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Performance Measurement Workgroup

March 19, 2025

HSCRC Quality Team

Meeting Agenda

- RY 2027 MHAC Draft Recommendation
- RY 2027 RRIP Draft/Final Recommendation
- RY 2027 ED-Hospital Throughput Best Practices Final Policy Update--approved
- Solventum (3M) Ambulatory PPC Measurement
- AHEAD Readmission Update (see appendix)

Workgroup Learning Agreements

- **Be Present** – Make a conscious effort to know who is in the room, become an active listener. Refrain from multitasking and checking emails during meetings.
- **Call Each Other In As We Call Each Other Out** – When challenging ideas or perspectives give feedback respectfully. When being challenged - listen, acknowledge the issue, and respond respectfully.
- **Recognize the Difference of Intent vs Impact** – Be accountable for our words and actions.
- **Create Space for Multiple Truths** – Seek understanding of differences in opinion and respect diverse perspectives.
- **Notice Power Dynamics** – Be aware of how you may unconsciously be using your power and privilege.
- **Center Learning and Growth** – At times, the work will be uncomfortable and challenging. Mistakes and misunderstanding will occur as we work towards a common solution. We are here to learn and grow from each other both individually and collectively.

REMINDER: These workgroup meetings are recorded.

PMWG Members

Carrie	Adams	Meritus	Stephen	Michaels	MedStar Southern Maryland Hospital
Andrew	Anderson	Johns Hopkins Bloomberg	Lily	Mitchell	CareFirst
Ryan	Anderson	MedStar - MD Primary Care Program	Sharon	Neeley	Maryland Department of Health Medicaid
Kelly	Arthur	Qlarant QIO	Christine	Nguyen	Families USA
Ed	Beranek	Johns Hopkins Health System	Jonathan	Patrick	MedStar Health
Barbara	Brocato	Barbara Marx Brocato & Associates	Elinor	Petrocelli	Mercy Medical Center
Zahid	Butt	Medisolv Inc.	Mindy	Pierce	Primary Care Coalition of Montgomery County
Tim	Chizmar	MIEMSS	Nitza	Santiago	Lifebridge Health
Linda	Costa	University of Maryland School of Nursing	Dale	Schumacher	MedChi, Maryland State Medical Society
Ted	Delbridge	MIEMSS (c)	Madeleine "Maddy"	Shea	Health Management Associates
Toby	Gordon	Johns Hopkins Carey Business School	Mike	Sokolow	University of Maryland Medical Systems
Shannon	Hall	Community Behavioral Health Association of MD	Geetika "Geeta"	Sood	JHU SOM,Division of Infectious Diseases.
Theressa	Lee	Maryland Health Care Commission	April	Taylor	Johns Hopkins Health System
Stacy	Lofton	Families USA	Tequila	Terry	Maryland Hospital Association
Angela	Maule	Garrett Regional Medical Center	Bruce	VanDerver	Maryland Physicians Care
Patsy	Mcneil	Adventist Health	Jamie	White	Frederick Health

Draft RY 2027 MHAC Recommendations Discussion

MHAC RY 2027 Draft Policy

- Maintains the focused list of clinically significant Potentially Preventable Complication (PPC) measures used for RY 2026
- Evaluates performance to date on payment PPCs, monitored PPCs and overall
- To address small cell size concerns, presents options for updating the current methodology from scoring PPCs individually to scoring using a PPC composite:
  - Validity and reliability analysis results provided for current methodology and composite measure options
  - Modeled hospital-level and statewide scores and revenue adjustment options provided for the current methodology and composite measure option

Statistical Issues of Measurement Validity and Reliability Related to Small Cell Sizes

- Current MHAC program addresses small cell size concerns in two ways:
  - Hospital must have 2 expected PPCs and 20 admissions at-risk for a PPC to be assessed
  - Small hospitals (those with less than 21,500 at-risk or 22 expected PPCs) are assessed using two years of data.
- Over the past year, staff assessed using a composite measurement methodology which would evaluate all PPCs as one measurement as opposed to evaluating each PPC unto itself.
- Two evaluations informed staff selection of the composite methodology over the current MHAC methodology
  - Content Validity
  - Signal to Noise Reliability

PPC Composite Improves Content Validity by Increasing Number of PPCs on Which Hospitals are Assessed

Hospital Category*	Number of Hospitals	Average Number of PPC Measures Evaluated	
		Current Methodology	Composite Methodology
Small Hospitals	5	3.6	13.2
Medium Hospitals	15	11.0	14.5
Large Hospitals	21	13.8	15

***Hospital category definitions are based on FY 2024 data. Small hospitals had less than 21,500 at-risk discharges or 22 expected PPCs; medium hospitals had between 60,000 and 150,000 at-risk discharges; large hospitals had greater than 150,000 at-risk discharges.**

Reliability* of the Current and Composite Methodology Options Assessed Using the Morris Signal-to-Noise Ratio

Performance Period	Current Methodology*	Composite Option 1	Composite Option 2	Composite Option 3
FY 24	0.24	0.61	0.48	0.54
FY 23	0.38	0.81	0.63	0.68
FY 22	0.50	0.81	0.70	0.76
FY 21	0.42	0.80	0.62	0.72
Average	**0.39**	**0.76**	**0.61**	**0.68**

***Reliability refers to the consistency of a measure and thus its dependability in assessing the performance of an intervention versus random variation. A score of 1.00 indicates a perfect signal of hospital performance without noise (i.e., perfect reliability) and a score of 0 indicates no signal of hospital performance and all noise (i.e., worst reliability). Staff considers reliability above 0.50 to be acceptable but would hope the MHAC methodology could achieve an average reliability across Maryland hospitals of 0.75 or higher.**

PPC Composite Score Options Assessed to Improve Reliability and Validity of PPC Measurement

Calculation Steps	Current Methodology	PPC Composite Option 1	PPC Composite Option 2	PPC Composite Option 3
PPC Exclusion Criteria	Exclude PPC measures with <2 expected PPCs or <20 at risk discharges	Exclude PPCs with 0 at-risk discharges		
PPC Measure "Volume" Weights	PPC measures not weighted by volume	PPC measures with greater expected PPCs at hospital receive a larger weight	PPC measures with more at-risk discharges at hospital receive larger weight	PPC measures with more observed PPCs across Maryland hospitals receive a larger weight
PPC Measure 3M Cost Weights	PPC measures are weighted by 3M Cost Weights			
Benchmarks and Thresholds	For each of the 15 payment PPCs, calculate a benchmark and threshold	Calculate a benchmark and threshold for the PPC Composite		

Based on modeling and validity and reliability results, staff preference is for Option 1.

Option 1 had highest reliability and uses hospital specific expected PPCs for weighting.

Composite Option 1 Calculation and PPC Measure Weights

As shown in the equation below, PPC Composite Option 1 is calculated as the sum of the hospital's observed PPCs times the 3M Cost Weight for each payment PPC measure divided by the sum of the hospital's expected PPCs times the 3M Cost Weight for each payment PPC measure.

$$PPC\ Composite_j = \frac{\left(\sum_{i=1}^{15} ObservedPPC_{ij} * 3MCostWeight_i\right)}{\left(\sum_{i=1}^{15} ExpectedPPC_{ij} * 3MCostWeight_i\right)}$$

PPC Composite Option 1 does not explicitly weight PPC measures by volume, but PPC measures with higher expected PPCs receive more weight.

PPC Measure Weight Examples Under Composite Options

PPC Measure	At-risk discharges	Expected PPCs	Pct. of hospital's expected PPCs (Composite Option 1)	Pct. of hospital's at-risk discharges (Composite Option 2)	Proportion of statewide observed PPCs (Composite Option 3)	3M Cost Weight
28	20,270	5.4	2.4%	12.7%	4.8%	0.45
42	20,294	10.2	4.5%	12.7%	7.3%	0.50

Revenue Adjustment Options

- ***Calculating MHAC Scores***
  1) Current methodology: hospital performance on each payment PPC measure relative to the PPC measure's benchmark and threshold, **OR**
  2) Composite Option (staff proposal): hospital performance on the PPC composite relative to the PPC composite benchmark and threshold

- ***Converting Scores to Revenue Adjustments***
  1) Use continuous linear scale ranging from 0 to 100 percent with a hold harmless zone (currently 10 percentage point range); set the hold harmless zone and reward/penalty cut point around the average hospital MHAC score as determined through prospective modeling*
  2) Use continuous linear revenue adjustment ranging from 0 to 100 percent without a hold harmless zone; set the reward/penalty cut point at the average hospital MHAC score as determined through prospective modeling*
  3) To account for modeling and performance time differences, consider assessing the actual average hospital MHAC scores and adjust the cut point if is more than +/- 10 percent different

NOTE: Prospective modeling does not reflect actual values for any rate year; in the final policy, staff may update the analysis with more recent data and gap between base and performance periods consistent with the current program.

Modeled Revenue Adjustments: Current Methodology and Option 1 Composite

Statewide Revenue Adjustments	Current Methodology		**Composite Option 1**	
	No Hold Harmless Zone	Hold Harmless Zone	No Hold Harmless Zone	Hold Harmless Zone
Aggregate Net Revenue Adjustment	$11,816,553	$9,289,553	$25,518,286	$22,286,597
Aggregate Penalties	-$23,903,863	-$16,502,774	-$35,931,679	-$29,594,430
Penalties: % of inpatient spending	-0.20%	-0.14%	-0.30%	-0.25%
Aggregate Rewards	$35,720,416	$25,792,327	$61,449,965	$51,881,027
Rewards: % of inpatient spending	0.30%	0.22%	0.52%	0.44%

Modeling will be updated in Final Policy. Staff will send updated modeling to PMWG members as soon as available.

Updated modeling will use CY24 performance (+ CY23 small hospitals) and FY22/23 for norms and PPC Grouper v42

Comment letter due date changed to Tuesday 3/25

Draft Recommendations

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RY 2027 Draft Recommendations for MHAC Program

1. Use 3M Potentially Preventable Complications (PPCs) to assess hospital acquired complications.
   a. Maintain a focused list of PPCs in the payment program that are clinically recommended and that generally have higher statewide rates and variation across hospitals.
   b. Assess monitoring PPCs based on clinical recommendations, statistical characteristics, and recent trends to prioritize those for future consideration for updating the measures in the payment program.
   c. Engage hospitals on specific PPC increases as indicated/appropriate to understand trends and discuss potential quality concerns.
2. Assess performance using more than one year of data for small hospitals (i.e., less than 21,500 at-risk discharges and/or 22 expected PPCs). The performance period for small hospitals will be CYs 2024 and 2025.
3. Assess hospital performance based on statewide attainment standards.
4. Consider options for determining hospital scores:
   a. Option1 (current methodology): Score hospital performance on each PPC individually weighted by Solventum (3M) cost weights as a proxy for patient harm. Hospitals are only assessed on the PPCs that meet minimum volume criteria.
   b. Option 2 (staff proposal): Score hospital performance on a PPC composite that includes all payment PPCs weighted by hospital specific expected volume and Solventum (3M) cost weights as a proxy for patient harm

RY 2027 Draft Recommendations for MHAC Program

5. Maintain a prospective revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent. Consider the following options for the revenue adjustment scale:
    a. Option 1 (current methodology): Linear scale that ranges from 0 to 100 percent and includes a 10 percentage point hold harmless zone. The cut point for penalties and rewards is determined by centering the no harmless zone around the average hospital MHAC score as determined through prospective modeling.
    b. Option 2 (staff proposal): Continuous linear scale that ranges from 0 to 100 percent without a hold harmless zone. The cut point for penalties and rewards is average hospital MHAC score as determined through prospective modeling.
    c. (**New proposal for either option**): Retrospectively assess the average hospital MHAC scores and propose to the Commissioners that the cutpoint be modified if the actual average score is more than +/- 10 percent different from the prospectively modeled average MHAC score.
6. Going forward, consider other candidate measures/measure sets that may be important for assessing hospital avoidable, harmful complications and appropriate for use in the program, e.g., digitally specified measures.

MHAC Future Considerations

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MHAC RY 2028 and Beyond

- Assess Composite Methodology
- Complications Strategic Plan Discussion
  - April/May PMWG meeting
  - Ask PMWG members to come prepared to discuss ideas for future improvements to the MHAC program; contact staff with questions or ideas you may wish to present.
- Payment PPCs Selection
  - Regarding monitored PPC list, following review of updated validity and reliability analysis results, staff plans to identify and begin to vet in the April PMWG meeting those most likely to be considered for payment in near future
- Overlap of MHAC and QBR Safety Domain & Revenue At Risk
- Adoption plan for additional measures including digital quality measures (e.g., hyper/hypo glycemia, maternal complications)

Payment PPC Selection Criteria

- PPC Data Analysis/Statistics
  - **High rates: Rate per 1,000 generally 0.5 or above**
  - **High Volume: Volume of observed events 100 or above (over two years)**
  - Significant variation across hospitals
  - At least half of the hospitals are eligible for the PPC

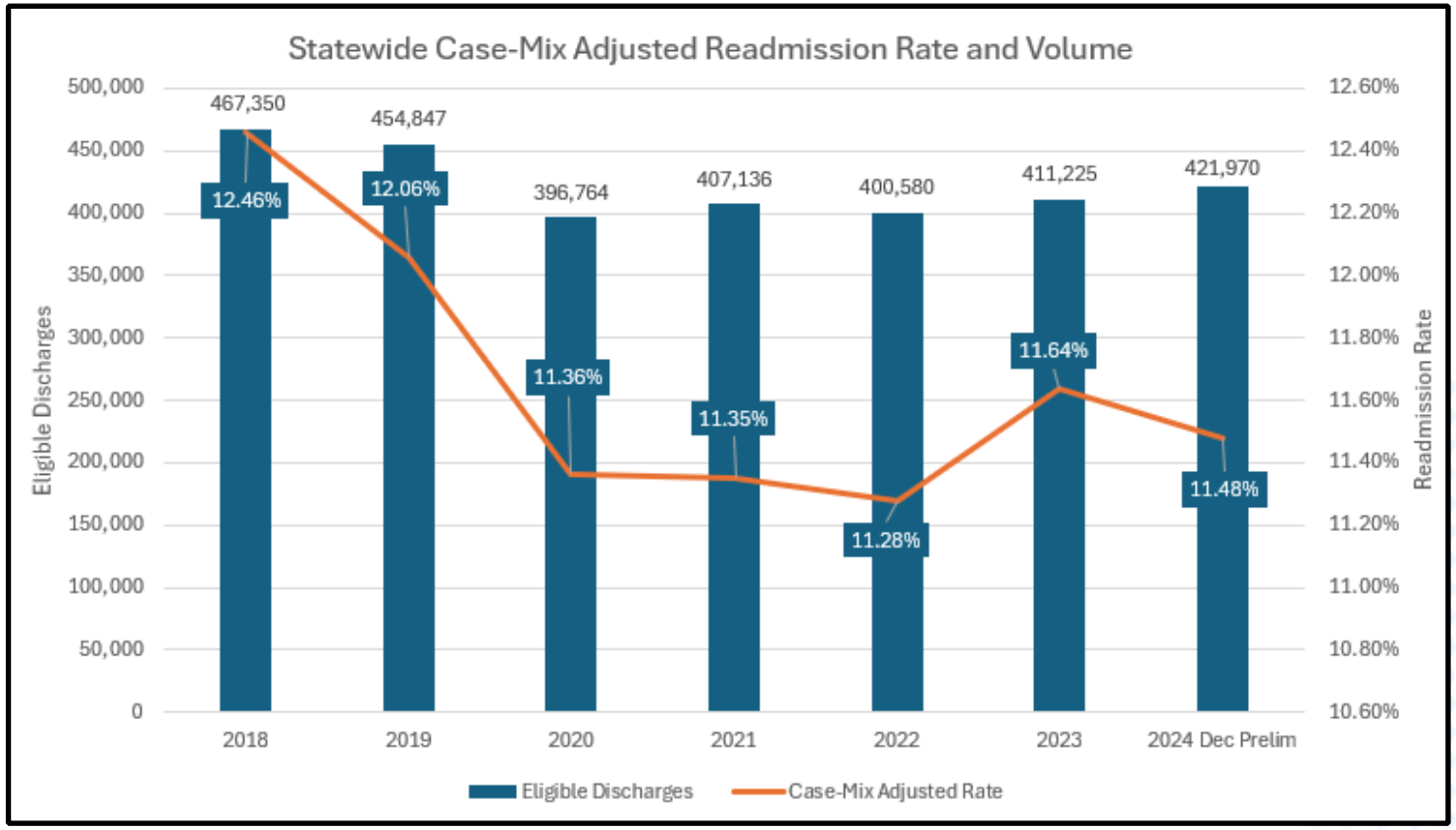
- Additional Considerations
  - Clinical significance
  - Potential influence of coding practices/changes
  - Opportunity for improvement/actionability
  - PSI overlap
  - All-payer

If using composite methodology, staff plan to revisit monitoring PPCs with lower rates and volumes.

Draft RY 2027 Readmission Reduction Incentive Program Discussion

Statewide Case-Mix Adjusted Readmission Rate, CY 2018-2024 YTD

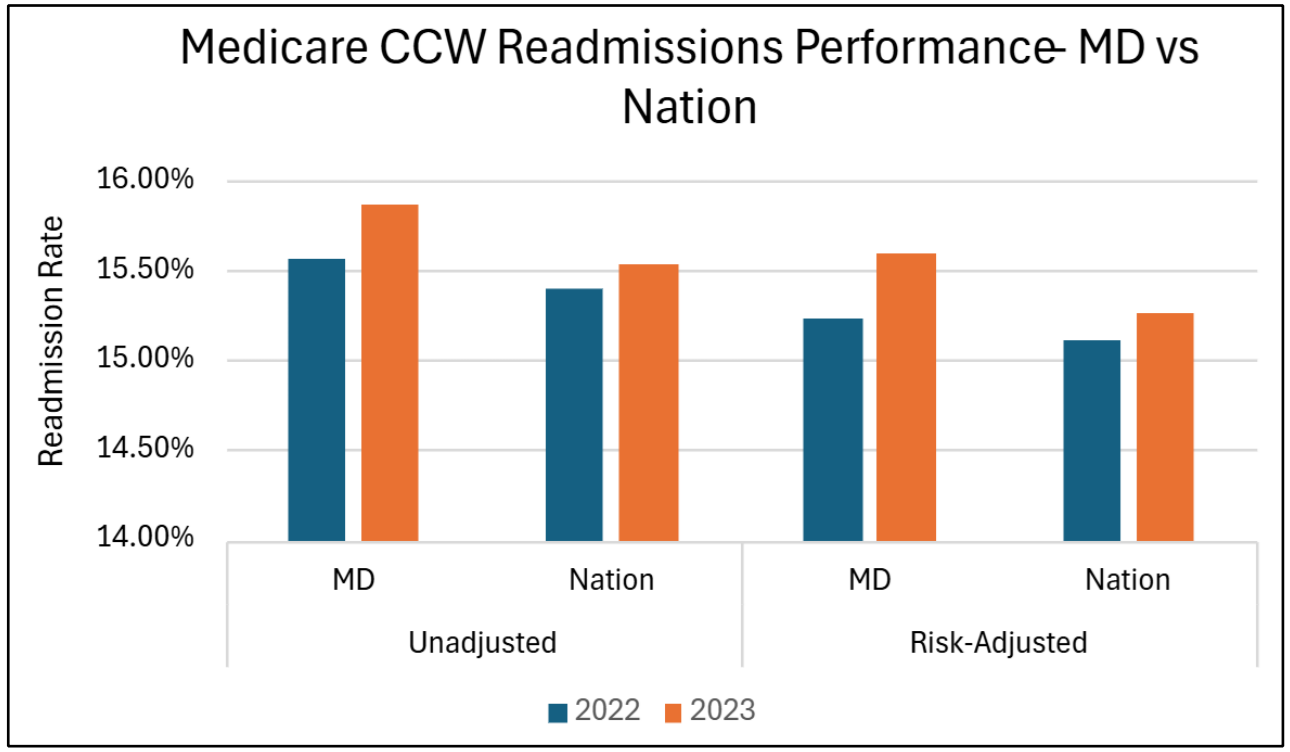
Due to the low volume and low readmission rate in CY 2022, staff agreed with PMWG members that CY 2022 should be re-evaluated as the base period and propose a blended CY22/23 base for both RY26 and RY27



Blended Base Period Recommendation

- From 2019, volume decreased by 11.93% in CY 2022 and 9.60% in CY 2023 (i.e., both were significantly lower than 2019)
- To exclude the impact of the omicron surge in CY 2022, staff calculated the Statewide Readmission rate for whole year vs. Mar-December:
  - CY 2022 readmit rate: 11.28%
  - Mar- Dec 2022 readmit rate: 11.30%
- Volume in CY 2024 through November is up and the readmission rate is down compared to CY 2023 suggesting CY 2023 performance could be the anomaly

Blended Base Period Recommendation Summary



This shows that on a risk-adjusted and unadjusted basis, Maryland saw a greater degradation than the nation in CY 2023 compared to CY 2022 and performed worse than the Nation in both years.

- Staff is continuing to recommend a blended base period of CY 2022 and CY 2023 and applying this change RY 2026, retrospectively.

Improvement Target

The approved RY26 policy set a 5% improvement target from CY 2022 through CY 2026 based on CY 2022 performance. Despite performing better than the Nation on an unadjusted basis in CY 2024 YTD, CY 2024 performance doesn't meet the expectations set against our peers or the incentives of our model. Updated benchmarking using CY 2023 data, indicates there is still opportunity to improve. Thus staff propose maintaining improvement target.

RY 2026 Improvement Target Estimates		
Estimating Method	**Percent Improvement from CY2022 (11.15%)**	**Resulting Readmission Rate (2026)**
1 Actual Compounded Improvement, 2018-2022	-8.61%	10.19%
2 Actual Improvement 2021-2022, Annualized to Four Years	-5.54%	10.53%
3 All Hospitals to 2022 Median	-4.1%	10.69%
4a Medicare Benchmarking - Peer County/MSA to 75th Percentile**	-4.75% to -5.45%	10.58%
4b Commercial Benchmarking - Peer County/MSA to 75th Percentile**	-2.22% to -9.15%	10.52%
5 Reduction in Readmission-PQIs	-2.39%	10.88%

Estimating Method	Percent Improvement from CY 2023 (11.64%)	Resulting Readm Rate (in 2026)
4a. Medicare Benchmarking- Peer County/MSA to 75th Percentile	-7.58% to -8.07%	10.73%
4b. Commercial Benchmarking- Peer County/MSA to 75th Percentile	-1.2% to -6.01%	11.22%

Comment Letter Feedback

For the RY 2027 draft RRIP policy, staff received 5 comment letters from stakeholders: MHA, UMMS, MedStar, Garrett, JHHS

- Blended base period was the focus of most of the feedback
  - 1 letter is supportive of a blended base period
  - 4 letters recommend CY 2023 as the base period/ not using CY 2022 at all
- Other concerns
  - Reducing improvement target
  - Out of State (OOS) Transfers inclusion in OOS ratio
  - Moving EDAC to payment

Out of State Readmissions vs. Transfers

- The OOS ratio comes from the Medicare CCW dataset and includes OOS readmissions (i.e., data from all states are analyzed but transfers out of state are not counted as readmissions)
- Currently, staff is analyzing the CCW data to understand the potential impact of OOS transfers that are transferred back to MD hospital, since these transfers would appear to be readmissions in the casemix dataset
  - Staff will also look into the Medicaid and APCD datasets for impacts well

Proposed Final Recommendations

1. Maintain the 30-day, all-cause readmission measure.
2. Improvement Target - Maintain the statewide 4-year improvement target of -5.0 percent through 2026 with a blended base period of CY 2022 and CY 2023
3. Retroactively apply a blended base period of CY 2022 and CY 2023 to the RY 2026 policy
4. Attainment Target - Maintain the attainment target whereby hospitals at or better than the 65th percentile of statewide performance receive scaled rewards for maintaining low readmission rates.
5. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
6. Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities. Scale rewards:
   - beginning at 0.25 percent of IP revenue for hospitals on pace for 50 percent reduction in disparity gap measure over 8 years, and;
   - capped at 0.50 percent of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years.
7. Monitor emergency department and observation revisits by adjusting readmission measure and through all-payer Excess Days in Acute Care measure. Consider future inclusion of revisits of EDAC in the RRIP program.

Note: If the final policy is approved in April, the RRIP reports will begin being posted to the CRS portal in May.

RRIP Statewide Revenue Adjustments, CY 2022 vs Blended Base vs CY 2023

RY 2026 YTD Revenue Adjustments	CY 2022 Base Period Attainment Target: 11.02% Improvement Target: -2.53%	CY2022/2023 Blended Base Period Attainment Target: 11.31% Improvement Target: -2.53%	CY 2023 Base Period Attainment Target: 11.48% Improvement Target: -2.53%
Net Adjustments ($), (%)	~ -$56M, -0.47%	~ -$34M, -0.30%	~-$4M, -0.03%
Penalties ($), (%)	~ -74M, -0.63%	~ -$53M, -0.45%	~-$32M, -0.27%
Rewards ($), (%)	~ $18M, 0.15%	~ 18M, 0.15%	~$29M, 0.24%

RY 2027 Estimated Revenue Adjustments (difference between RY26 YTD and these estimates are improvement target)	CY 2022 Base Period Attainment Target: 10.88% Improvement Target: -3.78%	CY2022/2023 Blended Base Period Attainment Target: 11.16% Improvement Target: -3.78%	CY 2023 Base Period Attainment Target: 11.33% Improvement Target: -3.78%
Net Adjustments ($), (%)	~ -$66M, -0.56%	~ -$49M, -0.41%	~-$23M, 0.19%
Penalties ($), (%)	~ -$82M, -0.70%	~ -$64M, -0.54%	~-$45M, -0.38%
Rewards ($), (%)	~ 16M, 0.14%	~ $15M, 0.12%	~$22M, 0.18%

ED Wait Time Reduction Commission Updates

ED Wait Time Reduction Commission:

Collaborate on behavioral health, post-acute, primary care, and other areas of opportunity.

Improve Access

Maryland Primary Care Program

Expand Behavioral Health Framework

SNF/Post-Acute

Implement Hospital Payment Programs to Improve Clinical Care

MD Hospital Quality Policies

ED "Best Practices" Incentive

Increase Transparency

MHCC Public Quality Reporting

ED Dramatic Improvement Effort

Reduce Avoidable Utilization

Programs to optimize high value care and reduce avoidable utilization

Reducing the number of people who need the ED

Improving throughput within the hospital

Improving the hospital discharge process and post-ED community resources

Increasing Transparency

Workforce Issues

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Commission Subcommittees

Access to Non-Hospital Care

- Integrate and optimize best practices and data analytics for advanced primary care, specialty care, home health, post-acute care, and ancillary services in an effort to reduce avoidable ED and hospital utilization and improve care transition workflows throughout the continuum of care.
- Meetings every six to eight weeks.

Data Subcommittee

- Identify different data sources across healthcare platforms to include ambulatory, acute care, post-acute care, and third-party data.
- Meetings every six to eight weeks.

ED Hospital "Throughput" Incentives

- Develop a set of hospital best practices and scoring criteria to improve overall hospital throughput and reduce ED length of stay, advise on revenue at-risk and scaled financial incentives, and provide input on data collection and auditing.
- Meetings every four weeks.

Hospital Capacity, Operations & Staffing

- Subgroup will convene in April 2025.
- Planned focus of the subgroup is to assess access and capacity across the State, collaborate with commercial payers, Medicare, and Medicaid, and optimize workforce development opportunities.
- Meetings every four to six weeks.

ED WTR Commission and Subgroup Updates

ED WTR Commission

- Successful site visit to Suburban Hospital
- Next meeting scheduled for March 26th
- Site visits pending at two additional hospitals

Access to Non-Hospital Care

- Meeting on March 6th
- Top priorities identified: post-acute (discharge barriers to post-acute and post-acute capacity) and advanced care planning.
- Consider engagement with vendors in the post-acute space for focused discussions on post-acute care transitions and capacity opportunities. Introductory meeting with PointClickCare occurred on 3/1; follow-up meeting with HSCRC leadership on 3/26
- Legislative support for evaluating opportunities in the post acute space, small workgroup created, will begin meeting in early April

ED WTR Commission and Subgroup Updates

Data Subcommittee

- Met on March 4th.
- Capacity/Occupancy report is in progress
- UMMS Shared a capacity calculator tool that is in progress and being evaluated for correlation with existing reports at HSCRC

ED Hospital " Throughput" Best Practices

- Best Practices Final Policy presented to HSCRC Commission on March 12th for approval; approved. Memos to hospital leadership mid-March
- Best Practice selections due from each hospital on 4/18.

Hospital, Capacity, Operations & Staffing

Will convene in April 2025; a high level of interest for membership on this group. Final subgroup appointments will be made by end of March

ED Best Practices Update

Final Recommendations for RY 2027 (CY 2025)

1. Approve and implement the specifications of the Best Practices policy including a set of six Hospital Best Practices that are designed to improve the emergency department (ED) and hospital throughput and reduce ED length of stay (LOS).
    - For each best practice identified, three weighted tiers were developed with corresponding measures that reflect the fidelity and intensity of each best practice.
2. Require hospitals to select two Best Practices to implement and report data on for RY 2027.
    - The target date for data submission is October 1, 2025. Any hospitals with justifiable reporting delays must notify HSCRC prior to October 1st. Failure to report data to the Commission by December 2025 will result in a 0.1 percent penalty on all-payer, inpatient revenue to be assessed in January 2026.
    - We will follow our extraordinary circumstances exception policy to address any unforeseen events (i.e., Cyberattack, natural disaster, etc.).
    - Hospitals will submit their selected best practices within 30 days of final approval of this policy. Submission deadline: April 18, 2025
3. We propose that subsequent rate years will have a +/- 0.25 percent inpatient hospital revenue at risk tied to performance on these best practice metrics BUT intend to evaluate the impact of the best practices and make a final recommendation for subsequent rate years after the Year 1 Best Practice program impact is assessed.

Stakeholder Feedback

THE BEST PRACTICE SUBGROUP HAS REPRESENTATION FROM ALL HOSPITALS/HEALTH SYSTEMS, AS WELL AS MHA AND SEVERAL OTHER AGENCIES AND ORGANIZATIONS. THE SUBGROUP MEMBERS HAVE BEEN VERY ENGAGED AND ACTIVELY INVOLVED IN THE DEVELOPMENT OF THE BEST PRACTICE RECOMMENDATIONS. OVERALL, STAKEHOLDERS HAVE EXPRESSED SUPPORT FOR THE BEST PRACTICE POLICY, BUT THE FOLLOWING HAS BEEN CALLED OUT IN COMMENT LETTERS:

- Consideration of the effort required for data collection and reporting, allowing flexibility across health systems for alignment of measures with specific organizational opportunities
- Encourage flexible reporting timelines
- Request to shift data reporting deadline from October 2025 to December 2025
- Request for consideration of justifiable reporting delays in hospitals that are making a good faith effort in implementing best practices that may fall outside of the extraordinary circumstances exception policy. Noted above: We will follow our extraordinary circumstances exception policy to address any unforeseen events (i.e.cyberattack, natural disaster, etc.).
- Hospitals have been investing significant resources to implement initiatives directed at optimizing throughput and decreasing both IP and ED LOS. They ask that we also support and lead efforts to address external factors driving throughput and boarding issues related to an increased need for behavioral health and substance use disorder care, primary care, chronic condition management and complex post-acute care, as well as prior authorization delays and payer denials.
- Suggestions to also consider concurrent evaluation of other measures in the context of ED Wait Times,throughput and patient outcomes including: post-acute facility capacity, ambulatory and telemedicine care access related to ED wait times and hospital throughput, Left without being seen (LWBS), length of stay (stratified by discharge location and other factors), readmissions, 30-day mortality and patient experience
- Stakeholders also note external drivers of throughput issues including workforce challenges, supply delays, and capacity constraints across the continuum of care.
- Stakeholders support and in many instances volunteer to assist with efforts to address these external challenges, including engagement with legislators to facilitate meaningful actions.
- Request consideration of the +/- 0.25% revenue at risk in future years. Note: Policy indicates we will evaluate year 1 results before determining revenue at risk for subsequent years.

HSCRC Response to Stakeholder Feedback

- The HSCRC staff support flexibility of measure reporting across health systems to allow for targeted efforts at each hospital. This flexibility is reflected in the measures in the final draft recommendation.
- HSCRC supports flexible reporting timelines and would support a data reporting timeline that would request preliminary data reporting as data is available in CY 2025 with a requirement to have a data submission by December 2025. As reflected in the policy, regarding justifiable reporting delays, HSCRC will follow our extraordinary exception policy to address any unforeseen events. HSCRC will consider each request for delayed reporting outside of this policy on a case-by-case basis.
- HSCRC staff supports the requested focus on external drivers of ED LOS and ED Wait Times, and are working with the ED Wait Time Reduction Commission and designated subgroups to address external factors including throughput and boarding issues related to an increased need for behavioral health and substance use disorder care, primary care, chronic condition management and complex post-acute care, as well as prior authorization delays and payer denials.
- External drivers related to capacity across the continuum of care, supplies, external throughput challenges, and workforce issues will be evaluated by the HSCRC staff in partnership with the ED Wait Time Reduction Commission and designated representatives from hospital and other health care organizations on the Capacity, Operations and Staffing Subgroup of the ED WTR Commission.
- HSCRC staff agree with the suggestion to concurrently evaluate other measures in the context of ED Wait Times, throughput and patient outcomes, including post-acute facility capacity, ambulatory and telemedicine care access related to ED wait times and hospital throughput, Left without being seen(LWBS), length of stay (stratified by discharge location and other factors), readmissions, 30-day mortality and patient experience.
    - HSCRC staff and the ED WTR Data Subgroup have begun analyses focused on capacity and LOS and are in agreement with analysis of the other measures noted above in the comments.
    - Regarding the post-acute facility capacity and care transitions, legislative partners have indicated supports research and data analysis to develop a for exploring a collaborative solution. A formal small working subgroup focused on post-acute care was proposed; subgroup members have been identified; initial meeting anticipated in early April 2025.
- HSCRC staff believes the request for consideration of the +/- 0.25 % revenue at risk for subsequent years has been addressed, as the policy notes that we will evaluate the impact of the best practices and make a final recommendation for subsequent rate years after the Year 1 Best Practice program impact is assessed.

Solventum Presentation on Ambulatory PPCs (AM-PPCs)

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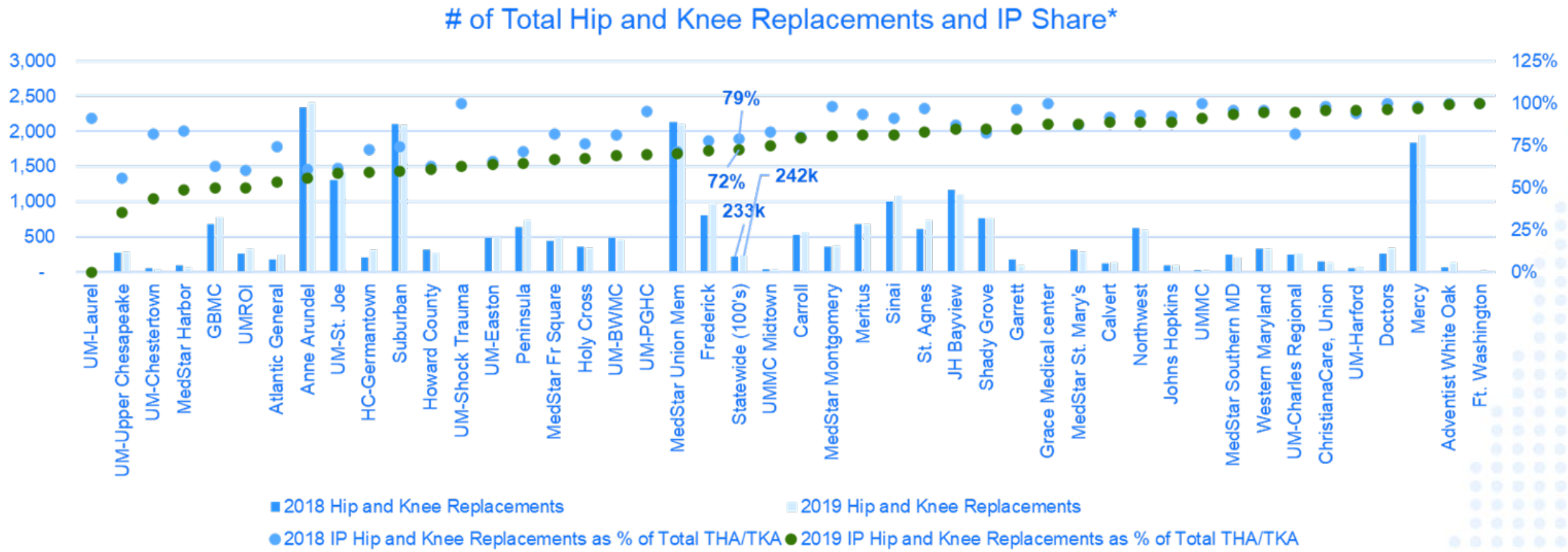
Impact of Model Incentives on Quality

- Commissioners and staff remain concerned about impact of TCOC model on quality of care received when services are moved outside of the IP setting
- HSCRC only has regulatory authority on IP and OP Hospital services
- Other options include OP measures submitted to CMS (staff will refresh and bring the measure results to the April/May PMWG)

Historical Look at Services Moving to Outpatient Hospital



Solventum AM-Potentially Preventable Complications Grouper

As services move to outpatient hospital and ambulatory settings in Maryland, HSCRC needs tools to assess quality of care in these settings

All-Payer Data

Inpatient

Outpatient

Medicare Data

Inpatient

Outpatient

ASC

Advantages of Solventum AM-PPC Grouper:

- Identifies complications by assessing subsequent visits to ED and inpatient setting, both of which are contained in the HSCRC all-payer and Medicare data
- Provides all-payer and Medicare reference population data for risk-adjustment and benchmarking
- Comparable to 3M PPC grouper for inpatient complications (i.e., similar clinical logic)

Potential Uses of Solventum AM-PPC Grouper in Maryland

- Compare complication rates across settings over time in Maryland
  - Have outpatient hospital complication rates increased as inpatient complication rates have decreased?
  - What proportion of Medicare complications occur in inpatient, outpatient hospital, and ambulatory surgery centers?

- Focus on most severe and prevalent types of complications that are measured by both the PPC and AM-PPC groupers, such as:
  - Septicemia and severe infections
  - Pulmonary complications
  - Pneumonia
  - Pulmonary embolism
  - Hemorrhage and hematoma

Potential Next Steps for Maryland

- Consider implementing Solventum AM-PPC grouper to identify complications that occur in ambulatory care setting by payer
  - Understand quality of care across the health care setting
  - Provide reports for complications occurring outside of IP that result in an ED or IP admissions for hospitals to monitor
  - Compare Maryland data to national benchmarks
- Staff is not currently recommending use of AM-PPC grouper for payment incentives due to concerns about attribution, among other issues, that would need to be addressed;
- However, staff believes that it is important to assess and consider impact of ambulatory care complications on the TCOC model and on hospitals.
- Staff have worked with Solventum to run and validate AM-PPC results for the State.
- Thank you to the Solventum team for presenting today.

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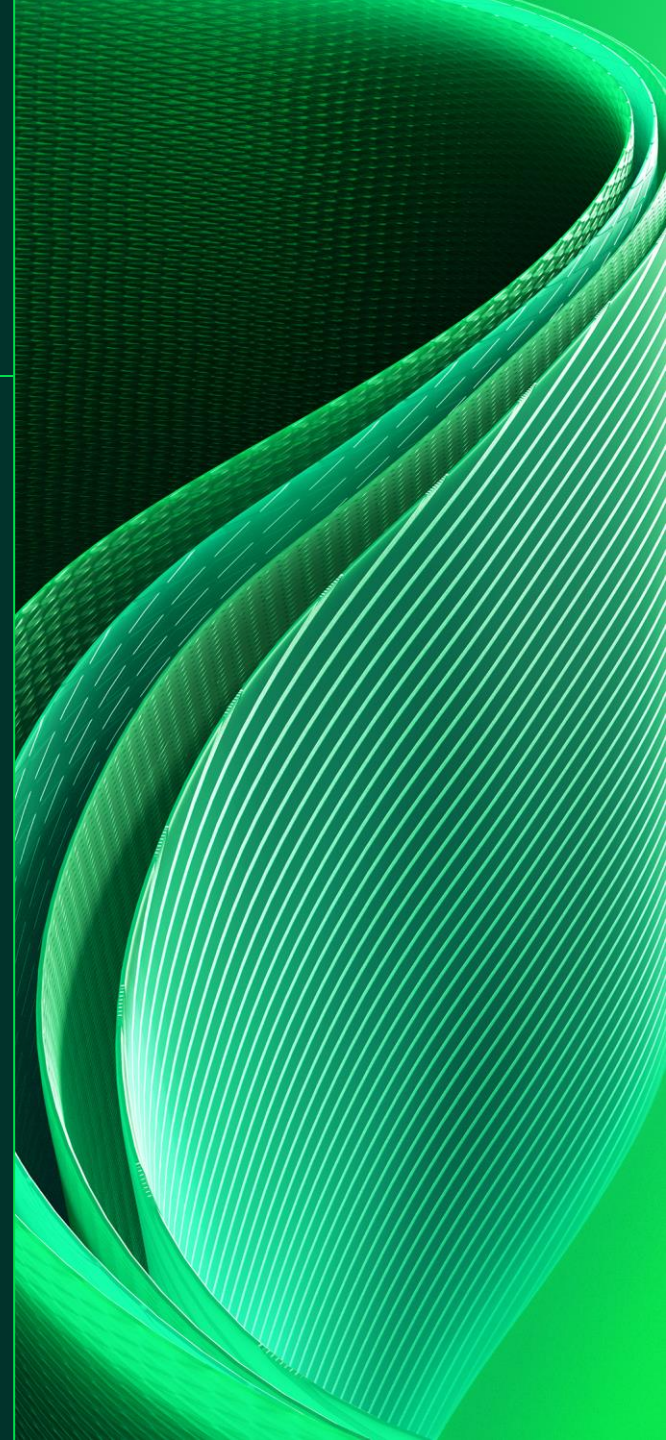
Solventum™ Ambulatory Potentially Preventable Complications (AM-PPCs)

March 2025

2025



Agenda

- Background and Introduction
- Solventum™ AM-PPC Clinical Logic
- Methodology in action
- Q&A

Background and Overview of Solventum™ AM-PPC

Background & Key Challenges

• Shift to ambulatory care settings

Over 66% of procedures are now conducted in outpatient settings, representing a notable transition from traditional inpatient care. This shift aims to reduce costs and improve patient convenience, but there is limited information on procedure outcomes.

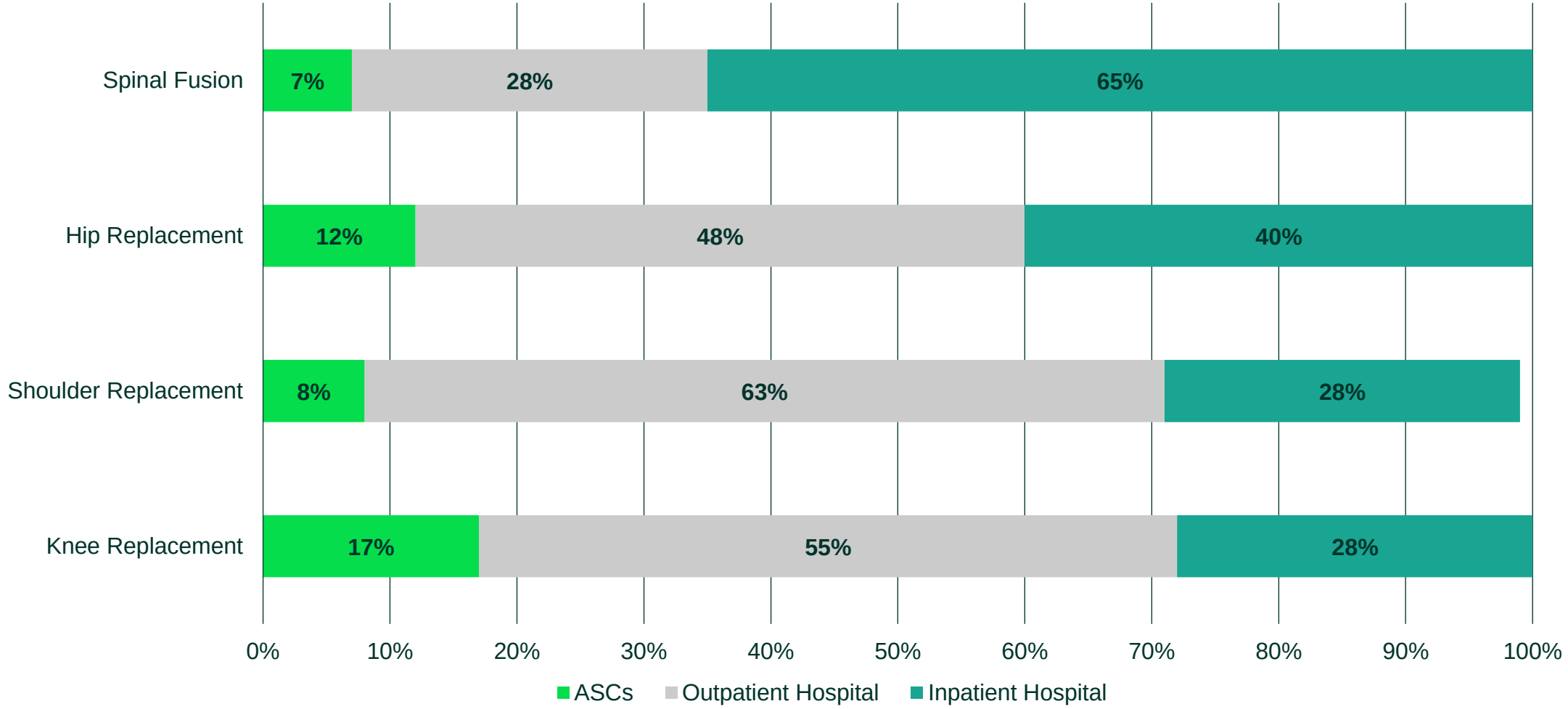
• Limited visibility and standards for outpatient procedure outcomes

Outpatient settings lack standardized methods for reporting postprocedural complications, unlike inpatient settings which have established Present on Admission (POA) and complication reporting and coding guidelines.

• Fragmented data across care settings

Data from Hospital Outpatient Departments, Hospital Admissions, Emergency Department Visits, Ambulatory Surgery Centers (ASCs), and Physician Offices are not integrated, resulting in an inability to continuously track and monitor postprocedural outcomes

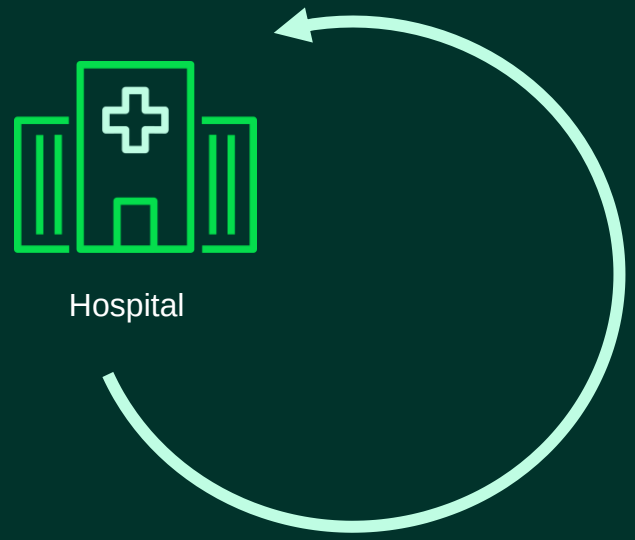
Procedure Volume Shifts Across Care Settings



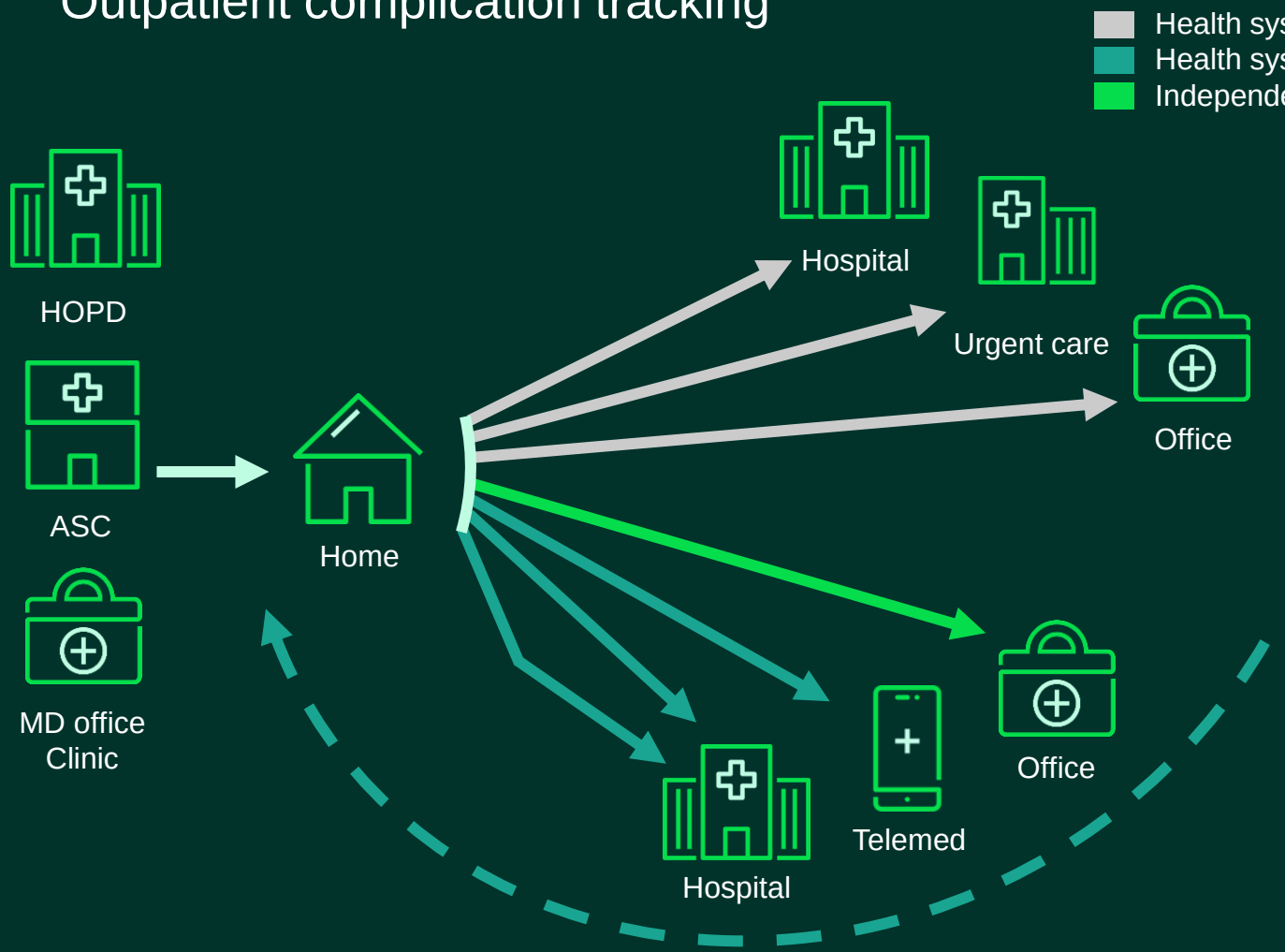
Source: Healthcare Dive: Definitive Healthcare

The Challenge of Tracking Outpatient Safety

Inpatient complication tracking



Outpatient complication tracking



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Impact and Why This Matters

Improve Patient Safety
Tracking complications helps identify areas where patient care can be improved. By understanding the types and frequencies of complications, healthcare providers can implement targeted interventions to reduce these events, ultimately leading to better patient outcomes.

Enhance Quality Improvement
Untracked outcomes represent missed opportunities for quality improvement. By systematically tracking and analyzing complications, healthcare providers can identify patterns and implement changes to improve the quality of care.

Cost Containment
Preventable complications often lead to additional treatments and longer hospital stays, which can be costly. By reducing the incidence of these complications, healthcare providers can contain costs and allocate resources more efficiently.

Solventum™ Ambulatory Potentially Preventable Complications (AM-PPCs)

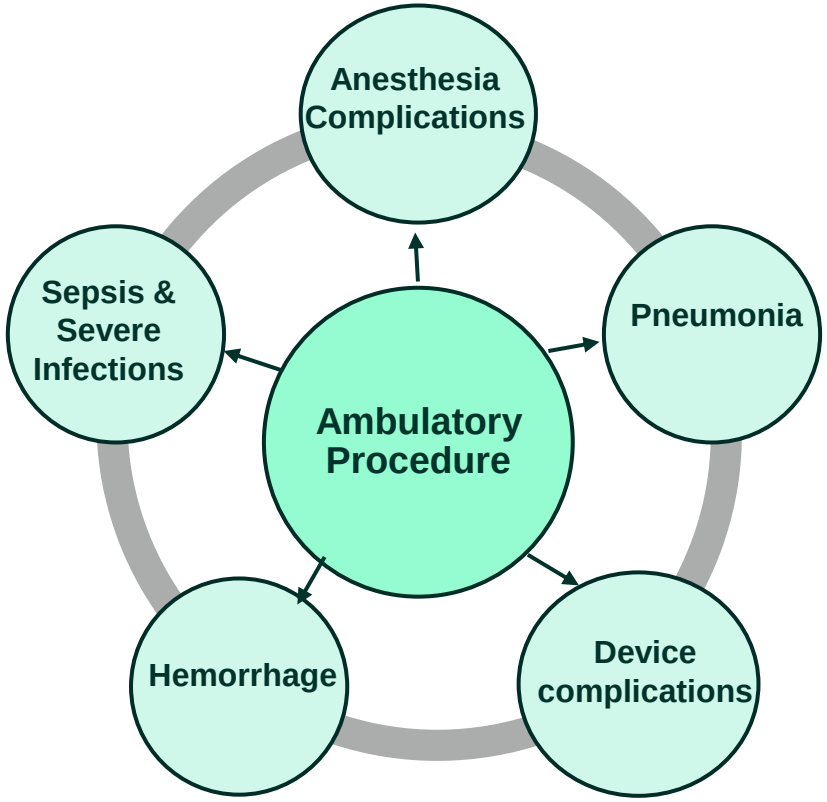
What are AM-PPCs?

AM-PPCs are complications that occur after an elective ambulatory procedure due to care and treatment processes rather than the natural progression of illness. In other words, these are complications that could be potentially prevented through improved clinical practices, surgical techniques, or post-procedural management.

Example 1: Post-Colonoscopy Perforation
A patient undergoes an elective colonoscopy and is discharged. Later that day, the patient returns and is admitted for treatment of a bowel perforation.

Example 2: Blood Clot After Knee Arthroscopy
A patient undergoes an elective knee arthroscopy and is discharged. One week later, the patient is treated in the emergency department for a deep vein thrombosis (DVT).

Example 3: Severe Infection Following Cataract Surgery
A patient undergoes an elective cataract surgery and is discharged. Within a few days, the patient is admitted for treatment of endophthalmitis, a severe eye infection.



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Difference between Inpatient PPCs and Ambulatory PPCs

Inpatient PPCs	Ambulatory PPCs
What could happen during an inpatient stay?	What could happen after an outpatient procedure?
Identifies complications occurring within an admission	Identifies complications that occur after an outpatient procedure
Based on conditions that are **Not** present on admission	Based on conditions **present on admission** (POA) or reported on any outpatient encounters, including emergency room visits
Examples of Complications that present during an admission: • Hospital acquired blood infection • Inpatient surgical complication • Hospital acquired pneumonia	Examples of Complications that present after an outpatient procedure: - Upper GI endoscopy that resulted in GI Bleeding - Vascular Access Procedure that resulted in Cellulitis - Spine Injection that resulted in septic arthritis

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Our Approach to Measuring Outpatient Procedure Quality

✅ **Standardized and Clinically Meaningful Procedure Classification**
- Uses procedure hierarchy to determine the primary procedure classification for encounters
- This classification enables risk-based assessment—such as differentiating hip arthroplasty from hip arthroscopy, where the risk profile is significantly different.

✅ **Comprehensive Complication Tracking**
- Ensures complications are clinically related to the procedure being evaluated
- Classifies minor to major potentially preventable complications, ensuring a broad view of quality

✅ **Inclusion of Procedures eligible for all populations**
- Unlike some measures that are limited to specific age groups, we include both pediatric and adult procedures, ensuring coverage across all populations

✅ **Flexible & Standardized Complication Tracking Window**
- Our primary 30-day analysis window ensures a comprehensive assessment of complications.
- However, we offer customizable options for organizations needing a 7-day or 15-day tracking window for more specific use cases.

✅ **Benchmarking for Quality Improvement**
- Standardized norms are provided to allow organizations to benchmark their performance to identify areas for improvement

How AM-PPCs Complement & Add Value to Quality Measures

While AM-PPCs provide a specialized approach to outpatient procedure quality, they also add value to other quality measures by filling **key gaps.** Let's take a look at two other measures in the industry looking at procedure quality and how AM-PPCs can be used to enhance or extend their insights.

Measure	Primary Focus	How AM-PPCs Add Value
NSQIP	Primarily inpatient surgical quality, focusing on major complications, requires manual abstraction of data	Extends quality tracking to outpatient procedures **and includes minor moderate and major preventable complications** using standardized encounter data
CMS OP-36	Tracks 7-day revisit rates for same day surgery ASC procedures, limited to Medicare patients	**Tracks 30-day outpatient procedure complications for all patients while excluding unrelated events.** Uses procedure group classification to evaluate complication rates while identifying key complications affecting outcomes.

AM-PPCs allow for a more granular understanding of procedure complication risks, supporting targeted quality improvement efforts that extend beyond inpatient settings, major complications, or Medicare only populations. AM-PPCs can help create a more complete picture of outpatient quality, ensuring providers and payers have the data they need to improve patient safety and procedural outcomes

Solventum’s approach to potentially preventable events

Focus on adverse outcomes that are potentially preventable, are meaningful for patients and are expensive for the healthcare system

Compare overall risk adjusted rates, not individual events

Remember, not all events are preventable, but **meaningful reductions can be achieved, saving money and improving health**

Solventum methodology design principles

Industry leader with over 40 years expertise in developing and maintaining clinical categorical classification tools for government and commercial value-based care, payment and quality programs.

Fair

Ensure equitable risk adjusted comparisons are made and allocation of resources and reimbursement are aligned without penalizing care delivery to complex patients

Scalable

Suitable for all populations including pediatrics, maternity and people with disabilities; designed to support population, episodic and service-based use cases

Accurate

Clinical categorical approach enables accurate prospective payment that appropriately align with resource utilization

Flexible

Non claims sources (i.e., social and functional assessments) can be used with Solventum classifications that are required for payment, quality and cost-efficiency programs

Efficient

Reduces burden on administrators and providers through existing claims-based data minimizing need to maintain clinical updates that impact risk adjustment within program design

Transparent

Thorough clinical documentation and logic using universally understood clinical language, hierarchies and specifications published in definitions manuals

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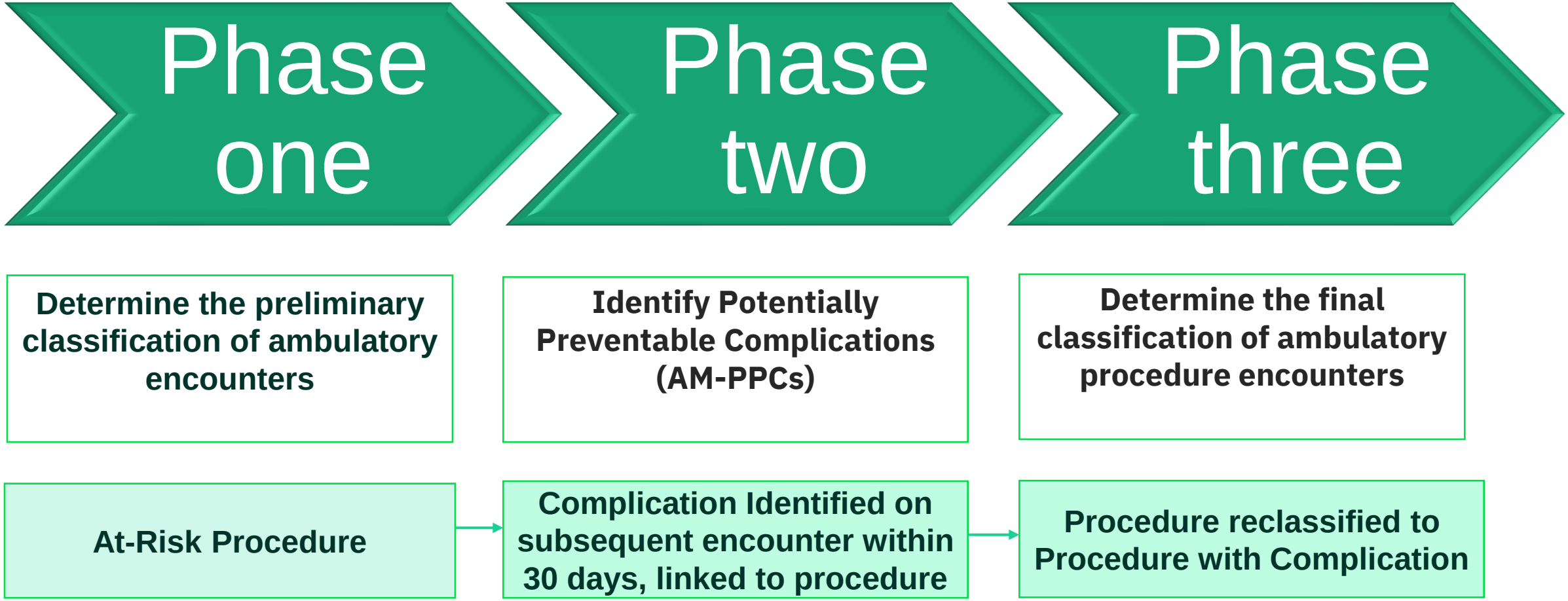
Introduction to Solventum AM-PPC clinical logic

AM-PPC Clinical logic

Three phases of processing using chain-based logic



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Phase I

Determine the preliminary classification of ambulatory encounters

Phase one | Phase two | Phase three

Step 1 Assign Procedure Subgroups (PSGs)

Step 2 Apply procedure (PSG) hierarchy
Select if applicable the primary PSG if multiple

PSG 39 Breast Biopsy and PSG 40 Mastectomy; PSG 40 Mastectomy selected to classify encounter

Step 3 Identify exclusion conditions
Exclusion Procedures, Unresolved Hierarchy, Patient Died

Exclusion procedure – tracheotomy (nonelective)

Step 4 Assign preliminary event status classification

- **At-Risk Procedure Events (OA)**
- Excluded Events
- Non-Events (ignored)
- “Other” Events (e.g., visits with complication)

Procedures eligible for complication analysis identified

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Procedure Subgroups (PSGs) and How They Were Developed

116 Total PSGs, v1.2 110 PSGs ,v1.1

Procedure Subgroups (PSGs) were formed based on:

- Anatomical region: grouping procedures affecting similar body areas.
- Complication risk: recognizing certain procedures carry higher risks.
- Surgical approach or specialty: differentiating by how and who performs them.
- Meaningful frequency: ensuring subgroups produce statistically meaningful insights.

PSGs are assigned into service and subservice lines, allowing aggregation

PSG	Description	Service Line	Subservice Line
3	Knee Arthroscopy	Orthopedic Surgery	Knee Surgery
13	Knee Arthroplasty	Orthopedic Surgery	Knee Surgery
14	Knee Arthroplasty Revision	Orthopedic Surgery	Knee Surgery
28	Open Knee Fracture Repair and Ligament Procedures	Orthopedic Surgery	Knee Surgery
29	Other Knee and Soft Tissue Procedures	Orthopedic Surgery	Knee Surgery
1	Shoulder and Elbow Arthroscopy	Orthopedic Surgery	Shoulder and Elbow Surgery
7	Shoulder and Elbow Arthroplasty	Orthopedic Surgery	Shoulder and Elbow Surgery
9	Shoulder and Elbow Arthroplasty Revision	Orthopedic Surgery	Shoulder and Elbow Surgery
24	Open Shoulder Procedures	Orthopedic Surgery	Shoulder and Elbow Surgery
25	Open Elbow Procedures	Orthopedic Surgery	Shoulder and Elbow Surgery

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Phase II

Identify Potentially Preventable Complications (AM-PPCs)

Step 1: Set the event window for identifying complications ex., 30 days

Step 2: Review subsequent encounters within the Event Window

Step 3: Assign Complication Groups (AM-PPCs)
(note: inpatient admission eligible diagnoses must be POA)

Step 4: Apply AM-PPC exclusion logic
- Exclude conditions unrelated to the procedure or that present outside the time in which they are expected to be plausibly related.

Step 5: Determine final classification of subsequent encounters in Event Window
e.g., Complication Event or Non-Event

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Complication Groups (AM-PPCs)

70 Total AM-PPCs, new v1.2

- Groups formed in part from our Inpatient PPCs classification.
  - Differentiation applied for broad complications such as device complications
- Exclusions logic applied based on:
  - Complication not related to procedure
    - (e.g., GI Device Complication not related to Musculo Procedure)
  - Timing limitations
    - (e.g., Fib/cardiac arrest limited to 7 days)
  - Principal diagnosis Requirements
    - (e.g., UTI must be Primary reason for encounter rather than subsequent finding)

AM-PPCs	Category
Pneumonia and Other Lung Infections	Infectious Complications
Septicemia and Severe Infections	Infectious Complications
Postprocedural Infection and Deep Wound Disruption	Infectious Complications
Catheter-Related Urinary Tract Infection	Infectious Complications
Septic Arthritis and Other Musculoskeletal Infections	Infectious Complications
Gastrointestinal Mechanical Device/Implant Complications	Device Complications
Genitourinary Mechanical Device/Implant Complications	Device Complications
Vascular Mechanical Device/Implant Complications	Device Complications
Venous Thrombosis	Non-Infectious Complications of Medical Care
Acute Posthemorrhagic Anemia	Non-Infectious Complications of Medical Care
Postprocedural Foreign Bodies and Substance Reaction	Non-Infectious Complications of Medical Care
Anesthesia Complications	Non-Infectious Complications of Medical Care
Transfusion-Related Complications	Non-Infectious Complications of Medical Care
Postprocedural Nausea, Vomiting, Fever, or Pain	Non-Infectious Complications of Medical Care
Acute Renal Failure and Nephropathy	Renal Complications
Acute Pulmonary Edema, Respiratory Failure or Distress	Respiratory Complications
Aspiration Pneumonia	Respiratory Complications
Pulmonary Embolism	Respiratory Complications

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Phase III

Determine the final classification of ambulatory procedure encounters

Phase one | Phase two | Phase three

Last Step: Determine the final classification of the at-risk procedure based on subsequent events within the procedures event window.

Examples:

- If a complication is identified in the chain, the chain terminates, and the procedure is reclassified based on the identified complication and reported care setting.
- If an admission occurs in the chain without complications, the chain terminates, and the procedure is not reclassified.
- If an exclusion encounter (exclusion procedure or patient death) occurs in the chain without complications, the chain terminates, and the procedure is reclassified as excluded.
- If another at-risk procedure occurs in the chain without complications, the initial procedure is excluded, and the chain analysis restarts based on the recent at-risk procedure.

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Complications Identified are differentiated by Care Setting

4 Complication Types

Type 1 Complication: Emergency Department Visit (O1 - C1)

- At-Risk Procedure with ED visit in chain with AM-PPC

Type 2 Complication: Inpatient Admission (O2 - C2)

- At-Risk Procedure with IP admission in chain with AM-PPC (POA)

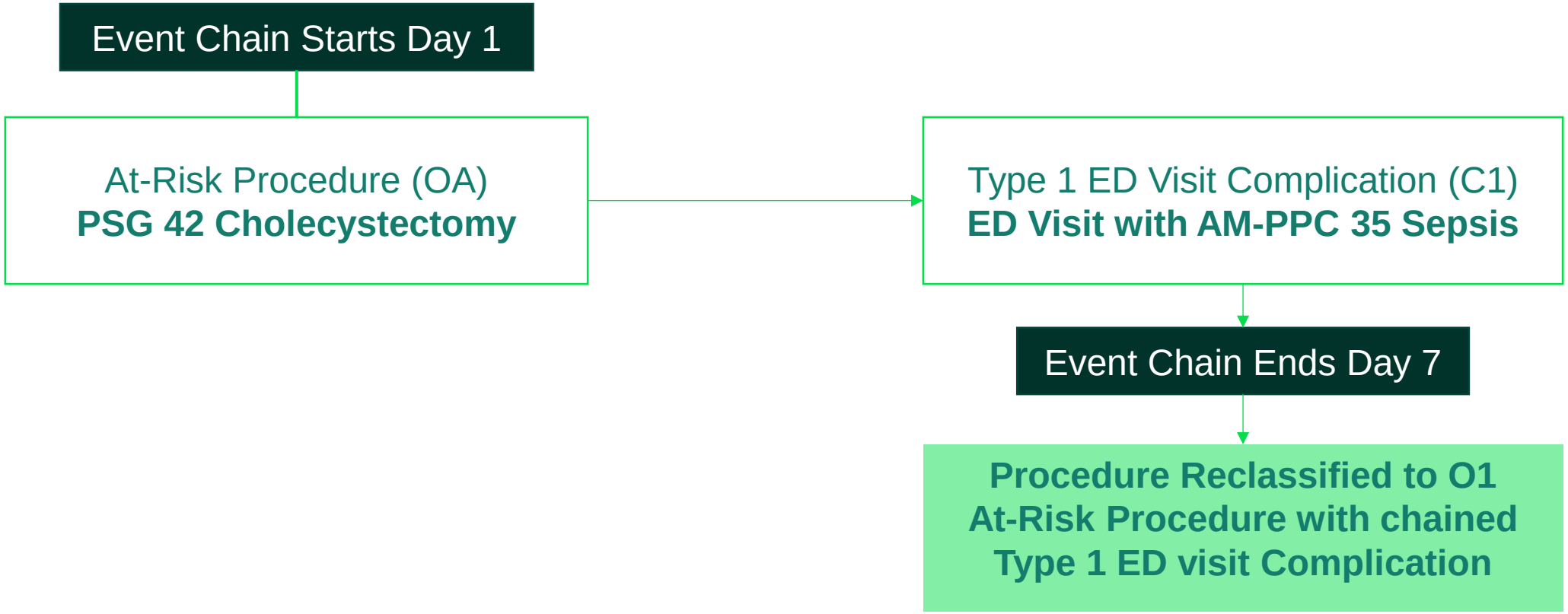
Type 3 Complication: Outpatient Visit (O3 - C3)

- At-Risk Procedure with OP visit in chain with AM-PPC

Type 4 Complication: Bundled Inpatient Admissions (O4)

- AM-PPC POA and captured on inpatient admission with ambulatory procedure preceding admission (72-Hr rule claims)

Type 1 Complication Event Chain Example



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Patient encounter level example

Outpatient Procedure with Inpatient Complication (Type 2 Complication)

Patient: Jane Doe ID: PT1234

Event Classification		Chain Classification		PSG Classification				AM-PPC Classification			
Even Type	Event Status	Chain Id	Window Day	PSG	Description	HCPCS	HCPCS Description	AM-PPCs	AMPPC Descriptions	AM-PPC Diagnoses	Diagnoses Description
OP	**O2**	1	1	**11**	**Hip Arthroplasty**	27130	Total hip arthroplasty				
IP	**C2**	1	15					**128;** **127**	**Musculoskeletal Mechanical Device/Implant Complications; Musculoskeletal Infection, Inflammation and Other Implant Complications**	M9701XA; POA=Y T8484XA POA=Y	Periprosthetic fracture right hip joint Pain due to internal orthopedic prosthetic devices
ED	**NE nonevent**	1	29								Visit for Dehydration

Summary Examples

Patient	Clinical Scenario	Day	Event Status	Comment
1	**OP Encounter:** PSG 68 Bronchoscopy **ED Visit**: AM-PPC 5 Pneumonia and Other Lung Infections	1 4	OA → O1 C1	**O1: At-risk procedure with subsequent Type 1 (ED) Complication** The initial outpatient procedure is determined to be at-risk (OA) and is followed by an ED visit 3 days later with a related complication that meets timing requirements. The ED visit is classified as a Type 1 Complication (C1) and the initial at-risk procedure is reclassified as O1.
2	**OP Encounter:** PSG 11 Hip Arthroplasty **ED Visit:** No AM-PPCs **IP Admission**: AM-PPC 157 Musculoskeletal Infection, Inflammation, and Other Complications of Devices, Implants, or Grafts	1 5 15	OA → O2 NE C2	**O2: At-risk procedure with subsequent Type 2 (IP) Complication** The initial outpatient procedure is determined to be at-risk (OA) and is followed by an ED visit 4 days later but no PPCs were present. The ED visit is classified as an ED non-event (NE) and the event chain analysis continues to look for complications. An IP admission occurs on day 15 of the Event Window with a PPC that is POA and related and meets timing requirements. The IP admission is classified as Type 2 Complication (C2) and the initial at-risk procedure is reclassified as O2.

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3M AM-PPCs key metrics

Operational definitions

Absolute Performance

- **At risk procedures** – the number of procedures performed determined to be at risk
  - Used to identify service lines, other areas with high procedure volumes
- **Actual complications** – the number of actual complications observed for the procedures determined to be at risk
  - Used to identify service lines, other areas with high absolute complication volumes
  - May be differentiated by where complication presents (IP, ED)
  - Note: ED and IP complications are standardly used in complication rate
- **Expected complications** – the number of complications expected for the procedures determined to be at risk, based on type of procedures, patient age, disability status, presence of oncology
  - Used to identify actual performance relative to a norm/benchmark

Relative Performance

- **Complication rate** – actual ED and IP complications divided by total at risk procedures
  - Used to identify service lines, other areas with high complication volumes relative to at risk procedures performed
- **Actual/expected – actual complications divided by expected complications**
  - Used to identify service lines, other areas with high complication volumes relative to expected complication volumes
  - >1, more complications than expected
  - <1, fewer complications than expected

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PSG Rates Examples

At-Risk Procedures with and without complications and by care setting (ED, IP, and OP) with applicable Rates

			ED	IP	OP			
PSG	***Description***	***cnt_OA***	***cnt_O1***	***cnt_O2***	***cnt_O3***	**cnt_numerator**	**cnt_denominator**	**AMPPC_Rate**
84	Colonoscopy and Lower GI Endoscopy - Diagnostic	2,353,318	10,616	11,448	18,990	22,064	2,394,372	0.92%
70	Esophagogastroduodenoscopy (EGD)	2,115,415	15,478	27,179	30,218	42,657	2,188,290	1.95%
13	Knee Arthroplasty	586,733	12,945	10,854	5,531	23,799	616,063	3.86%
91	Cystoscopy (Dx) & Minor Urological Procedures	482,570	8,110	7,506	15,235	15,616	513,421	3.04%
52	Left Heart Catheterization Procedures	435,890	2,410	4,389	2,951	6,799	445,640	1.53%
74	Laryngoscopy/Nasal Endoscopy -Diagnostic	385,304	1,656	3,573	5,623	5,229	396,156	1.32%
55	Pacemaker/AICD Procedures	365,853	4,236	6,174	4,568	10,410	380,831	2.73%
93	Cystoscopy with Excision, Incision, or Obstruction Removals	324,639	11,746	9,075	9,966	20,821	355,426	5.86%
11	Hip Arthroplasty	310,848	5,330	6,563	2,412	11,893	325,153	3.66%
61	Peripheral Vascular Access-Tunneled/PICC w Pump/Port	309,850	4,240	13,453	13,703	17,693	341,246	5.18%
56	Percutaneous Transluminal Coronary Angioplasty (PTCA)	298,079	2,581	4,870	2,484	7,451	308,014	2.42%
94	Endourological Procedures with Stent or Guidewire	262,257	11,683	14,092	12,837	25,775	300,869	8.57%

Value of Actual/Expected comparisons and risk adjustment

Facility	At-Risk Cases	Observed	Expected	Observed/ Expected*	Network Comparison
Facility A	4,739	53	86.9	0.61	1.11
Facility B	3,631	37	60.2	0.614	1.12
Facility D	2,374	30	44.6	0.673	1.23
Facility E	2,146	23	35.8	0.642	1.17
Facility F	2,029	29	37.9	0.765	1.39
Facility G	1,428	3	14.8	0.202	0.37
……					0.46
Total Network	38,417	362	641	0.549	1.00

*Expected rate calculations only based on AM-PPC occurring in the inpatient or ED setting.

- **Enables apples to apples performance comparison across the network.**

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Solventum AM-PPC risk adjustment approach

Elective procedure focus:
Less procedure complexity with care team informed by knowledge of chronic conditions

Procedure and complication relationship focus:
Clinical relationship between procedure & complication also limits effect of chronic conditions

Procedure-Specific Adjustment:

PSG assignment is the basis of evaluation since PSGs are a mechanism to standardly classify similar-like procedures and their shared relative risk of complications

→ Adjustments are made for certain Oncology related (PSG) procedure encounters shown to exhibit variation.

→ Payer Type, Age, Disability Status are used for additional risk adjustment to account for Chronic conditions, SES, frailty, and ability to self manage

General Surgery: Abdominal Surgery Example

						Medicare - Age Adjusted Rates			
PSG	PSG Description	Sub Service Line Description	At Risk	PPC Count	Rate	Under 65	65_74	75_84	85 and Over
42	Laparoscopic Cholecystectomy	Abdominal Surgery	101,134	4,456	4.41%	6.30%	3.60%	4.87%	5.89%
45	Ventral Hernia Repair	Abdominal Surgery	46,599	1,271	2.73%	3.90%	2.23%	3.01%	3.65%
46	Complicated Ventral Hernia Repair	Abdominal Surgery	52,638	1,890	3.59%	5.14%	2.93%	3.97%	4.80%
48	Inguinal and Hydrocele Hernia Repair	Abdominal Surgery	175,094	4,208	2.40%	3.44%	1.96%	2.65%	3.21%

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Solventum AM-PPC methodology in action

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Maryland AM PPC Rates by Payer Segment and Age

Payer Segments

- **Medicaid** AM-PPC Rates
  - Age adjustment ranges: Under 5, 5-17, 18-44, 45 and Over
- **Commercial** AM-PPC Rates
  - Age adjustment ranges: Under 5, 5-17, 18-44, 45 and Over
- **Medicare** AM-PPC Rates
  - Age adjustment ranges: Under 65, 65-74, 75-84, 85 and Over

Maryland AM PPC Rates: Top Five PSG by Procedures

MD Medicaid

PSG	PSG Description	Cohort	SSL	Sub Service Line Description	At Risk	Complication Count	Rate	Age Adjustment				Age Adjusted Rates			
								Under 5	5-17	18-44	45 and Over	Under 5	5-17	18-44	45 and Over
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	4392	64	1.46%	0.0000	0.5947	1.1234	0.9845	0.00%	0.87%	1.64%	1.43%
85	Lower Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	2654	38	1.43%	[redacted]		1.1234	0.9845	[redacted]		1.61%	1.41%
146	Uterine and Adnexa Procedures		18.1	Gynecological Surgery	1811	39	2.15%			0.9789	1.0565			2.11%	2.28%
99	Spine Injection Procedures		11.1	Spine	1472	8	0.54%			0.6861	1.0014			0.37%	0.54%
144	Hysterectomy and Myomectomy		18.1	Gynecological Surgery	1190	47	3.95%			0.9789	1.0565			3.87%	4.17%

MD Commercial

PSG	DESCRIPTION	Cohort	SSL_val	sub_service_line	At Risk	Complication Count	Rate	Age Adjustment				Age Adjusted Rates			
								Under 5	5-17	18-44	45 and Over	Under 5	5-17	18-44	45 and Over
85	Lower Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	16,408	60	0.37%	[redacted]	0.2819	1.2458	0.9617	[redacted]	0.10%	0.46%	0.35%
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	14,172	96	0.68%	2.4901	0.2819	1.2458	0.9617	1.69%	0.19%	0.84%	0.65%
50	Hysteroscopy		6.1	Gynecology	4,874	13	0.27%	[redacted]				[redacted]		0.25%	0.28%
99	Spine Injection Procedures		11.1	Spine	4,832	16	0.33%		0.0000	0.2090	1.3021		0.00%	0.07%	0.43%
144	Hysterectomy and Myomectomy		18.1	Gynecological Surgery	4,666	120	2.57%			0.9253	1.1195			2.38%	2.88%

MD Medicare

PSG	PSG Description	Cohort	SSL	Sub Service Line Description	At Risk	Complication Count	Rate	Age Adjustment				Age Adjusted Rates			
								Under 65	65-74	75-84	85 and Over	Under 65	65-74	75-84	85 and Over
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	13702	230	1.68%	1.0471	0.8347	1.2764	1.5199	1.76%	1.40%	2.14%	2.55%
85	Lower Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	10892	125	1.15%	1.0471	0.8347	1.2764	1.5199	1.20%	0.96%	1.46%	1.74%
99	Spine Injection Procedures		11.1	Spine	6204	61	0.98%	1.0626	0.7620	1.0165	2.3327	1.04%	0.75%	1.00%	2.29%
13	Knee Arthroplasty		10.4	Knee Surgery	6203	157	2.53%	1.3780	0.8185	1.1532	1.9298	3.49%	2.07%	2.92%	4.88%
61	Peripheral Vascular Access - Tunneled and PICC w Pump or Port		8.1	Interventional Radiology	3630	131	3.61%	1.4858	0.8927	0.8927	1.0839	5.36%	3.22%	3.22%	3.91%

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Maryland AM PPC v1.1 Rates: Top Five PSG by Rate

MD Medicaid

PS	PSG Description	Cohort	SS	Sub Service Line Description	At Ris	Complication Cour	Rate	Age Adjustment				Age Adjusted Rates			
								Under	5-17	18-44	45 and Ov	Under	5-17	18-44	45 and Ov
183	Prostatectomy		14.2	Urological Surgery	45	7	15.56%	[redacted]			1.2438	[redacted]			19.35%
95	Upper Genitourinary Catheter (Percutaneous) Procedures		8.3	Urology - General	248	34	13.71%	[redacted]				[redacted]		14.47%	12.94%
80	Laparoscopic Insertion/Revision of Intraperitoneal Catheter		5.6	Minimally Invasive Surgery	70	9	12.86%	[redacted]		1.1621	0.8431	[redacted]		14.94%	10.84%
126	Lower Extremity (Foot) Amputation		10.1	Foot and Ankle Surgery	69	7	10.14%	[redacted]		[redacted]	1.0510	[redacted]		[redacted]	10.66%
60	Proximal, Nonautogenous, of Revisions of AV Fistula		15.1	Vascular Surgery	196	19	9.69%	[redacted]		0.5633	1.2965	[redacted]		5.46%	12.57%

MD Commercial

PS	DESCRIPTION	Cohor	SSL_val	sub_service_line	At Ris	Complication Cou	Rate	Age Adjustment				Age Adjusted Rates			
								Under	5-17	18-4	45 and Ov	Under	5-17	18-44	45 and Ov
86	ERCP and Endoscopic Biliary tract Procedures	ONCOLO	4.1	Gastroenterology	41	8	19.51%	[redacted]			0.9617	[redacted]			18.77%
95	Upper Genitourinary Catheter (Percutaneous) Procedures		8.3	Urology - General	391	44	11.25%	[redacted]				[redacted]		13.64%	10.38%
87	Hepatobiliary Procedures		5.5	Hepatobiliary Surgery	143	15	10.49%	[redacted]			1.1504	[redacted]			12.07%
68	Bronchoscopy	ONCOLO	12.1	Pulmonology	54	5	9.26%	[redacted]			1.2043	[redacted]			11.15%
184	Transurethral Resection of Prostate (TURP)		14.2	Urological Surgery	104	9	8.65%	[redacted]			1.1996	[redacted]			10.38%

MD Medicare

PSG	PSG Description	Cohort	SSL	Sub Service Line Description	At Risl	Compli	Rate	Age Adjustment				Age Adjusted Rates			
								Under 6	65-74	75-84	5 and C	Under 6	65-74	75-84	85 and Over
58	Peripheral Vascular Access - Tunneled and PICC		8.1	Interventional Radiology	1504	135	8.98%	1.4858	0.8927	0.8927	1.0839	13.34%	8.01%	8.01%	9.73%
91	Lower Genitourinary Procedures		14.2	Urological Surgery	3504	153	4.37%	1.7011	0.8660	0.9596	1.1829	7.43%	3.78%	4.19%	5.17%
61	Peripheral Vascular Access - Tunneled and PICC w Pump or Port		8.1	Interventional Radiology	3630	131	3.61%	1.4858	0.8927	0.8927	1.0839	5.36%	3.22%	3.22%	3.91%
13	Knee Arthroplasty		10.4	Knee Surgery	6203	157	2.53%	1.3780	0.8185	1.1532	1.9298	3.49%	2.07%	2.92%	4.88%
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	13702	230	1.68%	1.0471	0.8347	1.2764	1.5199	1.76%	1.40%	2.14%	2.55%

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Maryland AM PPC v1.1 Rates: Top Five PSG by Complications

MD Medicaid

PS	PSG Description	Cohort	SS	Sub Service Line Description	At Ris	Complication Cour	Rate	Age Adjustment				Age Adjusted Rates			
								Under	5-17	18-44	45 and Ov	Under	5-17	18-44	45 and Ov
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	4392	64	1.46%	0.0000	0.5947	1.1234	0.9845	0.00%	0.87%	1.64%	1.43%
144	Hysterectomy and Myomectomy		18.1	Gynecological Surgery	1190	47	3.95%	[redacted]		0.9789	1.0565	[redacted]		3.87%	4.17%
61	Peripheral Vascular Access - Tunneled and PICC w Pump or Port		8.1	Interventional Radiology	884	43	4.86%	[redacted]	0.6579	0.9722	1.0267	[redacted]	3.20%	4.73%	4.99%
146	Uterine and Adnexa Procedures		18.1	Gynecological Surgery	1811	39	2.15%	[redacted]		0.9789	1.0565	[redacted]		2.11%	2.28%
85	Lower Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	2654	38	1.43%	[redacted]		1.1234	0.9845	[redacted]		1.61%	1.41%

MD Commercial

PS	DESCRIPTION	Cohor	SSL_val	sub_service_line	At Ris	Complication Cou	Rate	Age Adjustment				Age Adjusted Rates			
								Under	5-17	18-4	45 and Ov	Under	5-17	18-44	45 and Ov
144	Hysterectomy and Myomectomy		18.1	Gynecological Surgery	4,666	120	2.57%	[redacted]		0.9253	1.1195	[redacted]		2.38%	2.88%
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	14,172	96	0.68%	2.4901	0.2819	1.2458	0.9617	1.69%	0.19%	0.84%	0.65%
61	Peripheral Vascular Access - Tunneled and PICC w Pump or Port		8.1	Interventional Radiology	2,808	75	2.67%	[redacted]	0.4109	0.9199	1.0314	[redacted]	1.10%	2.46%	2.75%
58	Peripheral Vascular Access - Tunneled and PICC		8.1	Interventional Radiology	820	61	7.44%	[redacted]		0.9199	1.0314	[redacted]		6.84%	7.67%
85	Lower Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	16,408	60	0.37%	[redacted]	0.2819	1.2458	0.9617	[redacted]	0.10%	0.46%	0.35%

MD Medicare

PSG	PSG Description	Cohort	SSL	Sub Service Line Description	At Risl	Compli	Rate	Age Adjustment				Age Adjusted Rates			
								Under 6	65-74	75-84	5 and C	Under 6	65-74	75-84	85 and Over
70	Upper Gastrointestinal Endoscopy Procedures		4.1	Gastroenterology	13702	230	1.68%	1.0471	0.8347	1.2764	1.5199	1.76%	1.40%	2.14%	2.55%
13	Knee Arthroplasty		10.4	Knee Surgery	6203	157	2.53%	1.3780	0.8185	1.1532	1.9298	3.49%	2.07%	2.92%	4.88%
91	Lower Genitourinary Procedures		14.2	Urological Surgery	3504	153	4.37%	1.7011	0.8660	0.9596	1.1829	7.43%	3.78%	4.19%	5.17%
58	Peripheral Vascular Access - Tunneled and PICC		8.1	Interventional Radiology	1504	135	8.98%	1.4858	0.8927	0.8927	1.0839	13.34%	8.01%	8.01%	9.73%
61	Peripheral Vascular Access - Tunneled and PICC w Pump or Port		8.1	Interventional Radiology	3630	131	3.61%	1.4858	0.8927	0.8927	1.0839	5.36%	3.22%	3.22%	3.91%

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Maryland 2020-2022 Actual to Expected Ratios by Service Line

Service Line Description	At Risk Procedures	ED Complications	IP Complications	Actual Complications (A)	Expected Complications (E)	A/E	A - E
Interventional Radiology	12,107	247	485	732	713	1.026776877	19
Gastroenterology	58,229	232	435	667	664	1.004877671	3
Orthopedic Surgery	38,322	311	285	596	594	1.003899595	2
Urology	12,563	320	277	597	586	1.017915763	11
General Surgery	31,108	320	258	578	563	1.027494028	15
Cardiology	18,600	100	255	355	353	1.006767993	2
Vascular Surgery	5,216	104	188	292	299	0.977734517	-7
Gynecological Surgery	13,316	197	96	293	289	1.013645829	4
Pulmonology	10,123	47	152	199	211	0.943868048	-12
Spine Surgery	5,371	34	68	102	101	1.007403384	1
Ear, Nose and Throat Surgery	7,276	58	31	89	83	1.067426603	6
Pain Management	11,794	27	57	84	79	1.059063674	5
Ophthalmology Surgery	11,629	11	34	45	50	0.908389638	-5
Gynecology	6,327	18	11	29	28	1.018349571	1
Neurological Surgery	652	4	6	10	11	0.909690178	-1
Cardiothoracic Surgery	198		5	5	5	1.035300985	0
Pediatric General	138	2	1	3	3	1.013157895	0
Total	**242,969**	**2,032**	**2,644**	**4,676**	**4,631**	**1.009656073**	**45**

MD 2021, 2022, or 2020

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Maryland HSCRC Provided Data vs. Medicare Data

Medicare Data

AM-PPC Findings

Service Line Description	At Risk Procedures	ED Complications	IP Complications	Total Complications (A)	Complication Rate	OP Complications	Expected Complications (E)	A/E	A - E
Gastroenterology	26,601	124	351	475	1.79%	170	460	1.03	14.60
Orthopedic Surgery	16,007	168	230	398	2.49%	96	382	1.04	15.90
Cardiology	12,852	61	209	270	2.10%	64	261	1.04	9.40
General Surgery	11,365	122	141	263	2.31%	75	286	0.92	-22.70
Urology	9,551	270	251	521	5.45%	173	477	1.09	43.70
Ophthalmology Surgery	7,804	8	30	38	0.49%	54	36	1.07	2.40
Total	**116,300**	**1088**	**2028**	**3116**	**2.68%**	**1141**	**3086**	**1.01**	**30.50**

Client Provided Data

AM-PPC Findings

Service Line Description	At Risk Procedures	ED Complications	IP Complications	Total Complications (A)	Complication Rate	OP Complications	Expected Complications (E)	A/E	A-E
Gastroenterology	58,229	232	435	667	1.13%	192	664	1.00	3
Orthopedic Surgery	38,322	311	285	596	1.53%	122	594	1.00	2
General Surgery	31,108	320	258	578	1.82%	169	563	1.03	15
Cardiology	18,600	100	255	355	1.87%	55	353	1.01	2
Gynecological Surgery	13,316	197	96	293	2.15%	65	289	1.01	4
Urology	12,563	320	277	597	4.54%	133	586	1.02	11
Interventional Radiology	12,107	247	485	732	5.70%	306	713	1.03	19
Total	**242,969**	**2032**	**2644**	**4676**	**1.89%**	**1426**	**4631**	**1.01**	**45**

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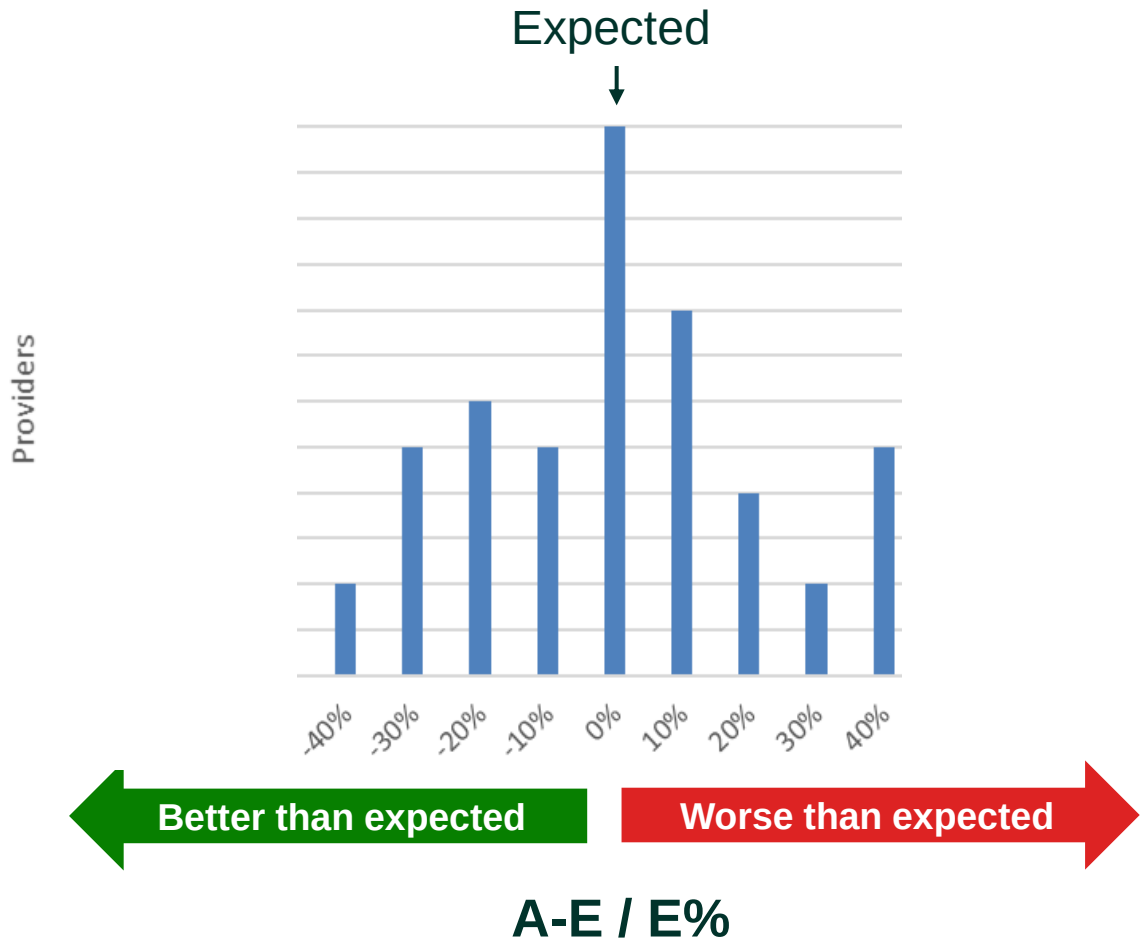
Driving network performance



38 Providers Maryland Data with 10+ Expected AM-PPCs

-42% **Fewer than expected complications**

47% **More than expected complications**

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Driving network performance

39 Providers National Medicare with 10+ Expected AM-PPCs

-29% **Fewer than expected complications**

53% **More than expected complications**

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Maryland HSCRC Procedure Sub Group (PSG) Analysis

Procedure Sub Group Summary

Top 15 PSGs by At Risk Procedures

Procedure Sub Group	At Risk Procedures	ED Complications	IP Complications	Total Complications (A)	OP Complications	Expected Complications (E)	A/E	A - E
Upper Gastrointestinal Endoscopy Procedures	28,659	109	241	350	112	353	0.99	-3
Lower Gastrointestinal Endoscopy Procedures	25,536	100	98	198	56	187	1.06	11
Spine Injection Procedures	11,732	27	53	80	36	79	1.01	1
Knee Arthroplasty	8,812	116	84	200	24	212	0.94	-12
Peripheral Vascular Access - Tunneled and PICC w Pump or Port	6,475	54	180	234	57	222	1.06	12
Hysteroscopy	6,327	18	11	29	7	28	1.02	1
Hysterectomy and Myomectomy	6,314	111	73	184	36	188	0.98	-4
Upper Airway Endoscopy Procedures	6,182	23	46	69	37	69	1.00	0
Uterine and Adnexa Procedures	5,769	69	19	88	14	81	1.09	7
Hip Arthroplasty	5,758	61	55	116	16	120	0.97	-4
Left Heart Catheterization Procedures	5,225	28	48	76	12	76	1.00	0
Lower Genitourinary Procedures	4,858	102	86	188	41	191	0.98	-3
Laparoscopic Cholecystectomy	4,683	48	60	108	14	107	1.01	1
Inguinal and Hydrocele Hernia Repair	4,554	48	17	65	7	63	1.03	2
Breast Biopsy and Localization Procedures	4,378	6	5	11	12	12	0.88	-1
Total	**135,262**	**920**	**1076**	**1996**	**481**	**1989**	**1.00**	**7**

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Maryland HSCRC Complication (AMPPC) Analysis

AMPPC: Complications

Top 15 AMPPCS by Total Complications

AMPPC	AMPPC Complications	% Total Complications	ED Complications	IP Complications
Septicemia and Other Severe Infections	1101	14.90%	67	970
Pneumonia and Other Lung Infections	606	8.20%	160	392
Post-Procedural Infection and Deep Wound Disruption	586	7.93%	191	266
Major Gastrointestinal Complications including Hemorrhages	416	5.63%	162	171
Other Complication of Medical or Surgical Care	395	5.35%	230	61
Cellulitis	383	5.18%	153	172
Vascular Infection, Inflammation and Other Implant Complications	354	4.79%	100	78
Urinary Tract Infection	302	4.09%	221	17
Genitourinary Complications except Urinary Tract Infection	257	3.48%	100	56
Other Moderate Infections	252	3.41%	42	161
Genitourinary Mechanical Device/Implant Complications	221	2.99%	124	55
Other Gastrointestinal Complications	213	2.88%	46	117
Acute Pulmonary Edema, Respiratory Failure or Distress	192	2.60%	19	173
Vascular Mechanical Device/Implant Complications	180	2.44%	50	30
Genitourinary Infection, Inflammation and Other Implant Complications	156	2.11%	58	83
Total	**5614**	**76.00%**	**1723**	**2802**

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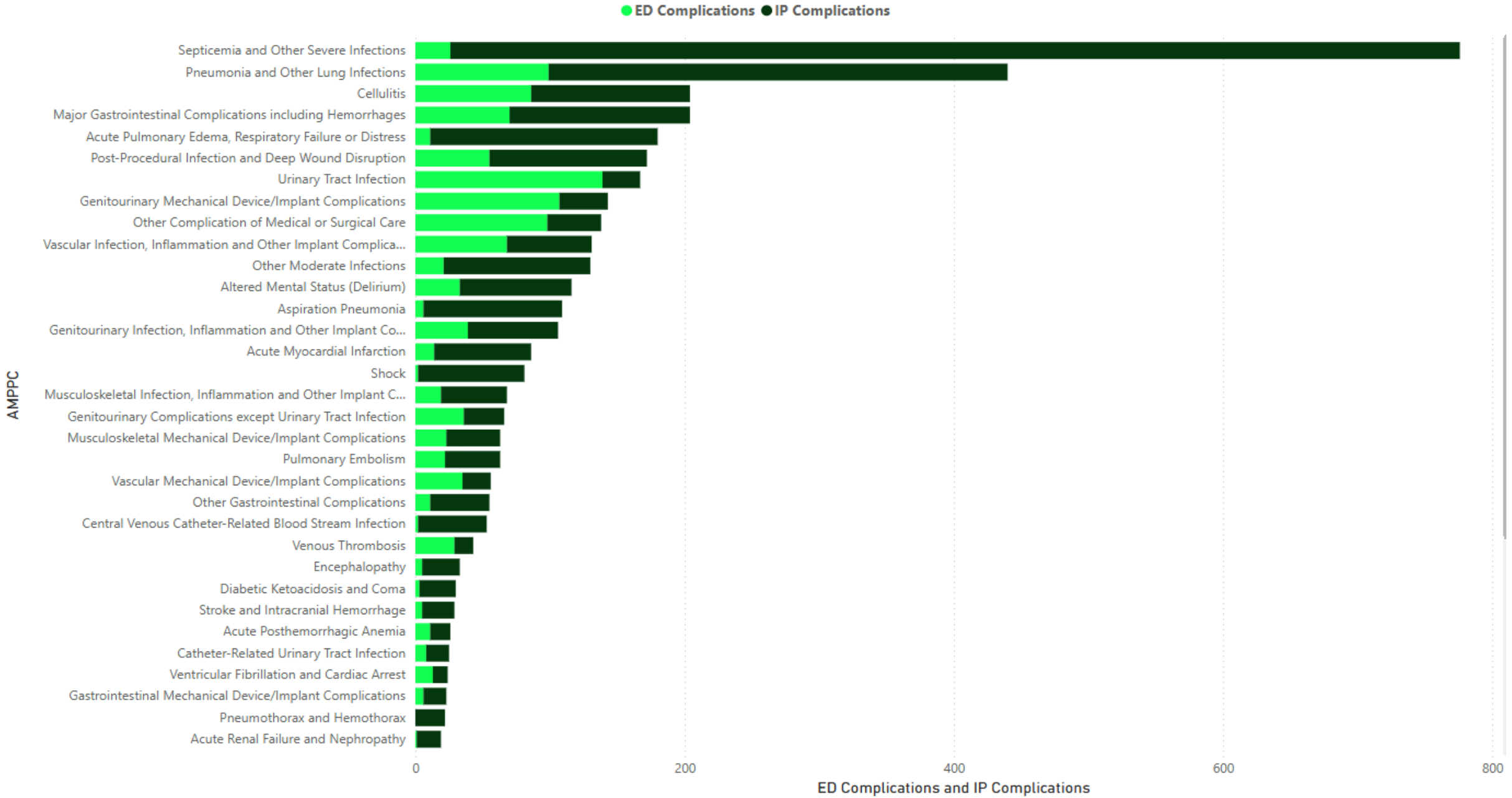

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Maryland HSCRC Service Line Breakout

Urology

Procedure Sub Groups (PSG)

Top 5 by At Risk Procedure Volume

PSG	At Risk Procedures	ED Complications	IP Complications	Total Complications (A)	OP Complications	Expected Complications (E)	A/E
Lower Genitourinary Procedures	4,858	102	86	188	41	191	0.98
Upper Genitourinary Stent and Guidewire Procedures	2,316	80	111	191	62	206	0.93
Male Genitourinary Procedures	1,785	41	17	58	11	47	1.24
Prostatectomy	987	29	27	56	3	56	1.01
Upper Genitourinary Procedures	560	17	16	33	8	29	1.15
Total	**10,506**	**269**	**257**	**526**	**125**	**528**	**1.00**

AMPPC: Complications

Top 5 by Total Complication Volume

AMPPC	AMPPC Complications	% Total Complications	ED Complications	IP Complications
Septicemia and Other Severe Infections	147	16.23%	12	127
Genitourinary Complications except Urinary Tract Infection	142	15.67%	54	36
Urinary Tract Infection	118	13.02%	86	13
Genitourinary Mechanical Device/Implant Complications	113	12.47%	75	24
Genitourinary Infection, Inflammation and Other Implant Complications	83	9.16%	37	41
Total	**603**	**66.56%**	**264**	**241**

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AM-PPC Value Propositions

- Improves outcomes and cost by reducing complications
  - *Can be used to improve quality of care at time of procedure and post-procedure*
  - *Reduces care variation*
  - *Improves patient care*

- Creates actionable results for clinicians, payers, quality agencies, and researchers
- Informs collaboration amongst the healthcare industry
- Supports Public reporting efforts
- Removes administrative burden associated with manual chart reviews

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Solventum™ AM-PPC

Materials available from HIS website and support site

- Solventum Patient Classification Webpages
  - www.3m.com/his/methodologies
- Solventum HIS customer support site (v1.0, v1.1, v1.2)
  - AM-PPC Definitions Manual
  - AM-PPC Methodology Overview
  - AM-PPC Grouping Software Setup Guide
  - AM-PPC Norms Files and User Guide
- On Demand Training Module
  - https://hca.3mhis.com
  - Search: Solventum Ambulatory Potentially Preventable Complications (AM-PPC)
- CGS/GPCS set up guides

Thank you.

THANK YOU!

Next Meeting: April 16, 2025

Appendix

AHEAD Update

AHEAD Quality, Equity and Population Health Measures

Statewide Quality and Equity Measures – Table 5&6 from the State Agreement

Domain- Core Set	Measure
Population Health	CDC HRQOL-4 Healthy Days Core Module
Prevention and Wellness - Pick at least 1	Colorectal Cancer Screening
	Breast Cancer Screening
Chronic Conditions- Pick at least 1	Controlling High Blood Pressure
	Diabetes: Hemoglobin A1c (HbA1c) Poor Control (> 9%)
Behavioral Health- Pick at least 1	Use of Pharmacotherapy for Opioid Use Disorder
	~~Antidepressant Medication Management~~
	Follow-up After Hospitalization for Mental Illness
	Follow-up After ED Visit for Substance Use
Health Care Quality and Utilization	Plan All-Cause Unplanned Readmission

Domain-Optional	Measure *Pick One Optional Measure from this table
Maternal Health Outcomes- Pick least 1	Live Birth Weighing Less than 2500 grams
	Prenatal and Postpartum Care: Postpartum Care
Prevention Measures- Pick at least 1	Adult Immunization Status
	Prevalence of Obesity
	~~Medical Assistance with Smoking and Tobacco Use Cessation~~
	ED visits for Alcohol and Substance Use Disorders
Social Drivers of Health- Pick at least 1	Food Insecurity
	Housing Quality

Two crossed-out measures are removed by CMMI.

In addition to Statewide Quality and Equity Targets from the menu above, the State shall, with CMS' approval, identify one or more measures that reflect the model's impact on population health, and set biannual interim and final performance targets for each selected measure (collectively, the "Statewide Population Health Targets").

Plan All-Cause Readmissions (PCR) Specification

Measure Component	Description
Description	The risk adjusted ratio of Observed/Expected unplanned all-cause readmissions based on discharges between January 1 and December 1 of the measurement year at the plan level.
Numerator	The observed numerator is all unplanned eligible **observation stays and readmissions within 30 days** of an eligible discharge. The expected numerator is weighted based on measure specifications.
Denominator	The eligible population is **any acute inpatient or observation stay** discharge occurring during the measurement year after removing exclusions listed below; **patients must be 18 or older** during month of discharge date
Exclusions	**Hospice and/or death** at any time during the measurement year; **Perinatal admissions, potentially planned procedures, organ transplant, chemotherapy, and psychiatric/rehab facilities and transfer/**inpatient admission are also excluded.
Continuous Enrollment	The year prior to index admission up until 30 days post index admission.
Outliers	**Medicaid and Medicare: Individuals with four or more admissions** during the measurement year. Commercial: Individuals with **three or more admissions** during the measurement year.
Risk adjustment	This measure is risk-adjusted and can be stratified by **age, payer and SNF/DE status** based on predetermined weights within the specifications.

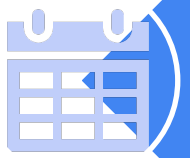
Maryland
DEPARTMENT OF HEALTH

Source: AHEAD Quality and Health Equity Target and Measures Guidance and MY 2025 PCR specifications

Staff Assessment
Green: suitable, Yellow: some concerns, Blue: Consider alternatives

Criteria	Key Questions	Considerations
Performance	• How do measure performance compare across different alternatives? • What would be the benchmark to use for assessing "room for improvement" ?	State is performing average based on other readmission measures.
Alignment	• What readmissions measures are currently in use?	HSCRC uses hospital-wide readmission for pay for performance programs. The PCR measure is more comprehensive as it includes observation stays and risk adjustment is based on national data.
Data quality and availability	• How comprehensive, how often is the data ? • How good is the race/ethnicity/location/provider id information? • Would providers have access to patient level information?	Claims are not available for a timely analysis. HSCRC's case-mix data is more timely and already in use for many reports.
Disparities	• Can we measure disparities reliability for the measure? • How significant are the disparities in this measure?	TBD.
State intervention capability/Expansion	• Would the measure selection impact interventions? • Would the measure expand the impact ?	Risk adjustment approach may have an impact on effectiveness of interventions. Adding observation cases is desired.

Initial considerations for using HSCRC's case-mix data for PCR



Eligible admissions are tied to continuous enrollment in an insurance plan

Risk adjustment includes comorbidity category determination for 12 months that uses all encounters

Includes an outlier logic to exclude patients with more than 3 or 4 admissions

Does not have risk adjustment model for uninsured or children under age 18.

Considerations for PCR Measure

- AHEAD statewide quality guidance specifies the data source for the PCR measure is **claims and eligibility files from payers**.
  - Proposing to use **hospital claims** (i.e., case-mix data) as the data source for the PCR measure
- Maryland has been working on reducing readmission rates for decades and has used case-mix data and different measure specifications over the years.
- Health Services Cost Review Commission (HSCRC) administers a pay-for-performance program (Readmission Reduction Incentive Program (RRIP) to incentivize reductions in readmissions.

Proposed Approach

- Assess if PCR measure yields similar results or trends using HSCRC's case-mix data
- Present the results of this assessment in April DAC meeting
    - Alternative measures are due to CMS on May 1

Initial Assessment of Data Sources

Data source	Completeness	Data quality	Timeliness	Alignment	Measure validity
All-payer claims	Does not include most self-insured plans and some Medicare advantage plans	Some information may be missing	Commercial claims have 9-month lag	Basis for publicly reported data for insurance plans	Risk adjustment based on full history of the patient from claims
HSCRC case-mix data	Does not include admissions to hospitals outside of Maryland	Audited and validated on a regular basis	Monthly updates	Used in many MD quality improvement initiatives, including RRIP	Risk adjustment based on hospital inpatient and outpatient claims