

Analysis of Medicare Reimbursement Changes in Massachusetts (2019–2021)

Exploring the Factors Behind Average Payment Increase

Component A:

Analyze the total average payment change between 2019 and 2021.

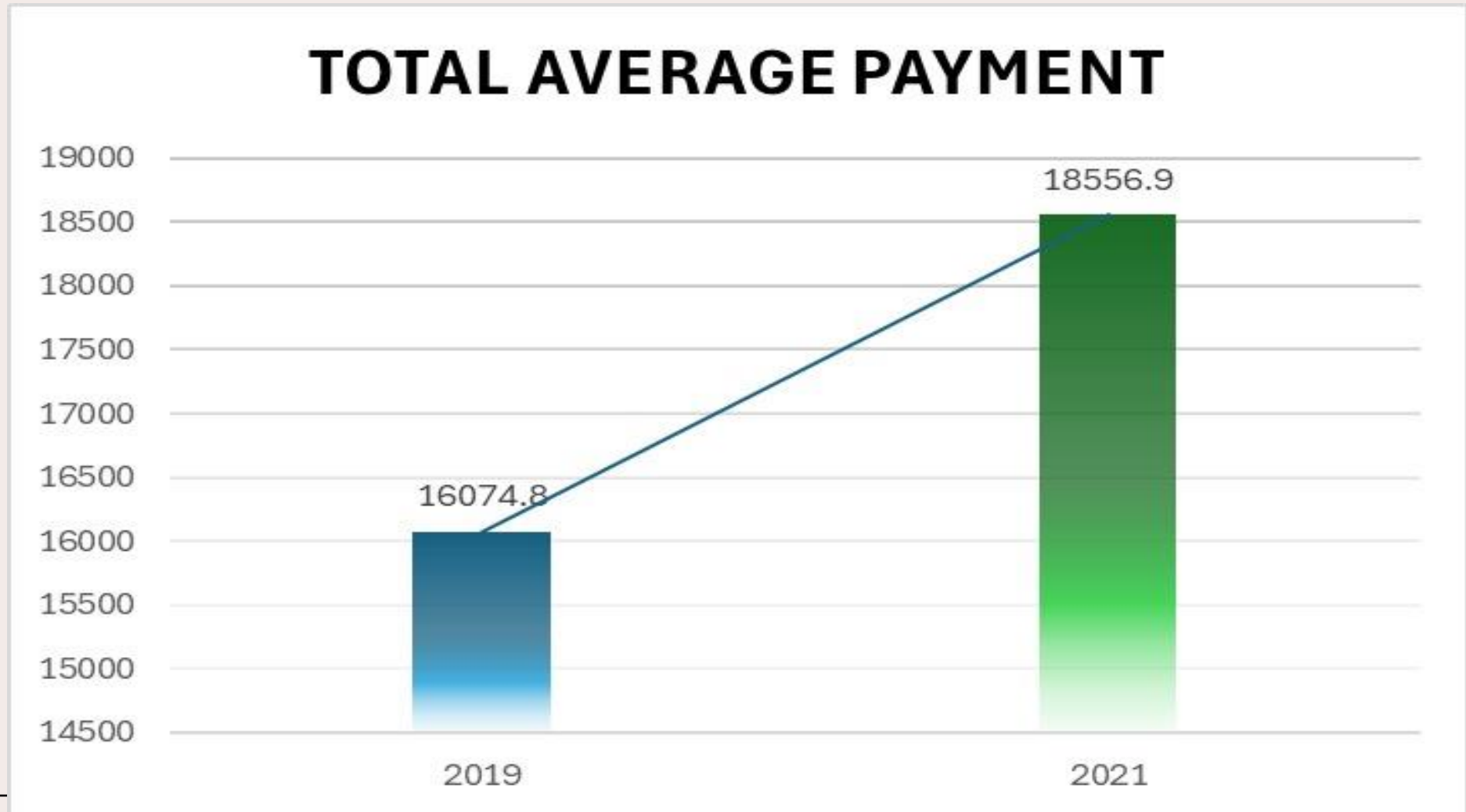
Component B:

Identify the top DRGs contributing to the increase or decrease in payments due to:

- Service mix change.
- Individual DRG average payment change.

Total Average Payment Change (Component A)

➡ Total Change: \$2,482.07



Service Mix VS Payment Impact (Component A)

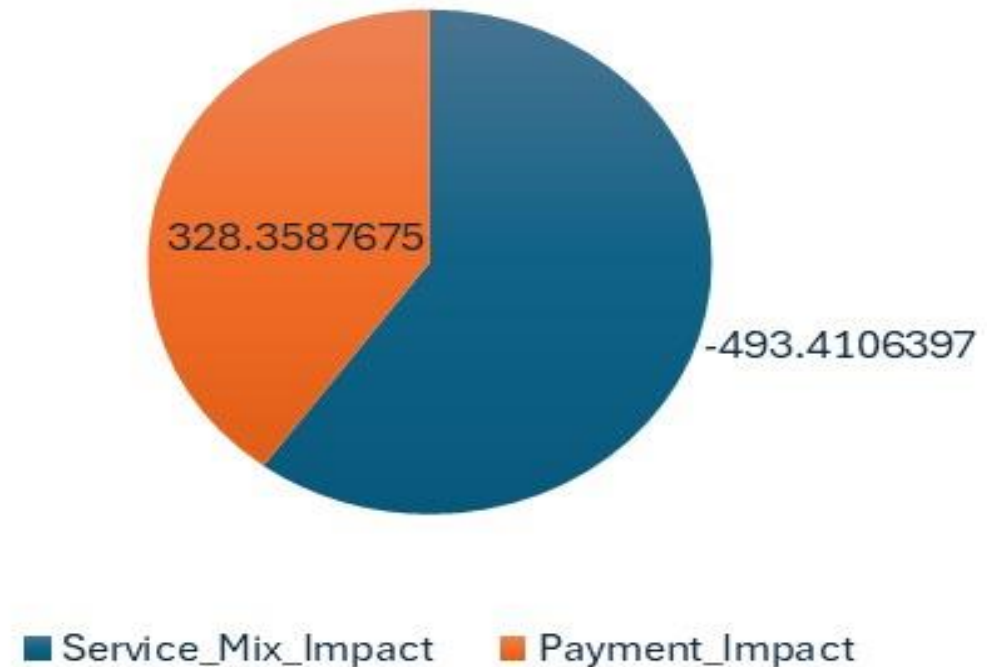


Service Mix Impact-
Due to shifting
treatment patterns



**Total DRG Payment
Impact-**
due to increased
payments in certain
DRGs

Impact of Service Mix & DRG payment



Top 10 DRGs Service Mix Impact Increase

Top_10_DRG_Service_Mix_Impact_Increase	
DRG_Code_Desc	Service_Mix_Impact
177 - RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC	99822361.79873500
207 - RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT >96 HOURS	11251817.834232100
266 - ENDOVASCULAR CARDIAC VALVE REPLACEMENT AND SUPPLEMENT PROCEDURES WITH MCC	7497502.197643640
4 - TRACHEOSTOMY WITH MV >96 HOURS OR PRINCIPAL DIAGNOSIS EXCEPT FACE, MOUTH AND NECK WITHOU	7083907.65754
870 - SEPTICEMIA OR SEVERE SEPSIS WITH MV >96 HOURS	7038678.0243118700
267 - ENDOVASCULAR CARDIAC VALVE REPLACEMENT AND SUPPLEMENT PROCEDURES WITHOUT MCC	6954950.843570770
454 - COMBINED ANTERIOR AND POSTERIOR SPINAL FUSION WITH CC	5480967.6085308
178 - RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH CC	3993033.0518216500
673 - OTHER KIDNEY AND URINARY TRACT PROCEDURES WITH MCC	3844402.37537175
235 - CORONARY BYPASS WITHOUT CARDIAC CATHETERIZATION WITH MCC	3514820.721896880

Bottom 10 DRGs Service Mix Impact Decrease

Bottom_10_DRG_Service_Mix_Impact_Decrease	
DRG_Code_Desc	Service_Mix_Impact
470 - MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY WITHOUT MCC	-116664810.72100800
871 - SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC	-42170948.73806410
193 - SIMPLE PNEUMONIA AND PLEURISY WITH MCC	-29015852.93442550
190 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH MCC	-23447064.30408380
194 - SIMPLE PNEUMONIA AND PLEURISY WITH CC	-17702165.86601110
483 - MAJOR JOINT OR LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITIES	-17550473.87048530
469 - MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY WITH MCC OR TOTA	-14892465.063464
16 - AUTOLOGOUS BONE MARROW TRANSPLANT WITH CC/MCC	-12746925.268423
291 - HEART FAILURE AND SHOCK WITH MCC	-11237898.216663800
1 - HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM WITH MCC	-10798261.711466700

Top 10 DRGs Increasing Payments (Component B)

Top_10_DRG_Payment_Impact_Increase	
DRG_Code_Desc	Payment_Impact
177 - RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC	36574915.400717300
18 - CHIMERIC ANTIGEN RECEPTOR (CAR) T-CELL AND OTHER IMMUNOTHERAPIES	31120862.42529
871 - SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC	19020622.85421280
522 - HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC	16092876.353591000
3 - ECMO OR TRACHEOSTOMY WITH MV >96 HOURS OR PRINCIPAL DIAGNOSIS EXCEPT FACE, MOUTH AND NEC	11922476.291950000
207 - RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT >96 HOURS	9326134.751464730
521 - HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITH MCC	9215702.02125625
870 - SEPTICEMIA OR SEVERE SEPSIS WITH MV >96 HOURS	6567813.924358620
4 - TRACHEOSTOMY WITH MV >96 HOURS OR PRINCIPAL DIAGNOSIS EXCEPT FACE, MOUTH AND NECK WITHOU	6461194.015050000
25 - CRANIOTOMY AND ENDOVASCULAR INTRACRANIAL PROCEDURES WITH MCC	6442396.750898140

Bottom 10 DRGs decreasing Payments (Component B)

Bottom_10_DRG_Payment_Impact_Decrease	
DRG_Code_Desc	Payment_Impact
16 - AUTOLOGOUS BONE MARROW TRANSPLANT WITH CC/MCC	-2063821.47188
267 - ENDOVASCULAR CARDIAC VALVE REPLACEMENT AND SUPPLEMENT PROCEDURES WITHOUT MCC	-1742670.9592033900
673 - OTHER KIDNEY AND URINARY TRACT PROCEDURES WITH MCC	-895838.7812675010
455 - COMBINED ANTERIOR AND POSTERIOR SPINAL FUSION WITHOUT CC/MCC	-469732.4350788440
229 - OTHER CARDIOTHORACIC PROCEDURES WITHOUT MCC	-419599.5156548570
389 - GASTROINTESTINAL OBSTRUCTION WITH CC	-392617.32509049200
215 - OTHER HEART ASSIST SYSTEM IMPLANT	-388842.7836799990
194 - SIMPLE PNEUMONIA AND PLEURISY WITH CC	-305737.97274919000
82 - TRAUMATIC STUPOR AND COMA >1 HOUR WITH MCC	-291587.6469396670
459 - SPINAL FUSION EXCEPT CERVICAL WITH MCC	-200301.8102580000

Conclusion

The average payment per hospitalization increased by \$2,482.07 between 2019 and 2021.

Changes in the service mix negatively impacted total payments, while increases in DRG payments offset these losses.

Recommendations - Areas of focus

Investigate the DRGs with large decreases to understand the impact on hospital services.

Further analyze the top DRGs driving payment increases to develop cost control strategies.

Thank you