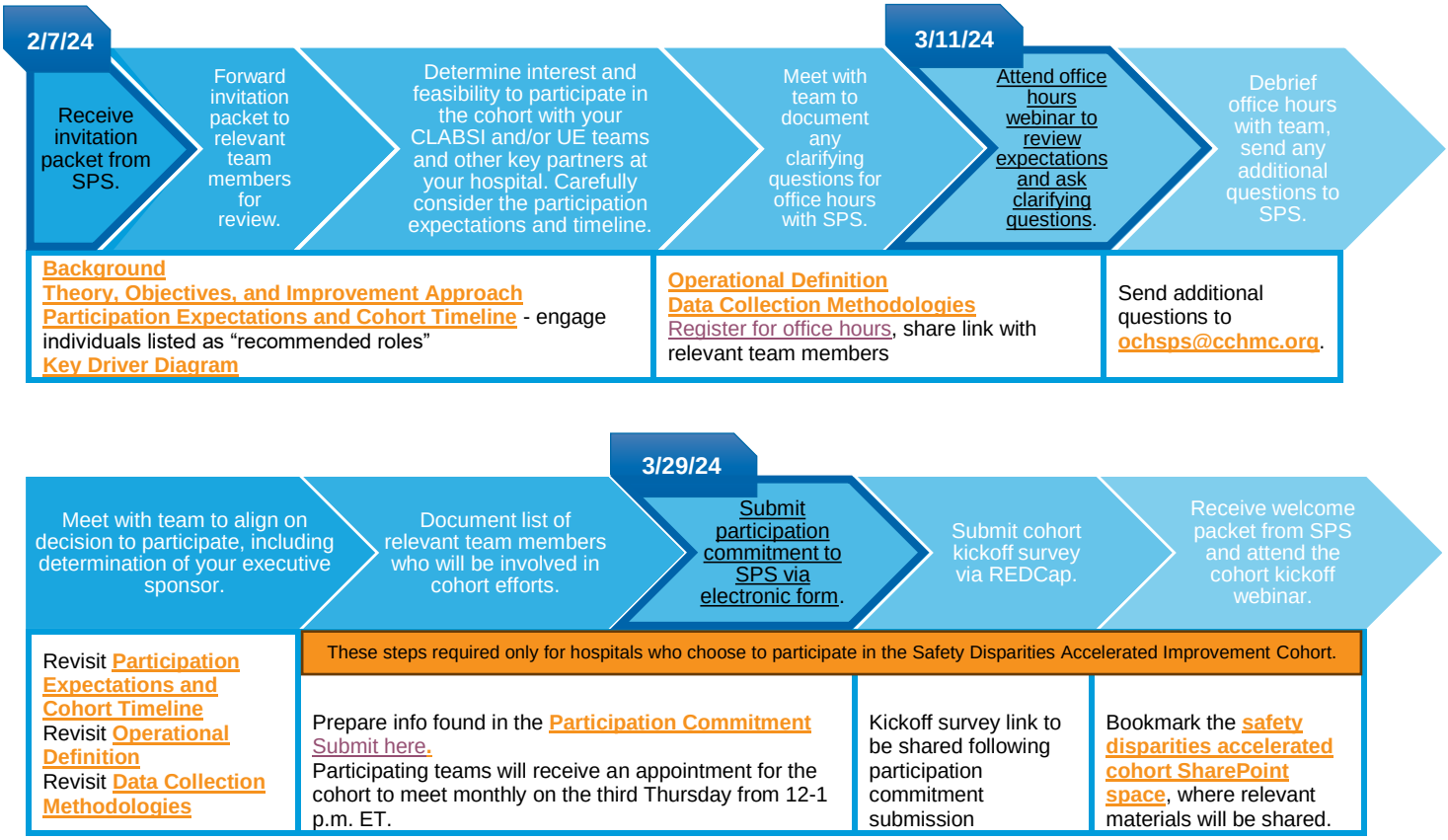
Safety Disparities Accelerated Improvement Cohort: Using Race, Ethnicity and Language (REaL) Data to Further Understand your Bundle Observations

INVITATION TO PARTICIPATE

The Safety Disparities Accelerated Improvement Cohort: *Using Race, Ethnicity and Language (REaL) Data to Further Understand your Bundle Observations* is a rapid cycle pilot project designed specifically to expose disparities in how bundle observations are performed for central line-associated blood stream infections (CLABSI) and unplanned extubations (UE) prevention based on race, ethnicity, and language (REaL). This pilot expands on the original SPS PHARE Cohort work, moving from learning about disparities in outcomes to discovering if disparities exist in our bundle execution and reliability and then testing interventions to decrease disparities in bundle reliability. Should this expanded pilot confirm that disparities exist, collaborative work will ensue with the further purpose of eliminating those disparities. SPS hospitals that already collect race, ethnicity, CLABSI, and/or UE-ICU data and have the organizational will, resources, and capacity to begin data submission by Aug. 2024 are invited to participate in this improvement cohort. If this describes your hospital, please read on for additional details and instructions.

At its conclusion, SPS hopes to spread cohort learnings around approaches to understand HAC bundle reliability, potential solutions to eliminate disparities in sampling, and establish equity to ensure this approach includes all patients that a hospital serves.

Interested teams should follow the process depicted below and reference the corresponding sections linked below each step to determine if participation may be right for their organization.



1. Background

We have a moral obligation to provide equitable care for all children. As a part of 2022-2024 goal setting, the SPS Board of Trustees named "Identify and eliminate safety disparities" as a strategic priority for the network. Working to understand safety disparities assists us in understanding drivers of gaps in outcomes and can help us attain further harm reduction. SPS has a goal to support all network hospitals in developing structures and processes to collect and analyze high-quality data, which is foundational to eliminating disparities.

Amidst a wealth of emerging information about the existence of inequities in health care outcomes, SPS organized a project called PHARE (Patient Harm and its Relation to Equity) to examine key safety outcomes by race and ethnicity in 2021. Results indicated several concerning disparities where marginalized populations have higher rates of both central line-associated blood stream infections (CLABSI) and unplanned extubations (UE), the two most common hospital-acquired patient conditions recorded by SPS. As a result, the SPS Network has committed to work urgently and in a focused manner to understand and eliminate these and other potential safety disparities in children's hospitals. Unlike many of the other improvement efforts we have undertaken in health care that promote consistency, equality, and reliability, eliminating disparities requires attention to the difference between equal and equitable care.

2. Theory, Objectives, and Improvement Approach

In 2022 SPS engaged subject matter experts from network hospitals to examine potential drivers of measured disparities in CLABSI and UE and develop recommendations for the creation of a testable improvement strategy. This design group investigated contributing variables in care delivery and considered factors which could be addressed through improvement methodology.

The design group aligned on the most likely drivers of these disparities, which is necessary to develop a meaningful improvement strategy for testing and spread to the SPS network. They recommended potential interventions for CLABSI and UE that are being explored more broadly within these SPS HAC groups. The team also determined that some interventions to decrease disparities may be agnostic and can align with any HAC. The focus of a new safety disparities improvement cohort will be on exploration of disparities and improvement opportunities related to CLABSI and UE bundle observations. Overtime, the principles learned from CLABSI and UE bundle observations could be spread to additional HACs."

Long term, SPS envisions that race, ethnicity, and preferred language for care will be incorporated into the way we evaluate outcome metrics across our entire portfolio. While this improvement cohort aims to start with interventions for CLABSI and/or UE, our goal is to spread learnings so that the entire safety portfolio will include race, ethnicity, and preferred language for care as these metrics are critical to our goal of eliminating safety disparities for children.

The Safety Disparities Accelerated Improvement Cohort will engage hospital team members to develop a process to collect and submit CLABSI and UE bundle observations stratified by REaL." The objectives of bundle observations stratified by REaL data are:

1. Understand the current state of bundle observation sampling practices and distribution of observations in the context of REaL data.
2. Understand if there are differences in bundle reliability based on race, ethnicity, and preferred language for care.
3. Test various interventions that increase equity in the way patients are chosen for a bundle observation to ensure observations are representative of the local population served.
4. Test various interventions that decrease any observed disparities in bundle reliability.

The cohort will work in two phases. Phase 1 will be centered around establishing a measurement system to collect bundle observations by race, ethnicity, and preferred language for care as well as to understand the hospital's current state of sampling practices for bundle observations. Phase 2 will be centered around improvement and sustain planning. Interventions for phase 2 will be developed and tested by the cohort based on the initial learning in phase 1. At the start of the cohort, hospitals will learn from each other around best practices to incorporate REaL data into bundle observation processes. In phase 2, hospitals will be expected to test methods for selecting patients for bundle observations to ensure that processes accurately reflect the patient populations served across racial, ethnic, and preferred language groups. Ultimately, the cohort's work will result in shared learnings that all SPS network hospitals can adopt to improve the health and safety of everyone.

To drive success in this cohort, hospitals must engage the respective HAC team (CLABSI and/or UE) as a willing participant in this effort. The work of this cohort will involve the current processes used to observe and learn from CLABSI and UE bundles at participating SPS

hospitals. Cohort-specific work should integrate into these existing processes as opposed to a separate bundle observation process for the purposes of this cohort.

Phase 1 Details:

During the initial phase of work, cohort hospitals will work toward submission of CLABSI and/or UE bundle reliability data stratified by the patient's race, ethnicity, and preferred language for care (stratifying to the broad cohort categories of English/Language other than English/Unknown only). Participating teams will select CLABSI, UE, or both HACs to be measured. Ideally, participating hospitals will also consistently submit valid outcomes data for CLABSI and/or UE stratified by race and ethnicity, with optional submission of outcomes data stratified by preferred language for care (stratifying to the broad cohort categories of English/Language other than English/Unknown only).

Monthly cohort calls will be opportunities for teams to share their progress and engage in "all teach, all learn" to develop and refine processes to achieve measurement and submission of data.

Phase 1 Hospital Outputs (April-Aug. 2024):

- ✓ **Hospitals must participate in race/ethnicity AND preferred language of care stratification of bundle observation data.**
- ✓ **This work should consist of adding REaL data abstracted from the electronic health record to the current process you have for your bundle observations.**
- ✓ Hospitals have a process to match **ALL** bundle observations throughout the children's hospital to race, ethnicity, and preferred language for care data for CLABSI and/or UE by the end of Aug. 2024.
    - Hospitals can start testing this process on 1-2 units but should only submit this data to SPS when they have the process ready for all units with applicable patients.
- ✓ Hospitals have a process to map this data to the broader categories listed in the SPS operational definition: Patient Definition by Race, Ethnicity, and Preferred Language for Care for cohort learning.
- ✓ Hospitals consistently submit monthly data to SPS, and retroactive data if asked by the end of Aug. 2024
    - CLABSI and/or UE process data stratified by race/ethnicity (all bundle observations)
    - CLABSI and/or UE process data stratified by preferred language for care (all bundle observations)
    - **Note:** For CLABSI and/or UE, SPS hospitals are asked to submit a minimum of 20 observations per month across the children's hospital.
- ✓ Hospitals assess their current process for how patients are "chosen" to have a bundle observation on various units.

Note: Long term, cohort hospitals may find it useful to subgroup this data by unit type. It will take some time for hospitals to have a large enough dataset to learn from this data by unit. For the purposes of this cohort, SPS will collect children's hospital-wide bundle data only.

Phase 1 Cohort Learning:

Statistical analysis methods will be employed to demonstrate potential differences in patient populations of race, ethnicity, and preferred language for care from the reported data. It is expected

that some of calendar year 2024 will be needed for data collection, submission, and analysis to fully understand the cohort dataset. Data analysis will aim to answer the following questions:

- Does CLABSI or UE bundle reliability differ between race, ethnicity, or preferred language for care groups?
- What is the distribution of CLABSI and UE bundle observations across race, ethnicity, and preferred language for care groups?
- How does the distribution of CLABSI and UE bundle observations across race, ethnicity, and preferred language for care groups compare with the distribution of total denominator days (central-line days for CLABSI, ventilator days for UE) for each race, ethnicity, and preferred language for care group? Ideally, these distributions would match, suggesting that the population of patients for whom bundle observations are completed is representative of the overall patient population at risk for CLABSI and UE events.
- Will increasing reliability to the CLABSI or UE bundle for a given racial, ethnic, or preferred language for care group result in a reduction in harm for that group?

Phase 2 Details (anticipated to begin Sept. 2024):

In the second phase of cohort work, QI methods will be applied to address potential disparities measured via the above analysis with a goal of creating equity in bundle observation processes. Cohort leaders will guide participating hospitals in efforts to define, learn, and measure testable interventions to eliminate disparities and reduce harm.

Hospitals will learn together around the following topics: sampling of patients to observe for a HAC bundle, looking for disparities in bundle reliability stratified by race, ethnicity, and preferred language for care, understanding the distribution of bundle learning observations by race, ethnicity, and preferred language for care and how well that matches to the distribution of the total population at risk for CLABSI and/or UE events. Unlike the work in the original PHARE cohort, this cohort will also test stratification of process data by preferred language for care mapped to the SPS categories of: “English,” “Language other than English,” and “Unknown” using the SPS operational definition: Patient Definition by Race, Ethnicity, and Preferred Language for Care. As cohort hospitals begin to understand if there are potential disparities in bundle learning observations, we can learn together about potential solutions. Hospitals will not be required to test the same solution but will rather test different solutions based on their organization’s needs.

Phase 2 Hospital Outputs:

- ✓ Hospitals test sampling methods to ensure the bundle observations match the distribution of total patients at risk for CLABSI and/or UE events.
- ✓ In phase 2, hospitals are encouraged to start small with 1 unit and gradually scale up to implement bundle observation changes with an equity focus throughout the children’s hospital for that particular HAC.
- ✓ Hospitals learn together on conclusions around the data and when to intervene in the system to ensure equity in bundle observations by race, ethnicity, and preferred language for care.
- ✓ Hospitals will test interventions to address any identified disparities in bundle execution and reliability.
- ✓ Hospitals learn together about how to monitor the newly created bundle observation system over time and discuss triggers for further intervention.

- ✓ Hospitals create a sustainment plan.
- ✓ Hospitals discuss ideas for how to spread to other HACs.

PHASE 2 Cohort Learning:

Throughout phase 2, hospitals will learn together and test potential interventions to ensure bundle reliability measurement equity and plan to scale up and spread new practices. Hospitals will also focus on a sustainment plan and discuss triggers that expose potential inequities in bundle observations.

At its conclusion, SPS hopes to spread the cohort's learnings around approaches to understand HAC bundle reliability, potential solutions to eliminate disparities in sampling, and spread possible interventions to decrease any observed disparities in bundle reliability.

Anticipated Network Spread:

SPS intends to develop a change package for network hospitals to adopt with learning from both phases of the cohort as well as learning from the following improvement questions:

- Does CLABSI or UE bundle reliability differ between race, ethnicity, or preferred language for care groups?
- How does the distribution of CLABSI and UE bundle observations across race, ethnicity, and preferred language for care groups compare with the distribution of total denominator days (central-line days for CLABSI, ventilator days for UE) for each race, ethnicity, and preferred language for care group? Ideally, these distributions would match, suggesting that the population of patients for whom bundle observations are completed is representative of the overall patient population at risk for CLABSI and UE events.
- Will increasing reliability to the CLABSI or UE bundle for a given race, ethnicity, or preferred language for care group result in a reduction in harm for that group?

3. Participation Expectations and Cohort Timeline

Because of the seriousness, pace, and resource requirements that participation in this Safety Disparities Accelerated Improvement Cohort requires, SPS would like to ensure that interested hospitals are appropriately informed of expectations for participation. The table below outlines expectations and can be used by interested teams as an exercise to determine feasibility of participation, and to identify and recruit needed collaborators.

Participation Requirement	Recommended Role(s) to Support	✓
Senior leadership commitment of time and human resources dedicated to safety disparities work	Executive sponsor	☐
Well-established will, infrastructure, and processes for engaging and preparing staff for safety disparities improvement efforts	Executive sponsor, quality improvement consultant, project manager	☐
Reliable processes in place for collecting and documenting patient race, ethnicity, and preferred language data in the EMR	Registration/access staff, data analyst, quality improvement consultant	☐
Reliable processes in place for completing bundle observations for CLABSI (house-wide) and/or UE (ICUs only)	Frontline staff, unit manager, quality improvement consultant, member(s) of CLABSI and/or UE improvement team	☐

Children's hospital CLABSI and/or UE HAC prevention team that meets on a regular basis	Physicians, nurses, safety and quality improvement consultant, data analyst, RT or infection prevention depending on the HAC	☐
Implementation of measurement system outlined in section *4. Operational Definition*, including stratification of measures by the designated categories of race, ethnicity, and preferred language for care	Data analyst, REaL data collection expert, staff responsible for bundle observations, quality improvement consultant, project manager	☐
Monthly submission of required and optional measures outlined in section *6. Data Collection Methodologies*	Data analyst, quality improvement consultant, project manager	☐
Monthly attendance and engagement in SPS Safety Disparities Accelerated Improvement Cohort Calls	Quality improvement consultant, project manager, data analyst	☐
Patient/family member perspective via representation on cohort team	Patient/Family Advisory Council	☐

Feb.-March 2024

- Safety Disparities Accelerated Improvement Cohort invitation sent to all network hospitals' Project Managers & Quality Leaders.
- Interested hospitals **attend Office Hours webinar** on **March 15 from 12-1 p.m. ET.**
- Hospitals **commit to joining the cohort** by **March 29**.
- Hospitals select, resource, and support team members.
- Hospitals develop a project plan.

April 2024 (Start of Phase 1)

- Kick off cohort with participating hospitals on **April 18 from 12-1 p.m. ET**.
- Hospital teams develop detailed plans to adopt the operational definition.

May 2024

- Monthly cohort calls begin (recurring on the third Thursday each month from 12-1 p.m. ET).
- Hospitals begin collecting and submitting ongoing monthly data.

June-July 2024 (Phase 1 Completed)

- Monthly cohort calls continue.
- Hospitals develop, refine, and implement processes to improve data collection and submission.
- Hospitals continue ongoing data collection and monthly submission.

Sept. 2024 (Phase 2 Starts)

- All cohort hospitals consistently submit process data for CLABSI and/or UE by race, ethnicity, and preferred language for care.
- Discuss potential interventions.

Oct. 2024-June 2025

- Cohort hospitals test potential interventions to ensure bundle reliability measurement equity and plan to scale up and spread new practices.
- Hospitals will also focus on a sustainment plan and discuss triggers that expose potential inequities in bundle observations.

Thank you for considering participation in the SPS Safety Disparities Accelerated Improvement Cohort. If you have additional questions not answered by this packet, please reach out to **ochsps@cchmc.org**.

July 2025 (Cohort Calls End)

- SPS team completes analysis of cohort learning.
- Cohort hospitals continue data submission to SPS.

Oct.- Nov. 2025

- Change package introduced to the network.

4. Operational Definition

The SPS operational definition: Patient Definition by Race, Ethnicity, and Preferred Language for Care has been created primarily for the purpose of including hospitals with a variety of existing data collection methodologies in the Safety Disparities Accelerated Improvement Cohort so that patient race, ethnicity, and preferred language for care data may be combined. This definition is also currently in use network-wide and outlines the process and definitions for how to map local race and ethnicity categories to the SPS categories for the purposes of network learning. Hospitals who choose to participate in the Safety Disparities Accelerated Improvement Cohort will complete a similar mapping process for bundle reliability numerators and denominators. Preferred language for care data will also be collected from network hospitals (stratifying English/Language other than English/Unknown only). Please review the complete operational definition **HERE** for further detail, and review key information in Appendix B.

5. Key Driver Diagram (KDD)

The initial cohort SMART aim is to increase the percentage of Safety Disparities Accelerated Improvement Cohort hospitals collecting and submitting bundle reliability data to SPS for CLABSI and/or UE by race, ethnicity, and preferred language for care from 0% to 80% by Sept. 30, 2024.

Key drivers were identified by subject matter experts to assist hospitals in understanding “what” needs to be in placed in a network hospital to be successful. Some interventions on the KDD – the “how” – are planned for current testing and some are noted for future testing. For more information, please review the current KDD **HERE** or see Appendix C.

6. Data Collection Methodologies

Phase 1 of the cohort will focus on methods for collection of bundle observation data stratified by race, ethnicity, and preferred language for care. Data collection will begin at the start of the cohort and hospitals may be asked to provide baseline data if able, based on their response to a cohort kickoff survey. This data will assist in understanding the primary measures used for cohort learning. For additional information on data collection and measures, see Appendix D.

Primary Cohort Measures:

Measures for CLABSI and UE	Hospitals without stratified outcomes data will have hospital level charts for these measures	Hospitals with stratified outcomes data will have hospital level charts for these measures
1. Bundle Reliability by Race, Ethnicity, and Preferred Language	★	★
2. Bundle Observation % by Race, Ethnicity, and Preferred Language	★	
3. Expected Bundle Observation % by Race, Ethnicity, and Preferred Language Based on the Distribution of Central-line Days (CLABSI) and Ventilator Days (UE)		★
4. Disproportionality Index		★

Thank you for considering participation in the SPS Safety Disparities Accelerated Improvement Cohort. If you have additional questions not answered by this packet, please reach out to **ochsps@cchmc.org**.

Cohort Kickoff Survey:

All hospitals who commit to joining the Safety Disparities Accelerated Improvement Cohort will be expected to submit a current state analysis to help SPS understand hospital processes for bundle reliability observation and ability to match REaL data to bundle observations.

Based on this information, SPS will determine the baseline data needs for the cohort. The earliest ***potential*** baseline data we may collect would begin with Sept. 2023 data onward. This cannot fully be determined until all participating hospitals submit their survey. Cohort hospitals will be asked to complete the kickoff survey following submission of their participation commitment with a deadline to submit the survey before the first monthly cohort call.

Data Submission:

All ongoing data will be tabulated and submitted monthly according to the same pattern as other SPS data and will be submitted two months after occurrence and due on the 10th of each month (e.g., Jan. data will be submitted to SPS by March 10).

For each of the measures pictured above, hospitals will select to submit data for either CLABSI or UE or may submit data for both HACs. This would be in addition to the outcomes data and bundle reliability data already submitted. Participating hospitals will indicate their selection when submitting their participation commitment and notify SPS if their selection changes once cohort work begins.

Cohort hospitals will submit data for these measures via the existing CLABSI Race and Ethnicity and/or the UE Race and Ethnicity webforms on the SPS data site, which will allow SPS to compute the above-listed measures.

Hospital Data Outputs:

For each of the 11 race and ethnicity categories and for each of the 3 preferred language for care categories outlined in the SPS operational definition: Patient Definition by Race, Ethnicity, and Preferred Language for Care, hospitals will submit:

1. # bundle observations completed successfully
    a. Fields will be added to the existing race and ethnicity webforms.
2. # bundle observations
    a. Fields will be added to the existing race and ethnicity webforms.
3. # events (outcomes) (optional, but strongly suggested)
    a. These fields already exist in the existing race and ethnicity webforms.
    b. Fields will be added to the existing race and ethnicity webforms for preferred language for care.
4. # central-line days and/or # ventilator days (optional, but strongly suggested)
    a. These fields already exist in the existing race and ethnicity webforms.
    b. Fields will be added to the existing race and ethnicity webforms for preferred language for care.

7. Participation Commitment

Click here to submit your organization's participation commitment, also pictured in Appendix A for reference.

8. Special Thanks

Each of the network members below have spent countless hours working as an effective team to align on this improvement plan, and we at SPS are so grateful for such generous participation. These

individuals demonstrate our mission and values of working together to eliminate serious harm across all children's hospitals. Our patients and families are so fortunate. Thank you!

Safety Disparities Improvement Co-leaders	
Cindy Darnell-Bowens	Children's Health, Children's Medical Center
Meghan Fanta	Cincinnati Children's
Liz Haines	Hassenfeld Children's Hospital at NYU Langone
Lakshmi Srinivasan	Children's Hospital of Philadelphia

Safety Disparities Improvement Subject Matter Experts	
Jeff Doyle	Yale New Haven Children's Hospital
Lauren Edwards	Yale New Haven Children's Hospital
Dionne Graham	Boston Children's Hospital
Kristi Klee	Seattle Children's
Anita Pryor	Cincinnati Children's
Lwam Rafel	Hassenfeld Children's Hospital at NYU Langone
Sangeeta Schroeder	Ann & Robert H. Lurie Children's Hospital of Chicago
Carolina Typaldos	CS Mott Children's Hospital
Danielle Zerr	Seattle Children's

9. Appendix

A. Participation Commitment

Safety Disparities Accelerated Improvement Cohort: Using REaL Data to Further Understand your Bundle Observations

Participation Commitment

After reading through the provided invitation packet and discussing with your team, hospitals who choose to join the Safety Disparities Accelerated Improvement Cohort should inform SPS by completing this form by **Friday, March 29**.

Submission of this participation commitment confirms the following:

- Your organization has identified a senior leader sponsor who is informed of participation expectations and supports the decision to join. Please enter their name at the bottom of this form where requested.
- Your organization currently has well-established will, infrastructure, and processes for hospital-level safety disparities improvement efforts.
- Your HAC team supporting CLABSI and/or UE work has been involved in relevant discussions, is informed of participation expectations, and supports the decision to join.
- Your team will utilize the outlined categories of race, ethnicity, and preferred language for care in the SPS operational definition to consistently submit data on a monthly basis.

Upon submission of this form, expect to receive additional information regarding a request to complete the cohort kickoff survey and registration information for the first cohort webinar.

Date of Submission *

Email of Submitter *

Organization *

Select

For which of the following HACs will your organization submit bundle reliability data (numerator and denominator) stratified by patient race, ethnicity, and preferred language for care? *

- ○ CLABSI only
- ○ UE-ICU only
- ○ Both

Use the following fields to enter the names and email addresses of all individuals on your team who should receive monthly cohort appointments and any relevant updates.

Work with your hospital's SPS Project Manager to determine if these individuals need access to SPS SharePoint, and request access via the SPS directory.

Executive Sponsor *
First and Last

Team Member 1 *
First and Last

Team Member 2
First and Last

Team Member 3
First and Last

Team Member 4
First and Last

Team Member 5
First and Last

Thank you for considering participation in the SPS Safety Disparities Accelerated Improvement Cohort. If you have additional questions not answered by this packet, please reach out to ochsps@cchmc.org.

B. Operational Definition – Patient Definition by Race, Ethnicity, and Preferred Language for Care

The following sections of the operation definition have been omitted from this invitation packet, but can be reviewed in their entirety here:

- **Description and Rationale**
- **Inclusion and Exclusion Criteria - Same as "Inpatient Definition" operational definition**
- **Data Source(s)**
- **Sampling and Data Collection Plan**
- **Calculation**
- **Data Quality and Audit Procedures**
- **Resources and References**
- **Additional Appendices:** *How and Why SPS Developed a Network-wide Operational Patient Definition by Race, Ethnicity, and Preferred Language for Care; Frequently Asked Questions*

Instructions for Use

All network hospitals should use this operational definition for detecting and measuring harm stratified by race and ethnicity as well as mapping data to the broad SPS categories for network learning. The improvement cohort launching in early 2024 will focus on detection and measurement of potential language disparities along with process measures (bundle reliability). Non-Cohort hospitals are NOT required to measure and report preferred language for care data or process measures.

Population Definitions

Race and Ethnicity

Categories and definitions of race and ethnicity are modeled after the United States Office of Management and Budget (OMB) combined format, with minor modifications[i]:

- **American Indian or Alaska Native (Canada: First Nations, Inuit, Métis[1])**
  Definition: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- **Asian**
  Definition: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- **Black or African American[2]**
  Definition: A person having origins in any of the black racial groups of Africa. Black includes persons from African or Caribbean descent[3].
- **Hispanic or Latino/Latina/Latinx[4]**
  Definition: A person of Cuban[5], Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin", can be used in addition to "Hispanic or Latino".
- **Native Hawaiian or Other Pacific Islander**
  Definition: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

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[1] Added to be inclusive of Canadian hospitals
[2] Removed language: Terms such as "Haitian" can be used in addition to "Black or African American."; "Negro" – removed from list as it is offensive and archaic
[3] Added clarification to "Black" and a description to be inclusive of Canadian hospitals
[4] Added "Latinx" to be more inclusive of the growing acceptance of the term in current literature
[5] The second listing of "Cuban" was removed due to being written twice

- **White**
  Definition: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Additional categories:

- **Patient's Race and Ethnicity not Listed Here**
  Definition: None of the above categories represents the respondent's race and/or ethnicity.

- **A respondent identifying as two or more of the above categories (may include "Patient's Race and Ethnicity not Listed Here") should be categorized using one of the following 3 options:**
  - **Multiracial, Hispanic:** At least one of the categories selected is Hispanic or Latino or Latinx from the race and ethnicity categories.
  - **Multiracial, Non-Hispanic:** Does not identify as Hispanic or Latino or Latinx.
  - **Multiracial, Unknown Ethnicity:** It's unclear/unknown whether the respondent identifies as Hispanic or Latino or Latinx.

- **Unknown**
  Definition: The race and/or ethnicity is unknown to the respondent, the respondent declined to answer, the respondent is not available, or the data field is "empty."

Additional notes:

Category definitions are not meant to be displayed to patients and/or parents or guardians during collection; they have been defined only for data alignment.

Hospitals should consider collecting additional race and ethnicity categories that represent their specific population. These additional categories should be aggregated, mapped, and reported to the identified eleven categories above.

Preferred Language for Care

Categories for preferred language for care have been created primarily for the purpose of including hospitals with a variety of existing data collection methodologies as a tool for combining data. As SPS begins learning about preferred language for care, we acknowledge that these categories are narrow as a starting point for network learning.

- **English**
  Definition: The preferred language for care is English.
- **Language other than English**
  Definition: The preferred language for care (either patient or caregiver) is any language other than English. This includes American Sign Language.

Additional categories:

- **Unknown**
  Definition: The preferred language for care is unknown to the respondent, the respondent declined to answer, the respondent is not available, or the data field is "empty/blank.

Additional Notes on Population Definitions:

Category definitions are not meant to be displayed to patients and/or parents or guardians during collection; they have been defined only for data alignment.

Hospitals should consider collecting preferred language for care categories that represent their specific population. These additional categories should be aggregated, mapped, and reported to the identified three categories above.

Operational Definition Appendix F: Preferred Language for Care Data Collection Scenarios Guidance

Hospitals collect preferred language for care data in varying ways. Hospitals may ask for respondents to indicate the preferred written or spoken language for the caregiver, patient, or both. For the purposes of participation in SPS work, the focus will be on preferred spoken language for patients or caregivers. The scenario below provides specific directions for how your team should map your local

preferred language for care categories into the 3 categories that SPS has defined in the race, ethnicity, and language operational definition.

SPS Categories: Outlines the 3 categories in use by SPS hospitals for monthly submission of preferred language for care data. These categories as defined in the race, ethnicity, and language operational definition are not endorsed by SPS for use in collecting data from patients and families, but rather have been selected for the express purpose of including hospitals with a variety of existing data collection methodologies so that disparities among a group of hospitals could be rapidly identified.

SPS Categories for Preferred Language for Care
English
Language other than English
Unknown

Select the scenario that most closely reflects your hospital's current method for collecting preferred language for care data and reference the instructions in the table below for mapping your local preferred language for care categories into the 3 categories that SPS has defined in the race, ethnicity, and preferred language for care operational definition.

Preferred Language for Care (Patient and/or Caregiver)	Mapped to SPS Categories
English (both patient and caregiver)	English
Language other than English (either patient or caregiver)	Language other than English
Unknown, blank/not collected	Unknown

Operational Definition Appendices B-E: Race and Ethnicity Data Collection Scenarios Guidance

Scenario #1: One-question format, a single question is asked to obtain race/ethnicity data, more than one response is allowed

Hospital Categories
American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
Asian
Black or African American
Hispanic or Latino/Latina/Latinx
Native Hawaiian or Other Pacific Islander
White
Other
Multiracial or multiple races
Unknown/Empty/Declined

Respondent's Answers			Mapped to SPS Categories
Race/Ethnicity			**Race/Ethnicity**
One category selected		American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
		Asian	Asian
		Black or African American	Black or African American
		Hispanic or Latino/Latina/Latinx	Hispanic or Latino/Latina/Latinx
		Native Hawaiian or Other Pacific Islander	Native Hawaiian or Other Pacific Islander
		White	White
		Other	Patient's Race and Ethnicity not Listed Here
		Multiracial or multiple races	Multiracial, Non-Hispanic
Hispanic or Latino/Latina/Latinx	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	Multiracial, Hispanic
		Asian	
		Black or African American	
		Native Hawaiian or Other Pacific Islander	
		White	
		Other	
		Multiracial or multiple races	

Two or more categories selected, none of which are Hispanic or Latino/Latina/Latinx	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	Multiracial, Non-Hispanic
	Asian	
	Black or African American	
	Native Hawaiian or Other Pacific Islander	
	White	
	Other	
	Multiracial or multiple races	
Unknown/Empty/Declined		Unknown

Scenario #2: One-question format, a single question is asked to obtain race/ethnicity data, only one response is allowed

Hospital Categories
American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
Asian
Black or African American
Hispanic or Latino/Latina/Latinx
Native Hawaiian or Other Pacific Islander
White
Other
Multiracial
Unknown/Empty/Declined

Respondent's Answers	Mapped to SPS Categories
Race/Ethnicity	**Race/Ethnicity**
American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
Asian	Asian
Black or African American	Black or African American
Hispanic or Latino/Latina/Latinx	Hispanic or Latino/Latina/Latinx
Native Hawaiian or Other Pacific Islander	Native Hawaiian or Other Pacific Islander
White	White
Other	Patient's Race and Ethnicity not Listed Here
Multiracial	Multiracial, Unknown Ethnicity
Unknown/Empty/Declined	Unknown
Not Used	Multiracial, Hispanic
	Multiracial, Non-Hispanic

Scenario #3: Two-question format, one question is asked to obtain race data and a separate question is asked to obtain ethnicity data, Hispanic is an option in race category

Hospital Race Categories
American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
Asian
Black or African American
Hispanic or Latino/Latina/Latinx
Native Hawaiian or Other Pacific Islander
White
Other
Multiracial or multiple races
Unknown/Empty/Declined

Hospital Ethnicity Categories
Hispanic or Latino/Latina/Latinx
Non-Hispanic
Unknown/Empty/Declined

Respondent's Answers				Mapped to SPS Categories
Ethnicity		**Race**		**Race/Ethnicity**
Non-Hispanic	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)		American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
		Asian		Asian
		Black or African American		Black or African American
		Hispanic or Latino/Latina/Latinx		Hispanic or Latino/Latina/Latinx
		Native Hawaiian or Other Pacific Islander		Native Hawaiian or Other Pacific Islander
		White		White
		Other		Patient's Race and Ethnicity not Listed Here
		Multiracial OR two or more of the above categories, none of which are Hispanic or Latino/Latina/Latinx		Multiracial, Non-Hispanic
		Unknown/Empty/Declined		Unknown
Hispanic or Latino/Latina/Latinx	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)		Multiracial, Hispanic
		Asian		
		Black or African American		
		Hispanic or Latino/Latina/Latinx		Hispanic or Latino/Latina/Latinx
		Native Hawaiian or Other Pacific Islander		Multiracial, Hispanic
		White		
		Other		
		Multiracial OR two or more of the above categories selected		
		Unknown/Empty/Declined		Hispanic or Latino/Latina/Latinx
Unknown/Empty/Declined	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)		American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
		Asian		Asian
		Black or African American		Black or African American
		Hispanic or Latino/Latina/Latinx		Hispanic or Latino/Latina/Latinx
		Native Hawaiian or Other Pacific Islander		Native Hawaiian or Other Pacific Islander
		White		White
		Other		Patient's Race and Ethnicity not Listed Here
		Multiracial or multiple races		Multiracial, Unknown Ethnicity
Unknown/Empty/Declined				Unknown

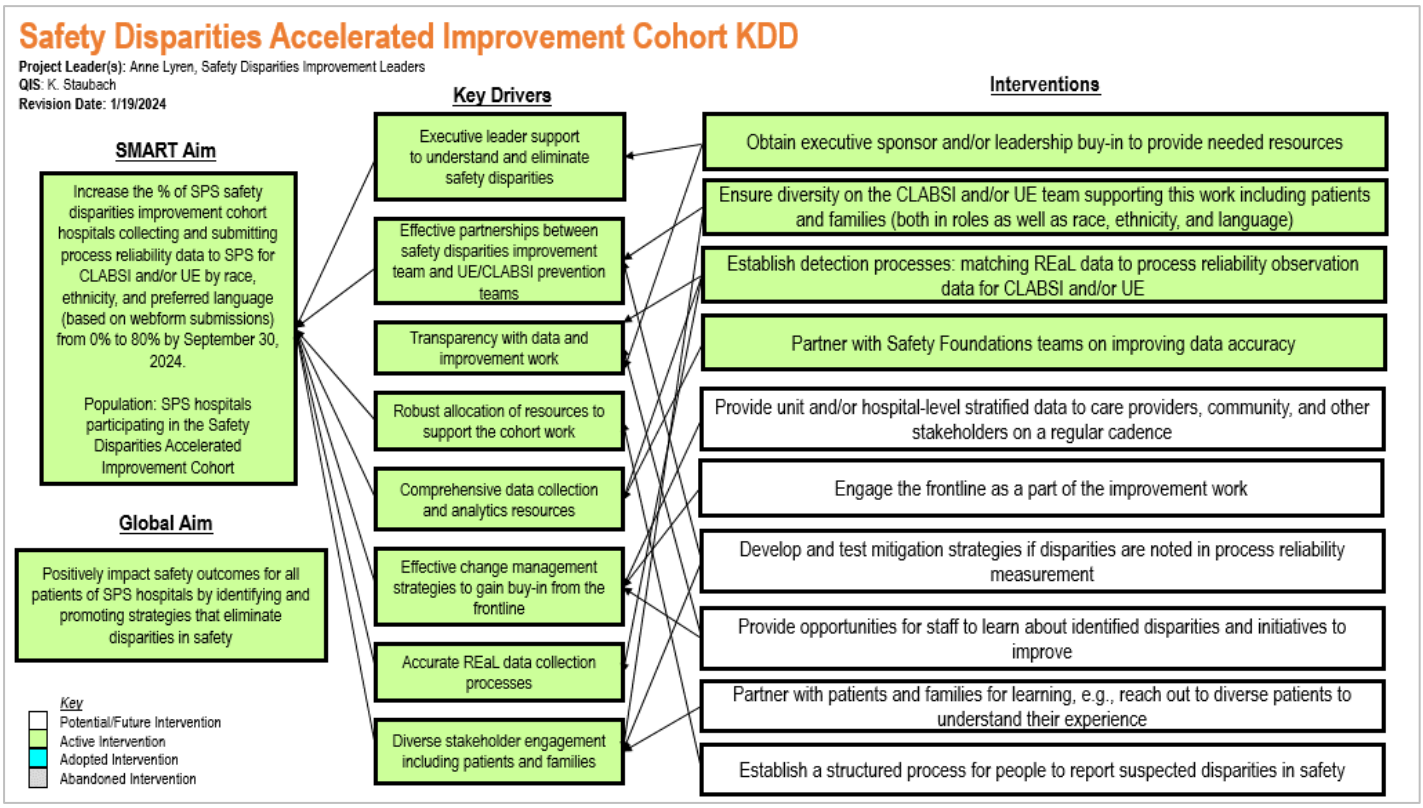
Scenario #4: Two-question format, one question is asked to obtain race data and a separate question is asked to obtain ethnicity data, Hispanic is not an option in race category

Hospital Race Categories
American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
Asian
Black or African American
Native Hawaiian or Other Pacific Islander
White
Other
Multiracial or multiple races
Unknown/Empty/Declined

Hospital Ethnicity Categories
Hispanic or Latino/Latina/Latinx
Non-Hispanic
Unknown/Empty/Declined

Respondent's Answers			Mapped to SPS Categories
Ethnicity		**Race**	**Race/Ethnicity**
Non-Hispanic	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
		Asian	Asian
		Black or African American	Black or African American
		Native Hawaiian or Other Pacific Islander	Native Hawaiian or Other Pacific Islander
		White	White
		Other	Patient's Race and Ethnicity not Listed Here
		Multiracial OR two or more of the above categories selected	Multiracial, Non-Hispanic
		Unknown/Empty/Declined	Unknown
Hispanic or Latino/Latina/Latinx	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	Multiracial, Hispanic
		Asian	
		Black or African American	
		Native Hawaiian or Other Pacific Islander	
		White	
		Other	
		Multiracial OR two or more of the above categories selected	
		Unknown/Empty/Declined	Hispanic or Latino/Latina/Latinx
Unknown/Empty/Declined	+	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)	American Indian or Alaska Native (Canada: First Nations, Inuit, Métis)
		Asian	Asian
		Black or African American	Black or African American
		Native Hawaiian or Other Pacific Islander	Native Hawaiian or Other Pacific Islander
		White	White
		Other	Patient's Race and Ethnicity not Listed Here
		Multiracial OR two or more of the above categories selected	Multiracial, Unknown Ethnicity
Unknown/Empty/Declined			Unknown

C. Key Driver Diagram



Thank you for considering participation in the SPS Safety Disparities Accelerated Improvement Cohort. If you have additional questions not answered by this packet, please reach out to ochsps@cchmc.org.

D. Data Measures

Required Measures for ALL Cohort Hospitals: All participating hospitals will submit both the numerator and denominator for CLABSI and/or UE				
1	**CLABSI and/or UE Bundle Reliability by Race, Ethnicity, and Preferred Language for Care** (*all or none, not broken down by bundle element*)	Numerators	*For each of the 11 SPS race/ethnicity categories:* Number of bundle observations that were completed successfully	*For each of the preferred language for care categories listed in the operational definition:* Number of bundle observations that were completed successfully
		Denominators	*For each of the 11 SPS race/ethnicity categories:* Number of bundle observations	*For each of the preferred language for care categories listed in the operational definition:* Number of bundle observations
2	**% of CLABSI and/or UE-ICU Bundle Observations by Race, Ethnicity, and Preferred Language for Care**	Numerators	*For each of the 11 SPS race/ethnicity categories:* Number of bundle observations	*For each of the 3 preferred language for care categories listed in the operational definition:* Number of bundle observations
		Denominators	Total number of bundle observations for all categories combined	Total number of bundle observations for all categories combined
Additional Measures for Hospitals Submitting Outcomes Data to SPS by Race/Ethnicity: Hospitals who submit CLABSI and/or UE outcomes data stratified by race and ethnicity and/or preferred language for care (both number of events and central-line or vent days), will be able to measure the following:				
3	**% of Bundle Observations *Expected* by Race, Ethnicity, and Preferred Language for Care** (equal to the % of central-line days and ventilator days by Race, Ethnicity, and Preferred Language for Care) *(Using the outcomes data submitted via the SPS race and ethnicity webform; hospitals will not be expected to submit data twice)*	Numerators	*For each of the 11 SPS race/ethnicity categories:* Number of central-line days (CLABSI) Number of ventilator days (UE)	*For each of the preferred language for care categories listed in the operational definition:* Number of central-line days (CLABSI) Number of ventilator days (UE)
		Denominators	Total number of central-line days or ventilator days for all categories combined	Total number of central-line days or ventilator days for all categories combined
4	**Ratio of the % of Bundle Observations to the Expected % of Bundle Observations by Race, Ethnicity, and Preferred Language for Care (also called the Disproportionality Index)**	Numerators	Measure #2 above for CLABSI and/or UE	Measure #2 above for CLABSI and/or UE
		Denominators	Measure #3 above for CLABSI and/or UE	Measure #3 above for CLABSI and/or UE
5	**CLABSI and/or UE-ICU outcome rates by Race, Ethnicity, and Preferred Language for Care** *(Using the outcomes data submitted via the SPS race and ethnicity webform; hospitals will not be expected to submit data twice)* Note: CLABSI outcome measures include MBI and non-MBI infections	Numerators	*For each of the 11 SPS race/ethnicity categories:* Number of CLABSI or UE-ICU events	*For each of 3 preferred language for care categories "English", "Language other than English", "Unknown":* Number of CLABSI or UE-ICU events
		Denominators	*For each of the 11 SPS race/ethnicity categories:* Number of central-line days (CLABSI) or ventilator days (UE)	*For each of 3 preferred language for care categories "English", "Language other than English", "Unknown":* Number of central-line days (CLABSI) or ventilator days (UE)

[i] Office of Management and (OMB) race/ethnicity categories and definitions, combined format: https://obamawhitehouse.archives.gov/omb/fedreg_1997standards (Accessed 10/13/2020)

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