Drivers of Maryland FFS Medicare Savings 2013 to 2018

June 2019



Background

- Analysis based on comparison of Maryland trend to US trends in 5% sample in each cost bucket and differs from the \$273 M
 - Impact of differing US versus National mix between cost buckets is not shown
 - 5% sample does not tie to CMMI true national numbers used in overall scorekeeping

 Comparison is to US total with no risk adjustment or modification

- Reflects overall scorekeeping approach
- Benchmarking analysis will normalize better for those differences.
- Visit counts are based on same beneficiary and date of service and are intended as approximations
- IP reflects patient day count

Overview of Savings, 2013 to 2018

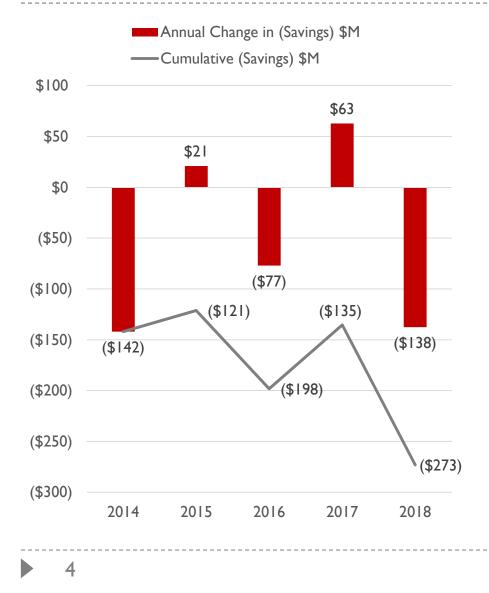
| | % of MD Spend | National CAGR | MD CAGR | Run Rate (Savings) Cost, \$M | % of Savings |
|---------------------|------------------|------------------|------------|---------------------------------|-----------------|
| Inpatient Hospital | 41.0% | 0.2% | -0.6% | (\$153) | 57% |
| SNF | 7.4% | -1.3% | -2.1% | (\$29) | 11% |
| Home Health | 3.1% | -0.9% | 2.2% | \$45 | -17% |
| Hospice | 2.0% | 1.7% | 5.2% | \$36 | -13% |
| Total Part A | 53.5% | | | (\$101) | 37% |
| Outpatient Hospital | 15.4% | 6.7% | 3.3% | (\$287) | 106% |
| ESRD | 2.4% | 2.3% | 1.4% | (\$10) | 4% |
| Outpatient Other | 1.1% | 7.1% | 4.9% | (\$14) | 5% |
| Clinic | 0.1% | 9.1% | 9.5% | - | 0% |
| Professional Claims | 27.4% | 2.0% | 3.1% | \$142 | -53% |
| Total Part B | 46.5% | | | (\$169) | 63% |
| Total | | | | (\$270) | 100% |

- Savings are driven by reductions in hospital spending and a shift to non-physician outpatient
- Observations:
 - Savings driven by IP and OP Hospital
 - Cost growth in positive areas like home health and hospice
 - OP hospital partially offset by increasing professional claims and likely reflects some place of service shift

Note: amounts above reflect change in each individual bucket, mix impact of different shares of each bucket would also impact overall savings, also amounts represent 5% sample data. Therefore will not tie to total actual savings of \$273.

CAGR = Compound Annual Growth Rate, amounts may not add up due to rounding. % of spend reflects 2018 values.

Run Rate (Savings) by Year



- While 2018 savings were favorable versus average performance the state's results have typically fluctuated by year
- 2018 total results are not atypical versus other positive years

Savings, 2013 to 2017 vs 2017 to 2018

| | 2013 to 2017, Ave | erage | 2017 to 201 | 8 |
|------------------------------------|---|-----------------|---------------------------------|-----------------|
| | Average Run Rate (Savings) Cost \$ M | % of Savings | Run Rate (Savings) Cost \$ M | % of Savings |
| Inpatient Hospital | (\$24) | 74.7% | (\$57) | 40.6% |
| SNF | (\$5) | 15.6% | (\$8) | 6.0% |
| Home Health | \$10 | -31.9% | \$4 | -3.0% |
| Ноѕрісе | \$9 | -27.8% | \$0 | -0.1% |
| Total Part A | (\$10) | 30.7% | (\$61) | 43.5% |
| Outpatient Hospital | (\$43) | 134.5% | (\$114) | 80.7% |
| ESRD | (\$2) | 6.1% | (\$2) | 1.5% |
| Outpatient Other | (\$2) | 7.3% | (\$5) | 3.3% |
| Clinic | \$0 | -0.7% | (\$1) | 0.4% |
| Professional Claims | \$25 | -77.9% | \$42 | -29.5% |
| Total Part B | (\$22) | 69.3% | (\$80) | 56.5% |
| Total | (\$32) | | (\$141) | |
| OP Hospital Net of Professional | (\$18) | | (\$72) | |

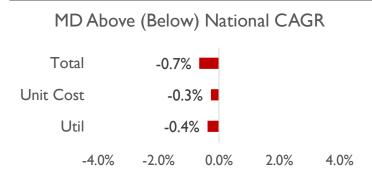
5

- Savings accelerated in IP and OP hospital in 2018 versus prior years
- Cost grew at a faster rate in professional although much less so than in OP hospital resulting in greater net savings
- Cost growth in home health and hospice slowed

Amounts may not add up due to rounding.

Inpatient Cost Variation by Source

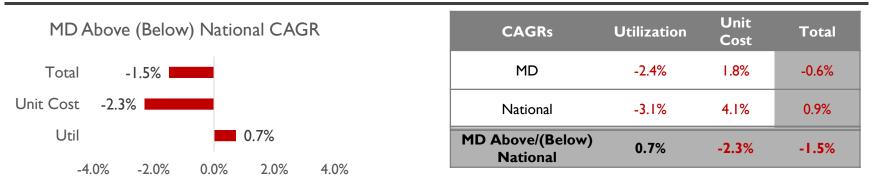
2013 to 2017 CAGR, IP Utilization and Cost Per Day



6

| CAGRs | Utilization | Unit Cost | Total |
|------------------------------|-------------|--------------|-------|
| MD | -3.1% | 2.5% | -0.6% |
| National | -2.7% | 2.8% | 0.0% |
| MD Above/(Below) National | -0.4% | -0.3% | -0.7% |

2017 to 2018 CAGR, IP Utilization and Cost per Day



- Through 2017 Maryland both shrunk IP utilization faster and grew cost per day slower than the Nation. In 2018 the total advantage was larger but all in cost per day
- Admissions based calculations might result in a different story

Amounts may not add up due to rounding.

Program Impact on TKA

Total Knee Arthroplasty was taken off the "Inpatient Only" List in 2018

Net Savings of approximately \$10 million from CY18 vs. CY17

| | MD CY18 | US CY18 | |
|--|--------------|-------------|---|
| Beneficiaries | 754,076 | 1,681,586 | |
| Average IP Episode Cost | \$20,080 | \$13,812 | |
| Average OP Episode Cost | \$13,569 | \$9,943 | |
| Savings per Episode from Procedure Move (2018) | \$6,511 | \$3,869 | ٦ |
| Utilization per K from Procedure Move (2017 to 2018) | 3.3 | 2.2 | |
| % of 2017 Inpatient Volume | 39% | 24% | _ |
| Total Savings | \$16,419,554 | \$6,312,252 | |
| | L | | |

\$10 M incremental savings in Maryland CY17 vs CY18

Drivers of Inpatient Savings By DRG

 Major Joint Replacement or Reattachment of Lower Extremity was largest driver of savings in 2018 and continues to trend favorably in 2019

| CY 18 over CY 17 | Maryland Savings compared to US |
|---|------------------------------------|
| Major Joint Replacement of Lower Extremity | \$28.0 M |
| Simple Pneumonia & Pleurisy | \$6.0 M |
| Signs & Symptoms | \$4.5 M |
| Musculokskeletal System & Connective Tissue Aftercare | \$4.5 M |
| Coronary Bypass w/o Cardiac Cath | \$4.5 M |
| Other | \$4.0 M |
| Heart Transplant or Implant of Heart Assist System | \$4.0 M |
| Other Heart Assist System Implant | \$4.0 M |
| Hearth Failure & Shock | \$3.5 M |
| Combined Anterior/Posterior Spinal Fusion | \$3.0 M |
| All Other Procedures | \$97.0 M |
| Total Savings | \$163 M |

Drivers of Inpatient Dissavings by DRG

| CY 18 over CY 17 | Maryland Dissavings compared to US |
|---|---------------------------------------|
| Extensive OR Procedure unrelated to Principal Diagnosis | \$8.0 M |
| Endovascular Cardiac Valve Replacement | \$7.0 M |
| Septicemia or Sever Sepsis w/o MV 96+ hours | \$6.5 M |
| Revision of Hip or Knee Replacement | \$5.5 M |
| Psychoses | \$4.0 M |
| Infectious & Parasitic Diseases w OR Procedure | \$3.0 M |
| Trach w MV 96+ Hour OR PDX Exc Face, Mouth, & Neck w/o Maj. OR | \$3.0 M |
| Intracranial Hemorrhage or Cerebral Infarction | \$3.0 M |
| Cardiac Valve & Other Maj Cardiothoracic Procedure w Cardiac Cath | \$3.0 M |
| Respiratory System Diagnosis w Ventilator Support 96+hrs | \$2.0 M |
| All Other Procedures | \$70 M |
| Total Dissavings | \$115 M |

MD vs Nation, OP Hosp. CAGR, '13 to '17

| 2013 to 2017 | | MD Above | (Below) Natio | nal CAGR | | |
|------------------------|------------|-------------|---------------|----------|---------------------------------|-----------------|
| | % of Spend | Utilization | Unit Cost | Total | Run Rate (Savings) Cost, \$M | % of Savings |
| Part B Rx | 19.0% | 4.1% | -9.6% | -6.1% | (\$67) | 36.3% |
| Imaging | 12.4% | -1.3% | 0.6% | -0.7% | (\$5) | 2.7% |
| Proc-Major Cardiology | 11.1% | -0.4% | -1.2% | -1.7% | (\$5) | 2.5% |
| E&M - ER | 10.6% | -0.2% | -9.9% | -10.3% | (\$63) | 34.4% |
| Proc-Minor | 8.6% | -1.3% | -2.3% | -3.7% | (\$16) | 8.6% |
| E&M - Other | 7.1% | -3.1% | -1.7% | -5.0% | (\$37) | 20.3% |
| Proc-Major Other | 5.9% | 3.3% | -2.3% | 1.0% | \$2 | -0.9% |
| Proc-Endocrinology | 5.4% | -0.8% | -0.4% | -1.2% | (\$2) | 1.3% |
| Lab | 5.2% | -1.1% | 12.1% | 11.0% | \$61 | -33.6% |
| Proc-Ambulatory | 4.7% | -4.6% | -0.3% | -4.9% | (\$11) | 6.0% |
| Proc-Oncology | 3.8% | -3.1% | 0.9% | -2.2% | (\$8) | 4.3% |
| Proc-Major Orthopaedic | 2.4% | 5.3% | -3.2% | 2.1% | \$1 | -0.4% |
| Proc-Eye | 1.8% | -8.8% | 2.8% | -6.4% | (\$5) | 2.6% |
| Other Professional | 1.7% | -4.5% | 4.3% | -0.2% | (\$2) | 0.8% |
| DME | 0.2% | 4.7% | -18.6% | -14.3% | (\$28) | 15.1% |
| Proc-Dialysis | 0.0% | -0.7% | 8.2% | 7.3% | \$0 | -0.1% |

 ~ \$172 M total with mix

From 2013 to 2017 material hospital OP savings accrued in Part B Rx (unit cost), ER (unit cost), Other E&M (Both) and DME (unit cost)

 Only in Lab did MD cost growth outstrip US to a material degree

% of spend reflects 2018 MD amounts.

MD vs Nation, OP Hosp. CAGR, '17 to '18

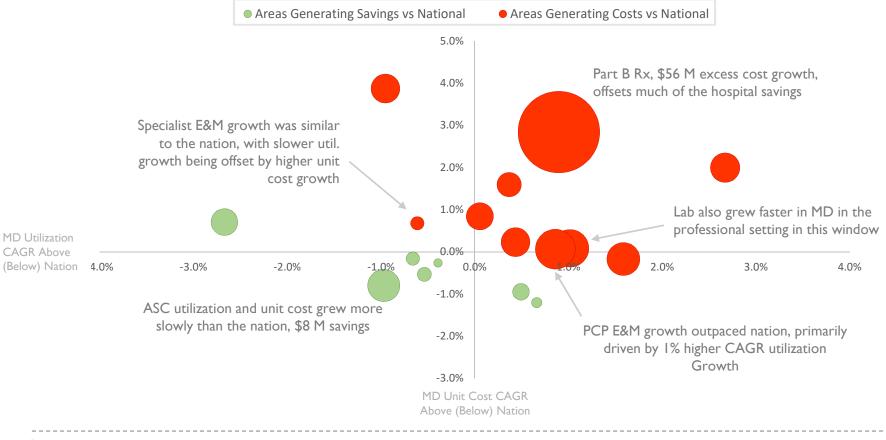
| 2017 to 2018 | | MD Above | (Below) Natio | | | |
|------------------------|------------|-------------|---------------|--------|---------------------------------|-----------------|
| | % of Spend | Utilization | Unit Cost | Total | Run Rate (Savings) Cost, \$M | % of Savings |
| Part B Rx | 19.0% | -4.8% | -4.2% | -9.3% | (\$26) | 28.6% |
| Imaging | 12.4% | -8.9% | 0.6% | -7.7% | (\$13) | 14.7% |
| Proc-Major Cardiology | 11.1% | -5.9% | -2.6% | -8.4% | (\$6) | 6.4% |
| E&M - ER | 10.6% | -17.3% | 15.8% | -3.0% | (\$4) | 4.9% |
| Proc-Minor | 8.6% | -9.9% | 3.3% | -6.1% | (\$7) | 7.4% |
| E&M - Other | 7.1% | -11.1% | 3.4% | -7.2% | (\$13) | 14.9% |
| Proc-Major Other | 5.9% | -11.8% | 7.3% | -4.6% | (\$2) | 2.4% |
| Proc-Endocrinology | 5.4% | -10.5% | 1.1% | -9.2% | (\$5) | 5.4% |
| Lab | 5.2% | -8.1% | 4.4% | -3.1% | (\$5) | 5.8% |
| Proc-Ambulatory | 4.7% | -15.6% | 5.4% | -10.3% | (\$5) | 5.9% |
| Proc-Oncology | 3.8% | -14.7% | 3.9% | -10.1% | (\$9) | 10.3% |
| Proc-Major Orthopaedic | 2.4% | 17.6% | -9.8% | 8.0% | \$1 | -0.9% |
| Proc-Eye | 1.8% | -15.7% | 9.6% | -6.0% | (\$1) | 1.1% |
| Other Professional | 1.7% | -8.4% | -3.4% | -12.7% | (\$22) | 24.9% |
| DME | 0.2% | 1.0% | 54.8% | 63.0% | \$28 | -31.8% |
| Proc-Dialysis | 0.0% | -27.5% | 13.6% | -15.8% | (\$0) | 0.1% |

- ~\$114 M total with mix
- From 2017 to 2018 the savings were more widely distributed across different areas and improved utilization versus national played a larger role
- Part B Rx, and E&M Other continued to be significant drivers, while Other Professional, Imaging and Cardiology also contributed
- DME unit cost variance reversed eliminating gains prior years, this reflects changes in national DME reimbursement in 2018.

% of spend reflects 2018 MD amounts.

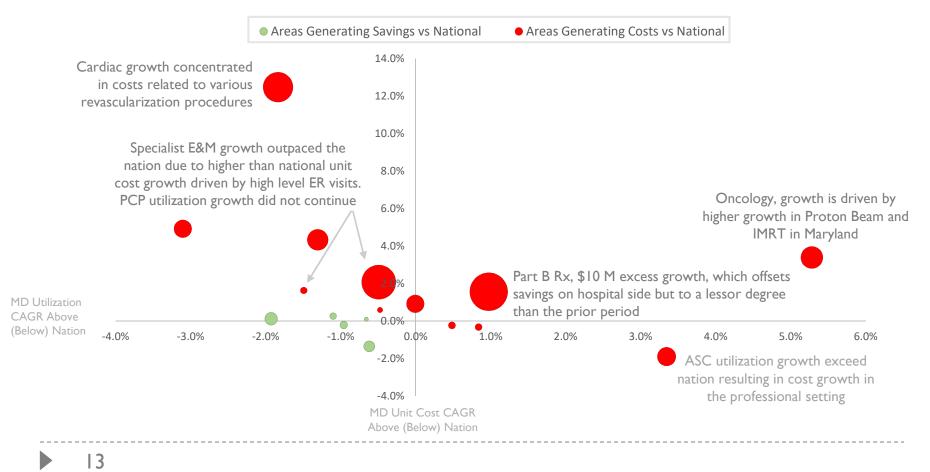
MD vs Nation, Professional CAGR, '13 to '17

- Scatter indicates the MD CAGR above (below) national growth, size indicates amount of savings (green) or incremental costs (red) generated
- Graphic represents a total of approximately \$100 in excess growth that occurred from 2013 to 2017 in professional Part B costs. The largest red bubble represents ~\$50 M of excess growth.



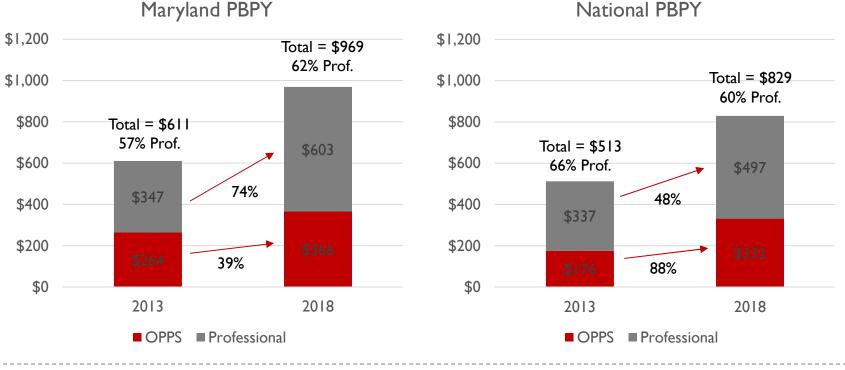
MD vs Nation, Professional CAGR, '17 to '18

- Scatter indicates the MD CAGR above (below) national growth, size indicates amount of savings (green) or incremental costs (red) generated
- Graphic represents a total of approximately \$35 in excess growth that occurred from 2017 to 2018 in professional Part B costs. The largest red bubble represents ~\$10M of excess growth.



Mix of Part B Drug Spending

- Maryland was successful in shifting Part B Rx to the professional setting going up from 57% professional to 62% professional while the nation dropped from 66% to 60%. Maryland also had a lower total CAGR: 9.7% versus 10.1%.
- However, Maryland's absolute disadvantage increased from \$100 PBPY to \$140 PBPY. Maryland's spending started much higher therefore the trend has a bigger impact.



Maryland PBPY

Appendix: Professional Spend Tables

D



MD vs Nation, Professional CAGR, '13 to '17

| 2013 to 2017 MD Above (Below) National CAGR | | | | | | |
|---|---------------|-------------|-------|-------|---------------------------------|-----------------|
| | % of Spend | Utilization | | Total | Run Rate (Savings) Cost, \$M | % of Savings |
| ASC | 3.7% | -1.0% | -0.8% | -1.8% | (\$8.04) | -8.5% |
| Proc-Ambulatory | 2.9% | -2.7% | 0.7% | -1.9% | (\$5.58) | -5.9% |
| DME | 6.4% | 0.5% | -0.9% | -0.4% | (\$2.16) | -2.3% |
| Proc-Endocrinology | 1.5% | -0.5% | -0.5% | -1.1% | (\$1.55) | -1.6% |
| Proc-Eye | 1.7% | -0.7% | -0.2% | -0.8% | (\$1.40) | -1.5% |
| Proc-Major Orthopaedic | 1.5% | 0.7% | -1.2% | -0.6% | (\$0.86) | -0.9% |
| Proc-Dialysis | 0.7% | -0.4% | -0.3% | -0.7% | (\$0.56) | -0.6% |
| E&M - Specialist | 19.6% | -0.6% | 0.7% | 0.1% | \$1.38 | 1.5% |
| Proc-Major Other | 2.1% | 0.4% | 1.6% | 2.0% | \$4.61 | 4.9% |
| Proc-Minor | 5.8% | 0.1% | 0.8% | 0.9% | \$5.76 | 6.1% |
| Imaging | 7.2% | 0.4% | 0.2% | 0.7% | \$6.49 | 6.8% |
| Proc-Major Cardiology | 1.7% | -1.0% | 3.9% | 2.7% | \$6.51 | 6.9% |
| Proc-Oncology | 1.4% | 2.7% | 2.0% | 4.7% | \$6.75 | 7.1% |
| Other Professional | 7.4% | 1.6% | -0.2% | 1.4% | \$8.47 | 8.9% |
| Lab | 9.1% | 1.0% | 0.1% | 1.1% | \$10.95 | 11.5% |
| E&M - PCP | 11.9% | 0.9% | 0.1% | 0.9% | \$12.35 | 13.0% |
| Part B Rx | 15.3% | 0.9% | 2.8% | 3.8% | \$51.69 | 54.5% |

% of spend reflects 2018 MD amounts.

| |6

MD vs Nation, Professional CAGR, '17 to '18

| 2017 to 2018 | | MD Above | e (Below) Nati | onal CAGR | | |
|------------------------|---------------|-------------|----------------|-----------|---------------------------------|-----------------|
| | % of Spend | Utilization | Unit Cost | Total | Run Rate (Savings) Cost, \$M | % of Savings |
| Proc-Major Other | 122.6% | -1.9% | 0.1% | -1.8% | (\$1.15) | -3.0% |
| Proc-Eye | 83.6% | -0.6% | -1.4% | -2.0% | (\$0.87) | -2.3% |
| Proc-Endocrinology | 84.6% | -1.0% | -0.2% | -1.2% | (\$0.42) | -1.1% |
| Proc-Major Orthopaedic | 105.1% | -1.1% | 0.3% | -0.9% | (\$0.32) | -0.8% |
| Proc-Dialysis | 53.4% | -0.7% | 0.1% | -0.6% | (\$0.12) | -0.3% |
| Lab | 59.6% | -0.5% | 0.6% | 0.1% | \$0.20 | 0.5% |
| E&M - PCP | 11.9% | -1.5% | 1.6% | 0.1% | \$0.33 | 0.9% |
| Proc-Ambulatory | 79.6% | 0.8% | -0.3% | 0.5% | \$0.35 | 0.9% |
| Proc-Minor | 78.2% | 0.5% | -0.2% | 0.2% | \$0.37 | 1.0% |
| Imaging | 79.2% | 0.0% | 0.9% | 0.9% | \$2.29 | 6.0% |
| Other Professional | 102.7% | -3.1% | 4.9% | 1.5% | \$2.31 | 6.1% |
| ASC | 57.5% | 3.3% | -1.9% | 2.2% | \$2.53 | 6.6% |
| DME | 109.9% | -1.3% | 4.3% | 2.8% | \$3.20 | 8.4% |
| Proc-Oncology | 90.5% | 5.3% | 3.4% | 8.9% | \$3.57 | 9.4% |
| Proc-Major Cardiology | 57.9% | -1.8% | 12.5% | 10.4% | \$6.56 | 17.3% |
| E&M - Specialist | 165.0% | -0.5% | 2.1% | 1.6% | \$8.57 | 22.5% |
| Part B Rx | 78.0% | 1.0% | 1.6% | 2.7% | \$10.60 | 27.9% |

% of spend reflects 2018 MD amounts.

▶