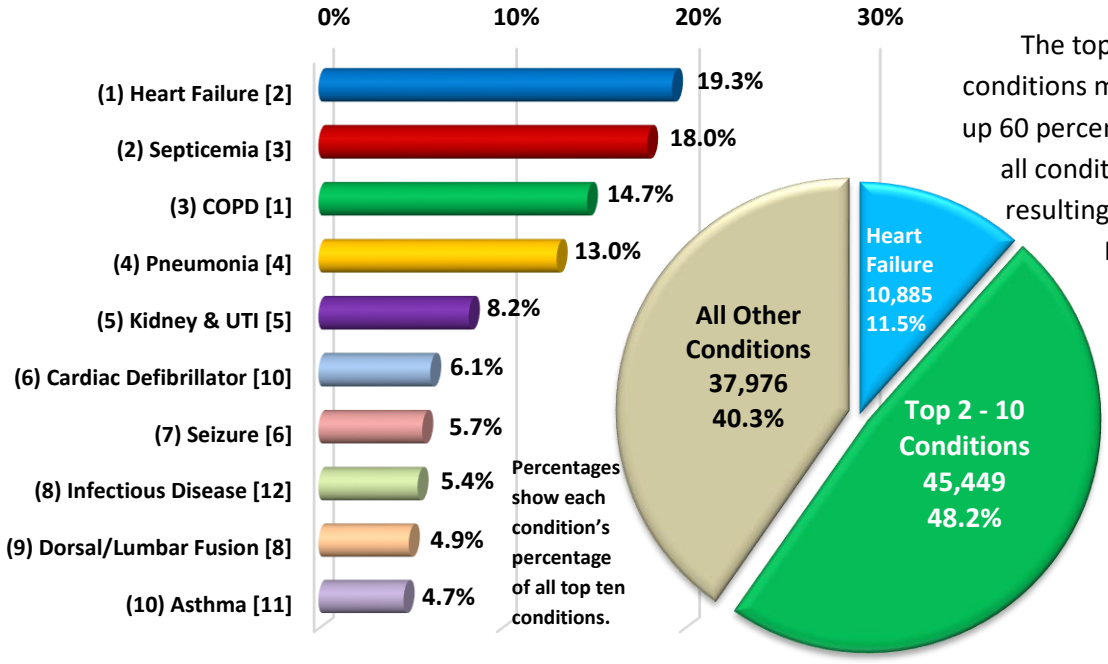
Figure 4: Top Reasons Admissions Are Defined as PPAs Statewide, July 2017 to June 2018



Nearly 87 percent of PPAs are ambulatory sensitive conditions. About 13 percent are nursing sensitive (NS) conditions.

Each PPA is associated with an underlying condition that resulted in the PPA. Heart failure accounts for over 19 percent of the top ten conditions that resulted in a PPA, followed by septicemia at 18 percent and COPD at almost 15 percent.

Figure 5: Top 10 Conditions Leading to PPAs Statewide, July 2017 to June 2018*



The top ten conditions make up 60 percent of all conditions resulting in a PPA.

Numbers in parentheses () are current year's statewide ranking. Numbers in brackets [] are previous year's rankings for that plan, region, eligibility, or age.

*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPAs by Age

The top conditions resulting in PPAs for children are pneumonia and asthma. Six of the top ten conditions for children are not in the top ten PPA conditions statewide.

Figure 6: Children-Top 10 Conditions Leading to PPAs, July 2017 to June 2018*

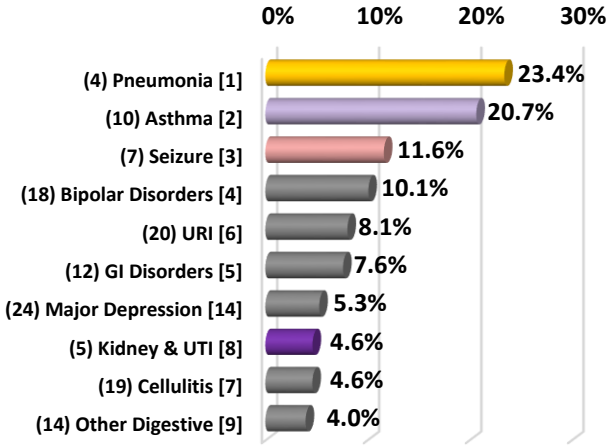


Figure 7: Children-Reasons Admissions Are Defined as PPAs, July 2017 to June 2018

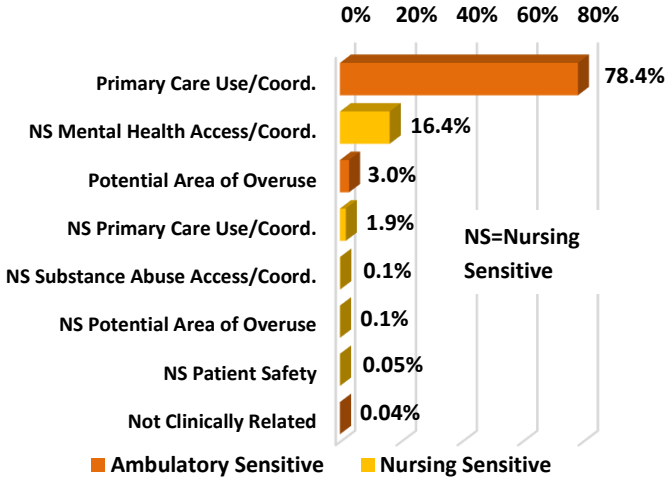


Figure 11: Risk-adjusted PPA Rates for Children and Adults per 1,000 Enrollee Months, July 2017 to June 2018

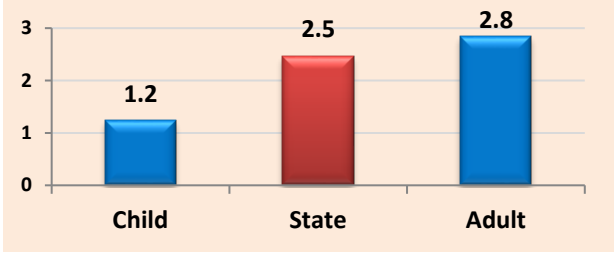
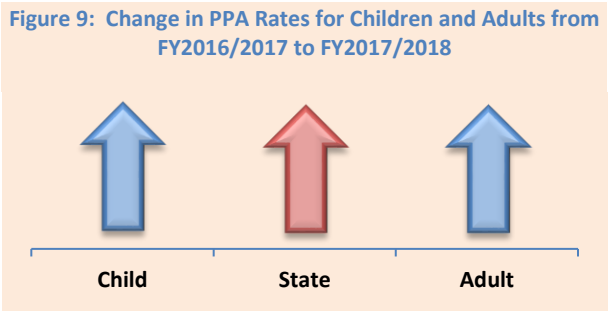


Figure 9: Change in PPA Rates for Children and Adults from FY2016/2017 to FY2017/2018



COPD, heart failure, and septicemia are the top conditions leading to PPAs for adults. The top three conditions for adults are the top three conditions for PPAs statewide.

Figure 8: Adults-Top 10 Conditions Leading to PPAs, July 2017 to June 2018*

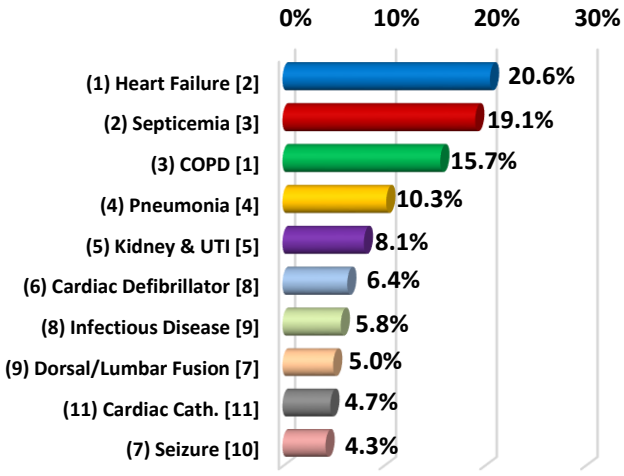
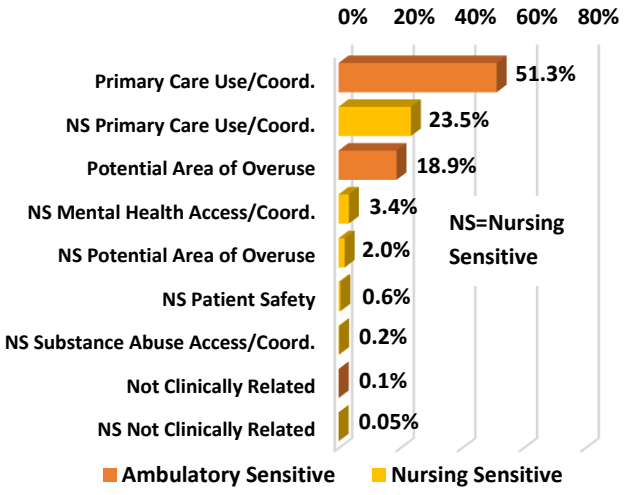


Figure 10: Adults-Reasons Admissions Are Defined as PPAs, July 2017 to June 2018



* Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPAs by Eligibility Group

The top conditions for recipients in a family-related eligibility category are pneumonia and asthma. Five of the top ten conditions are not present in the statewide top ten conditions for PPAs. The top ten conditions for individuals in a family-related eligibility group are similar to the top ten conditions for children.

Figure 13: Family-Top 10 Conditions Leading to PPAs, July 2017 to June 2018*

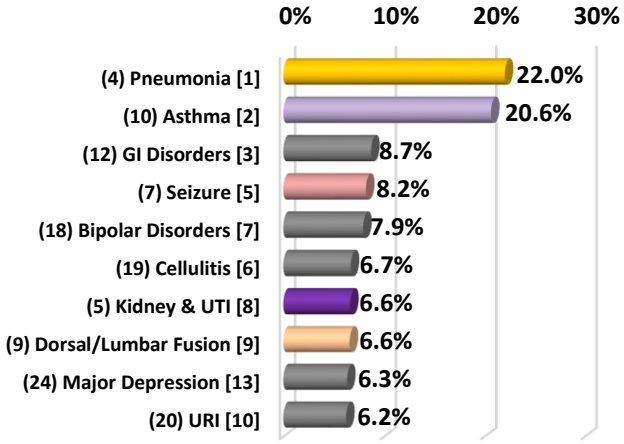


Figure 12: Family-Reasons Admissions Are Defined as PPAs, July 2017 to June 2018

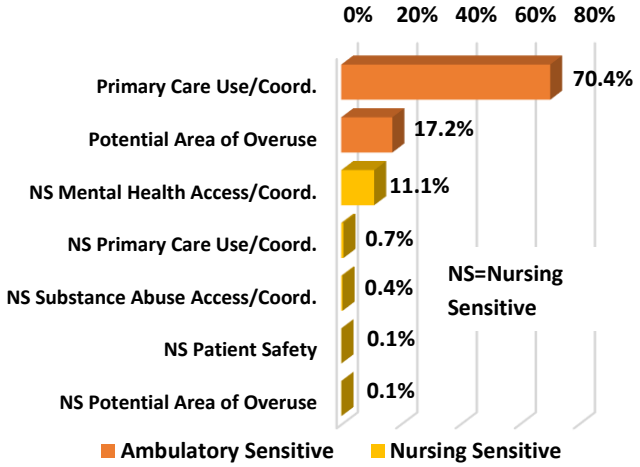


Figure 14: Risk-adjusted PPA Rates for Family-Related and SSI-Related Eligibility Categories per 1,000 Enrollee Months, July 2017 to June 2018

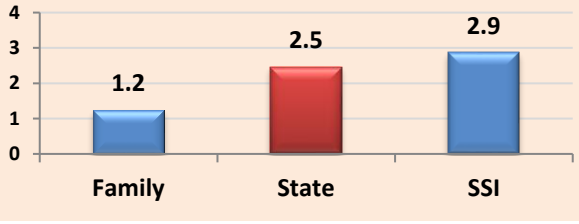
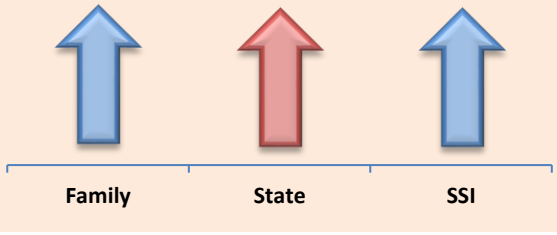


Figure 15: Change in PPA Rates for Family-Related and SSI-Related Eligibility Categories from FY2016/2017 to FY2017/2018



The top conditions for recipients in an SSI-related eligibility group are heart failure and septicemia. The top ten conditions for individuals in an SSI-related eligibility group are similar to the top ten conditions for adults.

Figure 16: SSI-Top 10 Conditions Leading to PPAs, July 2017 to June 2018*

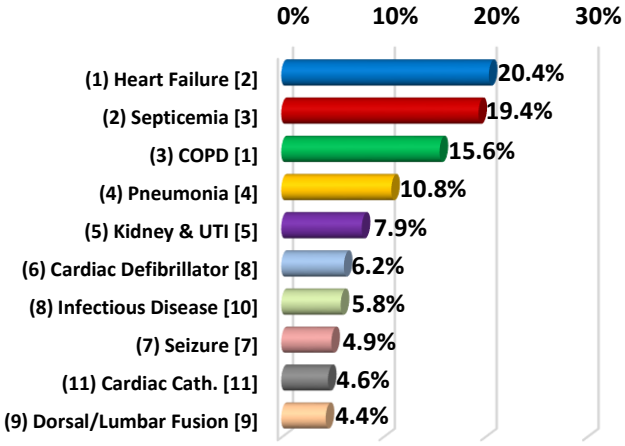
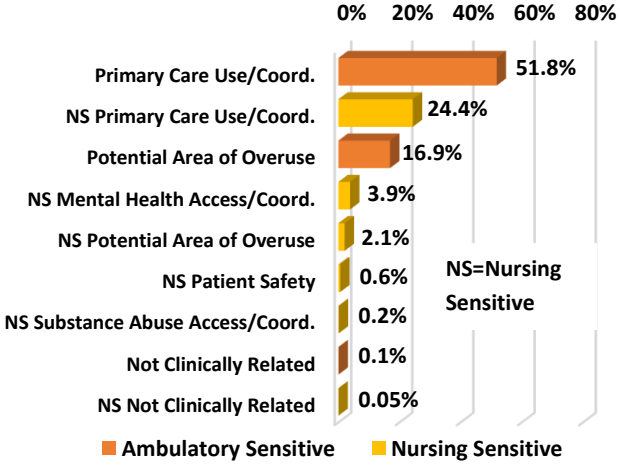


Figure 17: SSI-Reasons Admissions Are Defined as PPAs, July 2017 to June 2018

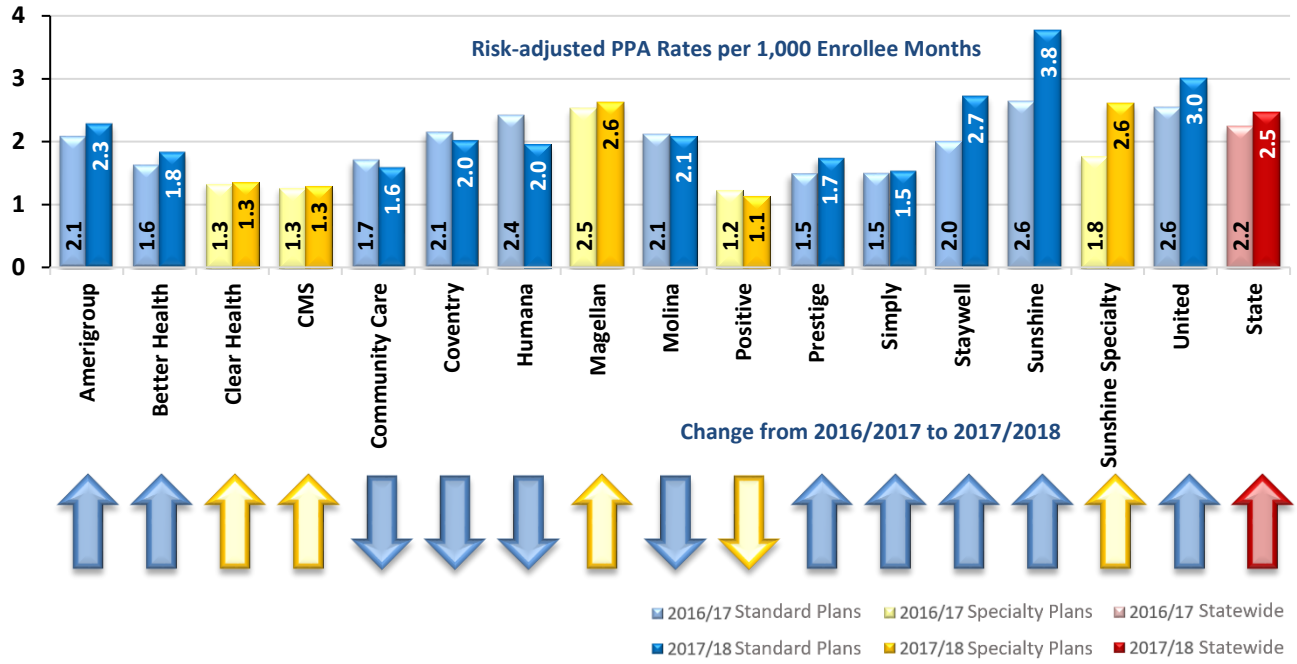


* Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPAs by Plan

Figure 18: Risk-adjusted PPA Rates by Plan, July 2016 to June 2017 and July 2017 to June 2018**



Rates vary by plan ranging from 1.1 to 3.8 PPAs per 1,000 enrollee months during the review period. PPA rates increased for all but five plans from FY16/17 to FY17/18. For more information on plans' service regions, market share, and populations served, see Appendix 3.

Seven of the top ten conditions for Magellan, the specialty plan for serious mental illness, are among the top ten conditions statewide. Three of Magellan's top ten conditions are mental health conditions.

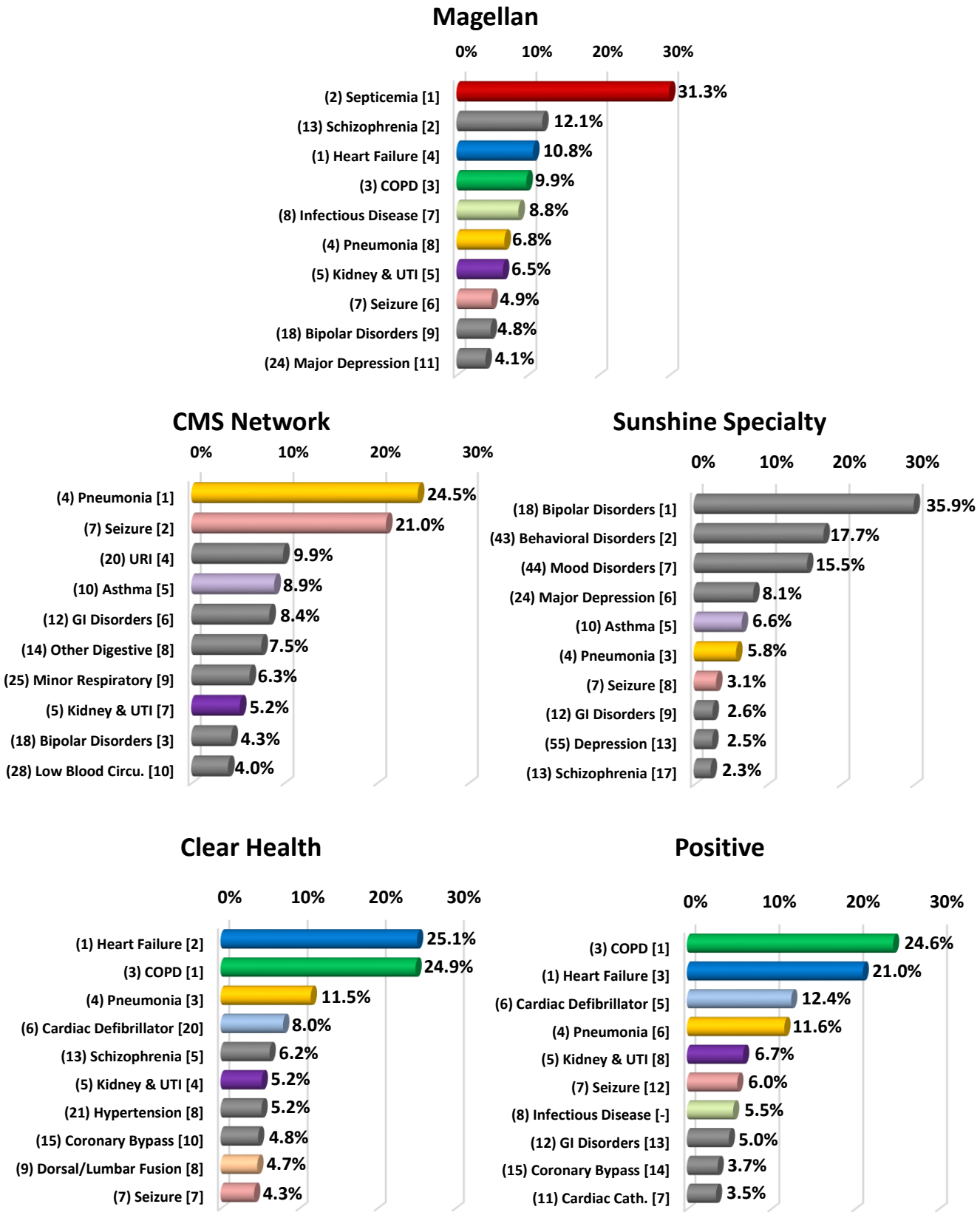
Pneumonia is the most common condition leading to a PPA for Children's Medical Services (CMS) but ranks fourth statewide. Many of the top ten conditions for CMS, the specialty plan for children with chronic conditions, are conditions common in children: asthma, upper respiratory infections (URIs), and gastrointestinal (GI) disorders.

Seven of the top ten conditions contributing to PPAs for Sunshine Specialty, the specialty plan for children in child welfare, are not among the top ten conditions statewide. Six of Sunshine Specialty's top ten conditions are mental health conditions.

The most common conditions leading to a PPA for both Clear Health and Positive, the specialty plans for enrollees with HIV/AIDS, are heart failure and COPD.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.
**The fee-for-service (FFS) population is included in the calculation of the statewide norms for risk-adjusted rates. Most of the FFS population consists of Medicaid recipients who are dually eligible for Medicare and Medicaid and whose medical care is managed by Medicare. Therefore results for FFS are not separately displayed in this report.

Figure 19: Top 10 Conditions Leading to a PPA by Specialty Plan, July 2017 to June 2018*

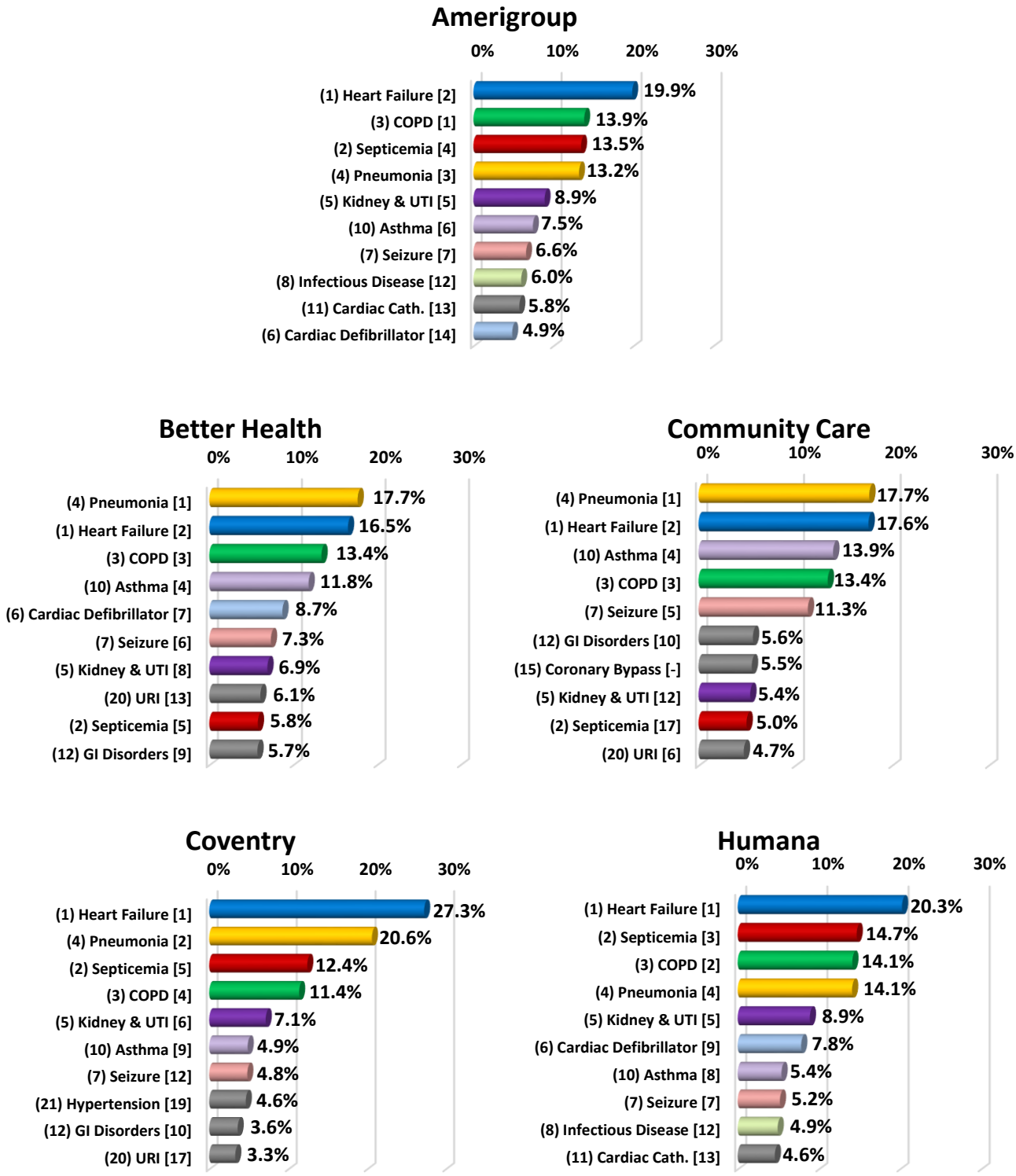


* Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

The top condition leading to a PPA for all but three plans is heart failure. Gastrointestinal Disorders, ranked 12th statewide, appears among the top ten conditions for five standard plans.

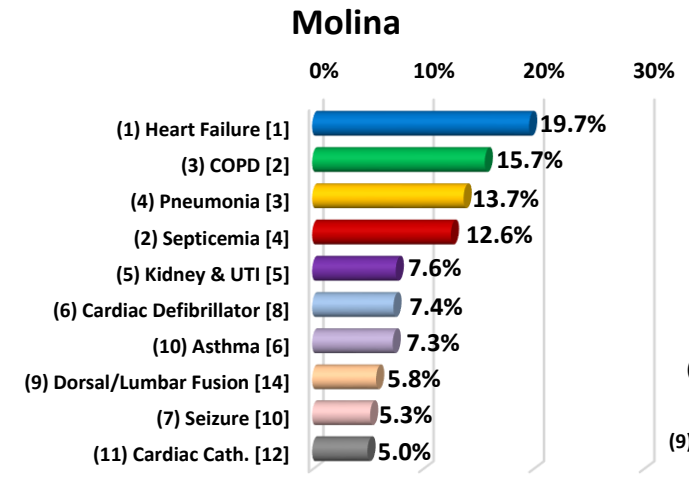
Figure 20: Top 10 PPA Conditions by Standard Plan, July 2017 to June 2018*

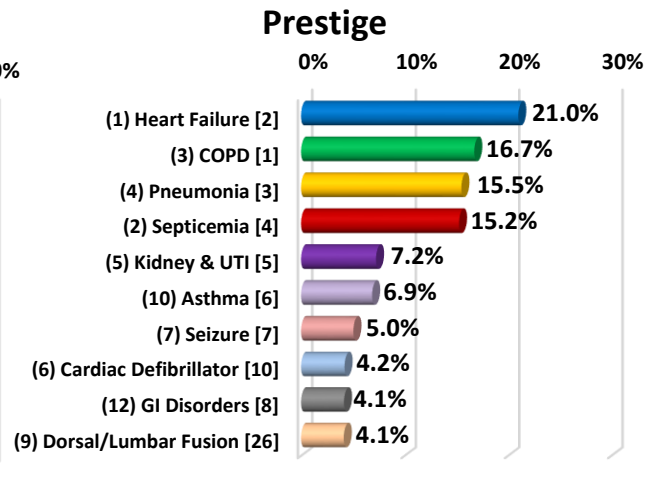


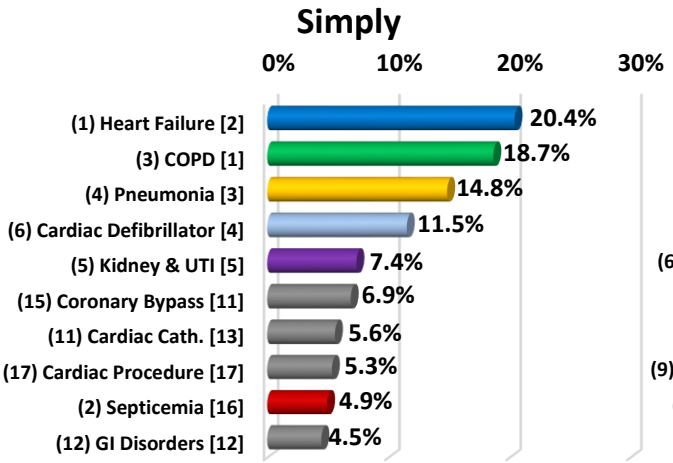
* Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

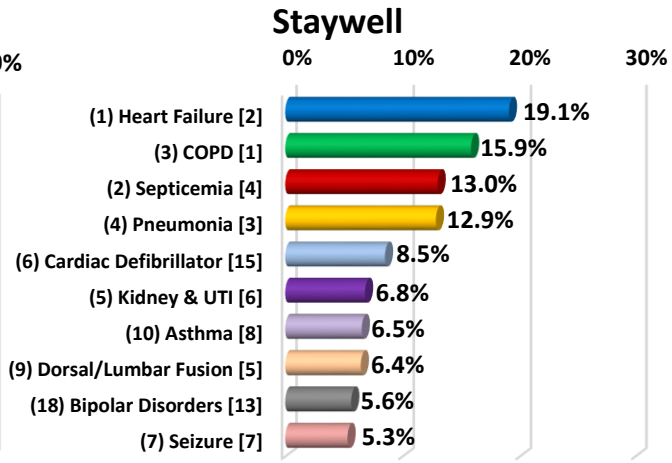
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

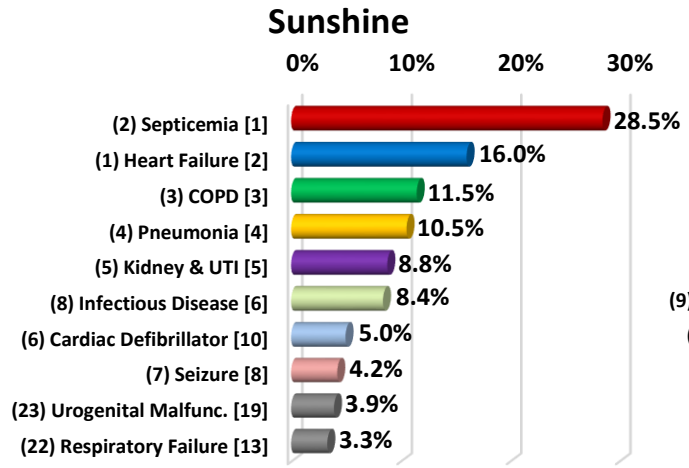
COPD, heart failure, and pneumonia are among the top ten conditions for every plan. Two infectious conditions, septicemia and infectious diseases, are also among the top ten conditions contributing to PPAs for many plans.

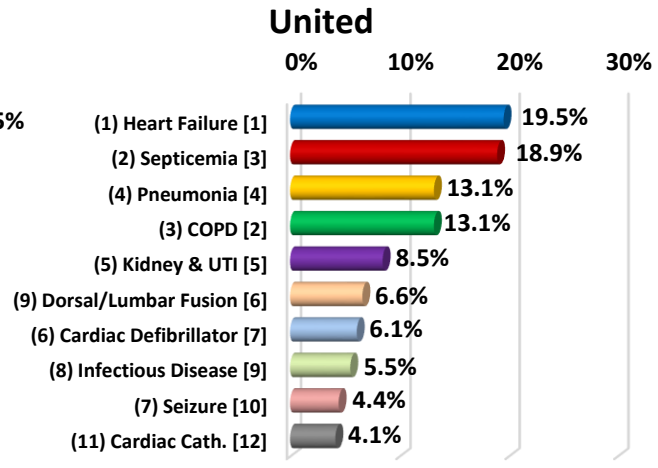










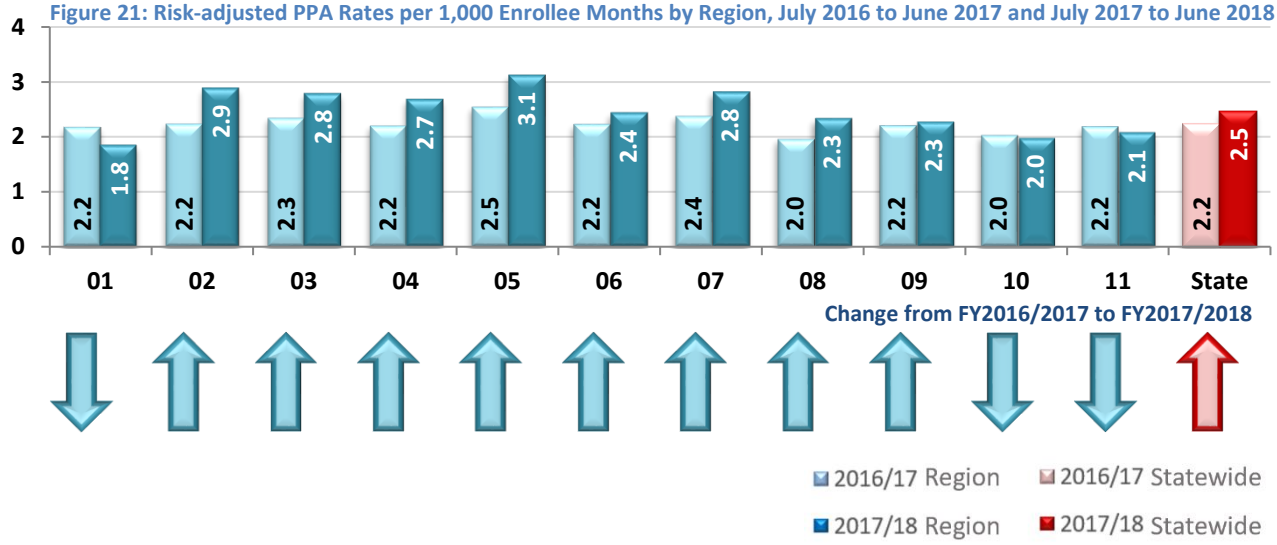


* Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

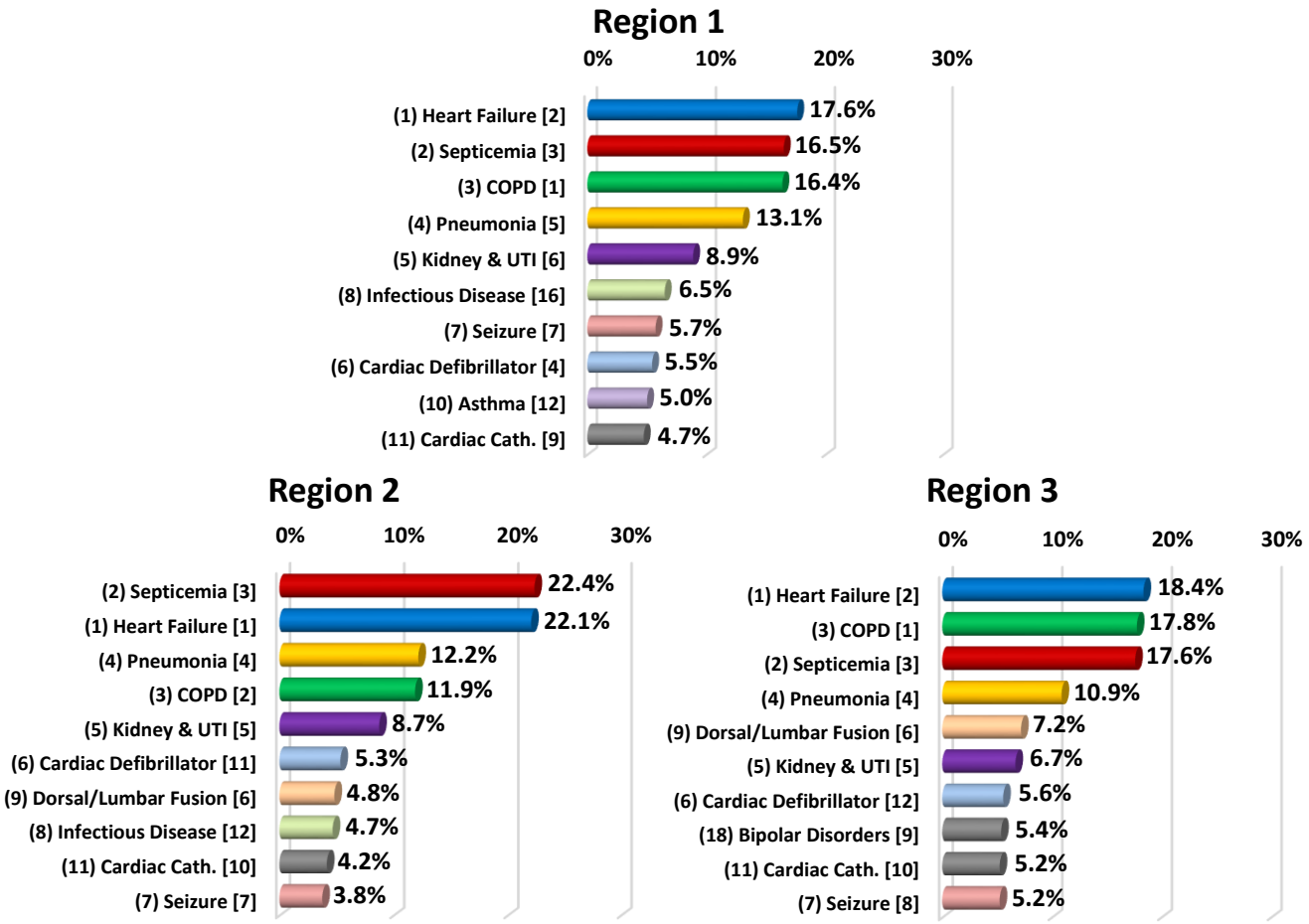
PPAs by Region

Figure 21: Risk-adjusted PPA Rates per 1,000 Enrollee Months by Region, July 2016 to June 2017 and July 2017 to June 2018



PPA rates increased in all regions except Regions 1, 10, and 11 from FY16/17 to FY17/18. Region 5 has the highest rate of PPAs in the state with septicemia accounting for over 26 percent of the top ten conditions leading to a PPA in the region. The top condition contributing to PPAs in all 11 regions is either heart failure or septicemia.

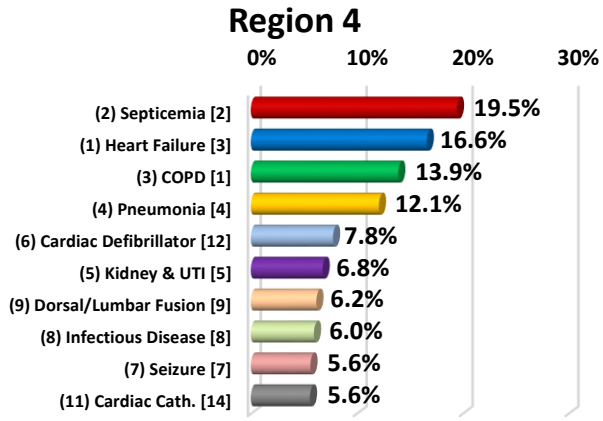
Figure 22: Top 10 Conditions Leading to a PPA by Region, July 2017 to June 2018*

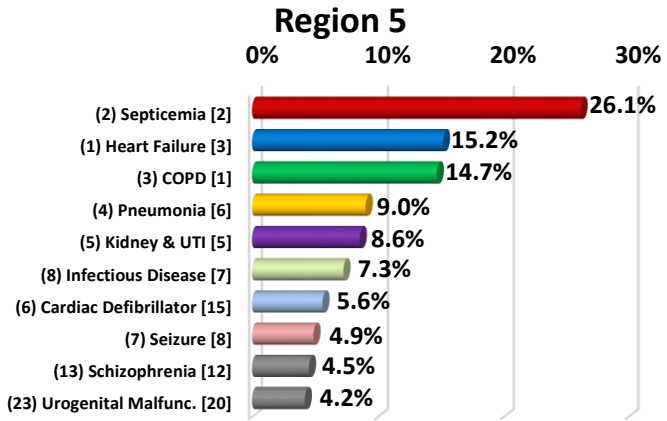


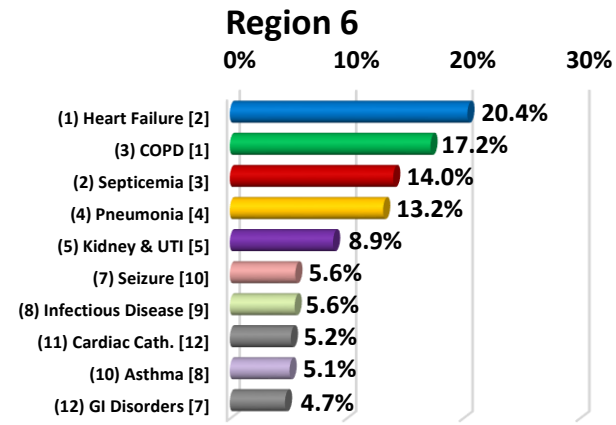
*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

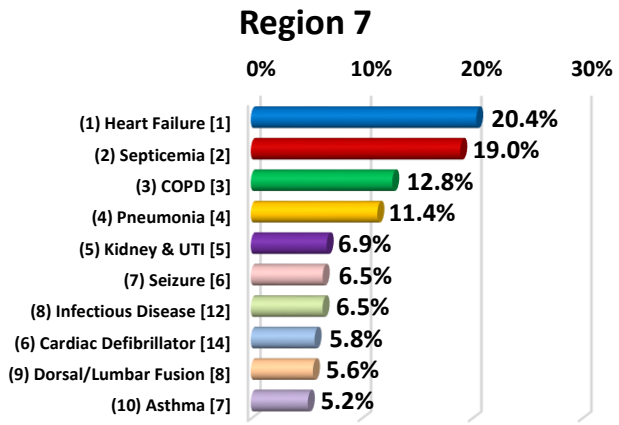
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

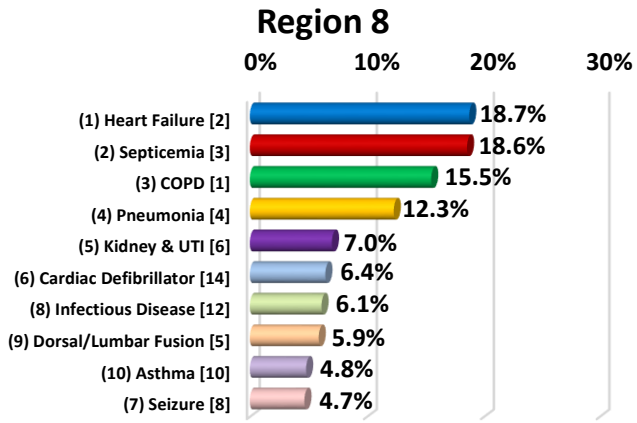
Five conditions appear in the regional top ten lists that do not appear in the statewide top ten conditions.

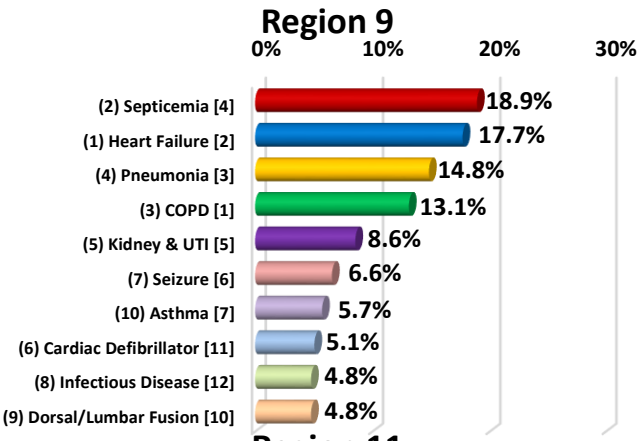


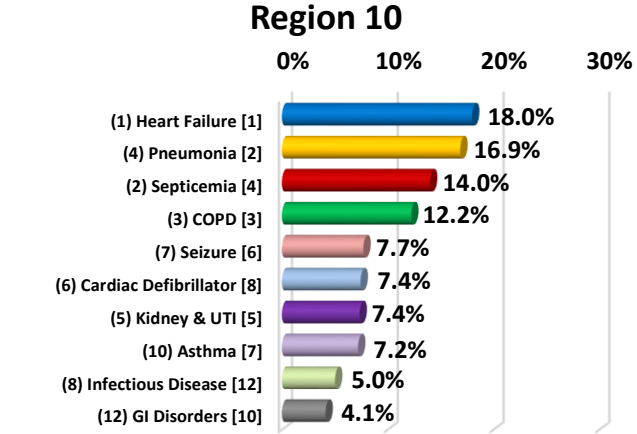


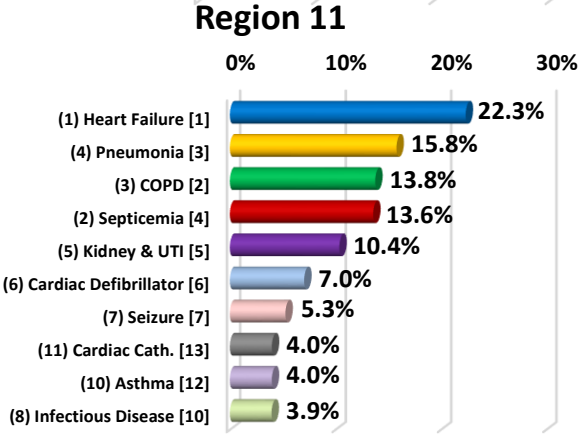












*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

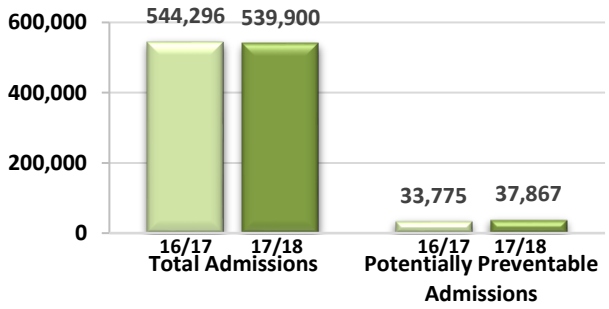
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Potentially Preventable Readmissions (PPR)

A potentially preventable readmission (PPR) is a hospitalization that occurred within 30 days of a prior hospital admission and is clinically related to the initial hospital admission. PPRs might result from the process of care and treatment during the initial admission (e.g., infection of a surgical wound) or from lack of follow up after discharge. PPRs can also indicate incomplete resolution of the illness during the initial stay.

Figure 23: Total Number of Admissions and Total Number of Readmissions Identified as Potentially Preventable from FY2016/2017 to FY2017/2018

The risk-adjusted rate adjusts for differences in the burden of illness across plans, regions, or other populations.



About seven percent (37,867/539,900) of all hospital admissions were followed by a potentially preventable hospital readmission in FY17/18.

Figure 24: Risk-Adjusted PPR Rates per 1,000 Hospital Admissions by Region, July 2017 to June 2018

Regions 2 and 3 had the highest rate of PPRs across all Florida regions.

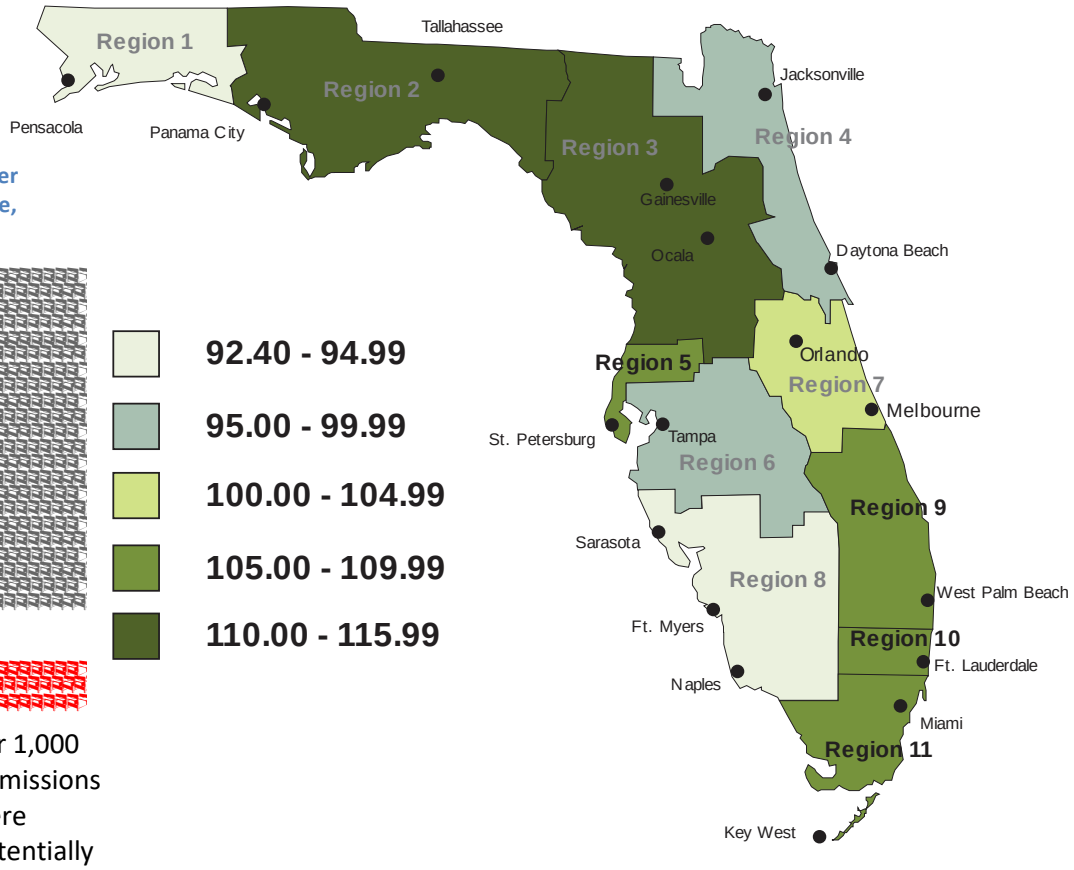
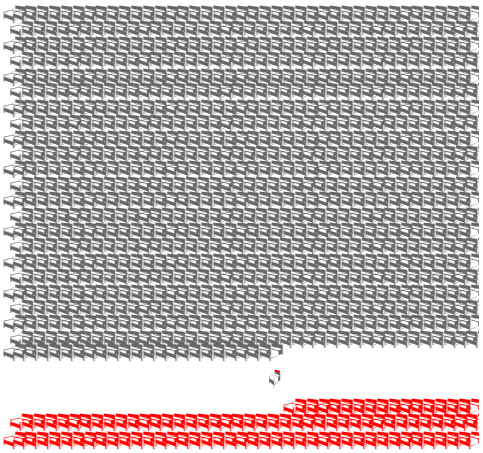


Figure 25: Risk-Adjusted PPR Rate per 1,000 Hospital Admissions Statewide, July 2017 to June 2018



92.40 - 94.99
95.00 - 99.99
100.00 - 104.99
105.00 - 109.99
110.00 - 115.99

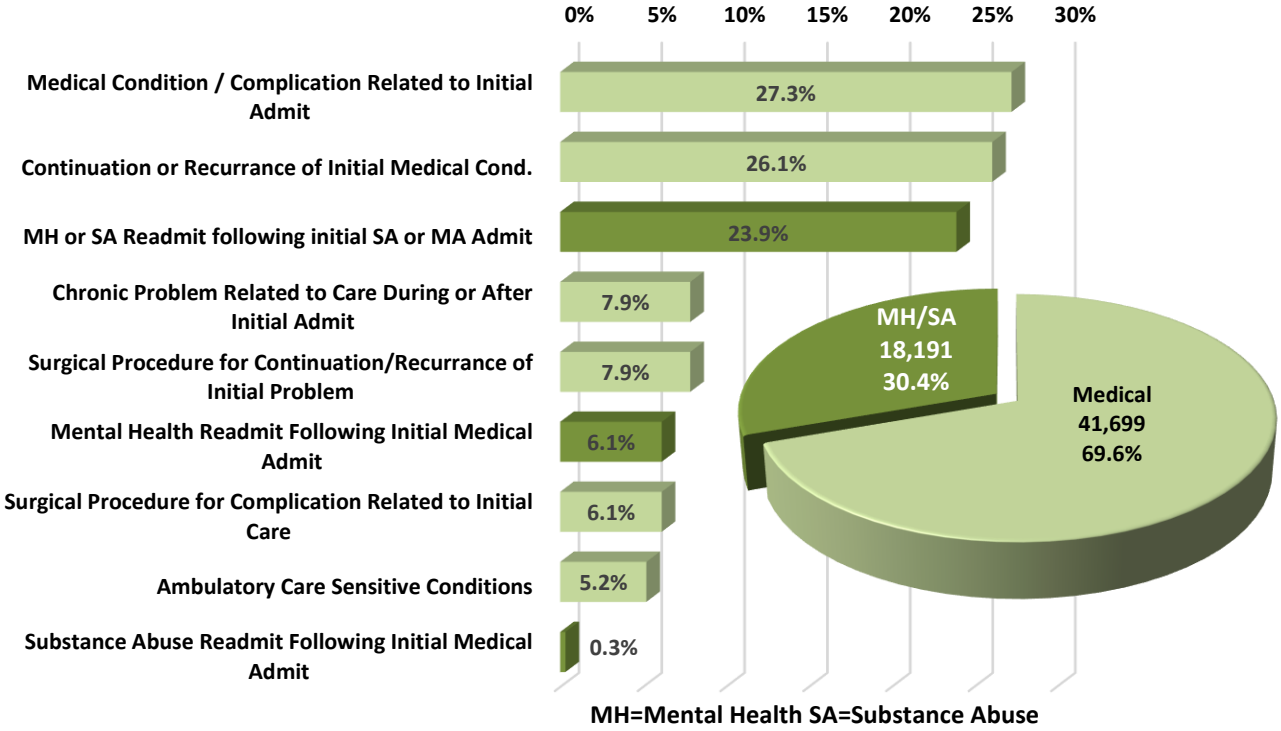
104.9
Hospital Readmissions

Per 1,000 Admissions were Potentially Preventable

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Over three-quarters (77%) of PPRs were considered potentially preventable because they were complications related to care provided during the initial hospitalization or after discharge (27%), were a continuation or recurrence of a medical condition addressed in the original hospitalization (26%), or were a continuation or recurrence of a mental health or substance abuse condition following an initial hospitalization for substance abuse or a mental health condition (24%).

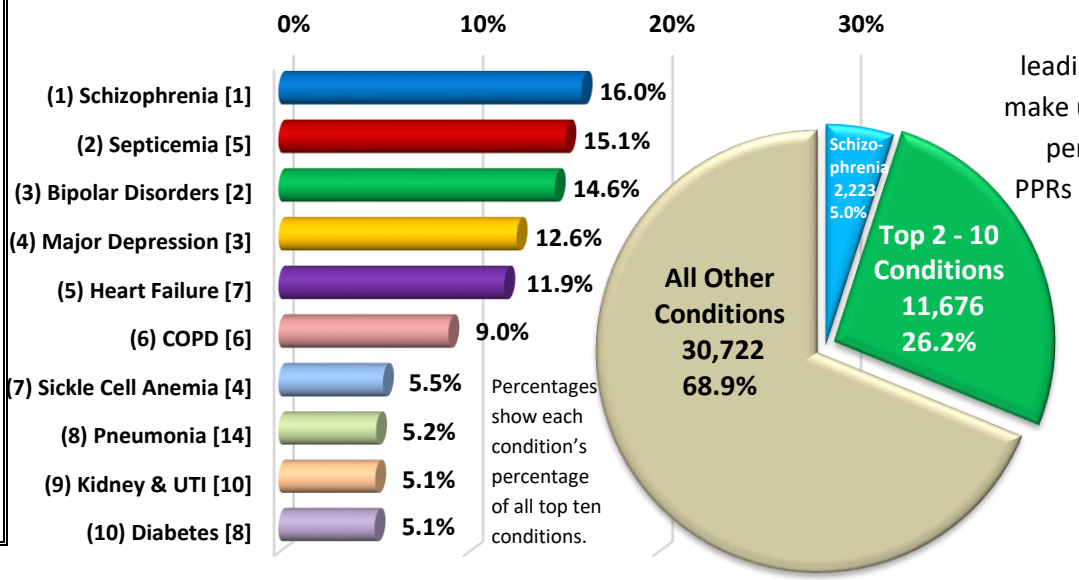
Figure 26: Reasons for PPRs Statewide, July 2017 to June 2018



MH=Mental Health SA=Substance Abuse

Three of the top five conditions for the initial admission that resulted in a PPR are mental health conditons. Schizophrenia accounts for 16 percent of the top ten PPRs, followed by septicemia (15%) and bipolar disorders (15%).

Figure 27: Top 10 Conditions Leading to PPRs Statewide, July 2017 to June 2018*



Numbers in parentheses () are current year's statewide ranking. Numbers in brackets [] are previous year's rankings for that plan, region, eligibility, or age.

The top ten conditions leading to PPRs make up over 30 percent of all PPRs statewide.

* Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions share the same ranking when the value of the percentage for each condition is the same.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPRs by Age

Bipolar disorders account for nearly a third of children's top ten PPRs. Five of the top ten PPRs for children are mental health conditions accounting for over 74 percent of top ten PPAs.

Figure 28: Children-Top 10 Conditions Leading to PPRs, July 2017 to June 2018*

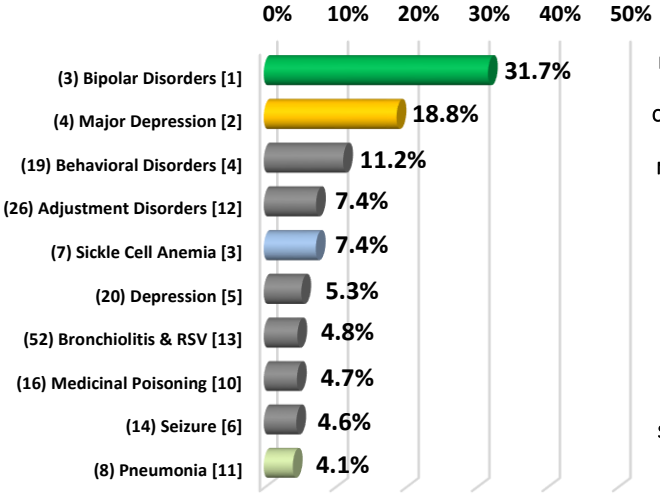


Figure 29: Children-Reasons for PPRs for Children, July 2017 to June 2018

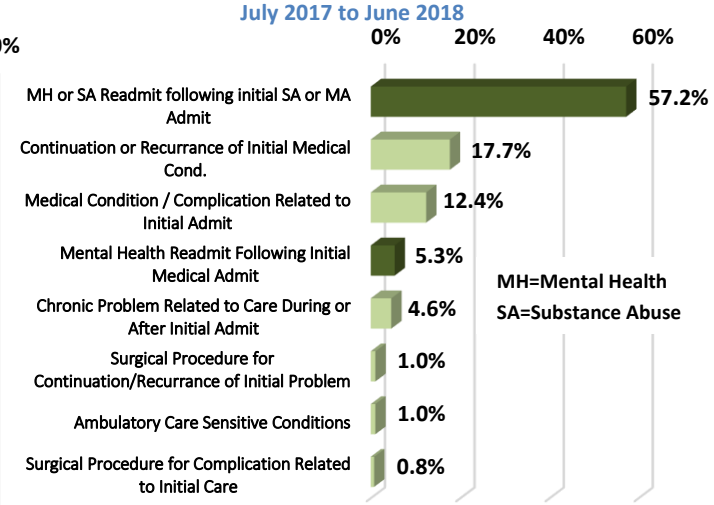
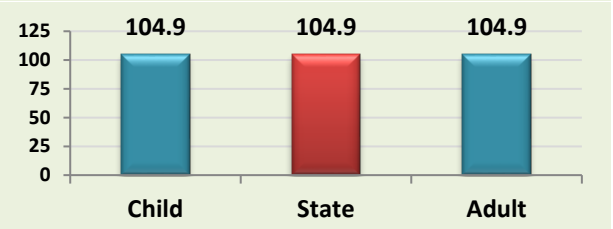
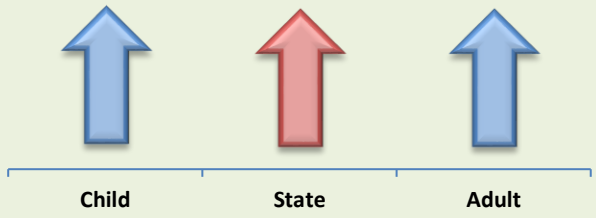


Figure 30: Risk-adjusted PPR Rates per 1,000 Hospital Admissions for Children and Adults, July 2017 to June 2018



PPRs for Children and Adults are the same due to risk adjustment.

Figure 31: Change in PPR Rates for Children and Adults from FY2016/2017 to FY2017/2018



Schizophrenia is the top condition leading to a PPR for adults accounting for a fifth (18%) of top ten PPAs.

Figure 32: Adults-Top 10 Conditions Leading to PPRs, July 2017 to June 2018*

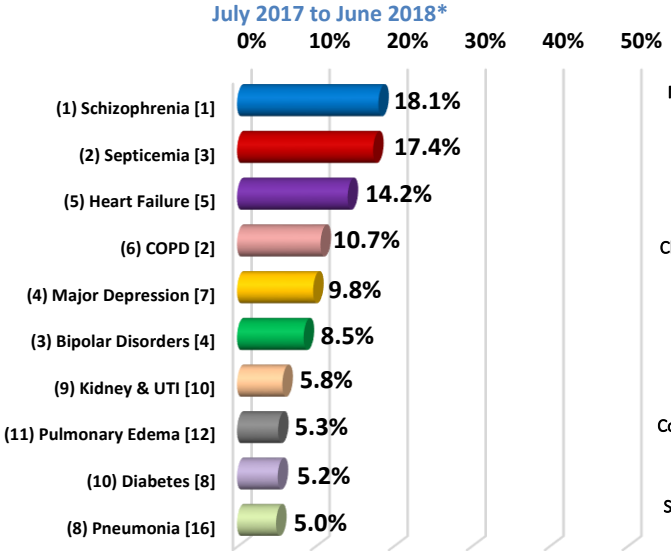
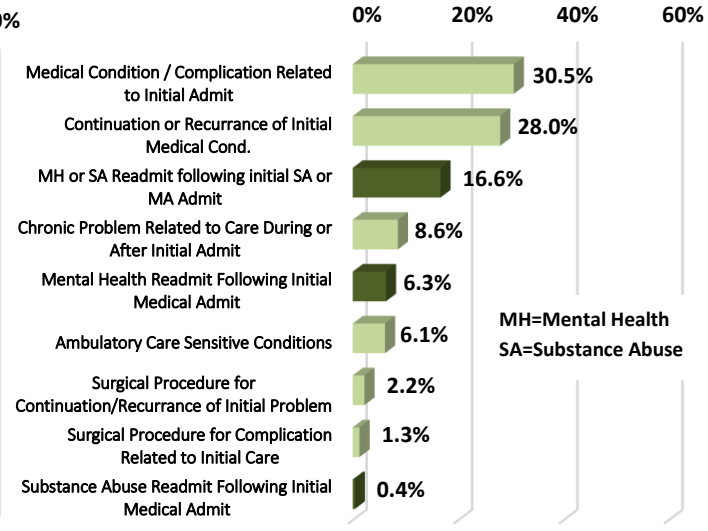


Figure 33: Adults-Reasons for PPRs, July 2017 to June 2018



*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPRs by Eligibility Group

Mental health conditions are the top two PPRs for enrollees in a family-related eligibility group. Delivery-related conditions are the top third and fourth conditions for enrollees in a family-related eligibility group.

Figure 34: Family-Top 10 Conditions Leading to PPRs, July 2017 to June 2018*

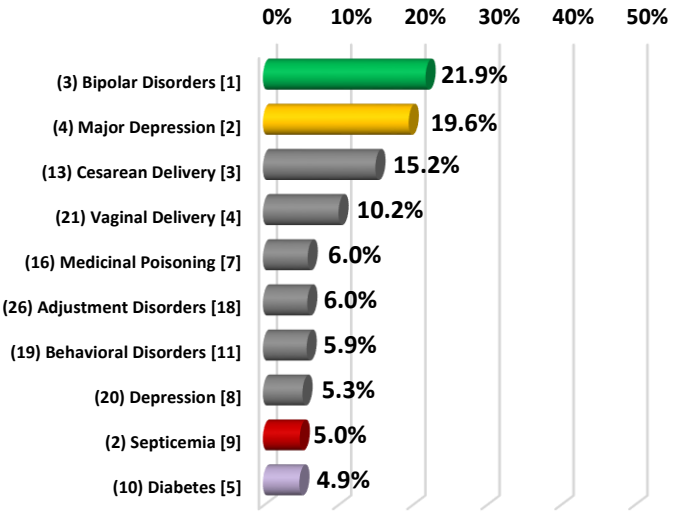


Figure 35: Family-Reasons for PPRs, July 2017 to June 2018

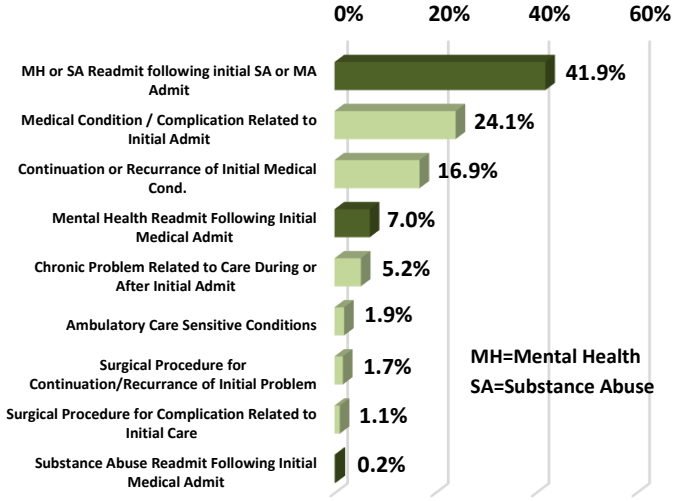


Figure 36: Risk-adjusted PPR Rates per 1,000 Hospital Admissions for Family-Related and SSI-Related Eligibility Categories, July 2017 to June 2018

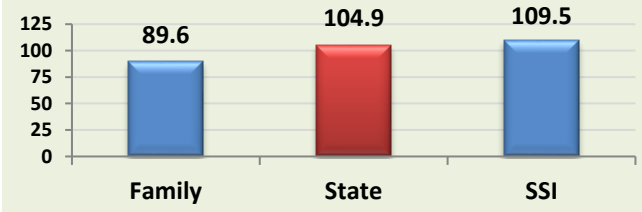
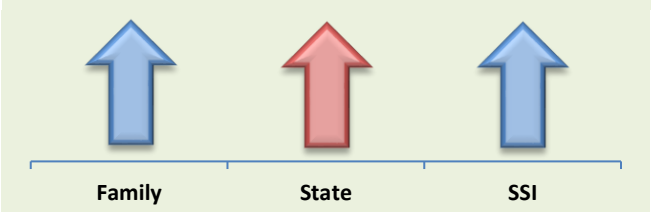


Figure 37: Change in PPR Rates for Family-Related and SSI-Related Eligibility Categories from FY2016/2017 to FY2017/2018



Mental health conditions were three of the top six PPRs for enrollees in an SSI-related eligibility group. Schizophrenia was the top PPR for enrollees in an SSI-related eligibility group accounting for almost 18 percent of top ten PPAs.

Figure 38: SSI-Reasons for PPRs, July 2017 to June 2018

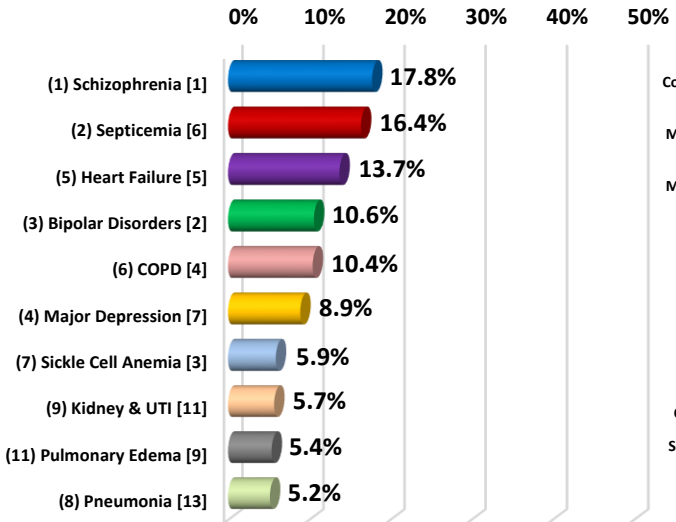
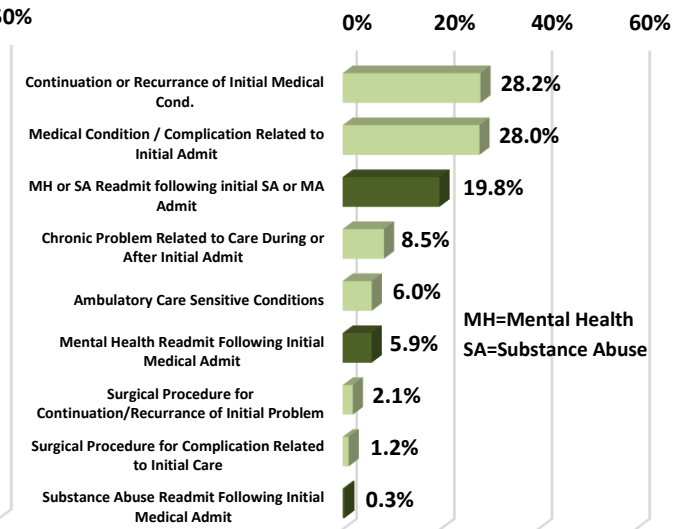


Figure 39: SSI-Top 10 Conditions Leading to PPRs, July 2017 to June 2018*

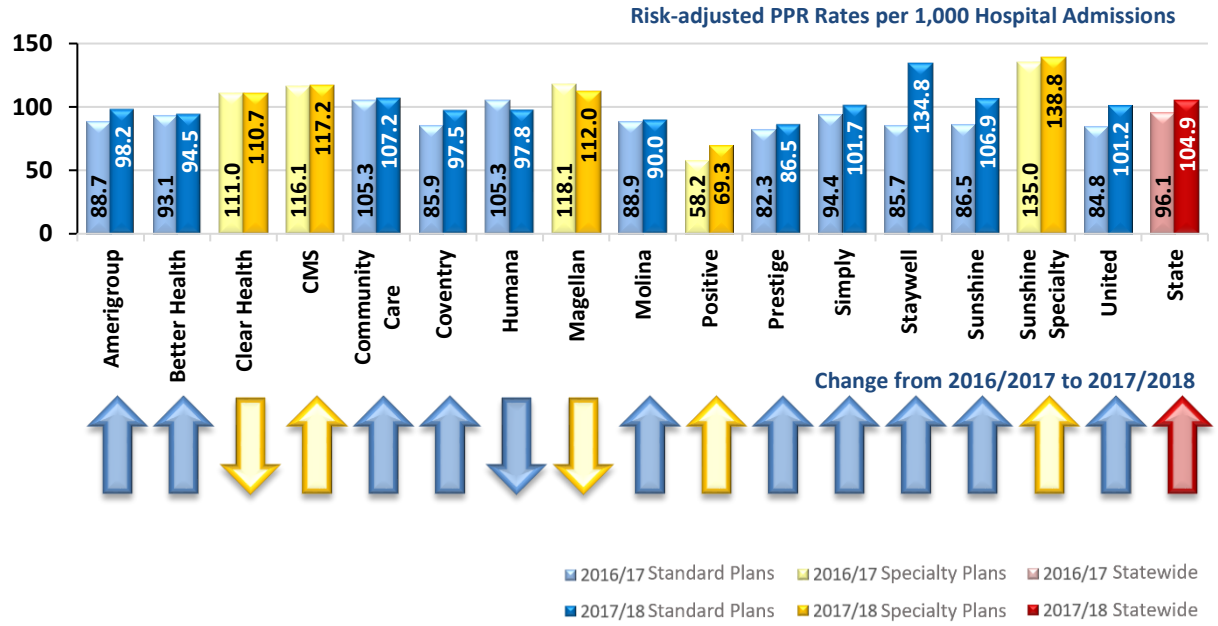


*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPRs by Plan

Figure 40: Risk-adjusted PPR Rates by Plan, July 2016 to June 2017 and July 2017 to June 2018**



Three plans experienced a decrease in PPR rates from FY16/17 to FY17/18. With the exception of Positive, specialty plans had the highest rates of PPRs. Community Care and Staywell were the only standard plans with a higher PPR rate than the statewide average.

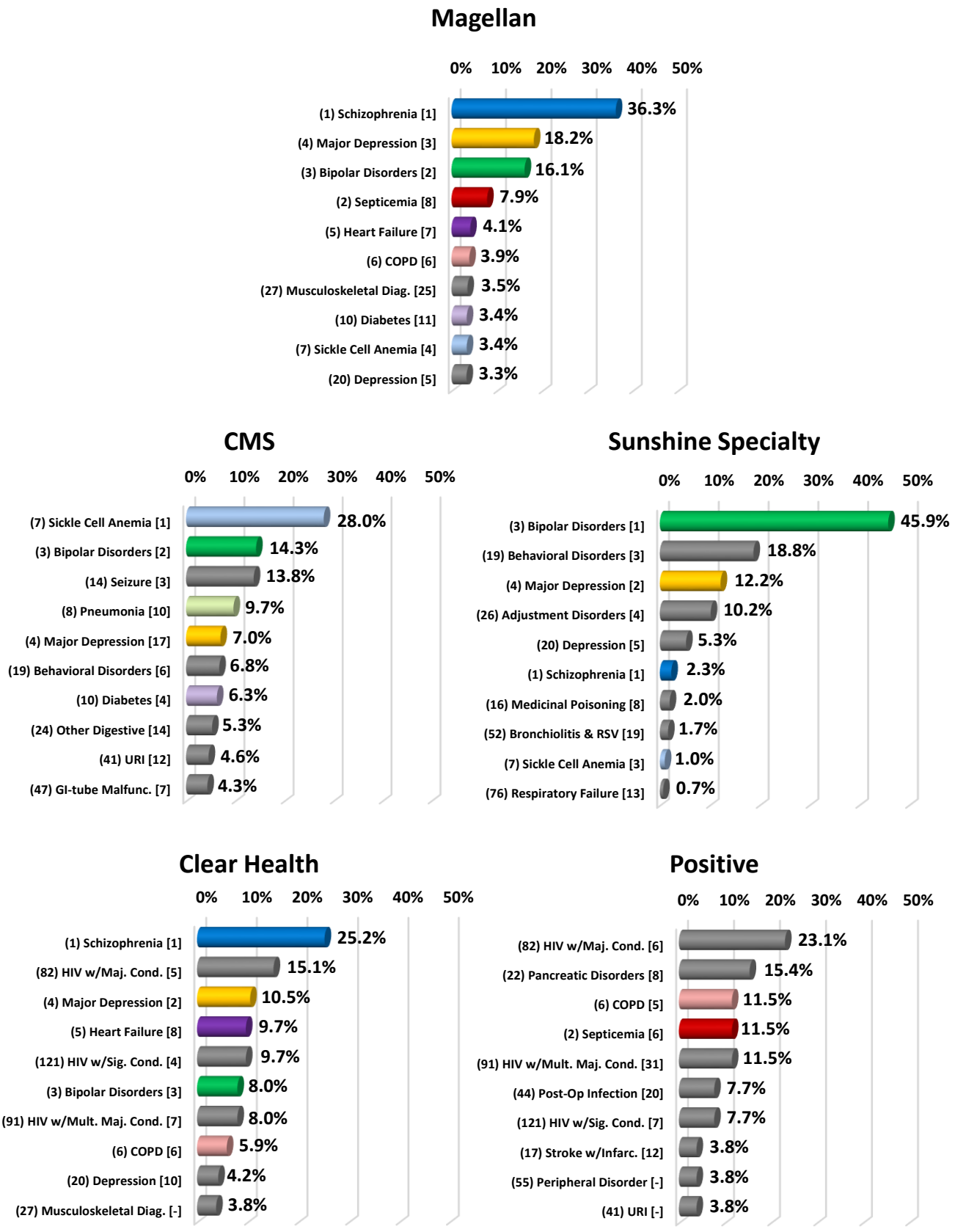
Four of the top ten conditions leading to a PPR for Magellan were mental health conditions.

Sickle cell anemia was the top condition leading to a PPR for Children's Medical Services. Two of the top ten conditions for CMS were mental health conditions although only one mental health condition was among the top five. The top six conditions for Sunshine Specialty were mental health conditions, accounting for 95 percent of the top ten PPRs for the plan. Bipolar disorders accounted for almost half of the top ten PPRs for Sunshine Specialty.

Clear Health and Positive are the Specialty Health Plans for enrollees with an HIV diagnosis. Four of the top ten conditions leading to a PPR for Clear Health are mental health conditions.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Figure 41: Top 10 Conditions Leading to a PPR by Specialty Plan, July 2017 to June 2018*

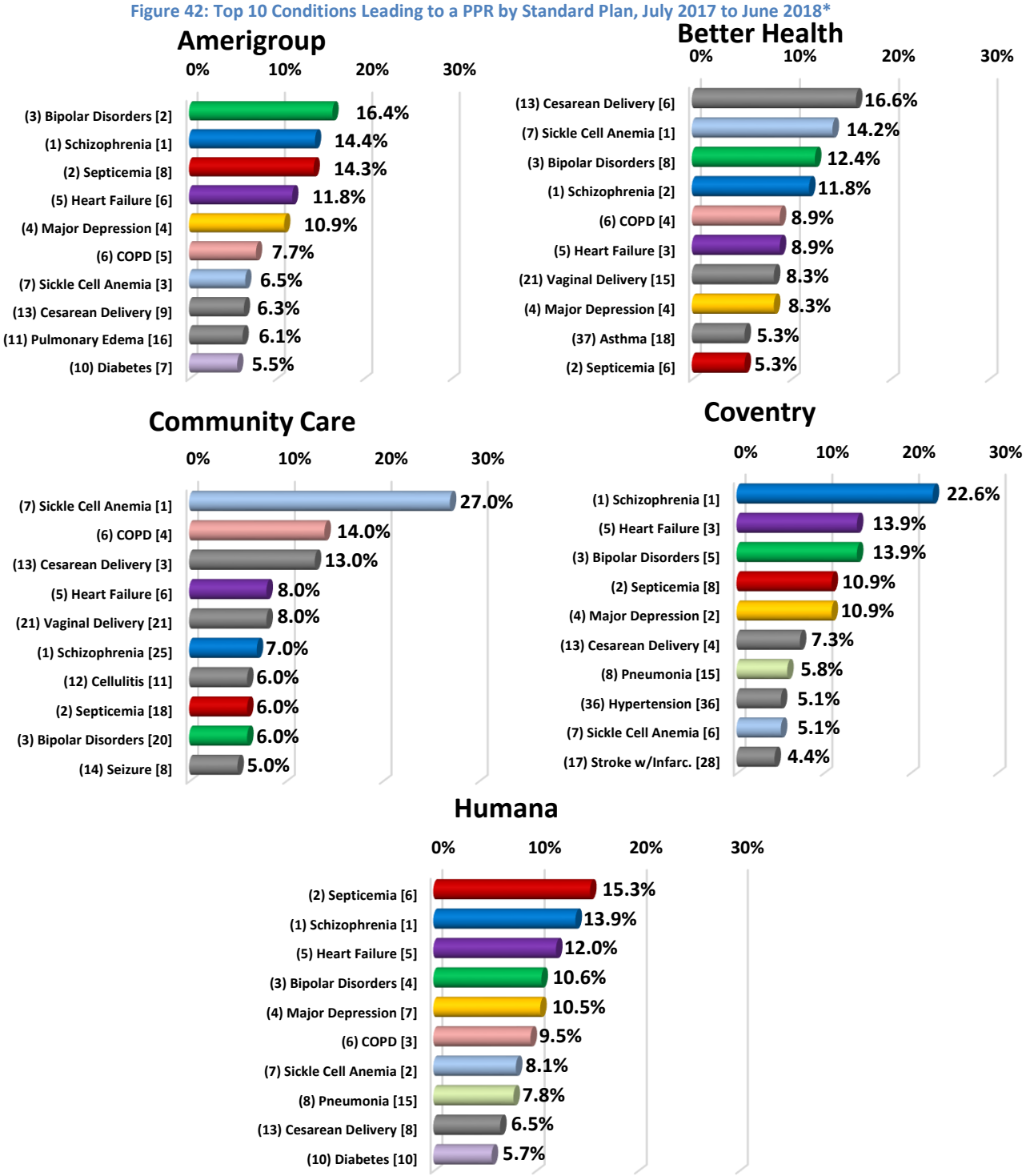


*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

A mental health condition was the top condition resulting in a PPR for four standard plans. Another top condition leading to a PPR was sickle cell anemia. Sickle cell anemia was the top condition for Community Care and the second condition for Better Health. Community Care operates exclusively in Region 10, and Better Health operates in Regions 6 and 10. Region 10 has the largest percentage of Black Medicaid recipients (42%). This population is more prone to sickle cell anemia (see Appendix 2).

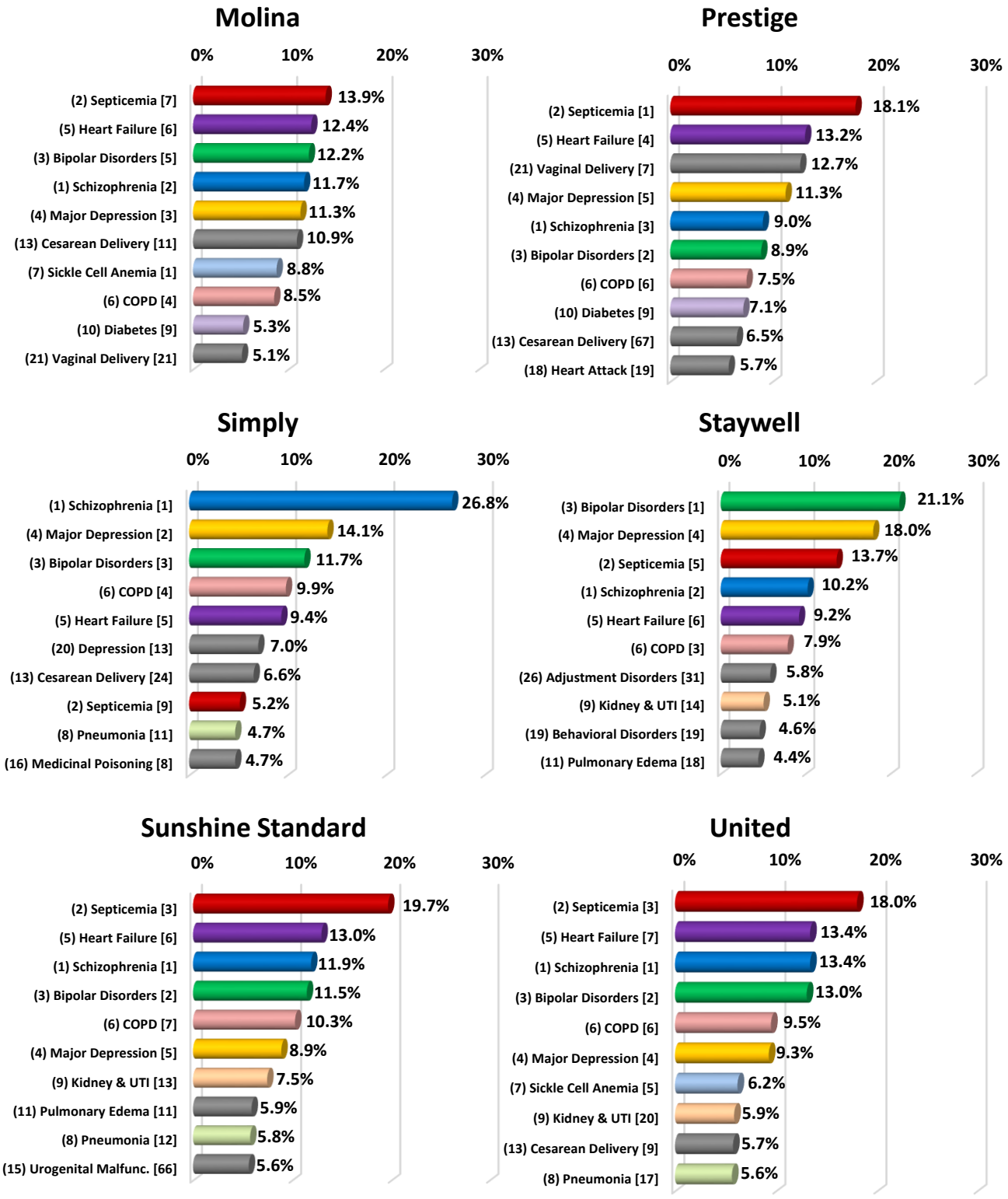
Figure 42: Top 10 Conditions Leading to a PPR by Standard Plan, July 2017 to June 2018*



*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

COPD is among the top ten conditions resulting in a PPR for ten standard plans, and among the top five conditions resulting in PPRs for five of the 11 plans. Cesarean delivery is among the top ten conditions resulting in PPRs for nine of the 11 plans.

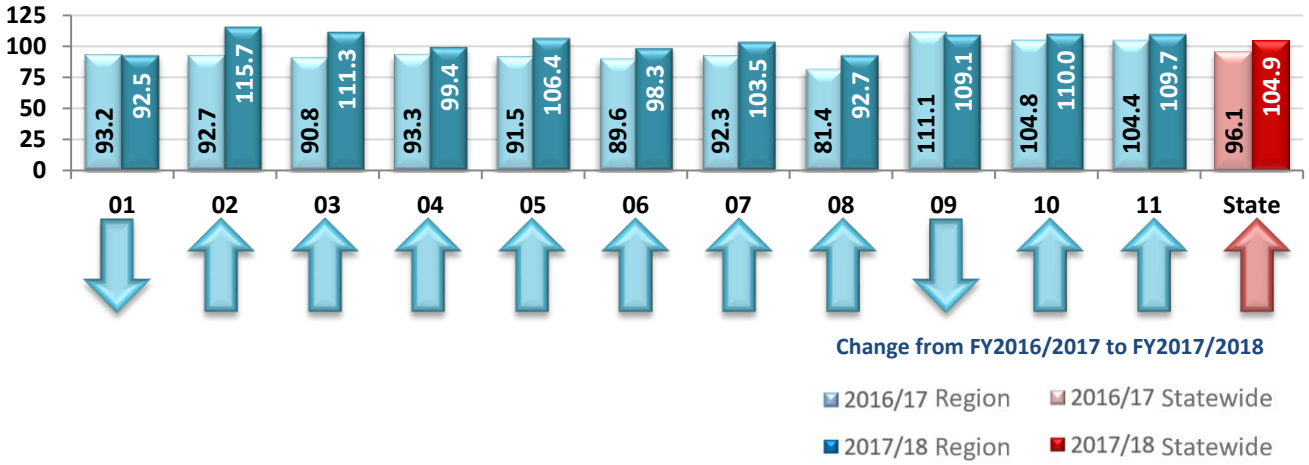


*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

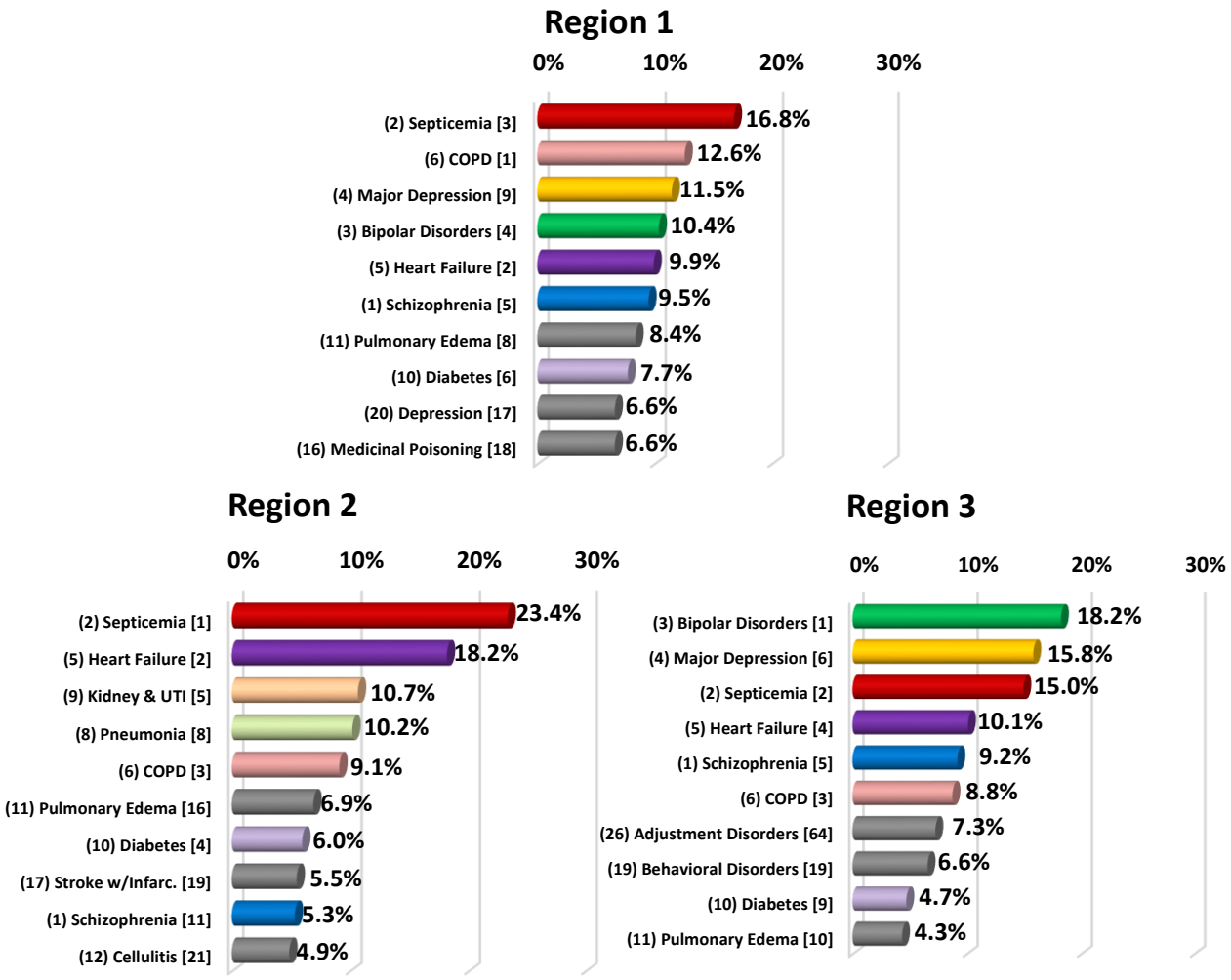
PPRs by Region

Figure 43: Risk-adjusted PPR Rates per 1,000 Hospital Admissions by Region, July 2016 to June 2017 and July 2017 to June 2018



PPR rates increased in 9 regions from FY16/17 to FY17/18. A mental health condition is the top condition leading to a PPR in Regions 3, 5, 7, 10, 11. COPD is in the top five conditions leading to a PPR in five of the 11 regions.

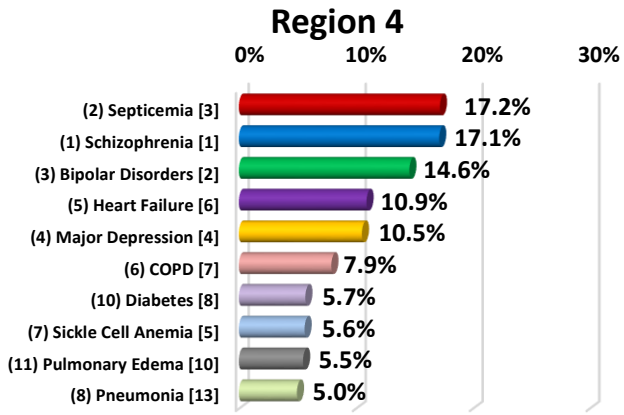
Figure 44: Top 10 Conditions Leading to a PPR by Region, July 2017 to June 2018*

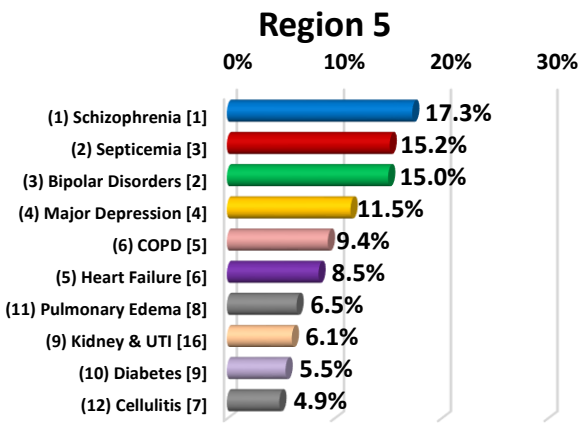


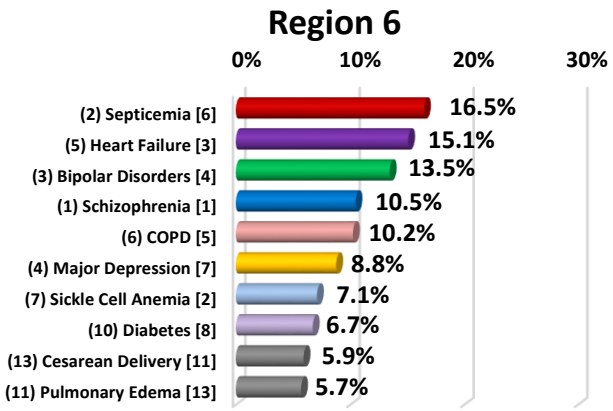
*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.

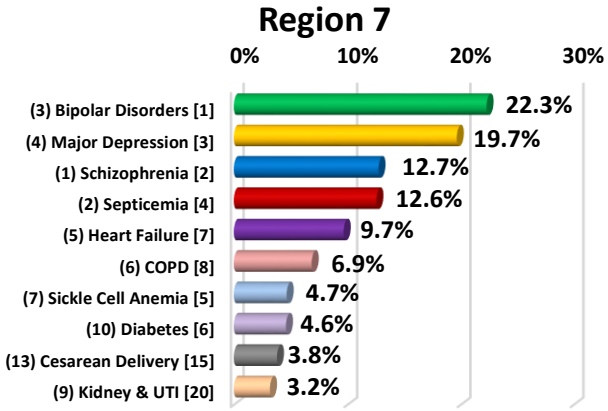
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

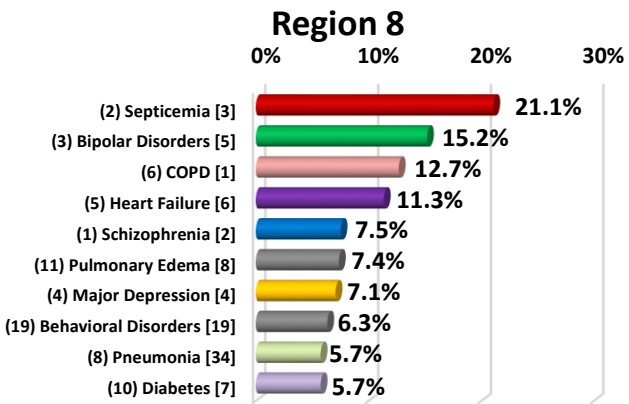
Septicemia is the leading medical condition followed by a PPR in six regions. It is the second most common condition in one region.

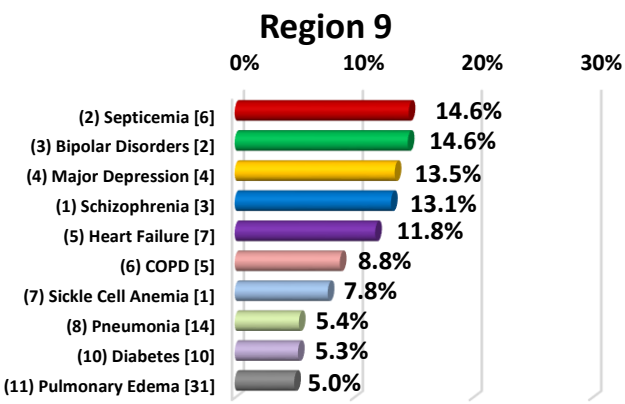


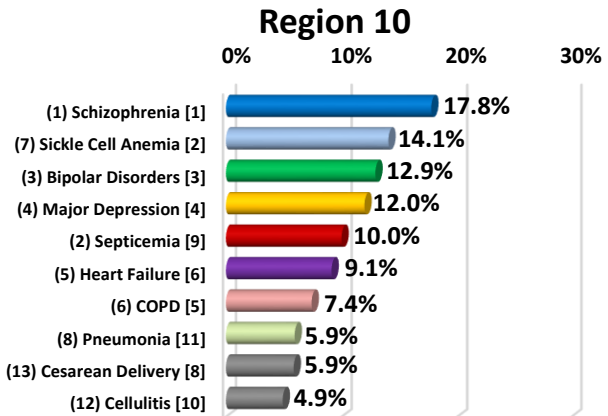


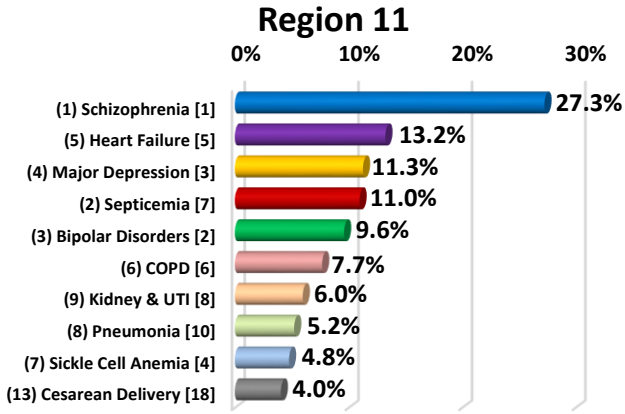












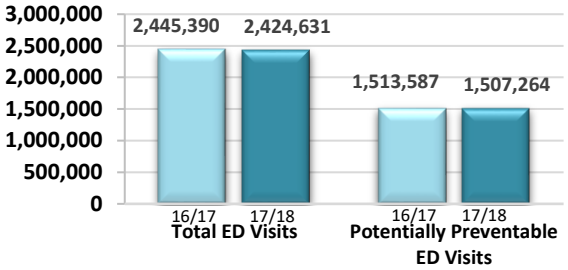
*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. A dash indicates the condition was not present in FY16/17. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18. Conditions share the same ranking when the value of the percentage for each condition is the same.
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Potentially Preventable Emergency Department Visits (PPV)

Potentially preventable emergency department visits (PPVs) are emergency department visits that may result from a failure to access primary care or a lack of ambulatory care coordination. PPVs are ambulatory sensitive conditions, such as asthma, which may be avoided with adequate monitoring and follow-up, such as medication management. When a PPV occurs shortly after a hospitalization, it may be the result of actions taken or omitted during the hospital stay or poor coordination with physicians after release. PPVs may also be nursing sensitive conditions such as a hip fracture because of a fall. These trauma events are considered potentially preventable.

There were 38,269,093 member months from July 2017 to June 2018.

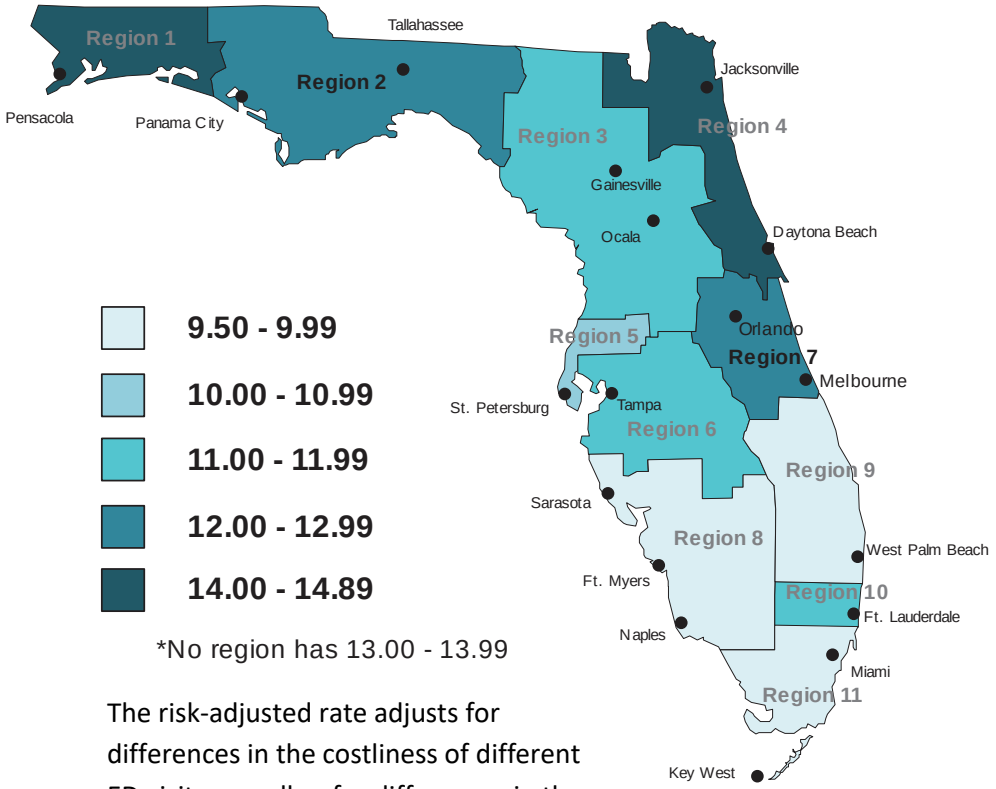
Figure 45: Total Number of ED Visits and Total Number of ED Visits Identified as Potentially Preventable from FY2016/2017 to FY2017/2018



During the FY17/18 review period, 62 percent (1,507,264/2,424,631) of all ED visits were identified as potentially preventable as compared to 61.9 percent in FY16/17.

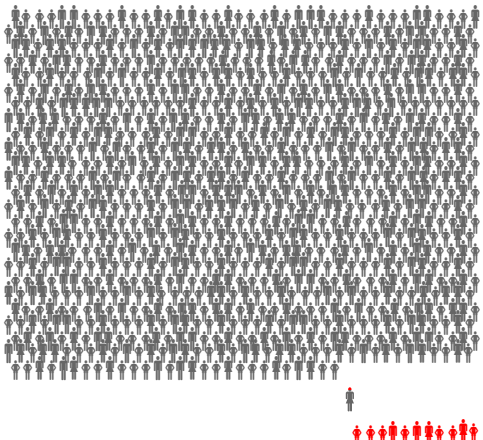
Region 4 had the highest rate of PPVs.

Figure 46: Risk-adjusted PPV Rates per 1,000 Enrollee Months by Region, July 2017 to June 2018



*No region has 13.00 - 13.99

Figure 47: Risk-adjusted PPV Rate per 1,000 Enrollee Months Statewide, July 2017 to June 2018



11.4* Emergency Department Visits

Per 1,000 Enrollee Months were Potentially Preventable

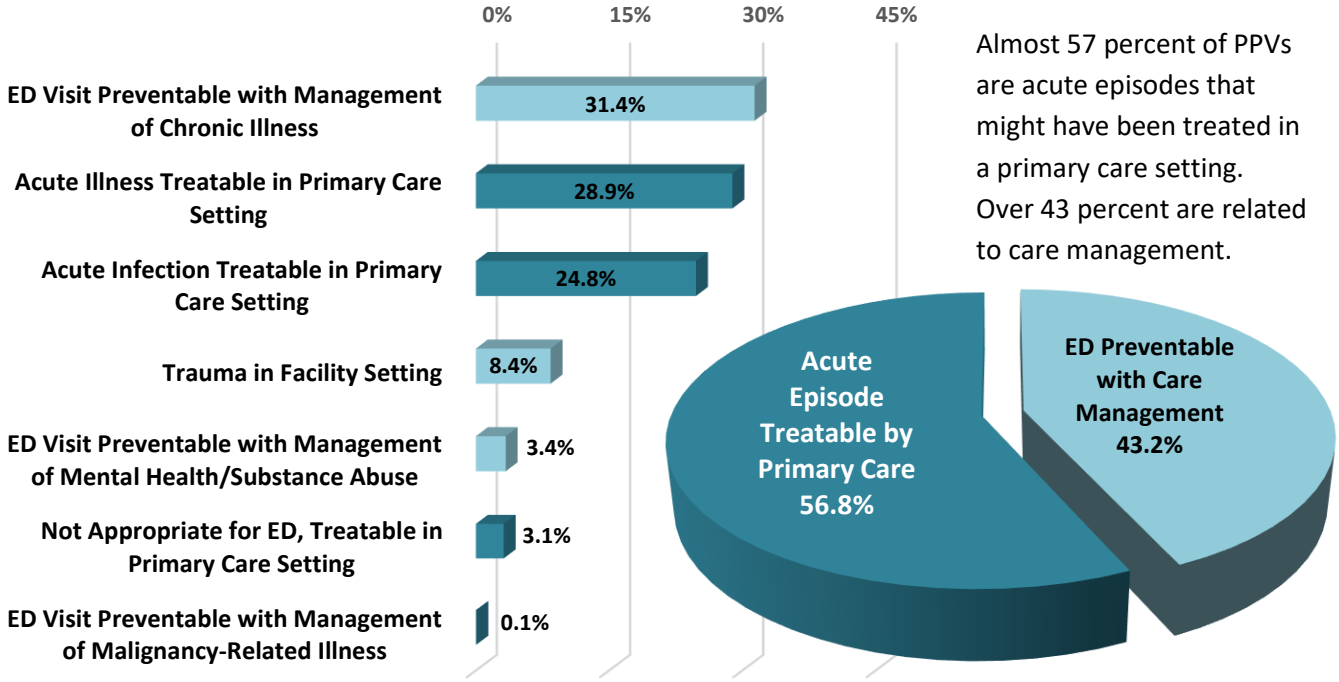
The risk-adjusted rate adjusts for differences in the costliness of different ED visits as well as for differences in the burden of illness across plans, regions, or other populations.

*See the technical appendix for changes to the methodology for identifying potentially preventable emergency department visits as compared to prior issues of this report.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

More than 31 percent of PPVs were considered potentially preventable because management of a chronic illness might have prevented the ED visit. About 54 percent of PPVs were considered potentially preventable because they addressed an acute illness (29%) or an acute infection (25%) that might have been treated in a primary care setting.

Figure 48: Reasons for PPVs Statewide, July 2017 to June 2018

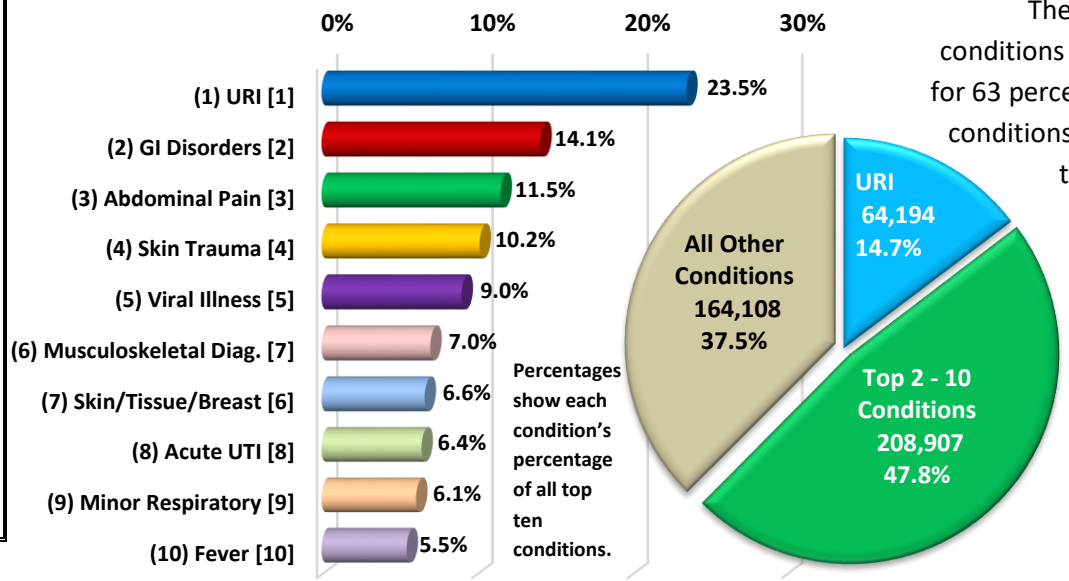


Almost 57 percent of PPVs are acute episodes that might have been treated in a primary care setting. Over 43 percent are related to care management.

Upper respiratory infections (URI) account for more than 23 percent of the top ten conditions leading to a PPV, 14 percent of all PPVs were gastrointestinal disorders (GI Disorders), followed by abdominal pain. Together these three conditions account for almost 50 percent of the top ten conditions that lead to an ED visit.

Figure 49: Top 10 Conditions Leading to PPVs, July 2017 to June 2018*

Numbers in parentheses () are current year's statewide ranking. Numbers in brackets [] are previous year's rankings for that plan, region, eligibility, or age.



The top ten conditions account for 63 percent of all conditions leading to a PPV.

*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPVs by Age

The top two conditions resulting in a PPV for children were upper respiratiory infections (URIs) and gastrointestinal (GI) disorders. The top two conditions for adults were abdominal pain and musculoskeletal diagnosis.

Figure 50: Children-Top 10 Conditions Leading to PPVs, July 2017 to June 2018*

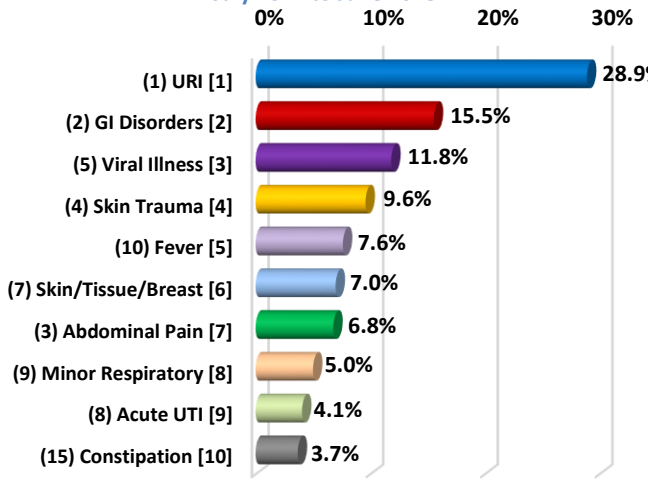


Figure 51: Children-Reasons for PPVs, July 2017 to June 2018

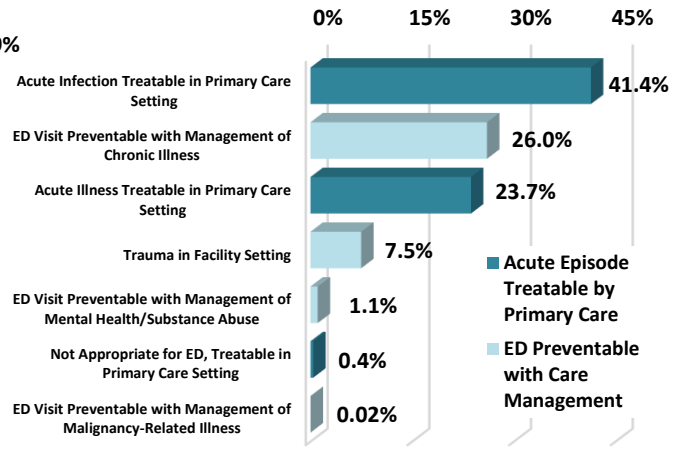


Figure 52: Risk-adjusted PPV Rates per 1,000 Enrollee Months for Children and Adults, July 2017 to June 2018

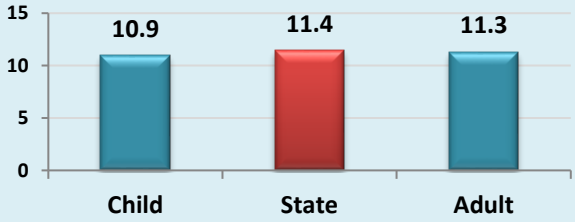
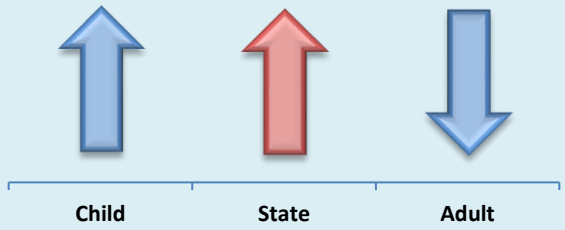


Figure 53: Change in PPV Rates for Children and Adults from FY2016/2017 to FY2017/2018



Forty one percent of children's PPVs involved acute infections that might have been treated in a primary care setting as compared to 18 percent of adults.

Figure 54: Adults-Top 10 Conditions Leading to PPVs, July 2017 to June 2018*

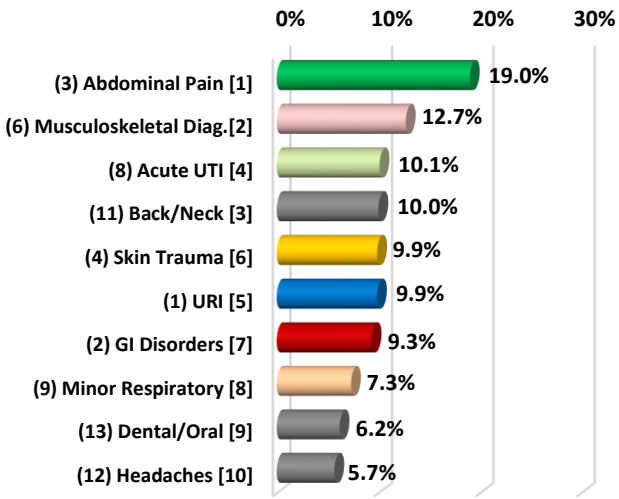
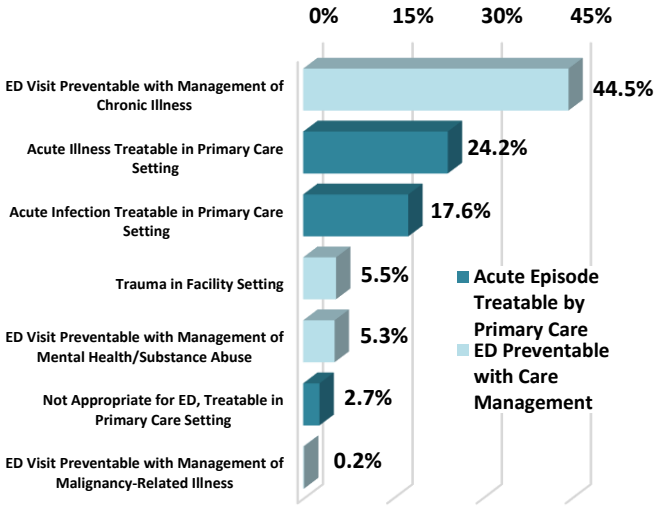


Figure 55: Adults-Reasons for PPVs, July 2017 to June 2018



*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPVs by Eligibility Group

The top two conditions resulting in a PPV for the Family-Related eligibility group were upper respiratory infections (URIs) and gastrointestinal (GI) disorders. The top two conditions resulting in a PPV for the SSI-Related eligibility group were abdominal pain and musculoskeletal diagnoses.

Figure 57: Family-Top 10 Conditions Leading to PPVs, July 2017 to June 2018

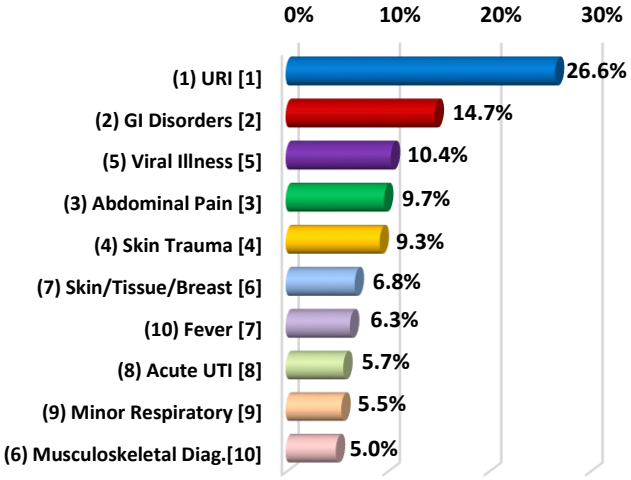


Figure 56: Family-Reasons for PPVs, July 2017 to June 2018

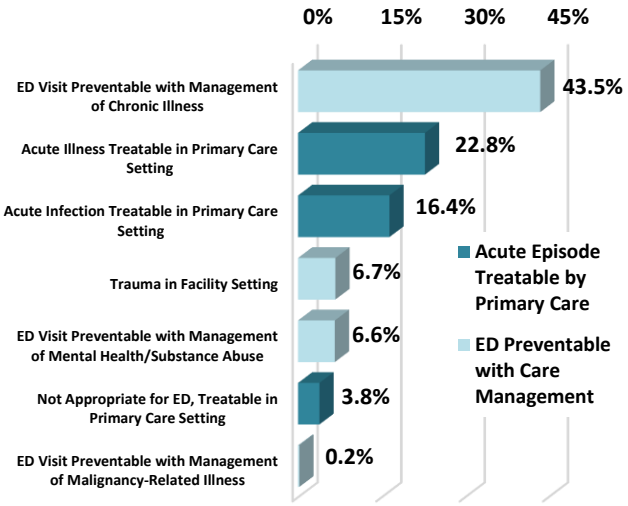


Figure 58: Risk-adjusted PPV Rates per 1,000 Enrollee Months for Family and SSI Eligibility, July 2017 to June 2018

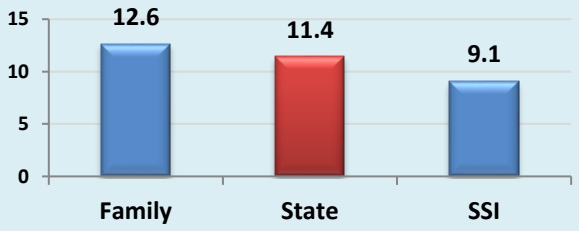


Figure 59: Change for Family and SSI Eligibility Categories from FY2016/2017 to FY2017/2018

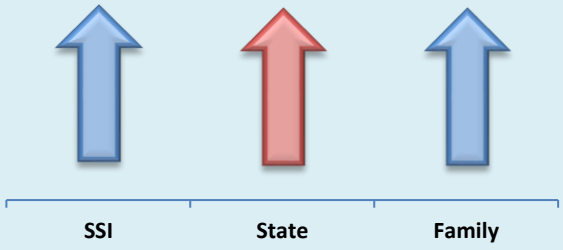


Figure 60: SSI-Top 10 Conditions Leading to PPVs, July 2017 to June 2018

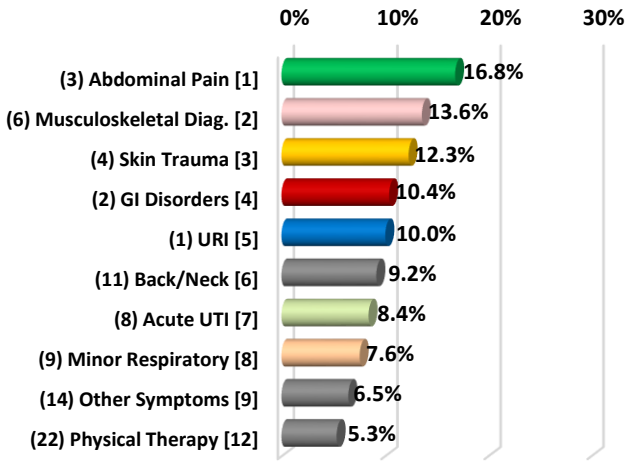
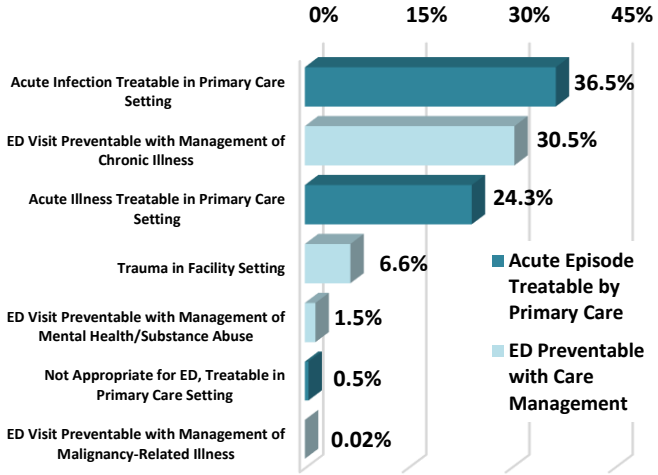


Figure 61: SSI-Top Reasons for PPVs, July 2017 to June 2018

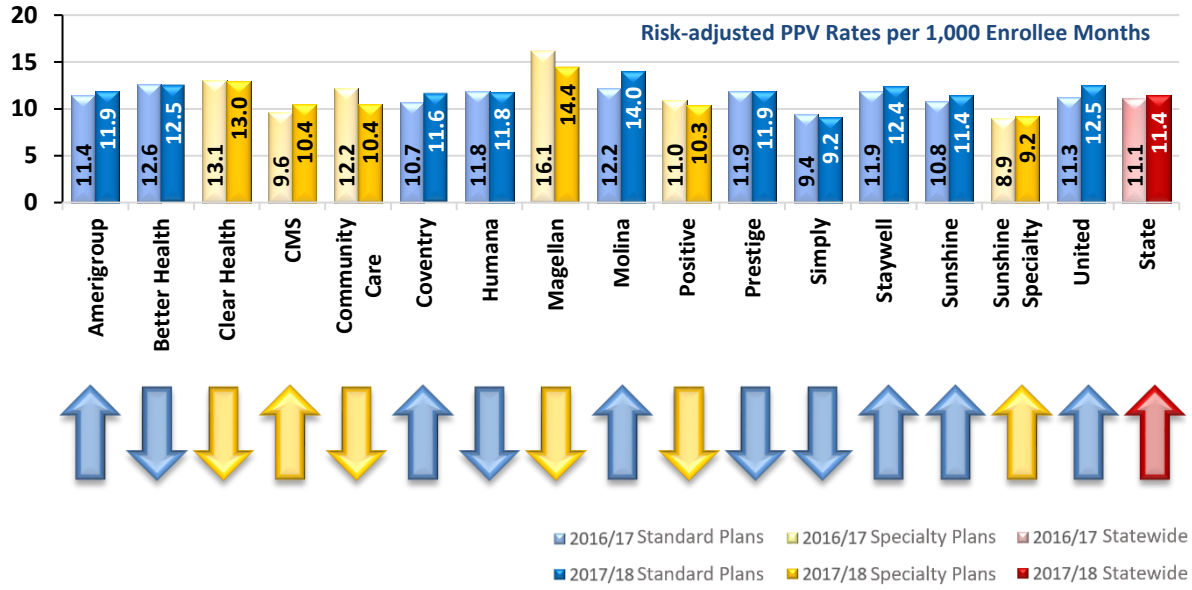


*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

PPVs by Plan

Figure 62: Risk-adjusted PPV Rates by Plan from July 2016 to June 2017 and July 2017 to June 2018**



PPV rates increased for 8 of the 16 plans from FY16/17 to FY17/18. Magellan had the highest rate of PPVs of any plan.

The top conditions contributing to a PPV for every specialty plan except the two specialty plans for children are abdominal pain and musculoskeletal diagnosis.

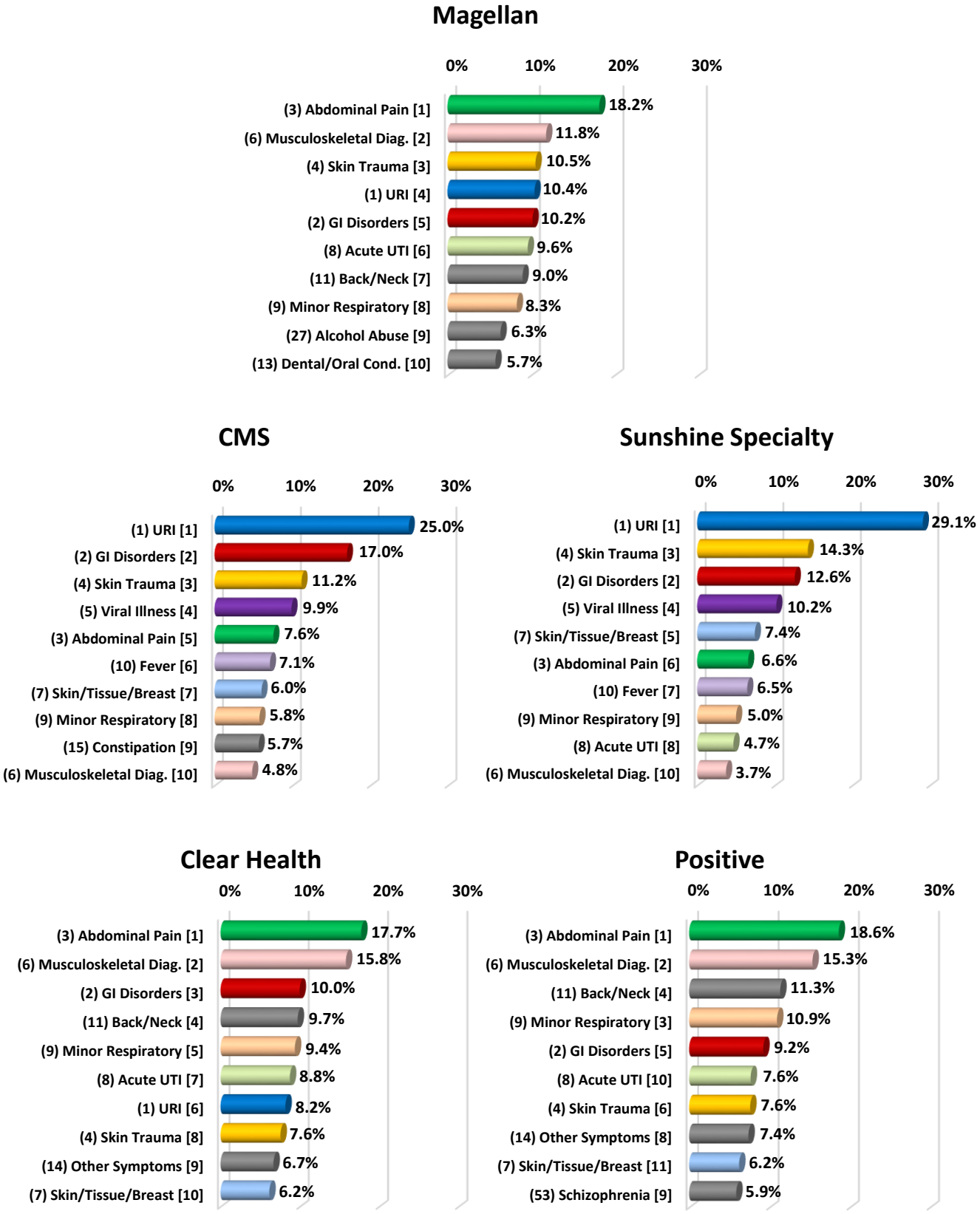
The top condition contributing to a PPV for the two specialty plans for children is the same as for all children, upper respiratory infections (URIs).

The top two conditions contributing to a PPV for the two specialty plans for enrollees with an HIV diagnosis are abdominal pain and musculoskeletal diagnosis.

** The fee-for-service (FFS) population is included in the calculation of the statewide norms for risk-adjusted rates. Most of the FFS population consists of Medicaid recipients who are dually eligible for Medicare and Medicaid and whose medical care is managed by Medicare. Therefore results for FFS are not separately displayed in this report.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Figure 63: Top 10 Conditions Leading to PPVs by Specialty Plan, July 2017 to June 2018*

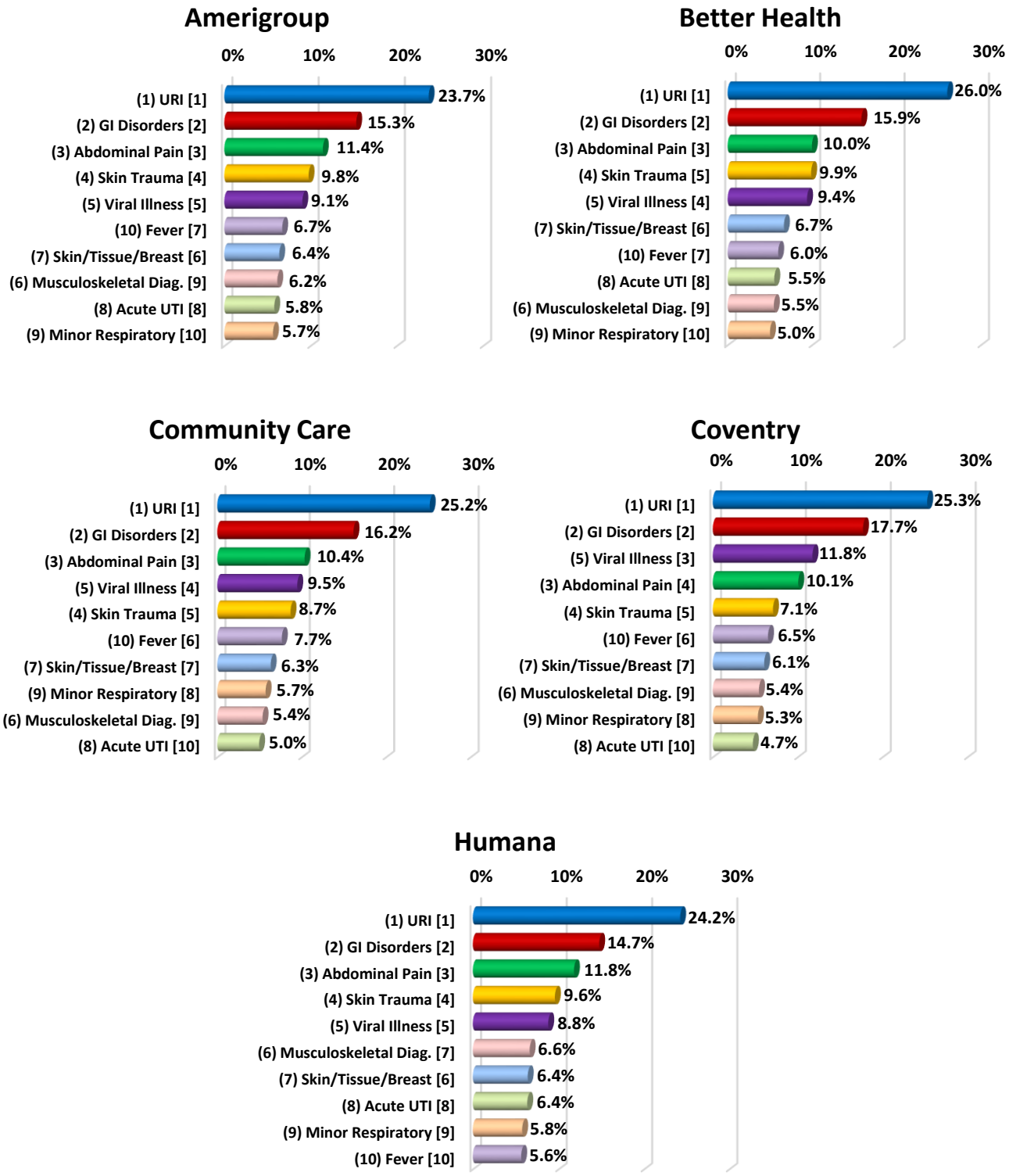


*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Upper respiratory infections (URIs), gastrointestinal (GI) disorders and abdominal pain are the top three conditions resulting in a PPV for nine of the 11 standard plans.

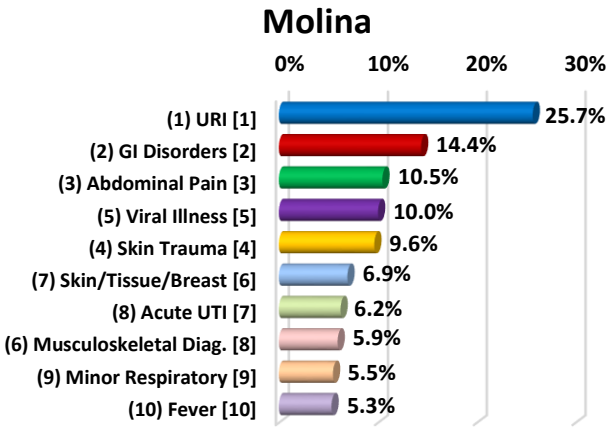
Figure 64: Top 10 Conditions Leading to PPVs by Standard Plan, July 2017 to June 2018*

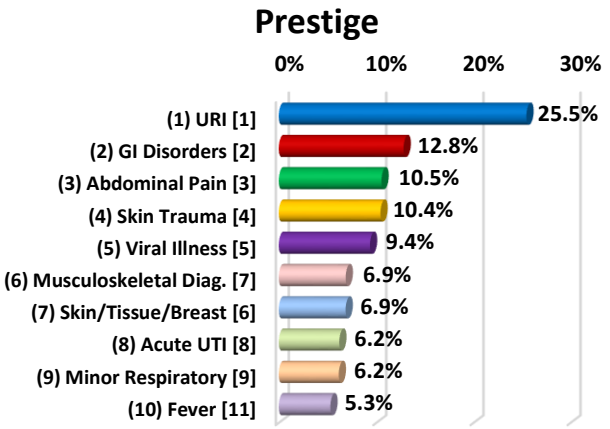


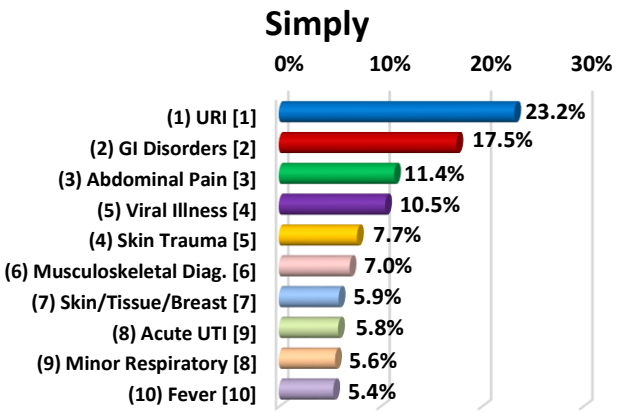
*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

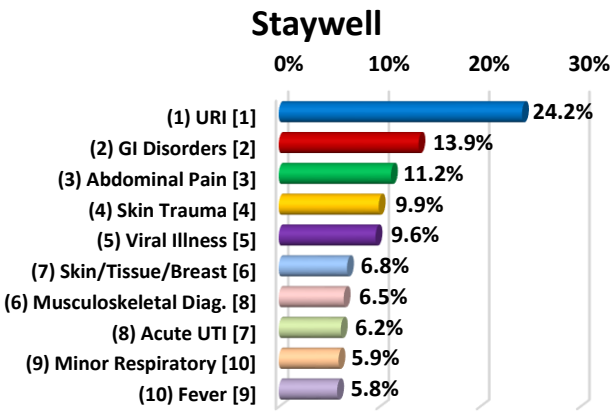
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

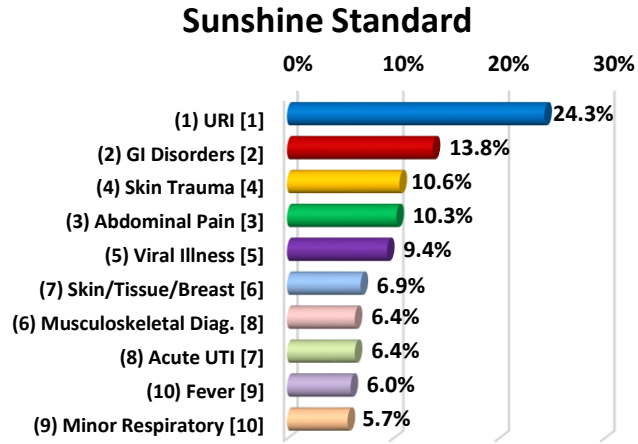
URIs were not only the top condition statewide but were the top condition for each standard plan and each region.

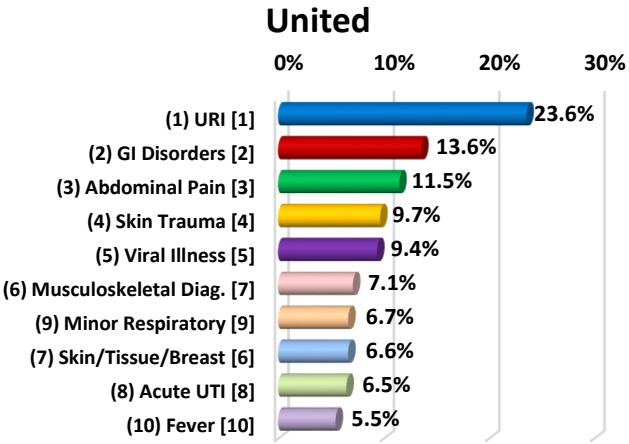










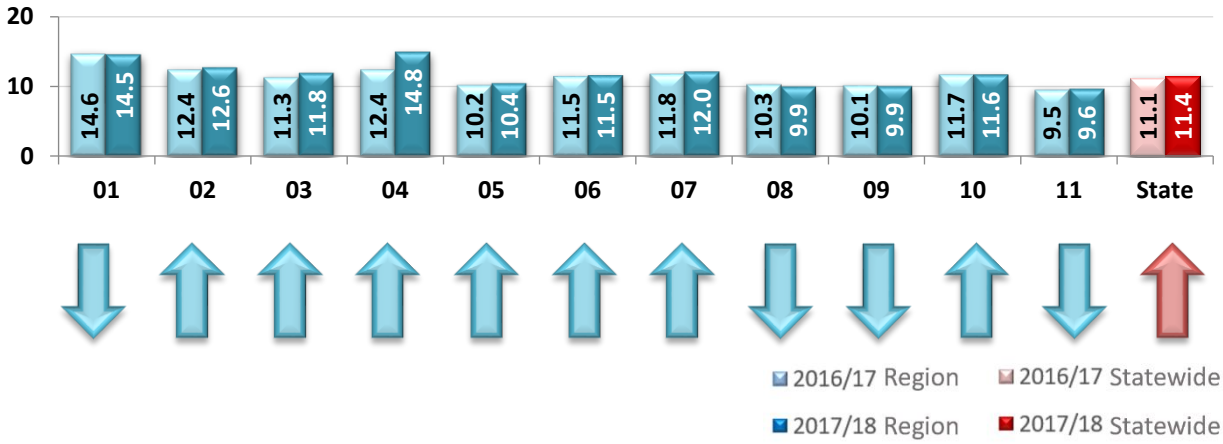


*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

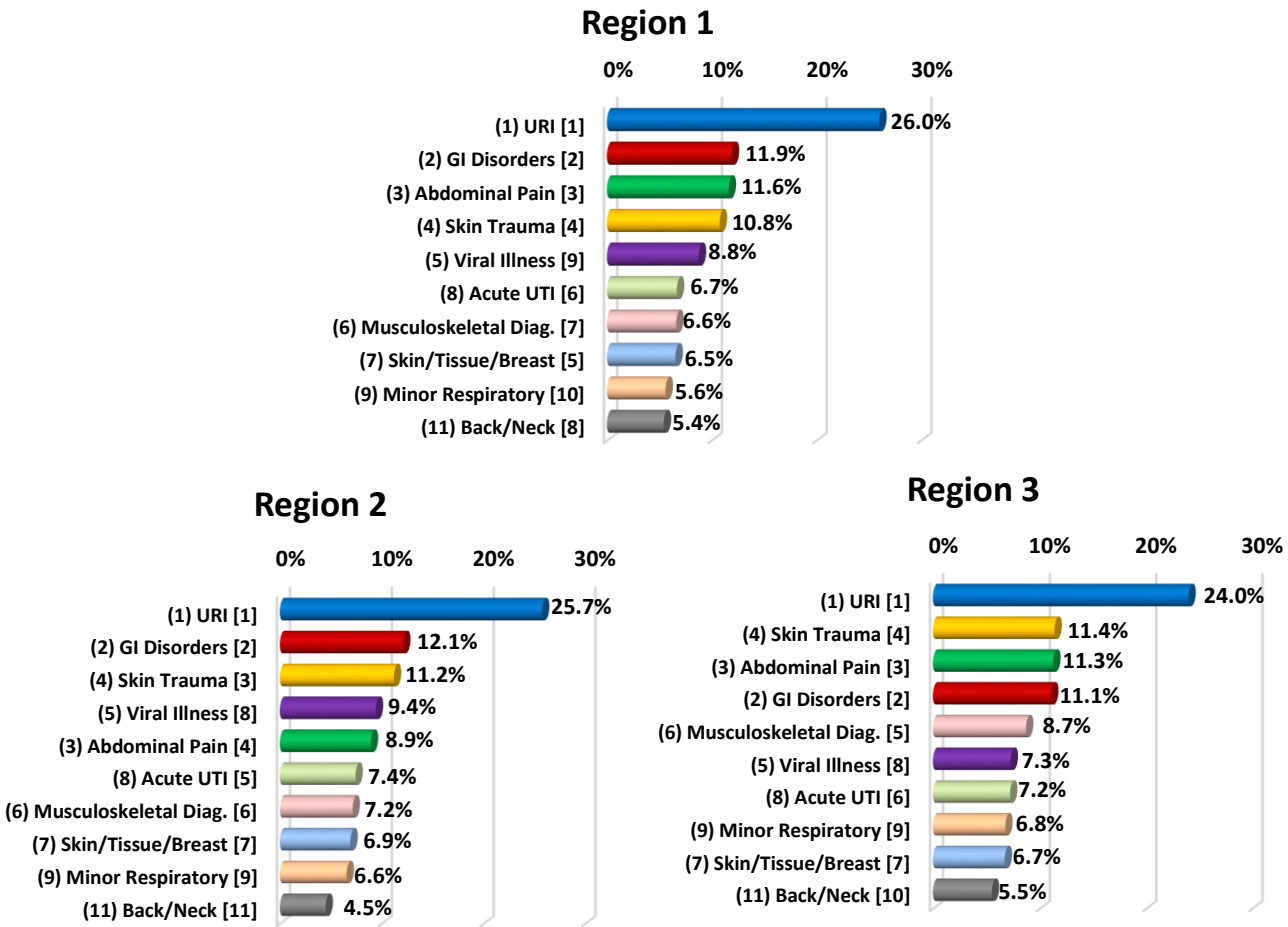
PPVs by Region

Figure 65: Risk-adjusted PPV Rates per 1,000 Enrollee Months by Region, FY16/17 to FY17/18



All but four regions experienced an increase in PPV rates from FY16/17 to FY17/18. Region 4 has the highest rate of PPVs of any region. Upper respiratory infections (URIs), GI disorders, and abdominal pain are among the top three conditions contributing to a PPV in seven of the 11 regions.

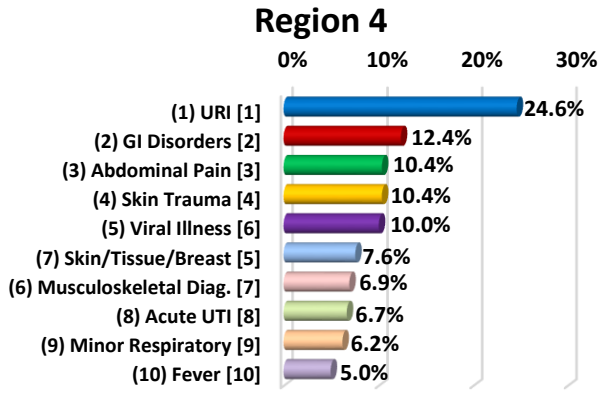
Figure 66: Top 10 Conditions Leading to PPVs by Region, July 2017 to June 2018*

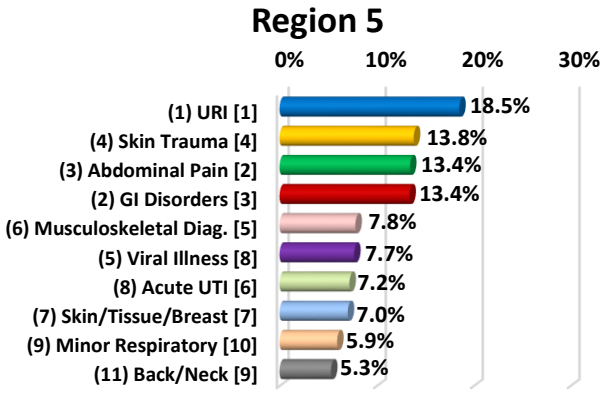


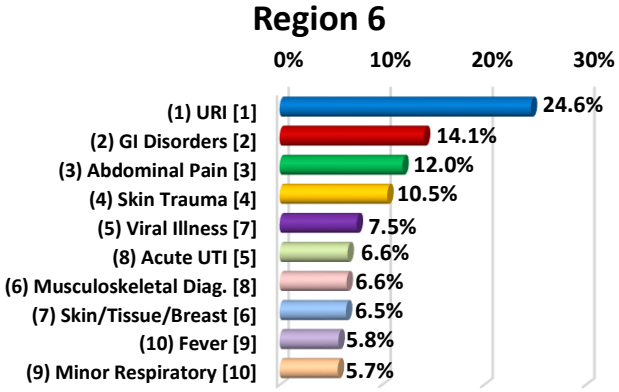
*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

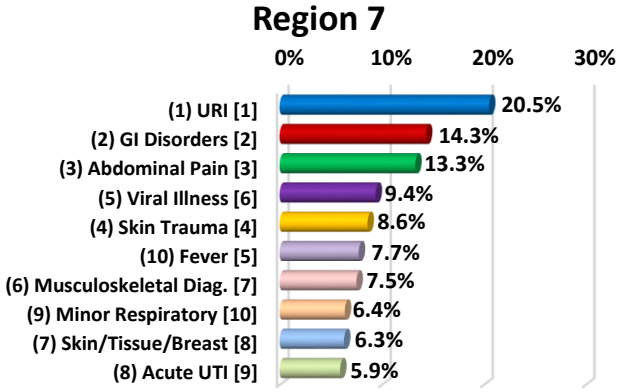
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

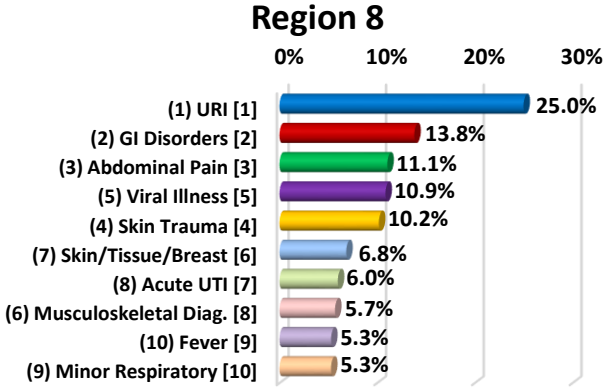
The top nine conditions resulting in a PPV statewide are consistently among the top ten conditions in all 11 regions of the state.

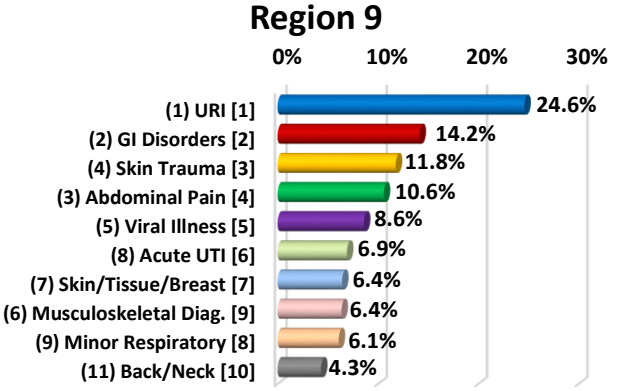


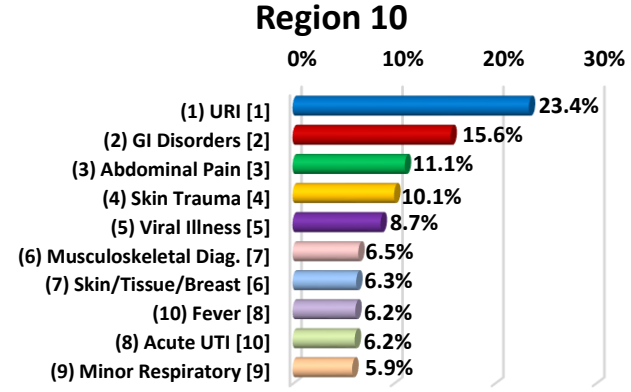


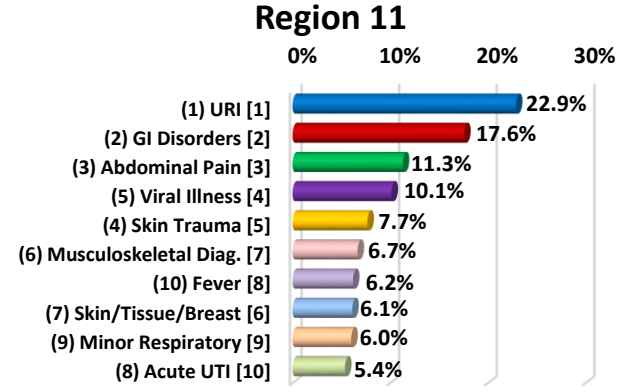












*Numbers in parentheses indicate the statewide ranking of the condition for FY17/18. Numbers in brackets indicate the group's corresponding ranking of the condition for FY16/17. Conditions shaded gray do not appear in the statewide top 10 ranking for FY17/18.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Conclusions

The statewide risk-adjusted PPE rates show that three hospital admissions and 11 ED visits were potentially preventable for every 1,000 member months during the review period. Over the same period, 105 hospital readmissions were potentially preventable for every 1,000 hospital admissions. Overall, PPA, PPR and PPV rates increased from FY16/17 to FY17/18.

Heart failure, septicemia, and COPD, all serious health conditions, were the top three conditions resulting in a PPA statewide. The top three conditions resulting in a PPR statewide were septicemia, schizophrenia, and heart failure. Upper respiratory infections (URIs), gastrointestinal (GI) disorders, and abdominal pain, all acute conditions, were the top conditions resulting in a PPV statewide. The top ten conditions contributing to each PPE statewide changed very little from FY16/17 to FY17/18. More changes were apparent when examining the top ten conditions by age, eligibility group, plan, and region.

While there is further work needed to understand the underlying causes of PPEs among Florida Medicaid enrollees, the details here lay a foundation for health plans, hospitals, and other providers to work with the Agency to reduce the number of PPEs, thereby improving quality of care and reducing costs.

Appendices

Appendix 1: Technical Specifications

Changes in the Methodology for Identifying Potentially Preventable Emergency Department Visits (PPVs)

Grouper Versions

Analyses of Potentially Preventable Admissions (PPAs) and Potentially Preventable Emergency Room Visits (PPVs) utilize versions 2.0 and 2.1 of the 3M™ Population Focused Preventable (PFP) grouper. Analyses for FY17/18 utilize version 2.0 and analyses for FY16/17 utilize version 2.1 of the grouper. Analyses of Potentially Preventable Readmissions (PPRs) utilize version 35.0 of the 3M™ PPR grouper for FY16/17 and version 35.0 for FY17/18.

Version changes for groupers typically include changes to the clinical logic the grouper uses to assess what conditions are considered potentially preventable. Following is a partial list of changes in clinical logic for each grouper version that are noteworthy because they may have impacted results in this report.

PPAs

Noteworthy changes in the clinical logic for PPAs from version 1.3 to version 2.0 of the PFP grouper:

- Sickle cell anemia crisis, inflammatory bowel disease, and intervertebral disc excision & decompression were changed to not potentially preventable for the general population but are considered potentially preventable for persons admitted to a hospital from a facility setting.

Noteworthy changes in the clinical logic for PPAs from version 2.0 to version 2.1 of the PFP grouper:

- Diagnosis Related Groups (APR DRGs) for Coronary bypass without Acute Myocardial Infarction (AMI) or complex primary diagnosis (PDX), Dorsal and Lumbar Fusion Procedure except for Curvature of Back, and procedures for obesity were added to the list of potentially preventable conditions for the general population;
- Diagnosis codes were removed from being considered potentially preventable for many APR DRGs. While these APR DRGs remain on the list of PPAs, fewer diagnosis codes trigger a PPA; and
- Additional diagnosis codes were considered potentially preventable for many APR DRGs. For these APR DRGs, more diagnosis codes trigger a PPA.

PPRs

Noteworthy changes in the clinical logic from version 32.0 to 35.0 of the PPR grouper:

- Renal Failure as an initial admission in combination with many conditions for a readmission was removed from the list of PPRs.
- Medicinal poisoning as an initial admission in combination with some conditions for a readmission were removed from the list of PPRs
- Kidney and urinary tract infection (UTI) as an initial admission in combination with some conditions for a readmission were added to the list of PPRs.

PPVs

Noteworthy changes in the clinical logic for PPVs from version 1.3 to version 2.0 of the PFP grouper

- Diagnosis codes were removed from being considered potentially preventable for many EAPGs. While these EAPGs remain on the list of PPVs, fewer diagnosis codes trigger a PPV.
- Additional diagnosis codes were considered potentially preventable for many EAPGs. For these EAPGs, more diagnosis codes trigger a PPV.

Noteworthy changes in the clinical logic for PPVs from version 2.0 to version 2.1 of the PFP grouper

- Diagnosis codes were removed from being considered potentially preventable for many EAPGs. While these EAPGs remain on the list of PPVs, fewer diagnosis codes trigger a PPV.
- Additional diagnosis codes were considered potentially preventable for many EAPGs. For these EAPGs, more diagnosis codes trigger a PPV.

Groupers Used by the PFP and PPR Groupers

The PPR grouper uses an APR DRG grouper to assign an APR DRG to each hospital admission. The PFP grouper uses an APR DRG grouper to assign an APR DRG to hospital admissions for PPAs, an EAPG grouper to assign an EAPG to emergency department visits for PPVs, and a CRG grouper to assign a CRG to each enrollee for PPAs and PPVs. Following is a list of the grouper versions embedded within the PFP and PPR groupers used in this report.

PFP Grouper version 2.0

- 3M™ All Patient Refined Diagnosis Related Groups (APR DRG) Classification System for ICD-10-CM, version 33.0
- 3M™ All Patient Refined Diagnosis Related Groups (APR DRG) Classification System for ICD-9-CM, version 32.0
- 3M™ Enhanced Ambulatory Patient Grouping (EAPG) System, version 3.10
- 3M™ Clinical Risk Groups (CRG) Classification System, version 2.0

PFP Grouper Version 2.1

- 3M™ All Patient Refined Diagnosis Related Groups (APR DRG) Classification System, version 34.0
- 3M™ Enhanced Ambulatory Patient Grouping (EAPG) System, version 3.12
- 3M™ Clinical Risk Groups (CRG) Classification System, version 2.1

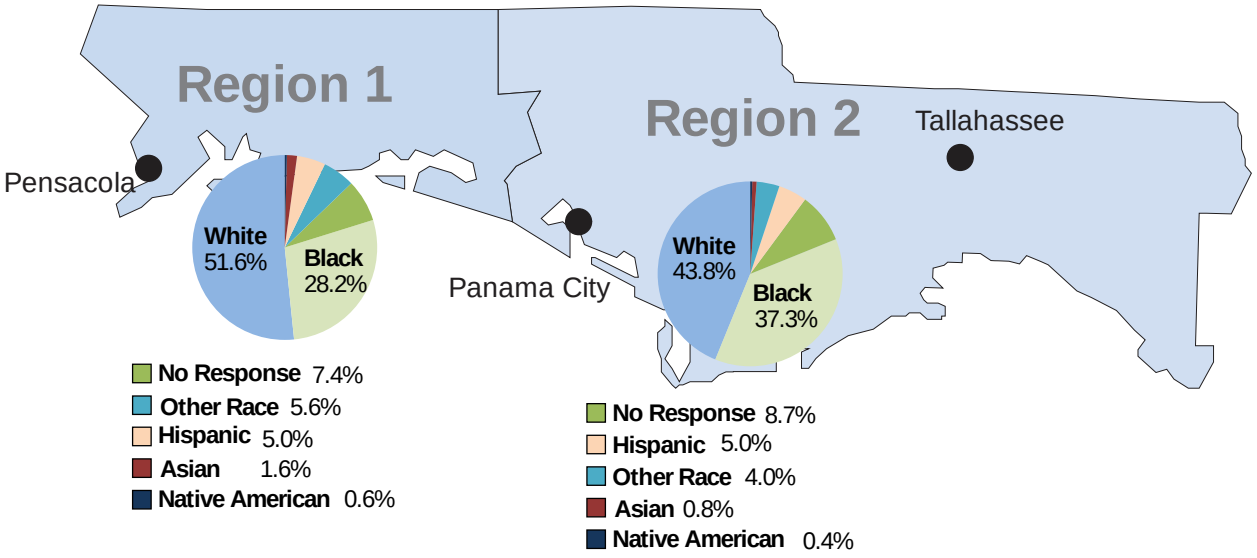
PPR Grouper Version 32.0

- 3M™ All Patient Refined Diagnosis Related Groups (APR DRG) Classification System, version 32.0

PPR Grouper Version 35.0

- 3M™ All Patient Refined Diagnosis Related Groups (APR DRG) Classification System, version 35.0

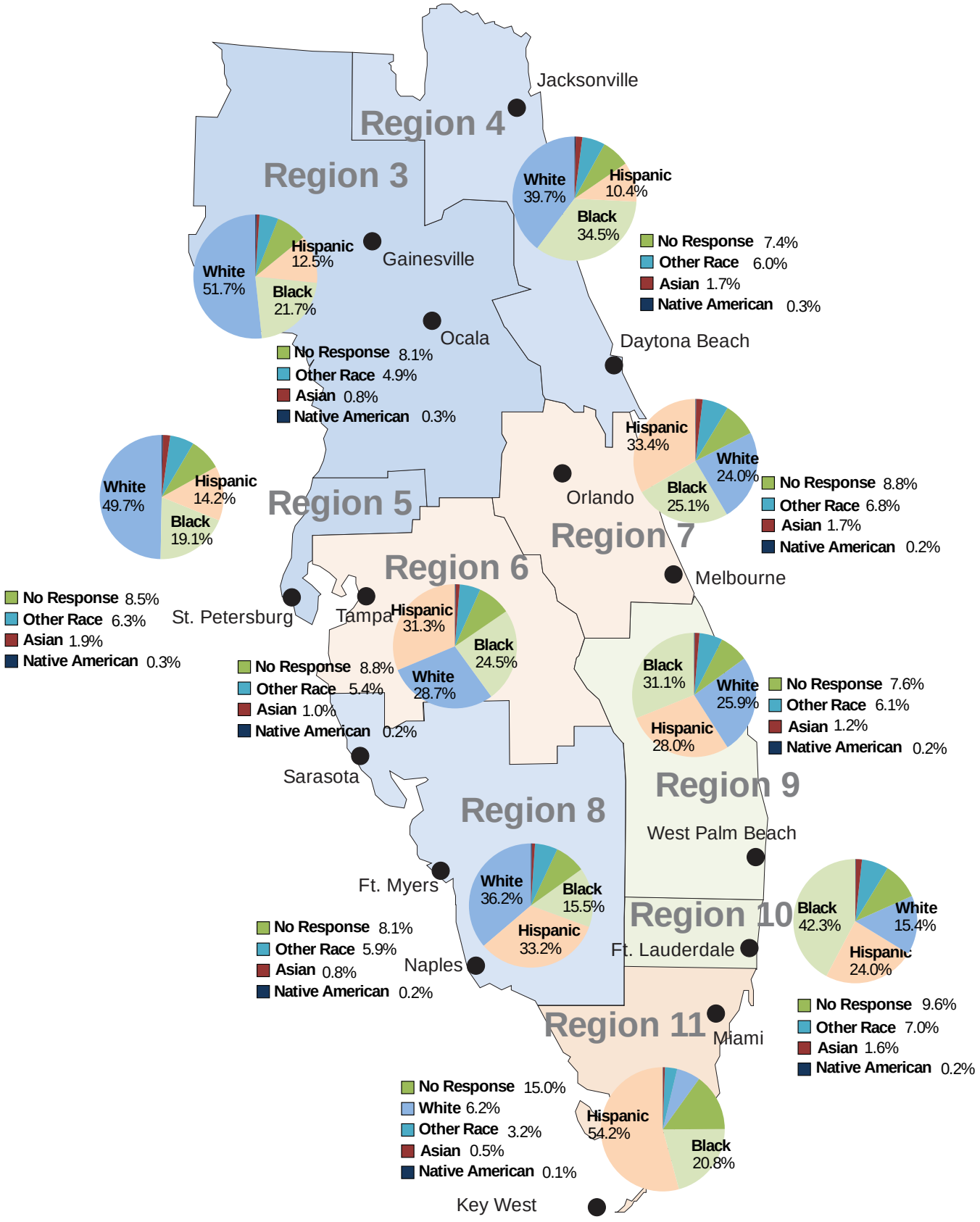
Appendix 2: Racial Composition of the Medicaid Population by Region



Region colors are based on the racial/ethnic group representing the largest percentage of Medicaid recipients in the region. Whites are the largest percentage of Medicaid recipients in six of the 11 regions. Hispanics are the largest percentage of Medicaid recipients in Regions 6, 7, and 11. Blacks are the largest percentage of Medicaid recipients in Regions 9 and 10.

Region 10 (Broward County) has experienced recent immigration from Caribbean countries including Haiti and Jamaica. One-third of Region 10's Black population is foreign-born (first generation immigrants), compared to only one-quarter of Florida as a whole.

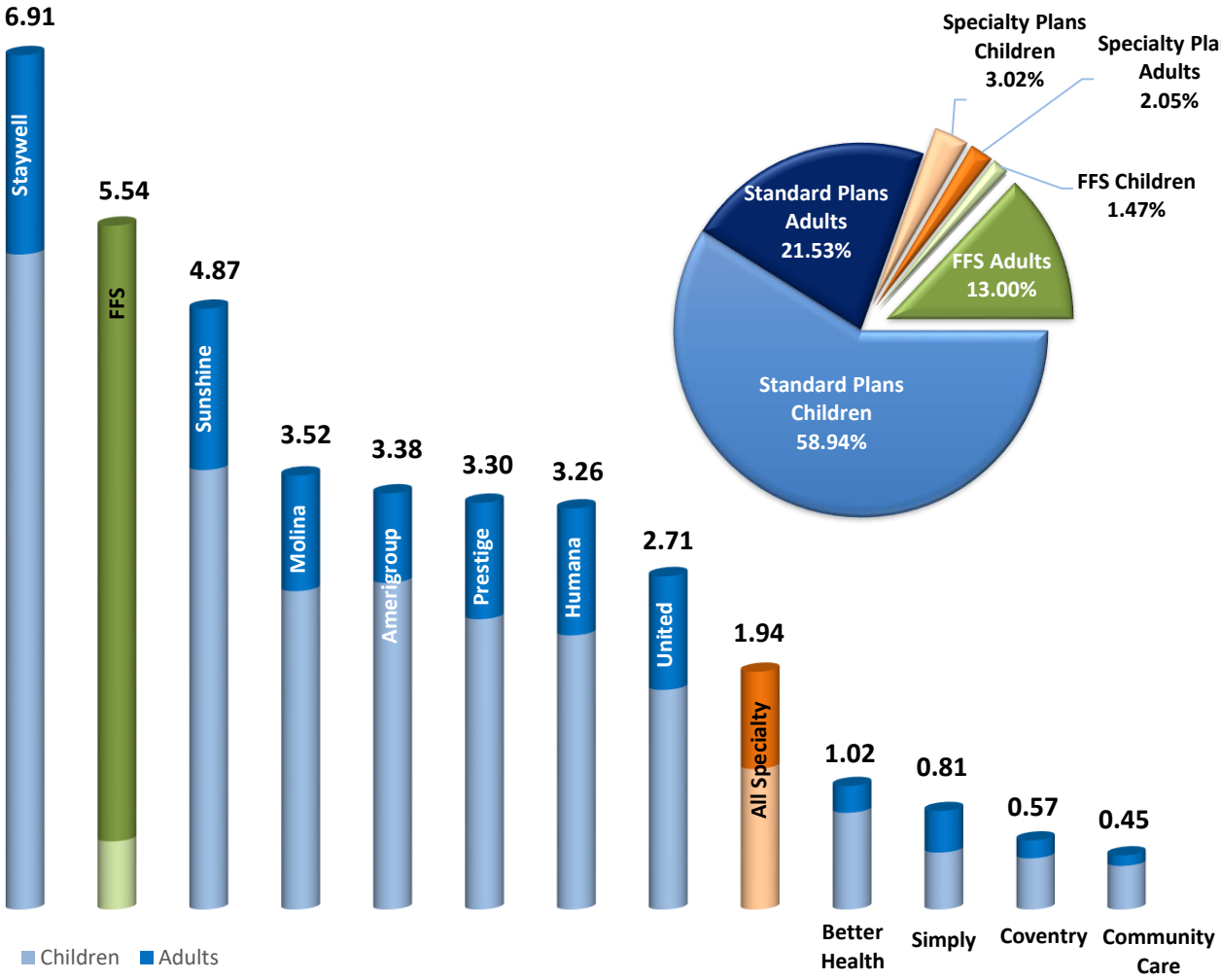
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.



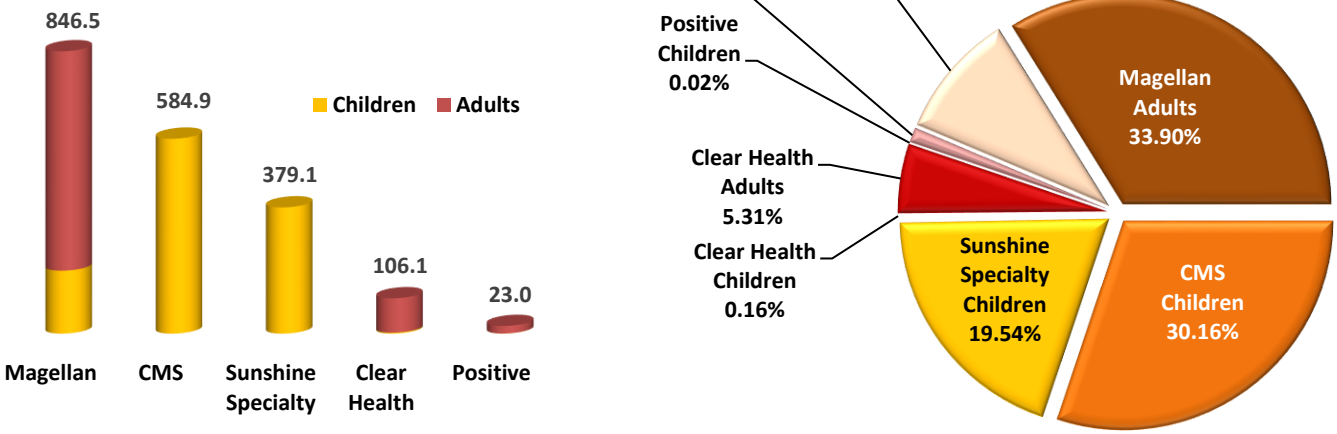
Source: Florida Medicaid Management Information System (FMMIS) Eligibility, Encounter, and Claims Information, July 2017 to June 2018.

Appendix 3: Plan Demographics

Number of Member Months (in Millions) by Plan and FFS Program, July 2017 to June 2018



Number of Member Months (in Thousands) by Specialty Plan, July 2016 to June 2017

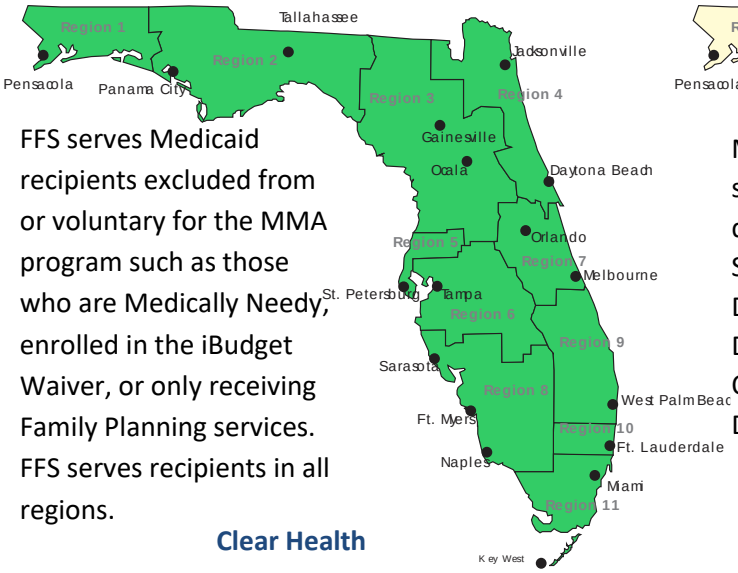


*Percentages for Children in Clear Health and Positive are too small to be visible.

Source: Florida Medicaid Management Information System (FMMIS) Eligibility Information, July 2017 to June 2018.

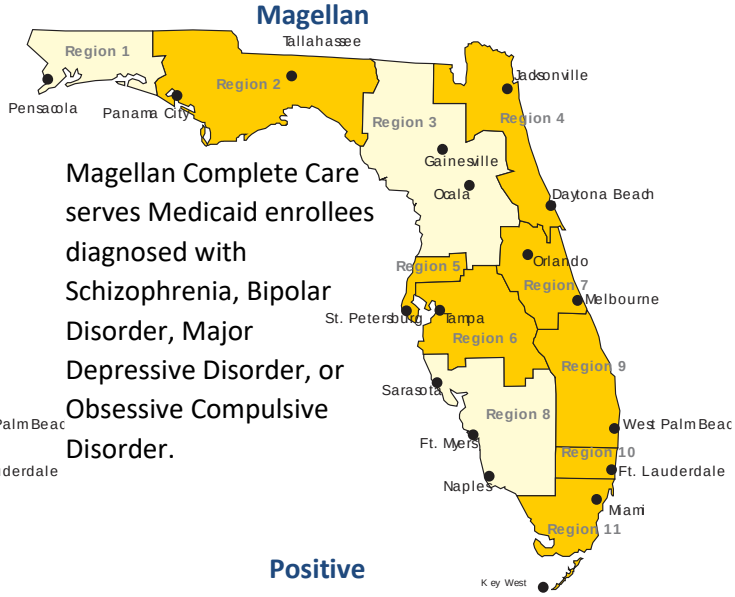
Regions Served by Specialty Plan and the Fee-For-Service Program, July 2017 to June 2018

Fee for Service



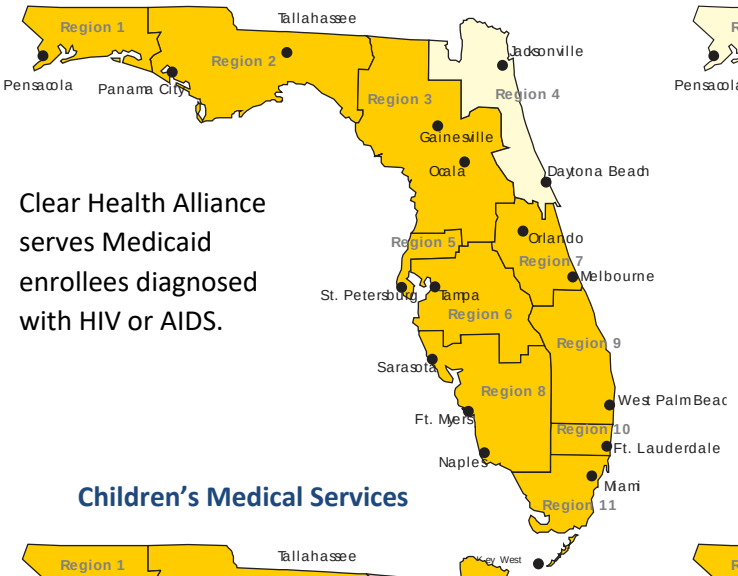
FFS serves Medicaid recipients excluded from or voluntary for the MMA program such as those who are Medically Needy, enrolled in the iBudget Waiver, or only receiving Family Planning services. FFS serves recipients in all regions.

Magellan



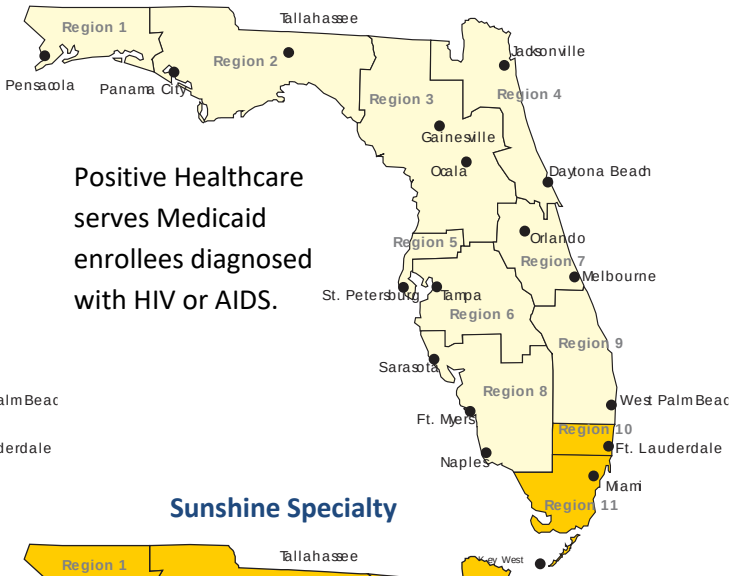
Magellan Complete Care serves Medicaid enrollees diagnosed with Schizophrenia, Bipolar Disorder, Major Depressive Disorder, or Obsessive Compulsive Disorder.

Clear Health



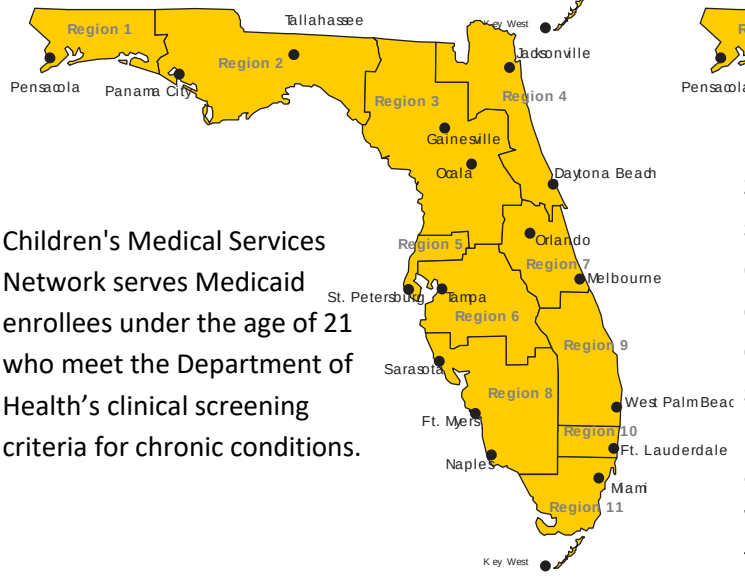
Clear Health Alliance serves Medicaid enrollees diagnosed with HIV or AIDS.

Positive



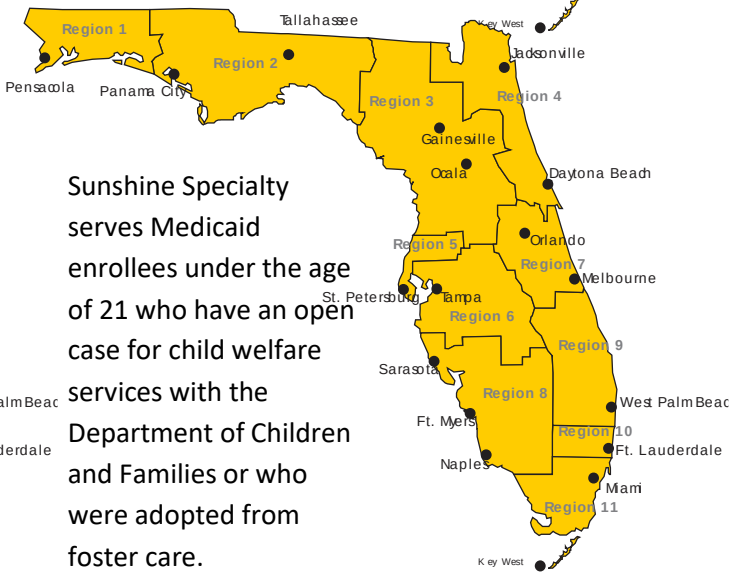
Positive Healthcare serves Medicaid enrollees diagnosed with HIV or AIDS.

Children's Medical Services



Children's Medical Services Network serves Medicaid enrollees under the age of 21 who meet the Department of Health's clinical screening criteria for chronic conditions.

Sunshine Specialty

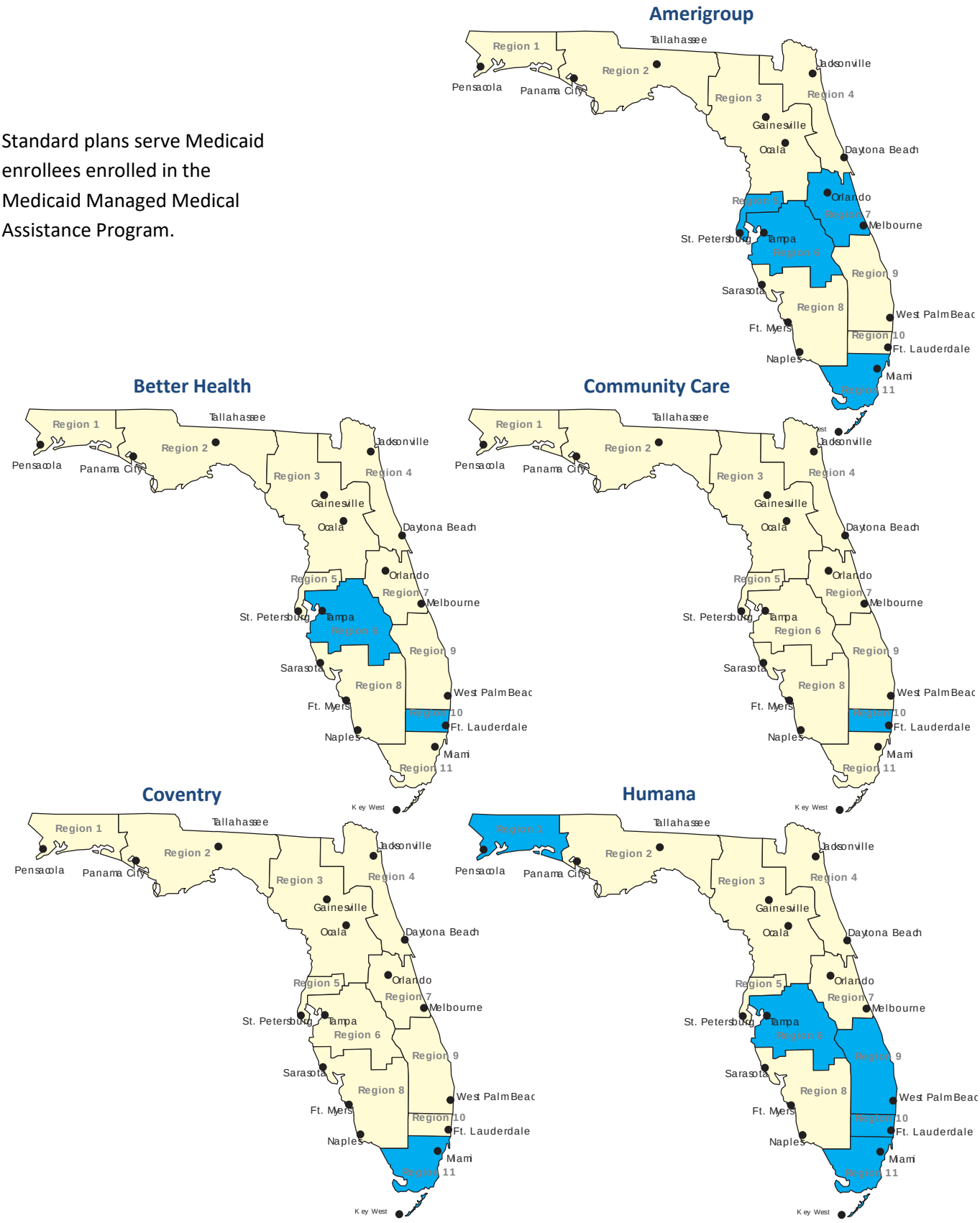


Sunshine Specialty serves Medicaid enrollees under the age of 21 who have an open case for child welfare services with the Department of Children and Families or who were adopted from foster care.

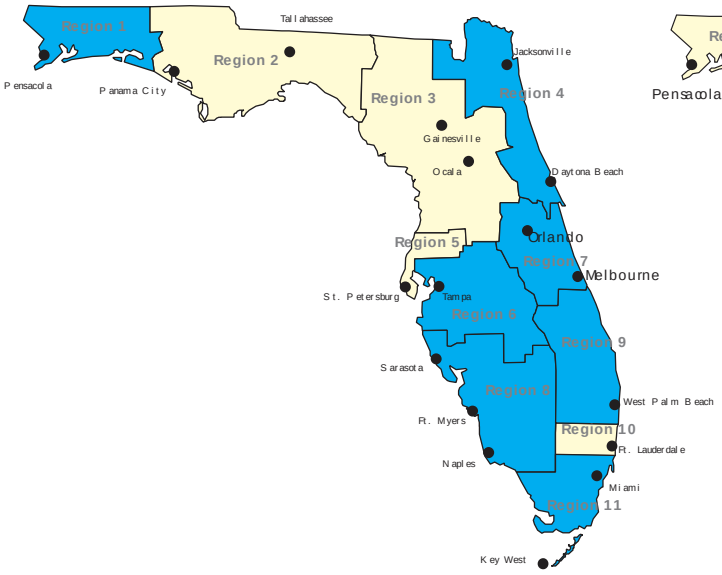
Plan Serves Region **Plan Does Not Serve Region**

Regions Served by Standard Plan, July 2017 to June 2018

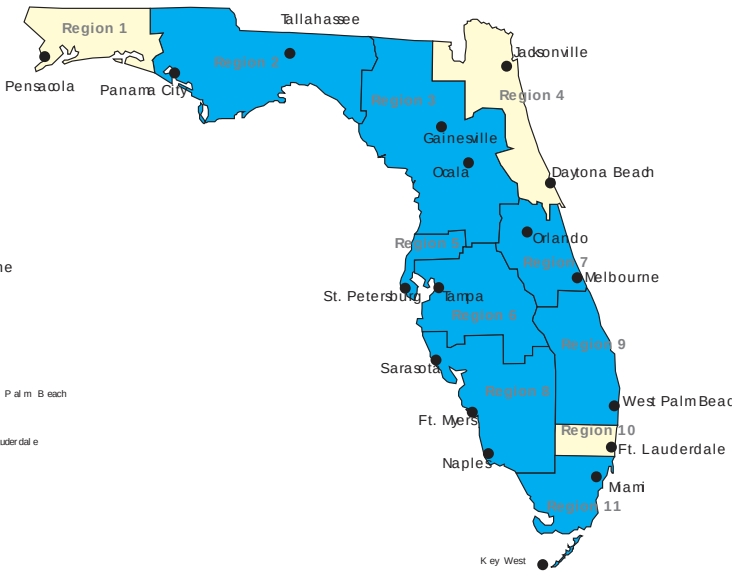
Standard plans serve Medicaid enrollees enrolled in the Medicaid Managed Medical Assistance Program.



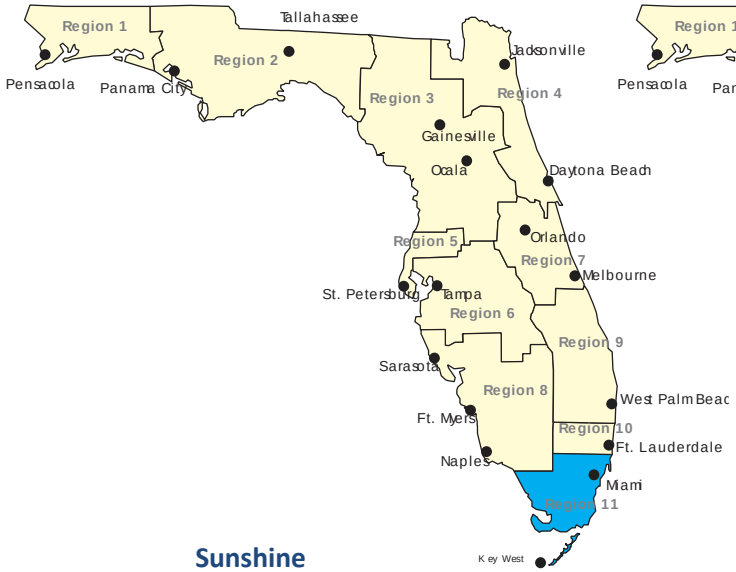
Molina



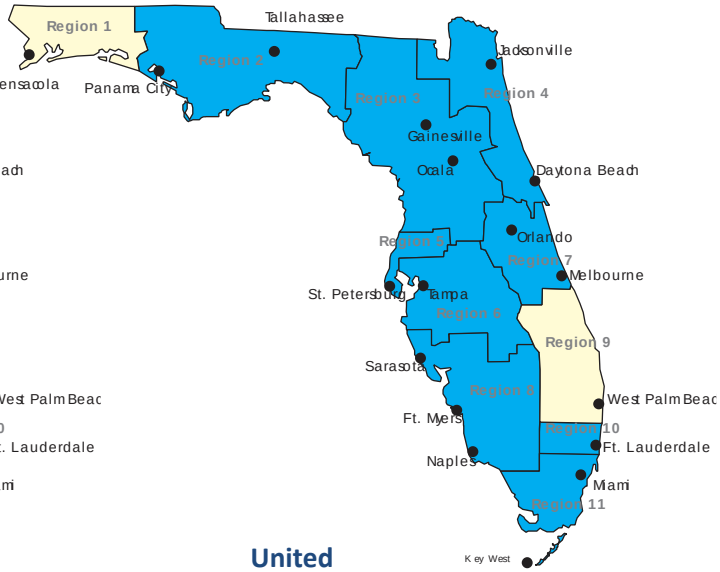
Prestige



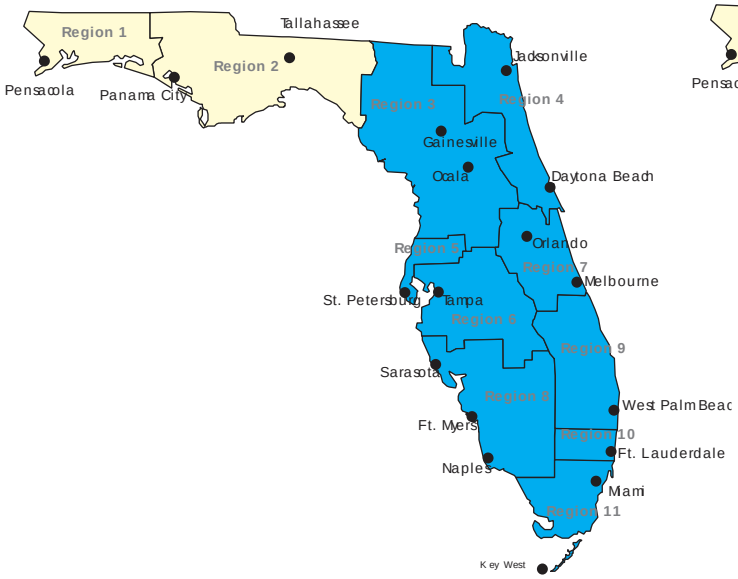
Simply



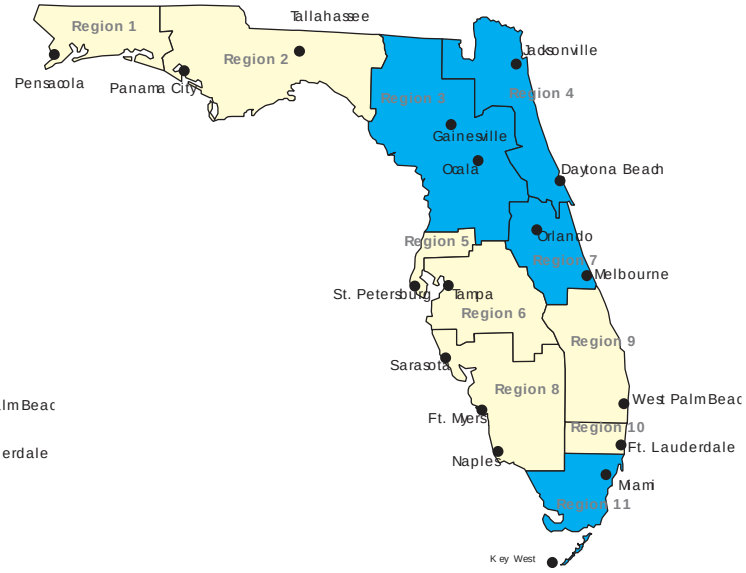
Staywell



Sunshine



United



Plan Serves Region **Plan Does Not Serve Region**

Appendix 4: List of All Patients Refined Diagnosis Related Groups (APR DRGs) and Enhanced Ambulatory Patient Grouping (EAPGs) in Top Ten Charts

The following is a list of the APR DRGs that appear in at least one of the top ten graphics for PPAs or PPRs in this report. The APR DRG code and full description are shown in the table.

Labeled in Report Charts	APR DRG	APR DRG Description
Adjustment Disorders	755	ADJUSTMENT DISORDERS & NEUROSES EXCEPT DEPRESSIVE DIAGNOSIS
Asthma	141	ASTHMA
Behavioral Disorders	758	CHILDHOOD BEHAVIORAL DISORDERS
Bipolar Disorders	753	BIPOLAR DISORDERS
Bronchiolitis & RSV	202	BRONCHIOLITIS & RSV PNEUMONIA
Cardiac Cath.	192	CARDIAC CATHETERIZATION FOR OTHER NON-CORONARY CONDITIONS
Cardiac Defibrillator	161	CARDIAC DEFIBRILLATOR & HEART ASSIST IMPLANT
Cardiac Procedure	175	PERCUTANEOUS CORONARY INTERVENTION W/O AMI
Cellulitis	383	CELLULITIS & OTHER SKIN INFECTIONS
Cesarean Delivery	540	CESAREAN DELIVERY
COPD	140	CHRONIC OBSTRUCTIVE PULMONARY DISEASE
Coronary Bypass	166	CORONARY BYPASS W/O AMI OR COMPLEX PDX
Depression	754	DEPRESSION EXCEPT MAJOR DEPRESSIVE DISORDER
Diabetes	420	DIABETES
Dorsal/Lumbar Fusion	304	DORSAL & LUMBAR FUSION PROC EXCEPT FOR CURVATURE OF BACK
GI Disorders	201	OTHER GASTROENTERITIS, NAUSEA & VOMITING
GI-tube Malfunc.	252	MALFUNCTION, REACTION & COMPLICATION OF GI DEVICE OR PROCEDURE
Heart Attack	190	ACUTE MYOCARDIAL INFARCTION
Heart Failure	194	HEART FAILURE
HIV w/ Maj. cond.	892	HIV W MAJOR HIV RELATED CONDITION
HIV w/ Mult. Maj. cond.	890	HIV W MULTIPLE MAJOR HIV RELATED CONDITIONS
HIV w/ Sig. cond.	894	HIV W ONE SIGNIF HIV COND OR W/O SIGNIF RELATED COND
Hypertension	199	HYPERTENSION
Infectious Disease	710	INFECTIOUS & PARASITIC DISEASES INCLUDING HIV W O.R. PROCEDURE
Kidney & UTI	463	KIDNEY & URINARY TRACT INFECTIONS
Low Blood Circu.	422	HYPOVOLEMIA & RELATED ELECTROLYTE DISORDERS
Major Depression	751	MAJOR DEPRESSIVE DISORDERS & OTHER/UNSPECIFIED PSYCHOSES
Medicinal Poisoning	812	POISONING OF MEDICINAL AGENTS
Minor Respiratory	166	RESPIRATORY SIGNS, SYMPTOMS & MINOR DIAGNOSES
Mood Disorders	755	ADJUSTMENT DISORDERS & NEUROSES EXCEPT DEPRESSIVE DIAGNO
Musculoskeletal Diag.	351	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES
Other Digestive	254	OTHER DIGESTIVE SYSTEM DIAGNOSES
Pancreatic Disorders	282	DISORDERS OF PANCREAS EXCEPT MALIGNANCY
Peripheral Disorder	300	PERIPHERAL & OTHER VASCULAR DISORDERS
Pneumonia	139	OTHER PNEUMONIA
Post-Op Infection	856	POST-OPERATIVE, POST-TRAUMATIC, OTHER DEVICE INFECTIONS
Respiratory Failure	133	PULMONARY EDEMA & RESPIRATORY FAILURE
Schizophrenia	750	SCHIZOPHRENIA
Seizure	53	SEIZURE
Septicemia	720	SEPTICEMIA & DISSEMINATED INFECTIONS

Sickle Cell Anemia	662	SICKLE CELL ANEMIA CRISIS
Stroke w/Infarct.	45	CVA & PRECEREBRAL OCCLUSION W INFARCT
URI	113	INFECTIONS OF UPPER RESPIRATORY TRACT
Urogenital Malfunc.	466	MALFUNCTION, REACTION, COMPLIC OF GENITOURINARY DEVICE OR PROC
Vaginal Delivery	560	VAGINAL DELIVERY

The following is a list of the EAPGs that appear in at least one of the top ten graphics for PPVs in this report. The list is in alphabetical order based on the label used in the charts. The EAPG code and full description are shown in the table.

Labeled in Report Charts	EAPG	Description
Abdominal Pain	628	ABDOMINAL PAIN
Acute UTI	727	ACUTE LOWER URINARY TRACT INFECTIONS
Alcohol Abuse	842	ALCOHOL ABUSE & DEPENDENCE
Back/Neck Diag.	656	BACK & NECK DIAGNOSES EXCEPT LUMBAR DISC DIAGNOSES
Constipation	630	CONSTIPATION
Dental/Oral Cond.	563	DENTAL & ORAL DIAGNOSES & INJURIES
Fever	807	FEVER
GI Disorders	627	NON-BACTERIAL GASTROENTERITIS, NAUSEA & VOMITING
Headaches	530	HEADACHES OTHER THAN MIGRAINE
Signs/Symp & Other	871	SIGNS, SYMPTOMS & OTHER FACTORS INFLUENCING HEALTH STATUS
Minor Respiratory	576	LEVEL I OTHER RESPIRATORY DIAGNOSES
Musculoskeletal Diag.	661	LEVEL II OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES
Physical Therapy	271	PHYSICAL THERAPY
Schizophrenia	820	SCHIZOPHRENIA
Skin Trauma	674	CONTUSION, OPEN WOUND & OTHER TRAUMA TO SKIN & SUBCUTANEOUS TISSUE
Skin/Tissue/Breast	675	OTHER SKIN, SUBCUTANEOUS TISSUE & BREAST DIAGNOSES
URI	562	INFECTIONS OF UPPER RESPIRATORY TRACT & OTITIS MEDIA
Viral Illness	808	VIRAL ILLNESS

Ron DeSantis, Governor
Mary C. Mayhew, Secretary