# Five Most Frequent DRGs in Washington's Community Hospitals, 2010–21:

## Part II – Inpatients by sex overview

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# Five Most Frequent DRGs in Washington's Community Hospitals, 2010-2021

*This is part two of a seven-part report on changes in the medical conditions for which Washington residents received care in community hospitals from 2010 to 2021. For an explanation of how these conditions are classified, and the data source and methods used, see part one of the report, available on the OFM website.*

**Inpatients by sex overview**

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## Part II – Inpatients by sex overview

The majority of the five most frequent diagnosis-related groups (DRGs) for female inpatients were related to labor and delivery. For them, the two most frequent DRGs were the same in all years. These two were DRG N70 (vaginal delivery with/without sterilization or D&C without CC/MCC) and DRG 795 (normal newborn). Two other birth-related DRGs were also among the five most frequent DRGs. These two were DRG N68 (Cesarean section with/without sterilization without CC/MCC) and DRG N69 (vaginal delivery with/without sterilization or D&C with CC/MCC). DRG 885 (psychoses) first appeared in the five most frequent DRGs for female inpatients in 2021.

Among male inpatients, two newborn-related DRGs were among the five most frequent DRGs in all years. These two were DRG 795 (normal newborn) in 1st place and DRG 794 (neonate with other significant problems) in 3rd or 4th place in all years. Two other DRGs were also among the five most frequent DRGs in all years. These two were DRG 885 (psychoses) and DRG 871 (septicemia or severe sepsis without MV>96 hours with MCC). Both DRGs moved up in ranking in the last few years, DRG 885 to 3rd place and DRG 871 to 2nd place. DRG 177 (respiratory infections and inflammations with CC) appeared in the five most frequent DRGs for males for the first time in 2021 due to the COVID19 pandemic.

### Female inpatients

For female inpatients, a total of seven DRGs appeared on the five most frequent DRG list in at least one year of the study period. DRGs N70 (vaginal delivery with/without sterilization or D&C without CC/MCC) and 795 (normal newborn) always remained in the top two positions. Besides DRGs N70 and 795, there was only one other DRG that appeared on the top five list in all years. This is DRG N68 (Cesarean section with/without sterilization without CC/MCC). Its ranking in the top five shifted between 3rd and 5th positions.

The total number of female inpatients in the top five DRGs decreased between 2010 (112,800) and 2021 (97,900). However, the share of female inpatients in the top five DRGs of all female inpatients increased, from 29.5% in 2010 to 33.8% in 2021.

**Figure II-1. Top five DRGs among female inpatients in Washington, 2010-2021**

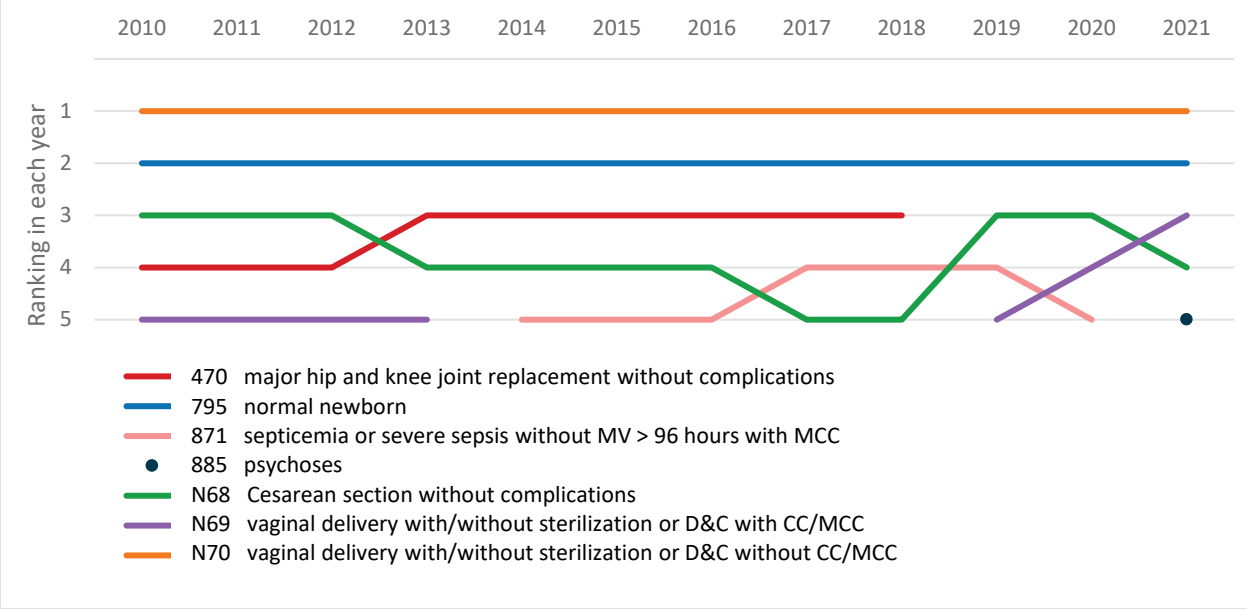



**Table II-1. Number and percent of female inpatients in Washington by top five DRGs, 2010-2021**

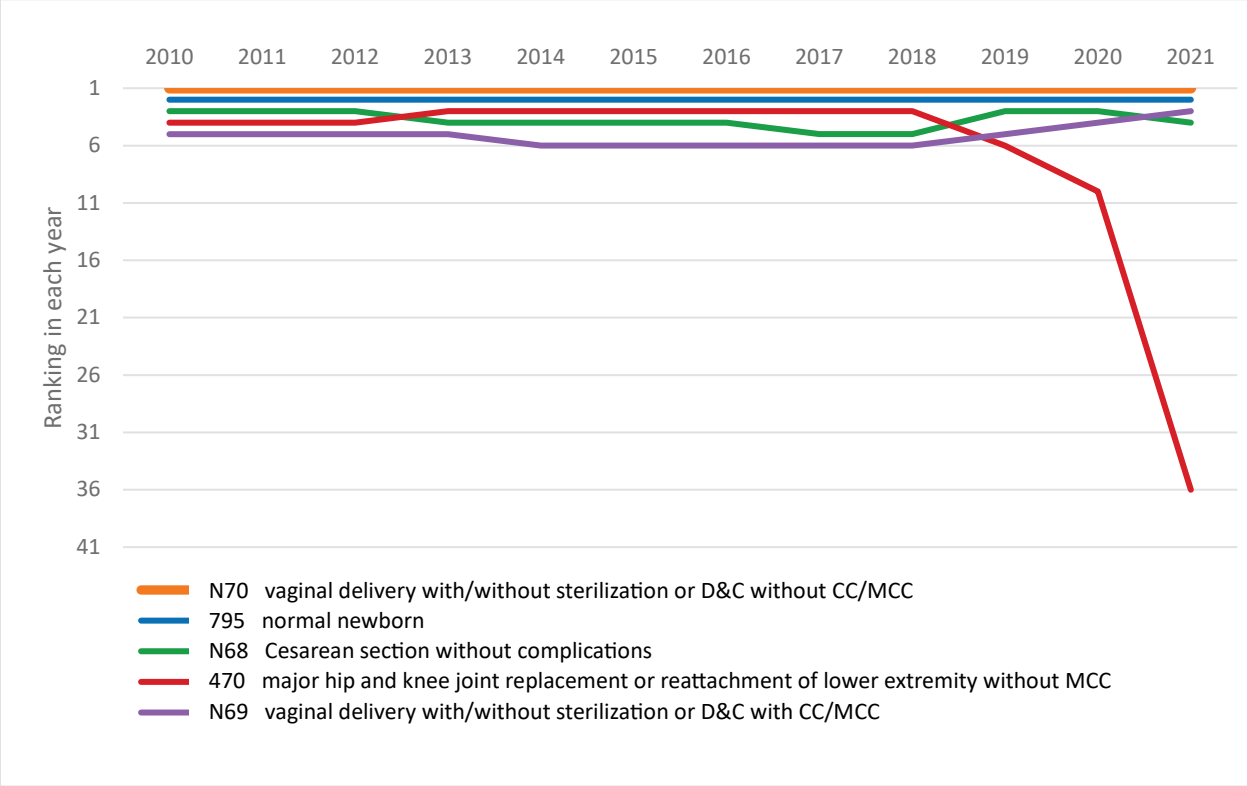
| Female | Top 1st DRG | | | Top 2nd DRG | | | Top 3rd DRG | | | Top 4th DRG | | | Top 5th DRG | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS-DRG | N | % Total | MS-DRG | N | % Total | MS-DRG | N | % Total | MS-DRG | N | % Total | MS-DRG | N | % Total |
| 2010 | N70 | 45,386 | 11.9 | 795 | 29,625 | 7.8 | N68 | 14,833 | 3.9 | 470 | 13,412 | 3.5 | N69 | 9,522 | 2.5 |
| 2011 | N70 | 44,732 | 12.0 | 795 | 29,575 | 7.9 | N68 | 14,691 | 3.9 | 470 | 13,539 | 3.6 | N69 | 9,837 | 2.6 |
| 2012 | N70 | 43,830 | 12.1 | 795 | 29,011 | 8.0 | N68 | 14,088 | 3.9 | 470 | 13,543 | 3.7 | N69 | 9,855 | 2.7 |
| 2013 | N70 | 44,044 | 12.1 | 795 | 28,048 | 7.7 | 470 | 14,306 | 3.9 | N68 | 13,353 | 3.7 | N69 | 10,082 | 2.8 |
| 2014 | N70 | 45,874 | 13.2 | 795 | 28,894 | 8.3 | 470 | 15,170 | 4.4 | N68 | 13,123 | 3.8 | 871 | 10,721 | 3.1 |
| 2015 | N70 | 46,088 | 12.6 | 795 | 28,649 | 7.8 | 470 | 16,038 | 4.4 | N68 | 12,880 | 3.5 | 871 | 12,078 | 3.3 |
| 2016 | N70 | 46,812 | 13.4 | 795 | 27,705 | 7.9 | 470 | 16,567 | 4.7 | N68 | 13,090 | 3.7 | 871 | 11,812 | 3.4 |
| 2017 | N70 | 46,291 | 12.9 | 795 | 25,513 | 7.1 | 470 | 16,915 | 4.7 | 871 | 13,056 | 3.7 | N68 | 12,923 | 3.6 |
| 2018 | N70 | 43,586 | 12.0 | 795 | 25,572 | 7.0 | 470 | 14,914 | 4.1 | 871 | 12,972 | 3.6 | N68 | 12,705 | 3.5 |
| 2019 | N70 | 39,528 | 11.2 | 795 | 25,125 | 7.1 | N68 | 14,073 | 4.0 | 871 | 13,342 | 3.8 | N69 | 12,446 | 3.5 |
| 2020 | N70 | 37,341 | 10.7 | 795 | 23,214 | 6.7 | N68 | 13,329 | 3.8 | N69 | 13,009 | 3.7 | 871 | 12,251 | 3.5 |
| 2021 | N70 | 36,351 | 12.6 | 795 | 22,412 | 7.7 | N69 | 14,039 | 4.9 | N68 | 12,591 | 4.4 | 885 | 12,474 | 4.3 |

470 = major hip and knee joint replacement without complications
794 = neonate with other significant problems
795 = normal newborn
871 = septicemia or severe sepsis without MV > 96 hours with MCC
885 = psychoses
N68 = Cesarean section without complications
N69 = vaginal delivery with/without sterilization or D&C with CC/MCC
N70 = vaginal delivery with/without sterilization or D&C without CC/MCC

## Tracking top five DRGs in 2010 onward

The rankings of four of the top five DRGs in 2010 remained relatively stable in subsequent years. However, DRG 470 (major hip and knee joint replacement or reattachment of lower extremity without MCC) experienced a significant drop in ranking, plummeting from 4th place in 2010 to 38th place in 2021. Notably, the largest single-year decline for DRG 470 occurred between 2020, when it ranked 8th, and 2021. This steep decline can be attributed to two key factors: the initial shift of major hip and knee replacement surgeries from inpatient to outpatient setting, and the halt of elective surgeries, including most DRG 470 cases, during the COVID pandemic.

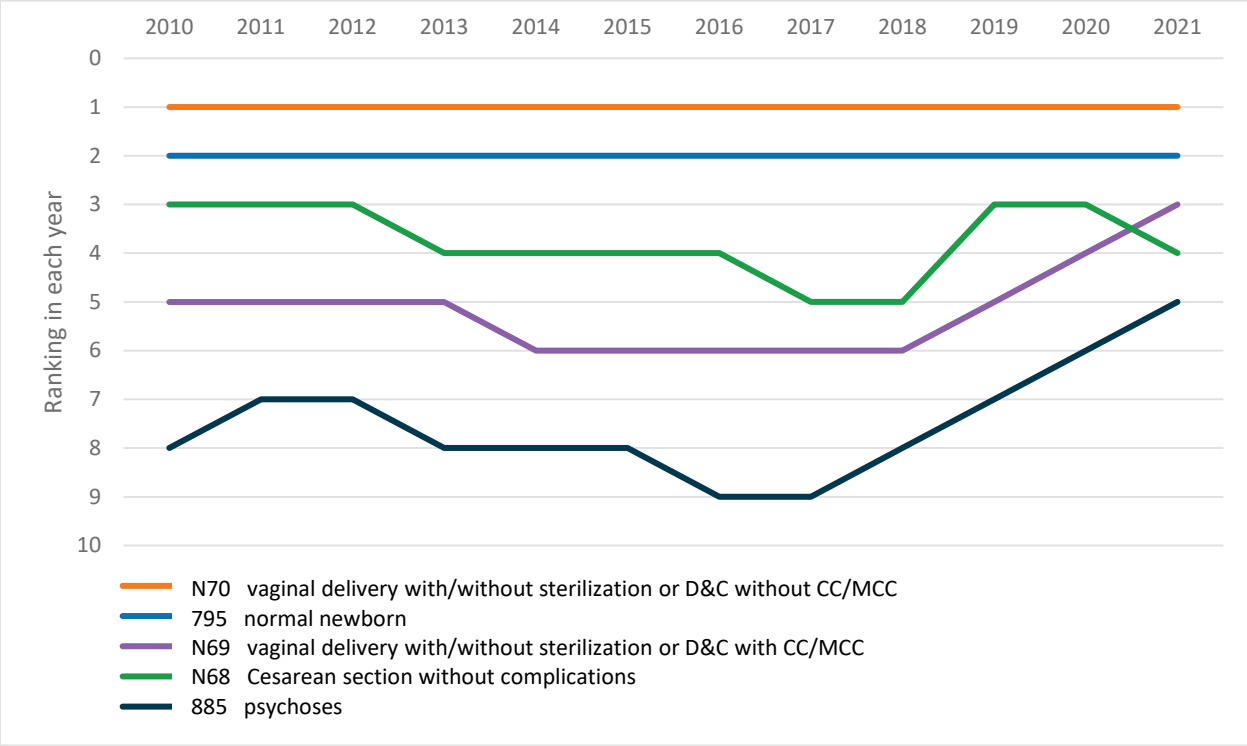
**Figure II-2. Top five DRGs in 2010 and their rank changes in subsequent years in Washington: female inpatients, 2010-2021**



## Tracking top five DRGs in 2021 backwards

In the top five DRGs in 2021, all but one appeared in the top five in 2010 as well. The exception was DRG 885 (psychoses). However, DRG 885 was ranked just outside the top five in 2010, holding 8th place 2010. This places it only a few spots below its later ranking of 5th place in 2021.

**Figure II-3. Prior rankings of 2021 top five DRGs in Washington: female inpatients, 2010-2021**



## Male inpatients

For male inpatients, seven DRGs appeared in the top five at some point between 2010 and 2021. Among these, four DRGs consistently remained in the top five throughout all years: DRG 795 (normal newborn), DRG 794 (neonate with other significant problems), DRG 885 (psychoses), and DRG 871 (septicemia or severe sepsis without MV >96 hours with MCC). Notably, DRG 795 retained its 1st place ranking across all years, while the rankings of the other three fluctuated. For example, DRG 871 rose from 5th place in 2010 to 2nd place in 2021.

Comparing male and female inpatients reveals contrasting trends. Recall that for female inpatients, the share of the top five DRGs accounted for about 30% of total discharges. Over time, the number of female patients in the top five DRGs declined, yet the share of these DRGs increased. For male inpatients, the share of the top five DRGs was higher, around 40%, but exhibited the opposite pattern. While the number of male patients in the top five DRGs grew from 56,300 in 2010 to 69,600 in 2021, their share decreased from 41.7% in 2010 to 37.2% in 2021.

**Figure II-4. Top five DRGs among male inpatients in Washington, 2010-2021**

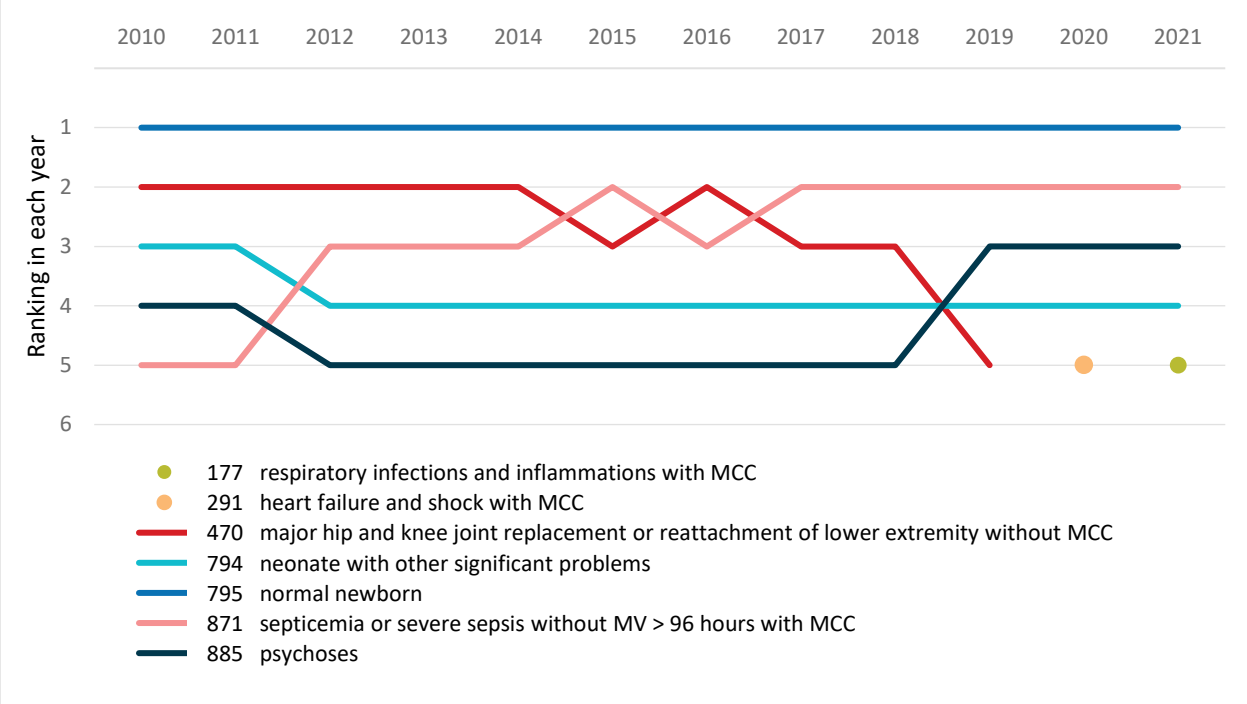


**Table II-2. Number and percent of male inpatients in Washington by top five DRGs, 2010-2021**

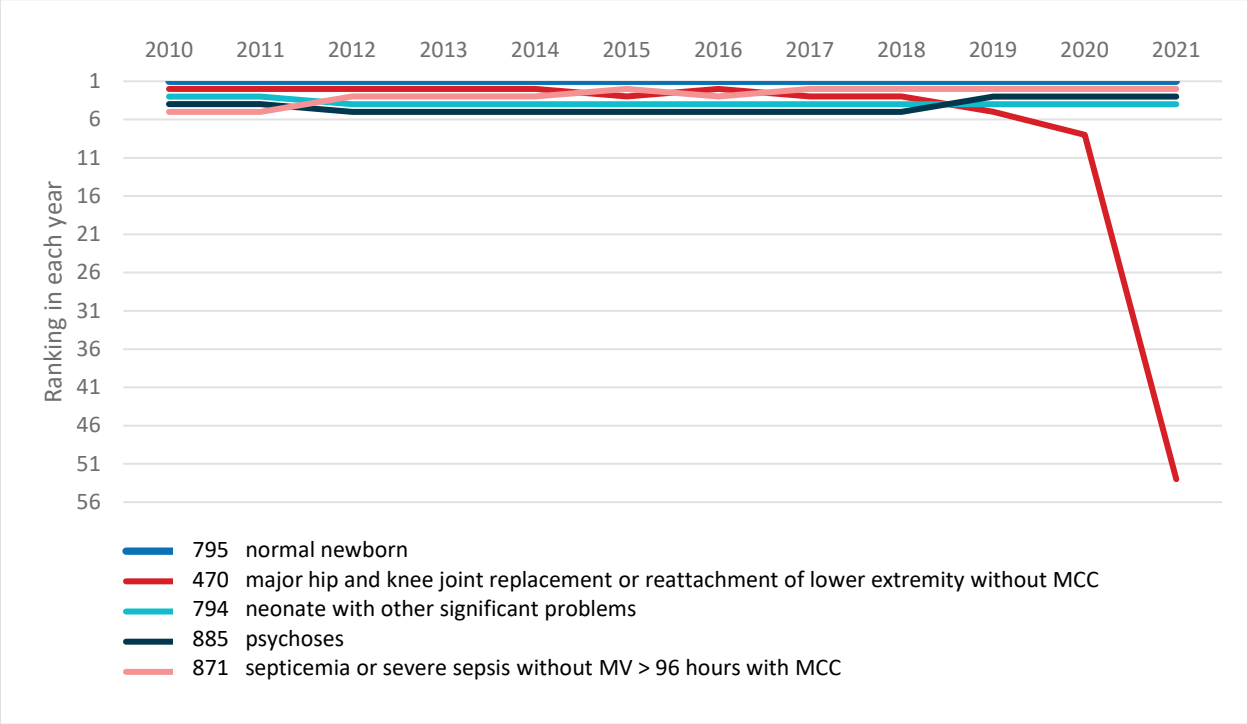
| Male | Top 1st DRG | | | Top 2nd DRG | | | Top 3rd DRG | | | Top 4th DRG | | | Top 5th DRG | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS-DRG | N | % Total | MS-DRG | N | % Total | MS-DRG | N | % Total | MS-DRG | N | % Total | MS-DRG | N | % Total |
| 2010 | 795 | 29,152 | 16.8% | 470 | 8,724 | 11.0% | 794 | 7,123 | 5.5% | 885 | 5,926 | 5.0% | 871 | 5,424 | 3.5% |
| 2011 | 795 | 29,838 | 16.5% | 470 | 9,112 | 10.9% | 794 | 6,439 | 5.4% | 885 | 6,189 | 5.0% | 871 | 5,961 | 3.6% |
| 2012 | 795 | 28,688 | 16.2% | 470 | 9,365 | 10.7% | 871 | 7,076 | 5.2% | 794 | 6,929 | 5.0% | 885 | 6,286 | 3.7% |
| 2013 | 795 | 28,239 | 16.4% | 470 | 10,235 | 10.5% | 871 | 8,613 | 5.3% | 794 | 7,298 | 5.0% | 885 | 6,144 | 3.8% |
| 2014 | 795 | 28,724 | 17.0% | 470 | 11,002 | 10.7% | 871 | 10,314 | 5.6% | 794 | 7,763 | 4.9% | 885 | 6,528 | 4.0% |
| 2015 | 795 | 28,615 | 16.6% | 871 | 11,481 | 10.3% | 470 | 11,467 | 5.8% | 794 | 8,532 | 4.6% | 885 | 6,922 | 4.4% |
| 2016 | 795 | 27,180 | 16.7% | 470 | 11,882 | 9.9% | 871 | 11,646 | 5.9% | 794 | 9,910 | 4.7% | 885 | 7,514 | 4.2% |
| 2017 | 795 | 24,782 | 16.3% | 871 | 12,982 | 9.0% | 470 | 12,121 | 6.0% | 794 | 10,722 | 4.6% | 885 | 8,459 | 4.6% |
| 2018 | 795 | 24,596 | 15.6% | 871 | 12,896 | 9.1% | 470 | 10,337 | 5.3% | 794 | 9,949 | 4.6% | 885 | 9,295 | 4.5% |
| 2019 | 795 | 24,267 | 14.1% | 871 | 13,562 | 8.9% | 885 | 10,770 | 5.0% | 794 | 10,065 | 4.7% | 470 | 8,547 | 4.4% |
| 2020 | 795 | 22,209 | 14.5% | 871 | 12,924 | 9.0% | 885 | 12,232 | 5.2% | 794 | 11,008 | 5.1% | 291 | 6,512 | 4.8% |
| 2021 | 795 | 21,417 | 13.8% | 871 | 13,382 | 8.5% | 885 | 11,946 | 5.3% | 794 | 11,774 | 4.8% | 177 | 11,043 | 4.7% |

177 = respiratory infections and inflammations with MCC
291 = heart failure and shock with MCC
470 = major hip and knee joint replacement or reattachment of lower extremity without MCC
794 = neonate with other significant problems
795 = normal newborn
871 = septicemia or severe sepsis without MV > 96 hours with MCC
885 = psychoses

## Tracking top five DRGs in 2010 onward

Of the top five DRGs in 2010 for male inpatients, only one was not among the top five in subsequent years. DRG 470 470 (major hip and knee joint replacement or reattachment of lower extremity without MCC) dropped from 2nd place in 2010 to 8th place in 2020 and then had a significant decline to 53rd place in 2021. This sharp drop can be attributed to two major factors: the initial transition of hip and knee replacement surgeries from inpatient to outpatient services, and the suspension of elective surgeries, including most DRG 470 cases, during the COVID-19 pandemic.

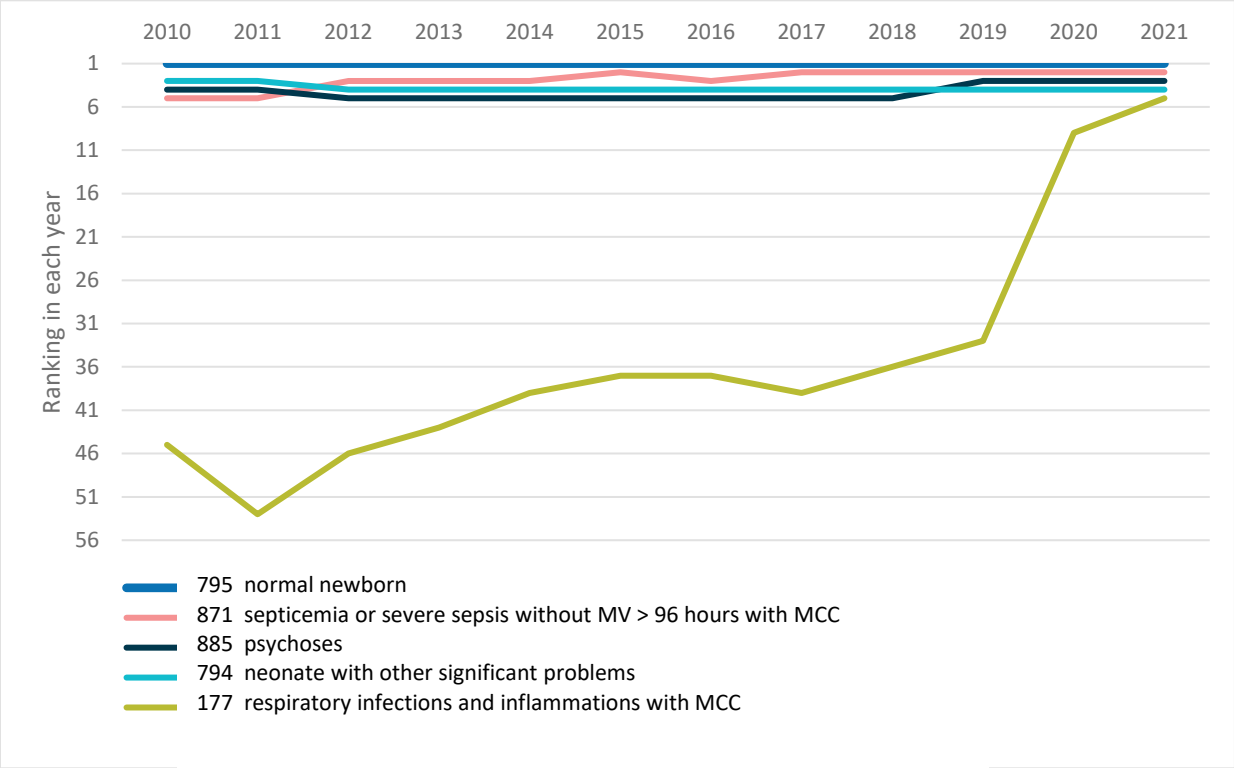
**Figure II-5. Top five DRGs in 2010 and their rank changes in subsequent years in Washington: male inpatients, 2010-2021**




## Tracking top five DRGs in 2021 backwards

Only one DRG in the top five in 2021 was not among the top five in prior years: DRG 177 (respiratory infections and inflammations with CC). Before 2020, DRG 177 consistently ranked below 30th place, but it experienced a rapid climb from 33rd place in 2019 to 8th place in 2020, ultimately reaching 5th place in 2021. This sharp increase in ranking can largely be attributed to the impact of the COVID-19 pandemic. Interestingly, DRG 177 did not appear in the top five DRGs for female patients in any year during this period.

**Figure II-6. Prior rankings of 2021 top five DRGs in Washington: male inpatients, 2010-2021**




The data source and methods section for this report can be found at the end of Part I.