

#### Health Equity Quickinar Series Session 8

## Analysis and Stratification of Health Equity Data



- Discuss the role of the HSAG HQIC data dashboard in stratifying disparities in health outcomes.
- Identify how hospitals can use internal data to stratify disparities in health outcomes.
- Review the importance of transparency of identified disparities throughout the hospital.



### **Data Stratification**

- Data stratification can be defined as "the process of partitioning data into distinct or nonoverlapping groups."
  - Allows for identification of potential relationships between variables and outcomes.
  - Stratified analysis can also be used to identify confounding variables.





# Data Stratification (cont.)

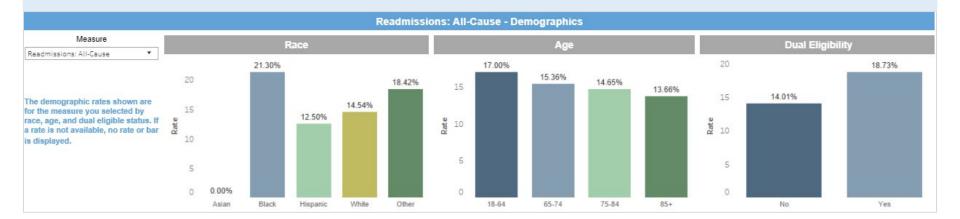
- Hospital quality data can be stratified by multiple groups:
  - Race/ethnicity
  - Dual-eligibility status
  - Area Deprivation Index (ADI) census block group
  - Gender
  - Age
- Stratified outcomes data can used to identify trends and potential disparities.





## HSAG HQIC Performance Dashboard

- Stratifies outcome metrics by demographic and geographic categories:
  - Race/ethnicity
  - Age
  - Dual-eligibility (proxy measure for social determinants of health [SDOH])
- Allows facilities to identify potential heath disparities in their outcomes.





# HSAG HQIC Dashboard Limitations

- It only contains Medicare Fee-For-Service data.
  - Disparities may be missed without all-payer data.
  - Does not allow for age comparisons, applicable to hospital general patient population.
- Demographic data only contain the most recent year of data.
  - It does not allow for comparison and tracking of progress over time.
- It does not contain patient-level data.
  - Cannot identify patients who are in multiple categories.



#### HSAG HQIC ADI Patient Stratification: Analyze Deprivation Level In Your Patient Population

				Beneficiaries with ADI National Ranking Assigned		Numerator: Beneficiaries Fall in the ADI Bucket Denominator: Beneficiaries with ADI National Ranking Assigned							Beneficiari	es with ADI	Numerator: Beneficiaries with Specific Reason that ADI is Not Available Denominator: Beneficiaries with ADI National Ranking Not Available								
																		National Ranking Not		Beneficiary's 9-Digit ZIP Code is Not		Beneficiary's 9-Digit ZIP Code Cannot be Found in the ADI	
			Total			ADI Ranking: 85 +		ADI Ranking: 76 - 84		ADI Ranking: 51 - 75		ADI Ranking: 26 - 50		ADI Ranking: 0 - 25				Cross	swalk	Availabl	e in BIC	Cross	swalk
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SC	100001 Hospital A		1,597	1,534	96.1%	823	53.7%	320	20.9%	298	19.4%	80	5.2%	13	0.8%	63	3.9%	27	42.9%	34	54.0%	2	3.2%
SC	100002 Hospital B		2,603	2,469	94.9%	915	37.1%	452	18.3%	749	30.3%	342	13.9%	11	0.4%	134	5.1%	46	34.3%	78	58.2%	10	7.5%
SC	100003 Hospital C		200	192	96.0%	148	77.1%	25	13.0%	9	4.7%	9	4.7%	1	0.5%	8	4.0%	2	25.0%	5	62.5%	1	12.5%

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S	C	100002	Hospital B			2,603	2,469		94.9%
S	C	100003	Hospital C			200	192		96.0%

	Numerator: Beneficiaries Fall in the ADI Bucket Denominator: Beneficiaries with ADI National Ranking Assigned													
ADI Rank	ting: 85 +	ADI Ranki			ng: 51 - 75	ADI Ranki		ADI Ranking: 0 - 25						
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823	53.7%	320	20.9%	298	19.4%	80	5.2%	13	0.8%					
915	37.1%	452	18.3%	749	30.3%	342	13.9%	11	0.4%					
148	148 77.1% 25		13.0%	9	4.7%	9	4.7%	1	0.5%					



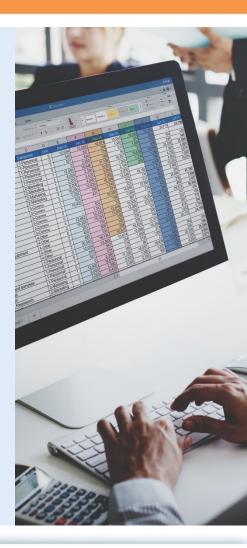
# **Stratification of Hospital Data**

- Select outcomes/quality measures to look at.
  - Outcomes could be selected for multiple reasons:
    - Literature has identified disparities.
    - To assess an ongoing/completed project.
    - Hospital has seen trends in its data that it wants to investigate further.
  - Can be a good idea to keep tabs on all measures regularly.
- Select which category to stratify by and separate data out into these groups.
  - Can be helpful to use charts, graphs, and other visuals to display the stratified data.



# Stratification of Hospital Data (cont.)

- Be careful in how you interpret your stratified data.
  - Differences do not always mean disparities.
  - Confounding variables can impact the outcomes.
  - Small numerators or denominators can skew results.
- Further analysis may be necessary to identify true disparities.
  - Regression analysis can identify relationships between variables while accounting for confounding variables.





## **Uses of Stratified Data**

 Hospitals can use stratified data to identify where the greatest disparities exist.

- Can be used to prioritize areas for improvement.

- Stratified data can be shared with stakeholders, such as leadership, providers, and community partners.
- Hospitals can use data to better understand their patient population.
  - Can be compared against community demographic data.

The Centers for Medicare & Medicaid Services (CMS). Building an Organizational Response to Health Disparities. Available at <a href="http://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Health-Disparities-Guide.pdf">www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Health-Disparities-Guide.pdf</a>.



10 Hospitals in Pursuit of Excellence. Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data. Available at www.hpoe.org/Reports-HPOE/Equity Care Report August2013.PDF.

# **Organizational Transparency**



- If hospitals identify disparities, they should be transparent at all applicable organizational levels.
  - Hospitals should implement interventions to address each disparity.
  - Transparency allows for staff buy-in and understanding of why these interventions are occurring.
- Can be an opportunity to identify potential higher-level issues.



# **Organizational Transparency (cont.)**

- Transparency helps facilitate a culture of equity.
  - Improves capacity to address identified disparities.
  - Could provide opportunities for staff education.
- Transparency allows for engagement of necessary stakeholders.
  - Community partnerships may be needed to address identified disparities.
  - Necessary hospital stakeholders also should be engaged.



# Key Concepts

- Hospital data can be stratified into discrete groups to allow for identification of disparities.
- HSAG HQIC provides stratification of quality measures in its Performance Dashboard.
- Hospitals should use stratified data to identify disparities and implement interventions.
- Transparency—when a disparity is identified—allows for effective interventions and supports a culture of equity.





#### Join Us for the Entire Series

#### Recordings, slides, and resource links will be posted for on-demand access after every session.

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#### 9. Health Equity Interventions

9. Interventions to Address Disparities in Health Equity *Thursday, May 11, 2023 | 1 p.m. ET | 12 noon CT | 11 a.m. MT | 10 a.m. PT* Objectives:

- · Discuss how to design interventions to address disparities in health outcomes.
- Review HSAG HQIC tools and resources to assist in identifying interventions to address health disparities.
- Identify the importance of the patient and family advisory councily (PFAC) in health equity interventions.



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# Thank you!

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