



CSHS Racial Equity Training Sessions 1-3: Resources & Job Aids



School of Public Health
Chobanian & Avedisian School of Medicine
Wheelock College of Education & Human Development



Understanding the History of Racism and Legacy that Impacts School Nursing Today

CSHS Racial Equity Training Session 1 Resources

Video and Audio Resources

- Video: [“This Is How Black People Get Killed”: Dr. Susan Moore Dies of COVID After Decrying Racist Care](#)
- Video: [What Is Systemic Racism? - Wealth Gap](#)
- Podcast: [The 1619 Project - The New York Times](#)
- NPR Audio & Transcript: [An American Secret: The Untold Story Of Native American Enslavement](#) by Rhaina Cohen, Maggie Penman, Tara Boyle, & Shankar Vedantam
- Podcast: [Speaking of Race](#)
- Podcast: [Code Switch](#)

Readings

Articles

- [Effect of the covid-19 pandemic in 2020 on life expectancy across populations in the USA and other high income countries](#) by Steven H. Woolf, Ryan K. Masters, & Laudan Y. Aron
- [Public School Nursing Practice in the United States](#) by Mayumi A. Willgerodt, Douglas M. Brock, & Erin D. Maughan
- [Why are states banning critical race theory?](#) by Rashawn Ray & Alexandra Gibbons
- [A Lesson on Critical Race Theory](#) by Janel George
- [Anger Over Stereotypes in Textbook](#) by Scott Jaschik
- [Origin of the Idea of Race](#) by Audrey Smedley
- [Facing America's History of Racism Requires Facing the Origins of 'Race' as a Concept](#) by Andrew Curran
- [Epigenetic understanding of gene-environment interactions in psychiatric disorders: a new concept of clinical genetics](#) by Takeo Kubota, Kunio Miyake & Takae Hirasawa
- [The World Federation of ADHD International Consensus Statement: 208 Evidence-based Conclusions about the Disorder](#)
- [How Does Racism in Nursing Show Up in the Education Space?](#)

Essays and Blogs

- Essay Series: [Beyond Florence | Nursing Clio](#) (2020-2021)
 - [Constructing the Modern American Midwife: White Supremacy and White Feminism Collide](#) by P. Mimi Niles & Michelle Drew
 - [Moving Beyond Florence: Why We Need to Decolonize Nursing History](#) by Kylie Smith
- Blog Post: [The Oxford Etymologist Looks at Race, Class and Sex \(but not Gender\), or, Beating a Willing Horse](#) by Anatoly Liberman

Webpages and News

- Encyclopedia Britannica: [The history of the idea of race](#)
- Webpage: [Race | NIH](#)
- News: [Gallup: Nurses are Most Trusted Profession for 20th Straight Year](#)

- *Webpage:* [Linnaeus and Race | The Linnean Society](#)
- *Webpage:* [Understanding RACE | American Anthropological Society](#)
- *News:* [A new take on the 19th-century skull collection of Samuel Morton](#)
- *Webpage:* [Childhood Asthma Resources](#)

Books

- [Four Hundred Souls: A Community History of African America, 1619-2019](#) by Ibram X. Kendi & Keisha N. Blain
- [The Mismeasure of Man](#) by Stephen Jay Gould
- [The Guarded Gate](#) by Daniel Okrent
- [The Story of the Irish Race](#) by Seumas MacManus
- [Superior: The Return of Race Science](#) by Angela Saini
- [Medical Apartheid](#) by Harriet A. Washington
- [Maladies of Empire](#) by Jim Downs
- [The Immortal Life of Henrietta Lacks](#) by Rebecca Skloot

Sources related to “The Bell Curve” (1994):

- *Book summary:* [The Bell Curve - Introduction](#) by Brian Beatty
- *Video:* [Charles Murray — Charlie Rose](#) (Charles Murray interview on Charlie Rose - 1994)
- *Video:* [Book TV: Charles Murray "Real Education"](#) (Charles Murray on CSPAN - 2009)
- *Letter:* [An open letter to the Virginia Tech community from President Tim Sands](#) (March 10, 2016)
- *Letter:* [An Open Letter to the Virginia Tech Community](#) by Charles Murray (March 17, 2016)

Additional Resources

- *Article:* [Racism in U.S. Nursing](#) by Evelyn L. Barbee
 - Barbee examines four attributes of the nursing profession that have allowed nurses to avoid openly dealing with racism: a) an emphasis on empathy, b) an individual orientation, c) a preference for homogeneity, and d) a need to avoid conflict. She also discusses race as a biological concept and the extensive marginalization of BIPOC nurses, particularly Black nurses, in nursing history.
- *Essay Series:* [Beyond Florence | Nursing Clio](#) (2020-2021)
 - [Black Before Florence: Black Nurses, Enslaved Labor, and the British Royal Navy, 1790-1820](#) by Erin Spinney
 - Spinney describes how enslaved Black women were commonly employed at naval hospitals during the late 18th and early 19th centuries. British medical officers used scientific racism (e.g., alleged immunity to certain illnesses) to justify the enslaved labor of Black nurses.
 - [African Americans, Slavery, and Nursing in the US South](#) by R.J. Knight
 - Knight discusses nursing in the context of slavery in the U.S. South and describes how enslaved women performed the bulk of daily nursing work on plantations.
 - [Susie Walking Bear Yellowtail and Histories of Native American Nursing](#) by Brianna Theobald
 - Theobald discusses the history of forced/coercive sterilizations performed on Native American women. In the 1970s, Native nurses brought a lot of attention to this practice through activism.
- *Tool Kit:* [A Tool Kit for Addressing Racism in Nursing and Healthcare](#)
- *Paper:* [The History of the Idea of Race... And Why It Matters](#) by Audrey Smedley
- *Wikipedia:* [Historical race concepts - Etymology](#)

Racism in Education: Physiological Consequences

CSHS Racial Equity Training Session 2 Resources

Readings

Position Statements

- [Statement on Racism in America | National Association of State School Nurse Consultants \(NASSNC\)](#)
- [Our Racial Reckoning Statement | American Nurses Association \(ANA\)](#)
 - **See also:** [A Black Nurse's Reaction to the ANA Apology](#) by Lucinda Canty

Articles, Reports, and News

- *Report:* [Structural Racism and Rigorous Models of Social Inequity: Proceedings of a Workshop | National Academies of Sciences, Engineering, and Medicine](#)
- *Article:* [250 preschool kids get suspended or expelled each day - 5 questions answered](#) by Kate Zinsser
- *Report:* [Girlhood Interrupted: The Erasure of Black Girls' Childhood](#) by Rebecca Epstein, Jamilia J. Blake, & Thalia González
- *News:* [10 Challenges Facing Public Education Today](#) by Brenda Álvarez, Tim Walker, Cindy Long, Amanda Litvinov, & NEA staff writers
- *Article:* [Shoddy conditions persist at schools serving poor and minority students, civil rights panel says](#) by the Associated Press
- *Journal Article:* [Allostatic load predicts racial disparities in intracerebral hemorrhage cognitive outcomes](#) by Jennifer Harris, Amelia Boehme, Luisa Chan, Harmon Moats, Rachelle Dugue, Chigozirim Izeogu, Marykay A. Pavol, Imama A. Naqvi, Olajide Williams, & Randolph S. Marshall
- *Journal Article:* ["Weathering" and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States](#) by Arline T. Geronimus, Margaret Hicken, Danya Keene, & John Bound
- *Article:* [Unequal Opportunity: Race and Education](#) by Linda Darling-Hammond
- *Reports:* Civil Rights Data Collection from the U.S. Department of Education Office for Civil Rights (March 2014)
 - [Data Snapshot: School Discipline \(PDF\)](#)
 - [Data Snapshot: Early Childhood Education \(PDF\)](#)
 - [Data Snapshot: College and Career Readiness \(PDF\)](#)
 - [Data Snapshot: Teacher Equity \(PDF\)](#)
- *Article:* [Police in schools: Keeping kids safe, or arresting them for no good reason?](#) by Emma Brown
- *Article:* [What It's Like to Be Black in the Criminal Justice System](#) by Andrew Kahn & Chris Kirk
- *Journal Article:* [A Nurse Educator's Perspective About Institutional Racism and White Supremacy in Nursing Education](#) by Amy Harding
- *Journal Article:* [Real-time racial discrimination, affective states, salivary cortisol and alpha-amylase in Black adults](#) by Soohyun Nam, Sangchoon Jeon, Soo-Jeong Lee, Garrett Ash, LaRon E. Nelson, & Douglas A. Granger
- *Editorial:* [Tackling systemic racism requires the system of science to change | Nature](#)
- *Journal Issue:* [Racism: Overcoming science's toxic legacy – A Nature special issue \(20 October 2022\)](#)

Webpages and Websites

- *Webpage:* [Framework for 21st Century Nursing Practice | NASN](#)

- Website: [Racial Justice Competency Model – For Public Health](#)
- Webpage: [The Preschool Exclusionary Discipline Study \(PEDS\)](#) by R.A. Fabes, M. Quick, A. Musgrave, S. Meek, & E. Catherine
- Webpage: [School-to-Prison Pipeline \(Infographic\)](#) by the American Civil Liberties Union (ACLU)

Books

- [Why Are All the Black Kids Sitting Together in the Cafeteria?: And Other Conversations About Race](#) by Beverly Daniel Tatum
- [The Impacts of Racism and Bias on Black People Pursuing Careers in Science, Engineering, and Medicine: Proceedings of a Workshop | National Academies of Sciences, Engineering, and Medicine](#)
- [Teaching White Supremacy](#) by Donald Yacovone

Videos

- [End Adultification Bias](#) by the Georgetown Law Center
- [Weathering – Arline T. Geronimus](#)
 - Additional videos are included within the shared slides.

Additional Resources

- Article: [BU School of Social Work Offers Free Online Course for Understanding Structural Racism](#) by Joel Brown
 - Free online course mentioned: [Understanding Structural & Institutional Racism](#)
- Article: [Recognizing and Responding to Microaggressions at Work](#) by Ella F. Washington
- Article: [The Feedback Fallacy](#) by Marcus Buckingham & Ashley Goodall
- Article: [What Is Contrition Without Reparation?](#) by Isabel Fattal
 - See also: [Monuments to the Unthinkable](#) by Clint Smith (Cover story re: above article)
- Article: [Why BMI is a flawed health standard, especially for people of color](#) by Carly Stern
- Article: [The Racist and Problematic History of the Body Mass Index](#) by Adele Jackson-Gibson
- Journal Article: [Levels of Racism: A Theoretic Framework and a Gardener's Tale](#) by Camara Phyllis Jones
- Journal Article: [Stress and the Mental Health of Populations of Color: Advancing Our Understanding of Race-related Stressors](#) by David R. Williams
- Journal Article: [The weathering hypothesis as an explanation for racial disparities in health: a systematic review](#) by Allana T. Forde, Danielle M. Crookes, Shakira F. Suglia, & Ryan T. Demmer
- Report: [The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity](#) from the National Academies of Sciences, Engineering, and Medicine (NASEM)
 - See: Chapter 9: *Nurses Leading Change* (pgs. 275-300) which is particularly relevant to the CSHS Racial Equity training series.
- News: [Scientists Start To Tease Out The Subtler Ways Racism Hurts Health](#) by Rae Ellen Bichell
- News: [In Pursuit of "A Better Education" for Black Deaf Students](#)
- News: [Leading an Antiracist Classroom: How to teach for transformation and liberation amid battles over critical race theory](#) by Steve Holt
- Webpage: [White Privilege: Unpacking the Invisible Knapsack](#) by Peggy McIntosh
- Book: [Nursing a Radical Imagination: Moving from Theory and History to Action and Alternate Futures](#) edited by Jess Dillard-Wright, Jane Hopkins-Walsh, & Brandon Brown

Strategies for Combatting Racism in Education

Job Aid



What are some contributing factors to the significant racial disparities in educational outcomes?

1

- Poor health due to chronic stress and trauma (higher allostatic loads lead to higher cortisol levels)
- High student stress levels
- Inequitable access to and uneven distribution of resources within and outside the classroom (larger class sizes, fewer higher-level classes offered, fewer opportunities, oppressive laws, pool of less skilled teachers, lower quality curriculum, underfunding/budget cuts, exclusionary discipline)
- Social determinants of health – access to nutritious foods and physical activity, air and water quality, socioeconomic environment, safe and stable housing, access to transportation and healthcare
- School/educator implicit bias/stereotypes (smog of racism, adultification of girls of color)

What is the Racial Justice Competency Model for public health professionals?

2

In October 2020, the Public Health Training Center Network (PHTCN) formed a workgroup to explore the development of a racial justice competency model. An expert review panel was formed to establish clear, specific, consensus-based recommendations and produced a Racial Justice Competency Model (RJCM) for public health professionals.

These competencies are periodically updated, but currently the RJCM contains 51 total statements centered around three domains: assessment (e.g., identifying assets and resources, creating/supporting opportunities, analyzing barriers to health policies and programs), policy development (e.g., addressing health inequities, working with community to develop plans and policy that improve conditions), and assurance (e.g., sharing resources, identifying strategies to assess equity, accountability for addressing health equity on an ongoing basis).

To learn more, visit the [RJCM website](#).

What is a four-step analytical strategy for developing racial justice competencies?

3

1. Navigate the present – promote and maintain children's wellbeing
 - Foster social/emotional learning – students learn better in an emotionally safe and cognitively stimulating environment with opportunities for social relationships
 - Be mindful of impacts of the pandemic – decline in student enrollment, rise in absenteeism and dropout rate, increase in mental health issues, high teacher burnout and job dissatisfaction
2. Look back – draw upon lessons from the past
 - Build intentional and diverse networks
 - Build strong relationships with children, families, community leaders, and those within and outside your discipline
 - Provide children examples/stories that counter dominant world views and expectations
3. Look forward – empower ourselves and our children
 - Gather evidence-based information and disseminate in all languages
 - Create a safe space in your clinic with materials that have characters that look like all of your students
 - Talk with staff/colleagues about race and review/challenge norms for racial bias
 - Avoid making assumptions/judgements about families, and be accessible/available to families
 - Make an active commitment to anti-racism, social justice, and inclusion
4. Make informed decisions – apply a systematic approach
 - Thoroughly understand root causes and social determinants of health, and remedy ongoing damage
 - Find and work to eliminate anything in your school that threatens children's wellbeing
 - Collaborate with others to develop protective measures

Research and Data Literacy

CSHS Racial Equity Training Session 3 Resources

Readings

Books

- [Weapons of Math Destruction](#) by Cathy O’Neil

Articles, Reports, and News

- *Journal Article:* [Medical Algorithms Are Failing Communities Of Color](#) by Donna M. Christensen, Jim Manley, & Jason Resendez
- *(Recommended) Journal Article:* [Childhood obesity within the lens of racism](#) by Nancy T. Browne, Erin A. Hodges, Leigh Small, Julia A. Snethen, Marilyn Frenn, Bonnie Gance-Cleveland, & Cindy Smith Greenberg
- *(Recommended) Article:* [Health Inequalities in Boston by T-Stops: A Pictorial Essay](#) by Sandro Galea
- *Article:* [Machine Bias](#) by Julia Angwin, Jeff Larson, Surya Mattu, & Lauren Kirchner
- *News:* [A troubling tale of a Black man trying to refinance his mortgage](#) by Diana Olick
- *Article:* [Facebook’s Ad Algorithm Discriminates Even When It’s Not Told To, Study Finds](#) by Matt Stieb
- *News:* [Retired Black players say NFL brain-injury payouts show bias](#) by Maryclaire Dale & Michelle R. Smith
- *Journal Article:* [Black–White Disparities in Preterm Birth: Geographic, Social, and Health Determinants](#) by Marie E. Thoma, Laura B. Drew, Ashley H. Hirai, Theresa Y. Kim, Andrew Fenelon, & Edmond D. Shenassa
- *Journal Article:* [Adolphe Quetelet \(1796–1874\)—the average man and indices of obesity](#) by Garabed Eknoyan
- *Journal Article:* [The association between allostatic load and anthropometric measurements among a multiethnic cohort of children](#) by Yenni E. Cedillo, Anarina L. Murillo, & José R. Fernández
- *Journal Article:* [Racial Differences in Detection of Fever Using Temporal vs Oral Temperature Measurements in Hospitalized Patients](#) by Sivasubramaniam V. Bhavani, Zanthia Wiley, Philip A. Verhoef, Craig M. Coopersmith, & Ighovwerha Ofotokun
- *Journal Article:* [Assessment of Racial and Ethnic Differences in Oxygen Supplementation Among Patients in the Intensive Care Unit](#) by Eric Raphael Gottlieb, Jennifer Ziegler, Katharine Morley, Barret Rush, & Leo Anthony Celi
- *Article:* [The 2020 census had big undercounts of Black people, Latinos and Native Americans](#) by Hansi Lo Wang
- *Article:* [Racial Bias Found in a Major Health Care Risk Algorithm](#) by Starre Vartan
- *Article:* [When it comes to darker skin, pulse oximeters fall short](#) by Craig Leomult

Webpages and Websites

- *Webpage:* [U.S. incarceration rates by race and ethnicity, 2010](#) by the Prison Policy Initiative
 - **See also:** [Inmate Race Statistics](#) from the Federal Bureau of Prisons (BOP)
 - **See also:** [QuickFacts: U.S. Population Estimates](#) from the United States Census Bureau
- *(Recommended) Poster:* [Nursing World’s Top 10 Ways to be an Antiracist](#)
- *Poster:* [BMI and Obesity Exam Room Poster - Obesity Medical Association](#)
- *Interactive Map:* [PLACES: Local Data for Better Health | CDC](#)
- *Interactive Map:* [The Opportunity Atlas](#)
- *Interactive Map:* [Child Opportunity Map | Diversity Data Kids](#)
- *Interactive Map:* [Food Access Research Atlas](#) from the USDA Economic Research Service

Videos

- [Does My Neighborhood Determine My Future?](#) by Vox
- [The problem with race-based medicine | Dorothy Roberts](#) from TEDMED
- [How considering race can sabotage health care | Stanford Medicine Magazine 2021](#)

Additional Resources

- *Article:* [“Race norming” and the long legacy of medical racism, explained - Vox](#) by Fabiola Cineas
- *Journal Article:* [Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms](#) by Darshali A. Vyas, Leo G. Eisenstein, & David S. Jones
- *Article:* [Why BMI is a flawed health standard, especially for people of color](#) by Carly Stern
- *Article:* [The Racist and Problematic History of the Body Mass Index](#) by Adele Jackson-Gibson
- *Journal Article:* [The Massachusetts BMI letter: A qualitative study of responses from parents of obese children](#) by Lindsay J. Moyer, Elena T. Carbone, Jean A. Anliker, & Sarah L. Goff

Research and Data Literacy

(CSHS Racial Equity Training Session 3)

Job Aid



What is data?

1

Data is a collection of discrete values that are recordable and convey information (numbers, categories, text). Data encode aspects of the world we can observe and wish to measure. Some things are easier to encode (i.e., we use degree measurements on a thermometer to encode temperature), while some things are more complex to encode and need multiple specific measurements to fully describe them (i.e., to fully encode a storm, you would need multiple measures, like geographic coordinates, direction, land speed, average temperature, precipitation type and amount, wind speed, etc.).

How is data useful?

2

- Data stores information about the past
- Data can point to possible causes of why things happened in the past
- Data can show a need and raise awareness about a particular issue
- Data enable us to make predictions about the future
- Data may enable us to avoid human biases and see the world as it is

What are some limitations of data?

3

- Data are not magic
- Data sets can be inaccurate, biased, and/or undesirable
- Data sets contain noise (information that is useless for the purposes of the question you wish to answer)
- Data can lead to inaccurate predictions or conclusions
- Data can cause toxic feedback loops
- The data you collect may only reflect certain aspects of what you are trying to capture (not a complete picture)

What are statistical bias and social bias?

4

Statistical bias is when a data set does not accurately represent the larger population you wish to measure. A statistically biased data set can lead to conclusions that are not representative of the general population. Examples of data sets with potential statistical bias include reports with limited survey responses or reports with self-reported illness.

Social bias is when certain arbitrary groups of people are systemically disadvantaged, the effects are reflected in the measurements we take, leading to inaccurate/undesirable conclusions. A socially biased data set accurately reflects existing inequities and unfairness of a society and exposes patterns that are undesirable. Data that may be socially biased could include: bullying, absenteeism, race/gender, transportation resources, caregiver surveys, and communication issues.

Why is the way data is collected important?

5

The way data is collected is very important. Data is generally never inaccurate (unless the measurement tool is broken), however, the conclusions, inferences, and predictions we draw from those data may be inaccurate or incorrect. If the question or process used to collect the data was flawed or contained too many variables to answer the initial question, it may be impossible to make conclusive findings from the data set.

What is an algorithm and how can it become biased?

6

An algorithm is a precise sequence of steps that transforms input data into an output.

Algorithms are useful in aiding decision-making by:

- Scaling decision-making (making decisions more quickly)
- Eliminating/automating decision-making
- Making better-informed decisions
- Eliminating the influence of human bias and fallibility
- Discovering new solutions to existing problems (i.e., in the AI world)

Properties that make algorithms objective include: they are discrete (subdivided into steps), they are explicit (each step clearly and precisely defined), and they are repeatable (does the same thing every time regardless of input).

Properties that make algorithms subjective include: the fact that they are written by humans, they have no knowledge of the world except what humans tell them, the results are interpreted and put into practice by humans, and they are susceptible to feedback loops.

Algorithmic bias describes systematic and repeatable errors in a computer system that create unfair outcomes. If there is bias in an algorithm, you'll get biased data out of it. Algorithmic bias is a symptom of social and institutional biases in our society.

How can bias in data lead to toxic feedback loops?

7

Using data from the past to inform decisions about the future can create a toxic feedback loop. If there is bias in the data we collect, and we form interventions around that biased data set, the bias continues. If we acknowledge that there are social biases in the world and are intentional about building equity and fairness into algorithms, we will collect data that is less biased, and the conclusions we draw will become more meaningful.

What is the difference between statistical race correction and statistical race awareness?

8

Statistical adjustment/correction is a statistical method to remove unwanted/unrelated effects from data. It removes some of the “noise” from the information being sought. It is a routine procedure in many analyses but doesn't work for all instances. Statistical race correction can cause harm by erasing the differences between people that are biological variables, changing the interpretation of our results, and making the data set less accurate.

Statistical race awareness can indicate areas where we must do better and where problems actually fall. Looking at variables beyond race to explain health disparities is an example of looking at race responsibly.

How can I look at data in a more responsible way?

9

As you explore data sets, be a detective. Look at the data you already collect in a new way. Make observations about the data – what stands out, what makes you want to learn more, and how you might use this data to advocate for your students. Assess if the data is representative of whom you're trying to help. Look beyond just the data and dive deeper into what other factors might have contributed to the results you see in that data set. That will give you the context you need to form interventions that are more holistic, sustainable, and meaningful.

What are some good health data maps?

10

Although health data maps also have limitations, they can be useful tools to start your data exploration.

Here are links to some helpful interactive data maps:

- [CDC, PLACES: Local Data for Better Health](#)
- [The Opportunity Atlas](#)
- [Diversity Data Kids ,Child Opportunity Map](#)
- [USDA Economic Research Service, Food Access Research Atlas](#)

PDSA Cycle Checklist

Job Aid



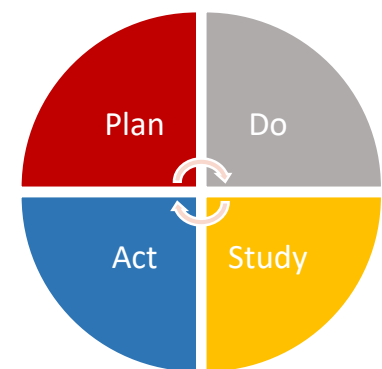
School Health Institute for Education
and Leadership Development

What is the PDSA cycle?

1

PDSA stands for:

- Plan – Identify an opportunity and plan for improvement
- Do – Test the theory for improvement
- Study – Use data to study results of the test
- Act – Standardize the improvement and establish future plans



PDSA is a cyclical process for improvement and testing changes that includes nine steps.

What are the steps under the Plan phase of the PDSA checklist?

2

The steps under the Plan phase of the PDSA checklist are:

1. Getting started –

- Identify area, problem, or opportunity for improvement
- Estimate and commit needed resources
- Obtain approval (if needed) to conduct QI

2. Assemble the team –

- Identify and assemble team members (including customers and/or stakeholders)
- Discuss problem or opportunity for improvement
- Identify team member roles and responsibilities
- Establish initial timeline for improvement activity and schedule regular team meetings
- Develop SMARTIE aim statement

3. Examine current approach –

- Examine the current approach or process flow
- Obtain existing baseline data, or create and execute data collection plan
- Obtain input from customers and/or stakeholders
- Analyze and display baseline data
- Determine root cause(s) or problem(s)
- Revise aim statement based on baseline data

4. Identify potential solutions –

- Identify all potential solutions to the problem based on the root cause(s)
- Review model or best practices to identify potential improvements
- Pick the best solution (the one most likely to accomplish aim statement)

5. Develop an improvement theory –

- Develop a theory for improvement (prediction using “if...then” approach)
- Develop a strategy to test the theory

What is the step under the Do phase of the PDSA checklist?

3

The step under the Do phase of the PDSA checklist is:

6. Test the theory for improvement –

- Carry out the test on a small scale
- Collect, chart, and display data to determine the effectiveness of the test
- Document problems, unexpected observations, and unintended side effects

What is the step under the Study phase of the PDSA checklist?

4

The step under the Study phase of the PDSA checklist is:

7. Use data to study the result

- Determine if test was successful
 - Compare results against baseline data and measures of success in aim statement
 - Did results match the theory/prediction?
 - Were there unintended side effects?
 - Was there an improvement?
 - Do you need to test the improvement under other conditions?
- Describe and report what you learned

What are the steps under the Act phase of the PDSA checklist?

5

The steps under the Act phase of the PDSA checklist are:

8. Standardize the improvement or develop a new theory

- If the improvement was successful on a small scale, test it on a wider scale
 - Continue testing until an acceptable level of improvement is achieved
 - Make plans to standardize the improvement
- If the change was not an improvement, develop a new theory and test it

9. Establish future plans

- Celebrate your success
- Communicate your accomplishments to internal and external customers
- Take steps to preserve gains and sustain accomplishments
- Make long-term plans for additional improvements
- Depending on the results of the “Do” and “Study” phases:
 - Adopt: standardize the improvements
 - Adapt: adjust the improvement process for improved results
 - Abandon: drop unsuccessful predictions and start again with a new prediction
- Conduct iterative PDSA cycles, when needed

Where can I get more information on the PDSA checklist?

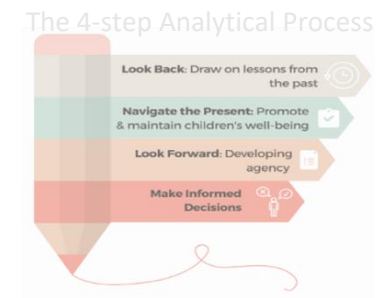
6

The Institute for Healthcare Improvement (IHI) provides excellent information on process improvement:

<http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>

Continuous Quality Improvement:

Applying the 4-analytical steps using the PDSA Cycle



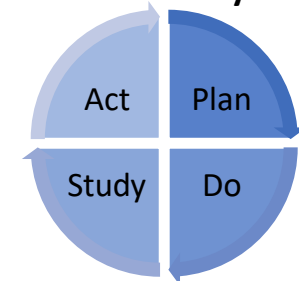
Use the table below to identify a potential CQI project(s) for the coming school year.

1. Look Back: What have you learned about the roots of systemic inequities in relation to access to quality education and healthcare for marginalized populations?	Example: Transportation access may be the root of a student's absenteeism.
2. Navigate the Present: What inequities have you identified that you want to address? How are these affecting the well-being of these students?	
3. Look Forward: What are the key problems identified you can address as a school nurse? What resources do you have or need to request to solve them?	
4. Make Informed Decisions: Once you have utilized the first three steps to inform your decision-making process, what will you do?	

Continuous Quality Improvement:

Applying the 4-analytical steps using the PDSA Cycle

The PDSA Cycle



Based on the 4-step analytical process, what quality improvement intervention are you considering?

Use this table to plan your intervention. Use the remainder of the table to document your process and outcomes during the school year

Plan the test:

- State the question you want to answer and make a prediction about what you think will happen. Make it SMARTIE. ([DESE's SMARTIE Goals Tool](#))
- Develop a plan to test the change. (Who? What? When? Where?)
- Identify what data you will need to collect.

SMARTIE: Specific, Measurable, Achievable, Relevant, Time-Bound, Inclusive, Equitable

Do:

- Run the test on a small scale
- Document problems and unexpected observations.
- Collect and begin to analyze the data.

Study

- Analyze the results and compare them to your predictions.
- Complete, as a team, if possible, your analysis of the data.
- Compare the data to your prediction.
- Summarize and reflect on what you learned.

Act

- Based on what you learned, plan your next step.
- Adapt (make modifications and run another test), adopt (test the change on a larger scale), or abandon (don't do another test on this change idea).
- Prepare a plan for the next PDSA.