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Performance Measurement Workgroup

December 21, 2022

HSCRC Quality Team

PMWG Members

Carrie	Adams	Meritus
Ryan	Anderson	MedStar - MD Primary Care Program
Kelly	Arthur	Qlarant QIO
Ed	Beranek	Johns Hopkins Health System
Barbara	Brocato	Barbara Marx Brocato & Associates
Zahid	Butt	Medisolv Inc.
Tim	Chizmar	MIEMSS
Linda	Costa	University of Maryland School of Nursing
Ted	Delbridge	MIEMSS
Lori	Doyle	Community Behavioral Health Association of Maryland
Laura	Goodman	MD Medicaid
Toby	Gordon	Johns Hopkins Carey Business School
Theressa	Lee	Maryland Health Care Commission
Staci	Lofton	Families USA
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Stephen	Michaels	MedStar Southern Maryland Hospital Center
Lily	Mitchell	CareFirst
Jonathan	Patrick	MedStar Health
Elinor	Petrocelli	Mercy Medical Center
Mindy	Pierce	Primary Care Coalition of Montgomery County
Tricia	Roddy	Maryland Department of Health
Farzaneh L.	Sabi	Kaiser Mid-Atlantic Permanente Medical Group
Nitza	Santiago	Lifebridge Health
Jodi	Segal	Johns Hopkins University
Madeleine "Maddy"	Shea	Health Management Associates
Brian	Sims	Maryland Hospital Association
Mike	Sokolow	University of Maryland Medical Systems
Geetika "Geeta"	Sood	Johns Hopkins University School of Medicine,Division of Infectious Diseases.
April	Taylor	Johns Hopkins Health System
Bruce	VanDerver	Maryland Physicians Care
Jamie	White	Frederick Health

Workgroup Ground Rules

- Be prepared: please read materials before the meeting
- Be brief
- Share the floor: please monitor your contributions to make sure others have an opportunity to engage in the discussion
- No interruptions (except for the time-keeper)
- Stay on topic
- Questions are welcome
- Respect deadlines for written comments

Meeting Agenda

- Hospital Population Health Accountability Policy discussion
- Potentially Avoidable Emergency Department Visits
- Draft Readmission Reduction Incentive Program (RRIP) and Disparity Gap RY 2025 policy discussion
- Health Equity
- Quality/ Population Health: Model Progression Plan

Timeline of Deliverables (See PMWG Workplan document)

Month	Commission Meetings	CMMI	HSCRC/Other
October 2022	Draft QBR		
November	Final QBR Draft MHAC Hospital Population Health Policy Discussion		RY2023 Revenue Adjustments
December	Final MHAC	Annual report including Year 3 SIHIS Update	
January 2023	RRIP Policy Extension PAU Measurement Report on Avoidable ED Hospital Population Health Policy Discussion		
February			
March/April			Internal TCOC Model Expansion Recommendations
May	Draft PAU Savings RY 2024 report (in Draft Update Factor Policy)		RY 2024 Revenue Adjustments
June	Final PAU Savings RY 2024 report (in Final Update Factor Policy)	Exemption Request	

Hospital Population Health Accountability Policy Discussion

Geoff Dougherty, PhD, MPH
Deputy Director, Population Health

Today's discussion

- Stakeholder comments
- Policy developments
- Guest speaker
- Decision framework
- Details on program implementation
- Risk evaluation/monitoring for unintended consequences
- Anticipated workload and cost
- Next steps

Stakeholder Comments

- HSCRC received a number of comment letters
- Broad themes
  - Program is better suited to primary care
  - ED lacks resources to effectively run program
  - May adversely impact ED throughput/patient experience
  - Program may result in excess testing
- Policy developments and implementation details address many of these concerns

Policy Developments

- Following stakeholder suggestions, HSCRC will monitor MDPCP A1c control measure during CY23
  - In tandem with monitoring ED A1c measure
- HSCRC will consider hospital-initiated submission of additional measures

Hospital-Initiated Measure Submission

- Deadline: 2/1/23
- Evaluation criteria available on request
- Draft criteria:
  - Starts to target primary/secondary diabetes prevention
  - Targets defined population of size similar to ED measure
  - Reasonable expectation of 10% annual improvement in diabetes incidence or screening prevalence
  - Relies on existing data
- Measures will be evaluated by panel of pop health/diabetes experts
- Selected measures will be implemented statewide if concerns regarding A1c measures arise during monitoring or if need for additional measures arises

Guest Presenter: Dr. Rifka Schulman-Rosenbaum

- Director of Inpatient Diabetes at Long Island Jewish Medical Center
- Associate Professor of Medicine at the Zucker School of Medicine at Hofstra/Northwell
- MD: SUNY Downstate College of Medicine
- Chief resident, internal medicine, Long Island Jewish Medical Center
- Fellowship, endocrinology and metabolism, Icahn School of Medicine at Mount Sinai
- Endocrinology coordinator for Northwell/LIJMC ED A1c screening program
- First author on Endocrine Practice paper describing program
- LIJMC: 583-bed tertiary care hospital on border of Queens, NY and Long Island, ~100k 2019 ED visits

Change and growth are uncomfortable

Chodron, P, Welcoming the Unwelcome, 2019

How do we know when discomfort is a sign of a problem?

- U.S. Coast Guard Risk Management Framework*
- Coast Guard operations are inherently complex, dynamic, dangerous, and, by nature, involve the acceptance of some level of risk
- The potential gains of conducting the activity or mission must justify the expected risk exposure
- Analysis of mishap data reveals that the most common cause of mishaps is a lack of deliberate and systematic risk management during preparation, planning, and execution of operations and activities.

* https://media.defense.gov/2018/Mar/07/2001887167/-1/-1/0/CI_3500_3A.PDF

Risk Assessment: A1c program

- What are the rewards?
  - Potentially large reduction in undiagnosed/uncontrolled diabetes
- What are the risks?
  - Worsening of ED throughput
  - Patients are diagnosed but not treated
- How can we mitigate risk such that the potential gains are likely to outweigh potential negative consequences?
  - Explore pilot approaches to provide resources during monitoring that could be utilized later in a statewide program
  - Provide implementation flexibility
  - Monitor follow up and adjust program if necessary
  - Monitor ED throughput and adjust program if necessary

Flexible Implementation: Resources & Incentive Structure

- Monitoring-only status
- Initial payment implementation possibilities
  - Reward only, based on improvement
    - Current test % is ~0%, so improvement is attainable for all hospitals
  - Up-front funding for 100% testing, retroactive adjustment for missed tests
    - Will likely cover variable cost of testing, not capital or professional fees
- Under each of these scenarios, hospitals would likely receive financial benefit even if they scale the program to meet their specific situation

Flexible Implementation: Scope of Program Beneficiaries

- Strategies to limit cost/staff/logistics requirements through screening selection criteria
  - Limit screening to ED patients who already receive blood draw for other labs
    - 60% of total ED volume
  - Screen patients in OBS status
  - Screen only patients who report test interval >3 years
  - Screen admitted patients

Follow up Strategies

Strategies to provide flexibility through intervention selection

- Confirmatory testing/follow-up do not need to happen in ED
- For those with PCP, CRISP alert
- For those without PCP, refer to hospital-affiliated MDPCP practice
- For those in prediabetes range, refer to DPP
- Focus on patients with A1c>9
  - HSCRC will monitor effectiveness of screening and intervention strategies and discuss as program matures

Assessment of Unintended Consequences

- ED throughput
  - Monitoring of OP18b (ED arrival to departure for non-admitted patients)
  - Monitoring of MIEMSS EMS ED handoff delay data
- Patient follow up/program impact on diabetes control
  - Tracking outpatient attendance for patients with newly diagnosed diabetes in ED
  - Structure similar to timely follow up quality measure
  - Investigating all-payer data sources for this

Anticipated Workload

Average hospital: 33,000 visits/year from target population

Staff	Task	Patient population	N	Task Time (minutes)	Total hours/week
ER tech	Administer test	All	394	5	33
Physician	Interpret results, notify patient	New diabetes	6	10	1
		New pre-diabetes	123	5	10
		Diabetes, A1c>9	18	5	2
Care coordinator	Counseling & referral	Positive test	147	15	37

Next Steps

- Develop reporting for ED and MDPCP A1c measures
- Review status with Commissioners

Potentially Avoidable Emergency Department Utilization

Adam Pittman
Chief, Population Health

Geoff Dougherty
Deputy Director, Population Health

Defining Avoidable Emergency Department Utilization

Avoidable Emergency Department utilization consists of services provided in the emergency department that could have either been prevented with intervention, or triaged to a more appropriate level of care.

- Primary care treatable conditions are a focal point of many avoidable ED usage studies.
- Other common subgroups to focus on include:
  - Low acuity or low urgency visits
  - Visits without the need for specialized ED services
  - Non-admission ED visits

Parkinson B, Meacock R, Checkland K, Sutton M. Clarifying the concept of avoidable emergency department attendance. *Journal of health services research & policy*. 2021;26(1):68-73. https://journals.sagepub.com/doi/full/10.1177/1355819620921894. doi: 10.1177/1355819620921894.

Public Health Problem - Avoidable ED Utilization

Avoidable Emergency Department Utilization presents public health problems on both the quality and the cost fronts.

- **Cost:** increases patient and payer costs, drains resources, inflates total cost of care.
- **Quality:** avoidable use contributes to crowding, long wait times, and resource shortages. Further, EDs are not able to perform continuity of care functions that primary care can.

Recap of work until this point

Reminder: The timeline and priority of this policy is decided by the Commissioners

In CY2021, a PAU-ED subgroup met, and decided to collect Triage information

- Starting in CY22, all hospitals were required to submit ED triage information to the HSCRC

In CY2022, the HSCRC analyzed the submitted hospital triage information and used this data to drive policy recommendations

- We will present these analyses and policies today

ED Triage data

Hospitals were required to collect triage information starting in 2022

- Used to evaluate and identify Reason for Visit (RFV) categories with potentially avoidable utilization
- Some hospital systems also provided retrospective triage data for ED visits in 2021
- Not feasible for all hospitals

Collected a total of **2.4M** ED observations with triage information, some missingness still exists

Percentage of missing triage values

Year	Q1	Q2	Q3	Q4	Total
2021	10%	14%	11%	29%	16%
2022	5%	14%	4%	NA	7%

Triage values

Examined different levels of triage status across hospitals and ICD-10 codes

Decided to use visits with a 3, 4, or 5 status as " potentially avoidable" or "non-urgent"

ESI Level 1	Patient requires immediate life-saving intervention
ESI Level 2	Patient is in a high-risk situation, is disoriented, in severe pain, or vitals are in danger zone
ESI Level 3	If multiple resources are required to stabilize the patient, but vitals are not in danger zone
ESI Level 4	If one resource is required to stabilize the patient
ESI Level 5	If patient does not require any resources to be stabilized

Tucci, Veronica & Ahmed, Syed & Hoyer, David & Greene, Spencer & Moukaddam, Nidal. (2017). Stabilizing Intentional Overdoses in Freestanding Emergency Departments: A Good Idea?. *Journal of General and Emergency Medicine*. 2. 007.

Analyzing this data

Checked rating scales across the hospital systems by analyzing their most common ICD-10 codes at each triage level

- All hospitals appear to use a similar scoring system
  - Scales ranges from 1-5; 1 is consistently the highest acuity
  - Still a question of standardization across hospitals, e.g. is a 3 the same in two different facilities

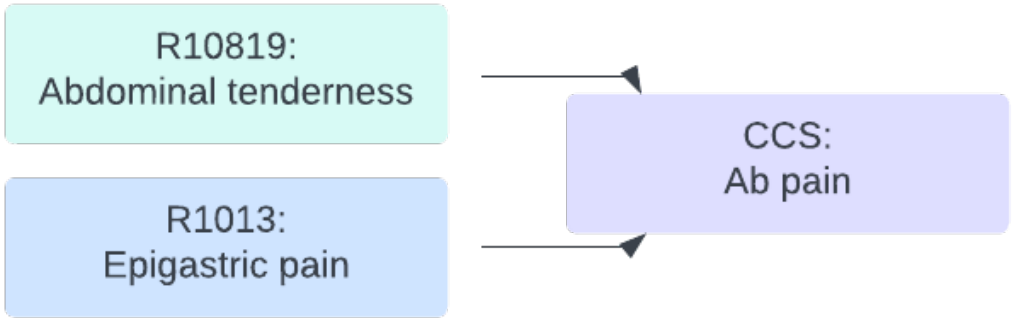
Tested various levels of Reason for Visits (RFV) grouping for analysis (ICD-10, CCS, CCSR)

- Tried to balance encompassing enough information with granularity of coding
- Used CCS as main grouping
- Reason for Visit reflects chief complaint, not diagnosis

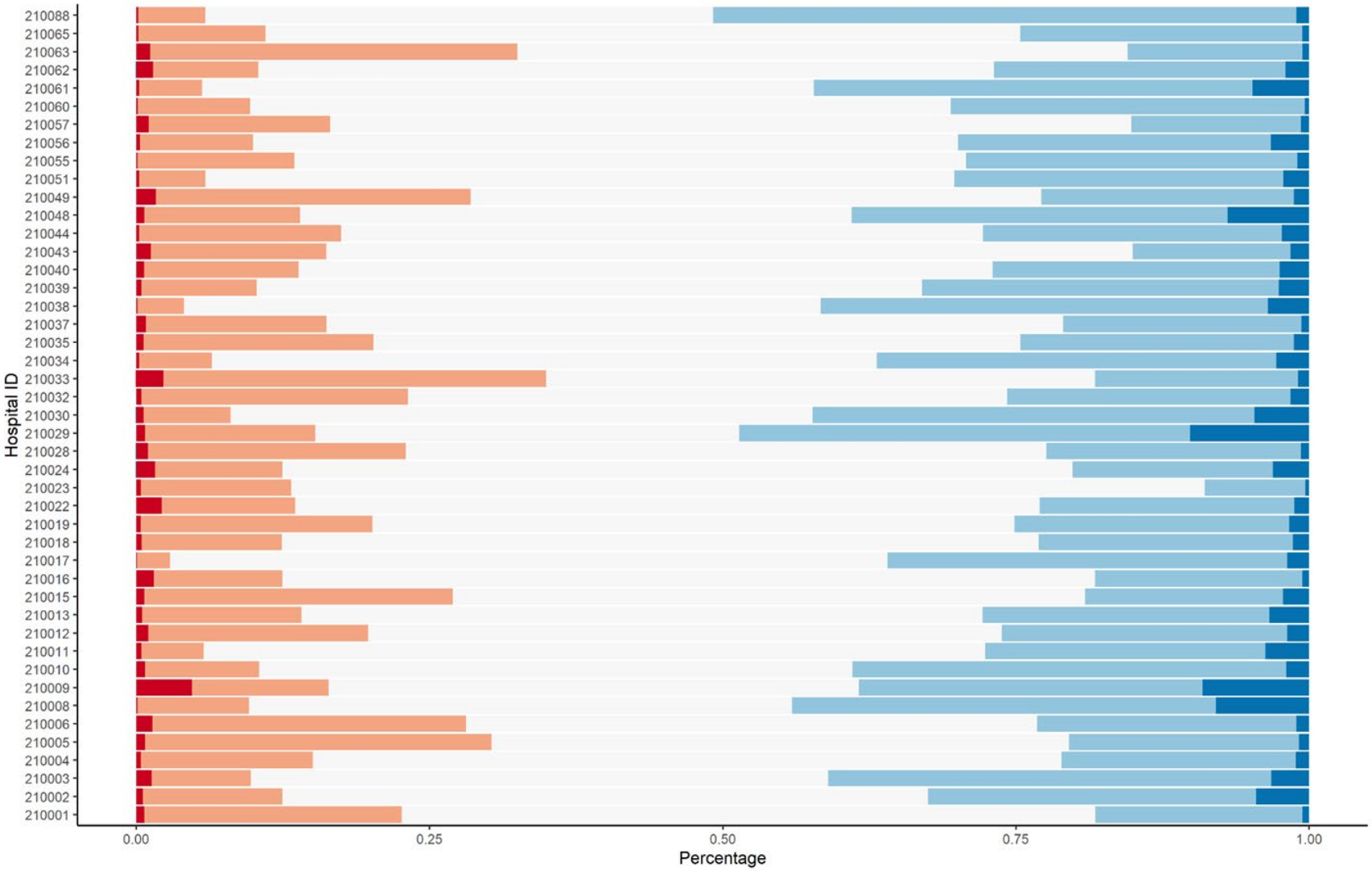
CCS grouping

Decided to use Clinical Classification Software (CCS) from Agency of Healthcare Research and Quality (AHRQ)

- Tool for clustering patient diagnoses/complaints
- CCS provided the optimal combination of high level summary and granularity

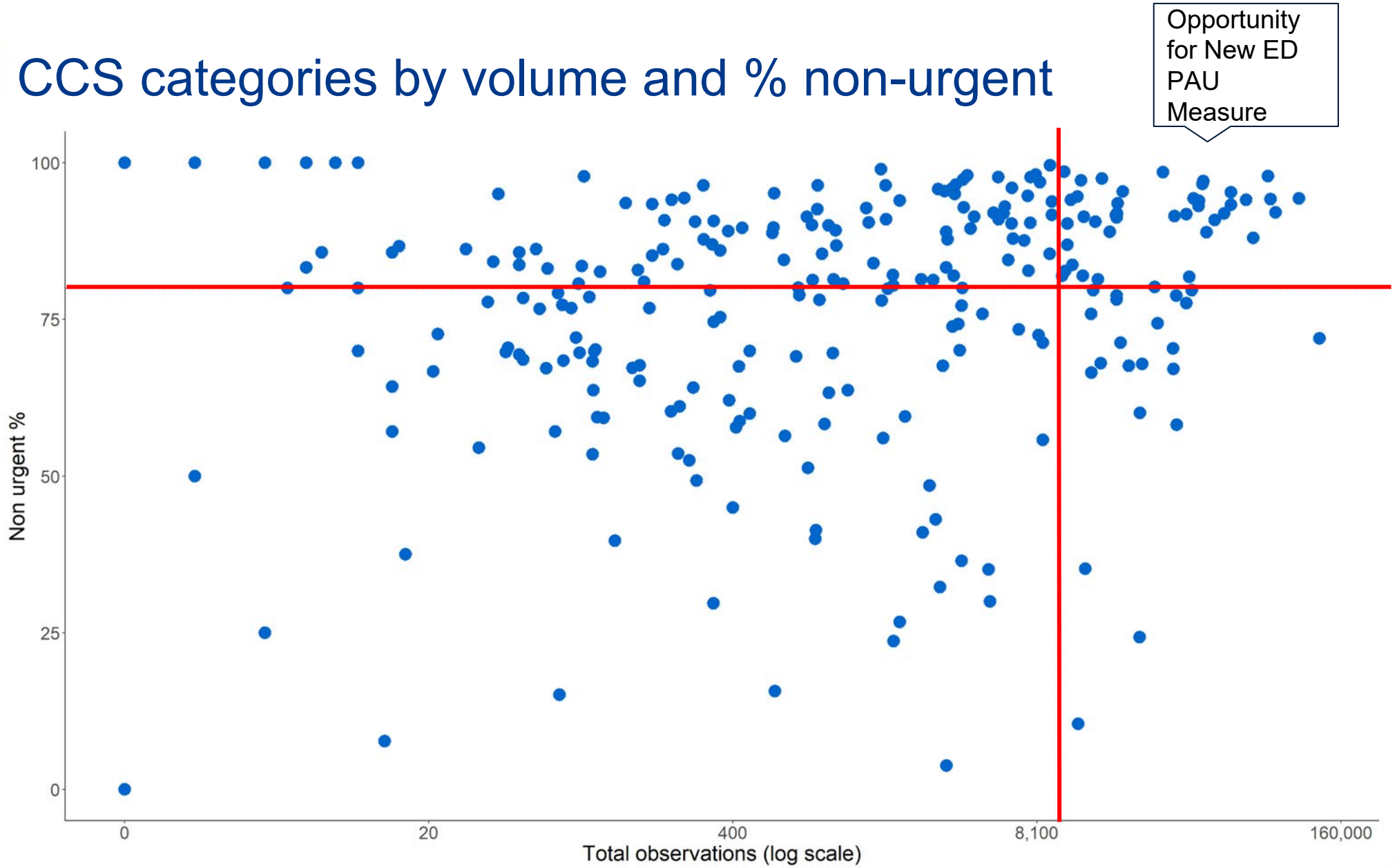


Distribution of triage values across hospitals

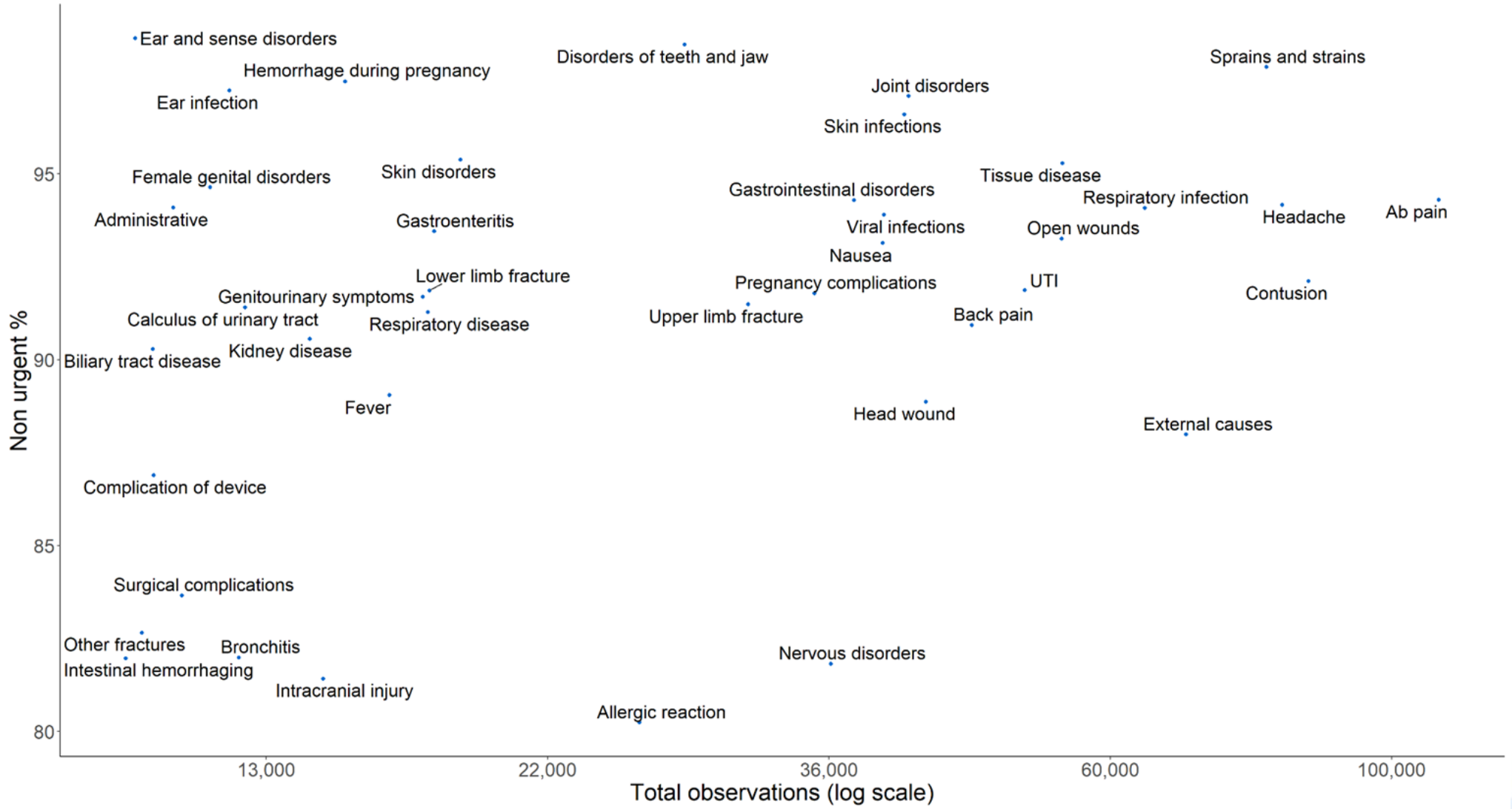


Triage Status	Percent
1	0.9
2	14.8
3	56.0
4	25.4
5	2.9

CCS categories by volume and % non-urgent



Selected chief complaints (RFV) from Opportunity Zone updated



Additional analyses excluded from this presentation

- Time of day analysis (Day of week)
- By payer analysis
- Nursing home
- Behavioral health items
- Secondary diagnoses

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Policy options

Policy option 1

Full selection of low acuity reasons for visit (RFV)

- More than 80% low-acuity
- More than 10,000 in each chief complaint group

Strengths

- Covers a wide range of chief complaints
- Potentially incentivizes more complete reduction in avoidable ED
- Provides maximum flexibility for hospitals to craft meaningful interventions

Limitations

- Difficult to communicate to patients
- Significant resources required
- May result in diminished focus
- May incentivize some patients who need ED care to avoid it

Policy option 2

Top 10-20 by total volume for low acuity RFV

- Select the top 10-20 low acuity RFV by total ED observations
    - (>=80% low acuity)
    - Subset of policy 1

Strengths

- Focused on high-volume items
- Potentially incentivizes more complete reduction in avoidable ED
- Provides opportunity for hospitals to craft meaningful interventions
- Favored by Carefirst

Limitations

- Not all items may be addressable
- Could miss items that are readily intervened upon
- Difficult to communicate to patients

Top 10-20 items by total volume

Rank	Item	Avoidable %
1.	Ab pain	94
2.	Superficial injury	92
3.	Headache	94
4.	Sprains and strains	98
5.	Other injuries (External causes)	88
6.	Upper respiratory infection	94
7.	Connective tissue disease	95
8.	Open wounds	93
9.	Urinary tract infection	92
10.	Back problems	91

Rank	Item	Avoidable %
11.	Open wound of head	89
12.	Joint disorders	97
13.	Skin issues	97
14.	Viral infection	94
15.	Nausea and vomiting	93
16.	Gastrointestinal disorders	94
17.	Nervous system disorders	82
18.	Pregnancy complications	92
19.	Fracture of upper limb	92
20.	Disorders of teeth and jaw	99

Policy option 3

By chief complaint themes

- Choose items that are relatively similar to one another from opportunity zone
  - Joint (Joint problems, joint disorders, spondylosis, strains and sprains)
    - ~8% total volume
  - Ear, nose, throat (Sense organ disorders, Teeth disorders, Eye infection, Eye disorders, ear infection)
    - ~3% of total volume

Strengths

- May create more focused interventions
- Easily communicated to patients
- Favored by some clinicians in subgroup

Limitations

- May not provide best return on investment
- Different items may require different interventions
- Potential for unanticipated consequences
- Limited flexibility for hospitals to innovate

Discussion questions

1. Staff recommendation: Start with Option 3, potential expansion to Top 20
2. How do we limit unintended consequences?
3. How does this affect health equity?
4. How do we message this information to patients and hospitals?

Policy 1	All low acuity items
Policy 2	Top 10-20 by total volume
Policy 3	By theme

Next steps

1. Incorporate feedback from all interested parties
2. Present PAU-ED to Commission in December
3. Monitoring in CY23
4. Development of scaling/payment policy for CY24 / RY26

Readmission Reduction Incentive Program (RRIP)
RY 2025 Final Policy

Final RY 2023 & 2024 RRIP Recommendations

1. Maintain the 30-day, all-cause readmission measure.
2. **Improvement Target** - Maintain the RY 2022 statewide 5-year improvement target of -7.5 percent from 2018
3. **Attainment Target -** Maintain the attainment target whereby hospitals at or better than the 65th percentile statewide performance receive scaled rewards for low readmission rates.
4. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
5. 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 track for 50 percent reduction in disparity gap measure over 8 years, 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.
6. Continue development of an all-payer **Excess Days in Acute Care** measure in order to account for readmission, emergency department, and observation revisits post-discharge.
7. Adjust the RRIP pay-for-performance program methodology as needed due to **COVID-19 Public Health Emergency** and report to Commissioners.

RRIP Recommendation Update

Extend policy through report at January commission meeting

- Based on feedback from PMWG and other priorities, staff propose to simply extend the current RRIP policy for another year
  - Completes the 5-year improvement target of 7.5 percent
  - Maintains current attainment target methodology

- Technical changes include:
  - APR-DRG Grouper update
  - Update planned admission logic, if new version is available
  - Keep the time period for normative values to CY 2021
  - Updating PAI to use CY 2021 and latest ADI for coefficients

RRIP & Disparity Gap Analysis

- Analyzed RY23 RRIP and Disparity Gap by-hospital performance to understand if goals of policies are being met

- Staff has reached out to a sample of hospitals to understand how hospitals are working to reduce readmissions and disparities in readmissions

RY 2023 RRIP and Disparity Gap Analysis Results

	Achieved Readmission Attainment Target (11.48%)	Achieved Readmission Improvement Target (-4.57%)	Achieved **Both** Readmission Improvement and Attainment Target	Achieved **Neither** Readmission Improvement nor Attainment Target	**Total**
Improved Disparity Gap	3 hospitals: 210001 210005 210037	4 hospitals: 210011 **210015** 210029 **210065**	10 hospitals: **210002** **210040** **210018** 210044 **210022** **210057** **210033** 210063 210035 **210064**		17 hospitals saw an improved disparity gap in 2021 compared to 2018
Worsened Disparity Gap	5 hospitals: 210032 210039 210058 210060 210061	7 hospitals: 210004 210043 210009 210056 210012 210034 210038	9 hospitals: 210003 210040 210017 210049 210019 210051 210027 210062 210020	6 hospitals: 210006 210028 210008 210016 210023 210024	27 hospitals saw a worse disparity gap in 2021 compared to 2018

The question we are trying to answer from calls with hospitals, is what is happening in hospitals where overall readmissions are improving but the gap is increasing

RY 2025 Draft Recommendations

1. Maintain the 30-day, all-cause readmission measure.
2. Improvement Target - Maintain the RY 2022 statewide 5-year improvement target of 7.5 percent from 2018
3. Attainment Target - Maintain the attainment target whereby hospitals at or better than the 65th percentile statewide performance receive scaled rewards for low readmission rates.
4. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
5. Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities.
    a. Scale rewards beginning at 0.25 percent of IP revenue for hospitals with 50 percent reduction in disparity gap measure, capped at 0.50 percent of IP revenue for hospitals with 75 percent or larger reduction in disparity gap measure.
6. Monitor an all-payer Excess Days in Acute Care measure and consider for payment in future years

Health Equity

FY23 IPPS Final Rule: Health Equity Measures

1. Hospital Commitment to Health Equity (CMS CY23)
    a. Attestation structural measure of 5 domains of health equity:
        i. Equity as strategic priority, data collection, data analysis, quality improvement, leadership engagement
2. Screening for Social Drivers of Health (CMS CY24)
    a. Assesses the percent of patients 18 years ≤ who are screened for food insecurity, housing instability, transportation needs, utility difficulties, and interpersonal safety
    b. Can use a self-selected screening tool
3. Screen Positive Rate for Social Drivers of Health (CMS CY24)
    a. Assesses the percent of patients 18 years ≤ who were screened and screened positive for one or more of the social drivers

Requesting that hospitals submit this data to HSCRC as well as CMS

- During CY 2023 will further evaluate these requirements and develop reporting mechanism

Health Equity Survey

- In 2015, all MD hospitals signed #123 for Equity pledge
- On August 24th, HSCRC staff sent out a Health Equity Survey to better understand hospital efforts in regard to health equity
- This survey will be used as an environmental scan to gather information about the state of addressing health equity at each of the hospitals
  - Results will be aggregated and will NOT be used to penalize hospitals
- The deadline was extended to December 15th, 2022
  - Any hospitals that have not submitted need to contact the HSCRC

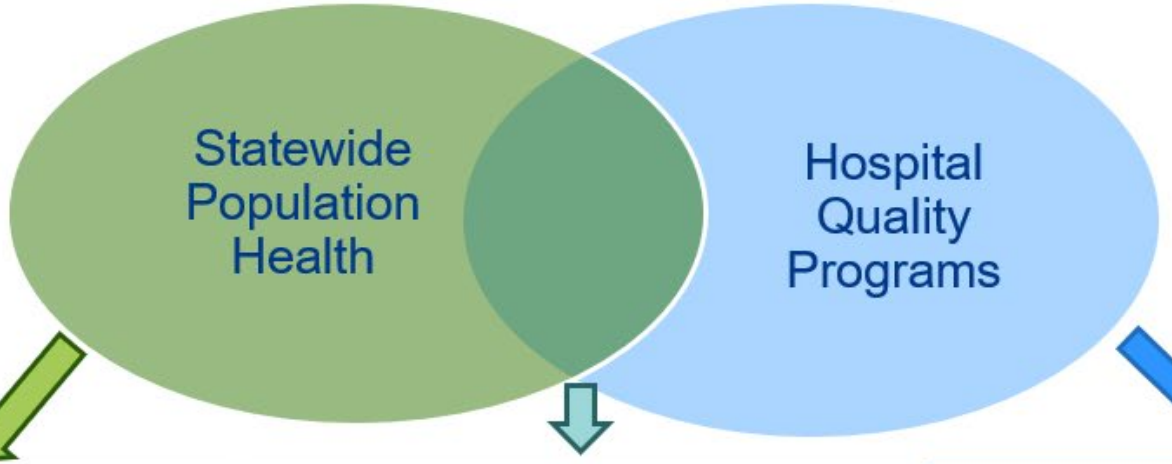
Hospital Quality and Population Health Progression Plan Strategy Development

Future Model Planning: Hospital Quality and Population Health

Task: April report for HSCRC leadership outlining strategic plan for future model

- Convene workgroup members to discuss model evolution and outline 3-5 year plan for future of Quality programs
  - Population health metrics
  - electronic Clinical Quality measures (eCQMs)/hybrid measures/digital measure strategy
  - Additional disparity metrics
  - Expansion of hospital focus, e.g., patient-reported outcome measures, climate change
  - Consider providers and other care settings
  - Revise policy approach (e.g., service lines)

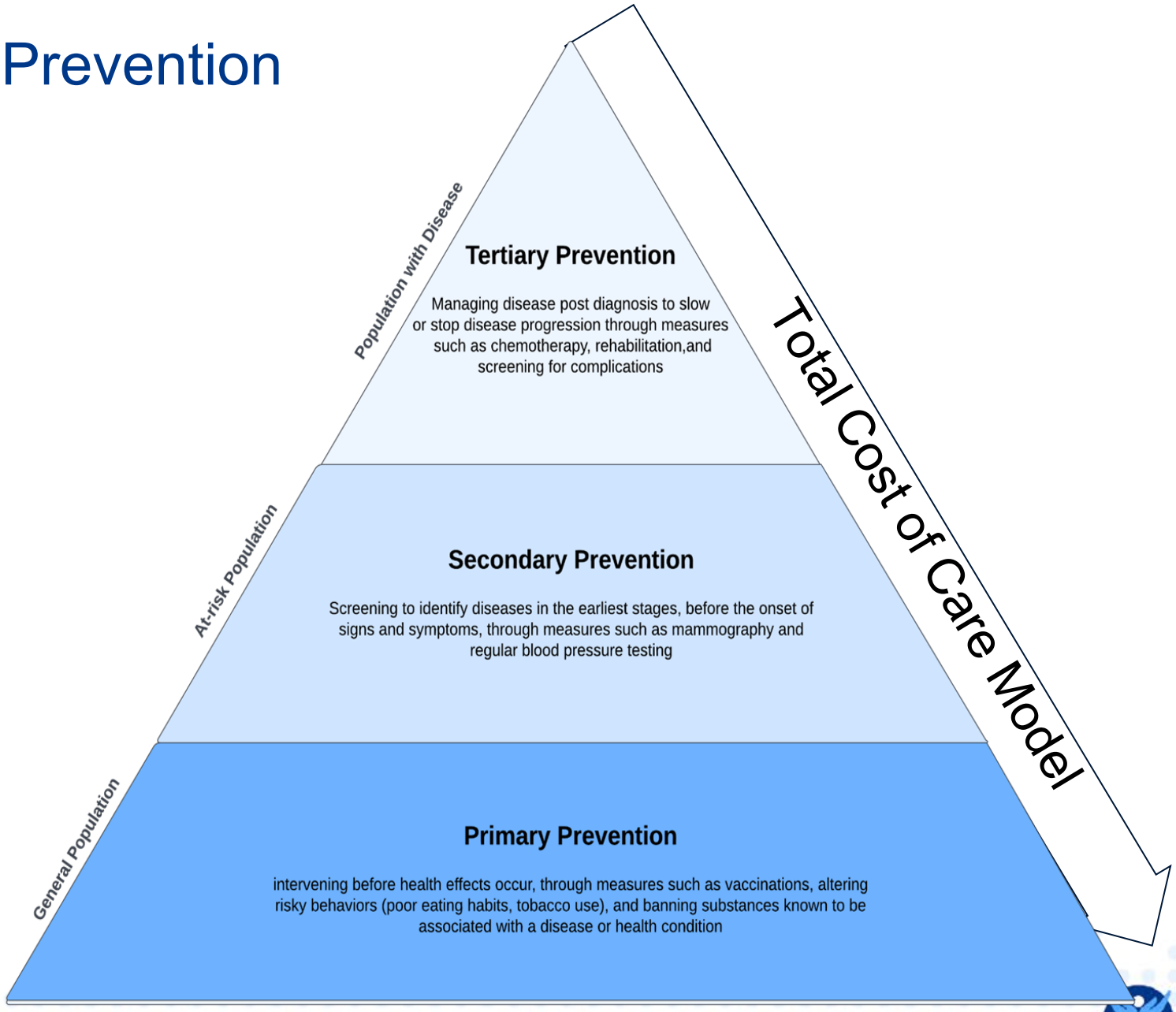
Intersection of Hospital Quality and Population Health



Statewide Population Health	Hospital Accountability for Population Health	Hospital Quality Programs
Goal: Leverage TCOC model to improve the health of all Marylanders	Goal: Create actionable incentives that hold hospitals accountable for population health	Goal: Improve hospital quality and guard against unintended consequences of global budgets
Current programs: Outcome-Based Credits, Pop Health SIHIS goals	Current Programs: To be added to existing hospital quality programs (with re-evaluation of percent at-risk)	Current Programs: QBR, MHAC, RRIP,PAU (analogs to CMS hospital programs but all-payer)
National comparison	State or national comparison	State or national comparison
Workgroups: Pop health subgroup	Both pop health and PMWG	PMWG

Progression Plan Recommendations

Levels of Prevention



https://www.cdc.gov/pictureofamerica/pdfs/picture_of_america_prevention.pdf

Invitation

Please reach out to schedule a meeting with our team to discuss ideas for model expansion

Schedule

January: Discuss potential areas of focus that should be considered

February: Explore measures and methodologies

March: Draft recommendations

April: Final recommendations for report to HSCRC leadership

THANK YOU!

Next Meeting: Wednesday, January 18th, 2023