## Systematizing DEI into Lean Practices

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## About Virginia Mason Franciscan Health

- Established in 1920, Virginia Mason began as an 80-bed hospital with six physician offices.
- Today Virginia Mason Franciscan Health includes 11 hospitals and nearly 300 sites of care, including primary and specialty care clinics, same-day surgery centers, Benaroya Research Institute, Bailey-Boushay House and Virginia Mason Institute.
- The organization employs more than 18,000 team members and staff, including nearly 5,000 employed physicians and affiliated providers.



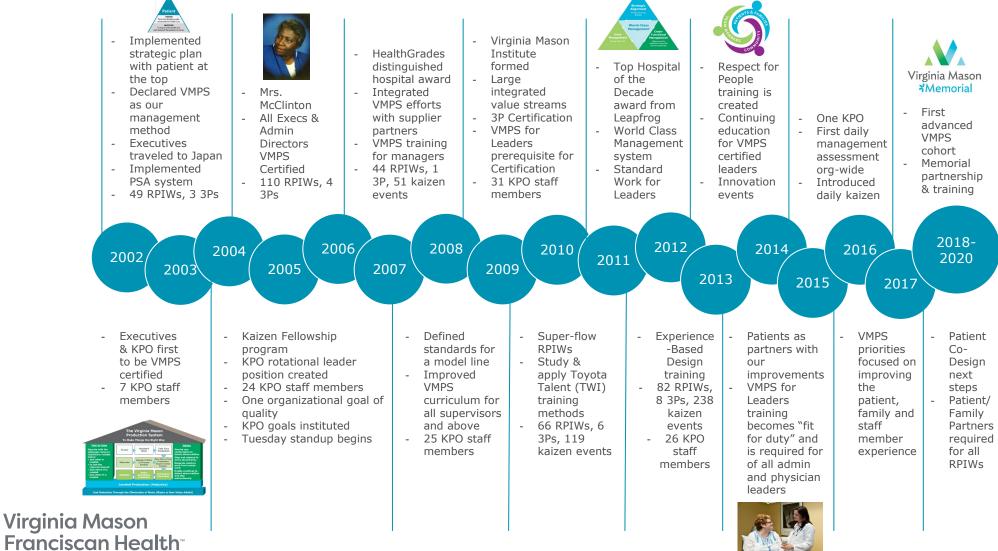


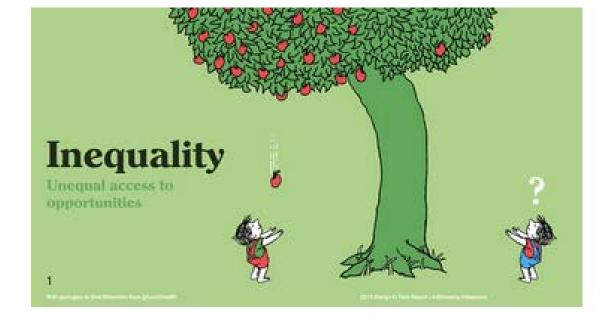
## About Virginia Mason Production System

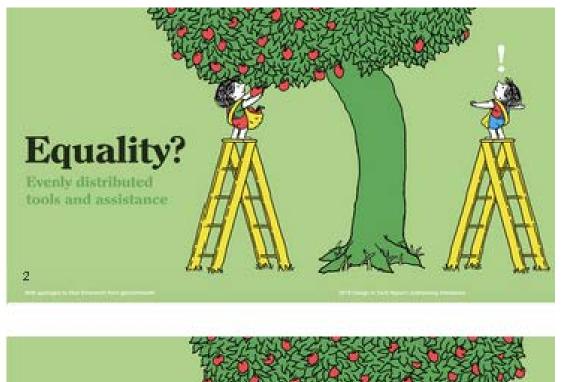
- Combined basic tenets of the Toyota Production System (TPS), and elements from the philosophies of kaizen and lean created the Virginia Mason Production System (VMPS).
- While some medical centers have initiated projects using TPS, Virginia Mason is the first to integrate the Toyota management philosophy throughout its entire system.
- The Virginia Mason Institute provides education and training in the VMPS management method to health care and other industry leaders.

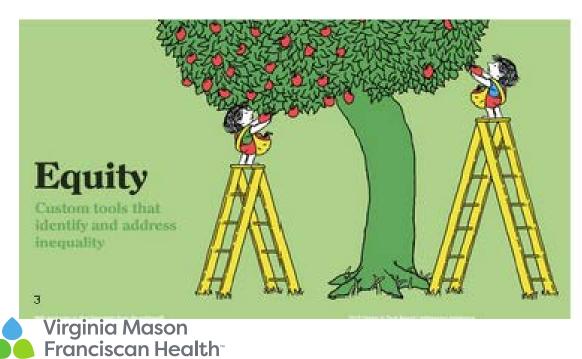


## Our VMPS Journey









https://familygivingtree.org/about-us/dei/fgt-talksdei/626-equality-vs-equity

Justice

both tools and

opportunities

Fixing the system to

offer equal access to

## Why is Equity Important?

## ECONOMIC BENEFITS OF CLOSING THE RACIAL EQUITY GAP



Turner, Ani. "The Business Case for Racial Equity: A Strategy for Growth," W.K. Kellogg Foundation and Altarum, July 24, 2018.

For every \$1 spent on:	We save:
Water fluoridation	\$38 in dental treatment costs <sup>25</sup>
Preconception care programs for women with diabetes	<b>\$5.19</b> by preventing costly complications in both mothers and babies <sup>26</sup>
School-based HIV/STD and pregnancy prevention	\$2.65 in medical and social costs <sup>27</sup>
programs	

"A system, such as ours today, which continues to house racial and ethnic gaps in health status

cannot be called in its essence a high-quality system." - Dr. Don Berwick



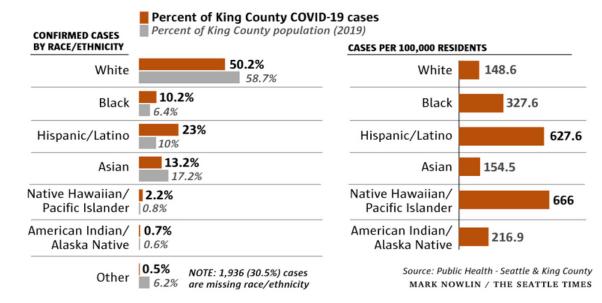
## Impact of COVID-19

- Minority populations are greater risk of getting sick and dying from COVID-19
- Record unemployment rates, especially amongst Black/African American and Hispanic/Latinx
- 33% increase in mental health concerns
- Increased dependency on technology/virtual care



#### **COVID-19 not affecting all races equally in King County**

In King County, some communities of color have been infected with the novel coronavirus at higher rates than white people, according to a new analysis of public health data.



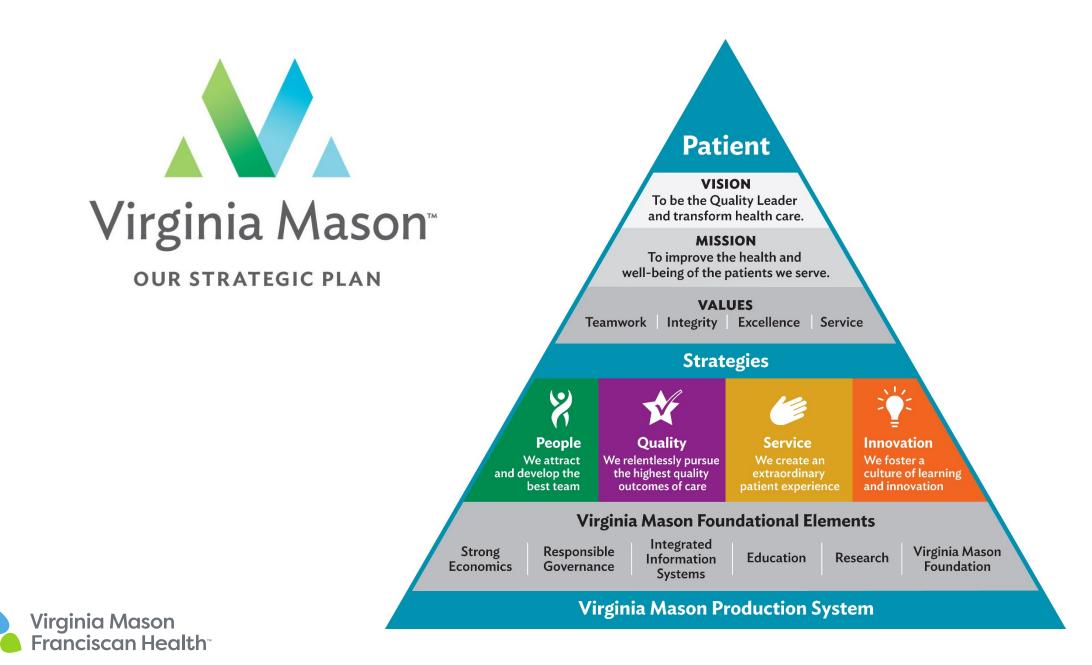
https://www.seattletimes.com/seattle-news/health/king-county-has-big-racial-

disparities-in-coronavirus-cases-and-deaths-according-to-public-health-data/

	FY20	D21 A3					
Goal Focus Areas: Health Equity/Diversity, Equity &	Executive Leads: Charleen Tachibana,	Author/Contact Person: Courtney Bello	Last Updated: 12/20/2020 (v27)				
Inclusion (DEI)	Jennifer Richards, Lynne Chafetz	Neves/Charleen Tachibana					
		Type X Organizational Goal Other Priority					
Current Condit	ion	Aim Statement/Target Condition					
		Over the next year(s), our Health Equity / DEI Gu	Over the next year(s), our Health Equity / DEI Guiding team and respective				
<ul> <li>With our commitment to the patient and team member experience, Virginia Mason recognizes that it is essential we address the increasing diversity and individual needs that exist in our patient population, workforce and the communities we serve. We propose a broad, yet unified, strategy to better recognize and address health care disparities and support organization-wide efforts to update policies, practices and systems in order to improve health equity for our patients and provide a more equitable environment for our team members.</li> <li>In 2017, Virginia Mason signed the American Hospital Association (AHA) Equity of Care (EOC) pledge (#123forEquity) which is a national call to action to eliminate health care disparities. It includes the following four goal areas:</li> <li>Goal 1: Increase the collection, stratification and use of race, ethnicity, language preference, and other sociodemographic data to improve quality and safety</li> <li>Goal 3: Advance diversity in the workforce, leadership and governance to reflect the communities served</li> <li>Goal 4: Improve and strengthen community partnerships</li> </ul>		<ul> <li>subcommittees/workgroups will:</li> <li>Discover and prioritize meaningful differences in care, outcomes, and experiences across patient groups and programs. Using patient demographic data and information gathered during assessments, we will facilitate evidence-based interventions to reduce disparities.</li> <li>Improve awareness, knowledge, and attitudes concerning health inequities through sharin of data, staff training and patient education.</li> <li>Commit to and implement practices to advance diverse recruitment and retention.</li> <li>Design (or redesign) key culture-enhancing organizational systems, programs and policies</li> </ul>					
HISTORY FOR OVERSTY Association	HIGHLINE COMPUTER OF A DESCRIPTION OF A	Healthcare Disparities     Culturally Responsive Care     N       Patient Demographic Collection     Respect for People Training     Image: Collection       Stratification of     Online D, E & I	ter a Diverse & Systematize Engage the Community Workforce VMPS & Process Team Member Demographic Collection Improvement Demographics Leadership Policy Partnerships/				
<ul> <li>In 2019, Chairman and CEO, Gary Kaplan, MD, signed the CEO Action for Diversity &amp; Inclusion, which is another national call to action to engage organizations in advancing diversity and inclusion in their workplaces. Through this pledge, Virginia Mason has committed to:         <ol> <li>Ensuring our workplace is a trusting environment to have complex, and sometimes difficult, conversations about diversity and inclusion. This ongoing and open dialogue encourages compassion, open-mindedness, and inclusivity.</li> </ol> </li> <li>Expanding unconscious bias education to help our team members recognize and minimize</li> </ul>		Quality & Safety     Resources &       Measures     Training       Health Literacy and Language Access     "Know Me" Initiative       Quality     Clinical Education	Belonging Groups				
<ol> <li>Expanding unconscious bias education to help of their biases and facilitate open and honest conver</li> <li>Sharing best—and unsuccessful—practices to hel throughout the community to reduce structural in</li> <li>Driving accountability through prioritized, focuse track progress; and regular communication to and</li> </ol>	rsations. Ip spread what works and what doesn't njustice and inequity in society. d action plans and aligned measures to						



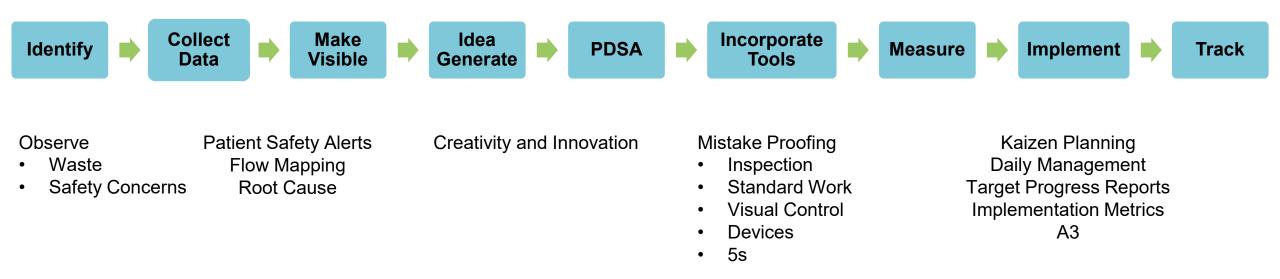
of Directors to frontline team members).



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## VMPS in Action

Toyota and Virginia Mason Production System (VMPS)

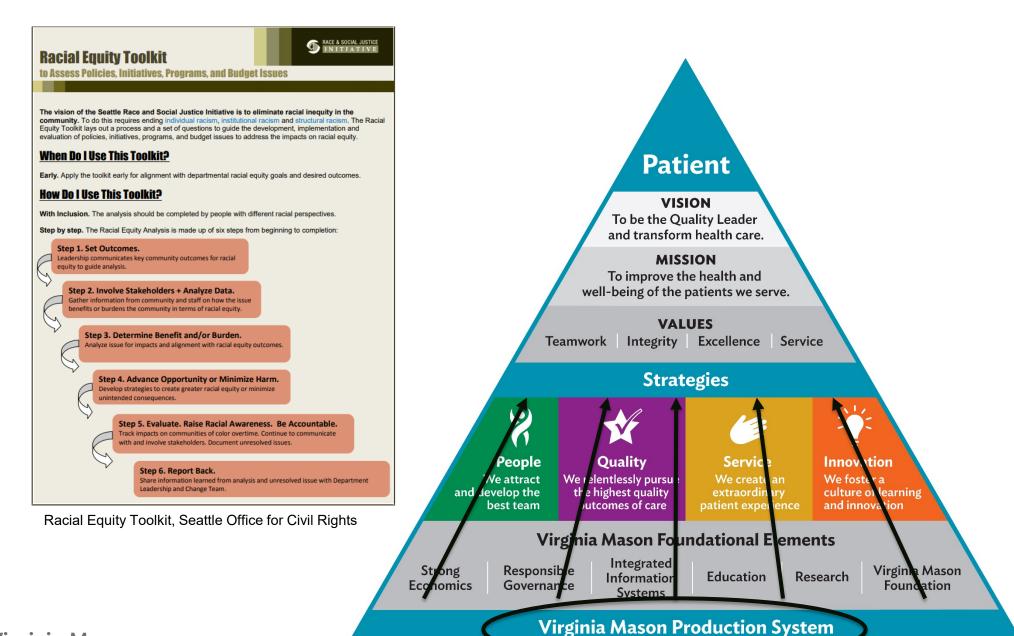




## Core Principals of VMPS

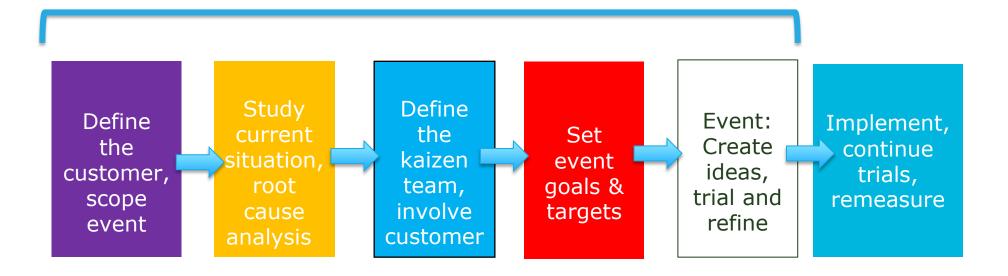
- VMPS is "top-down" = the more senior, the more training
- Use of 2-5 day full-day workshops to study and improve proccesses
  - Patients should be equal participants in workshops
- Data
  - 80/20 rule applied to data analysis
  - Observations done when convenient for team lead
  - Fixed set of targets one can choose from (e.g. lead time, quality, etc.)
- VMPS is a "language"
  - Ex: genba, kaizen, heijunka, etc.



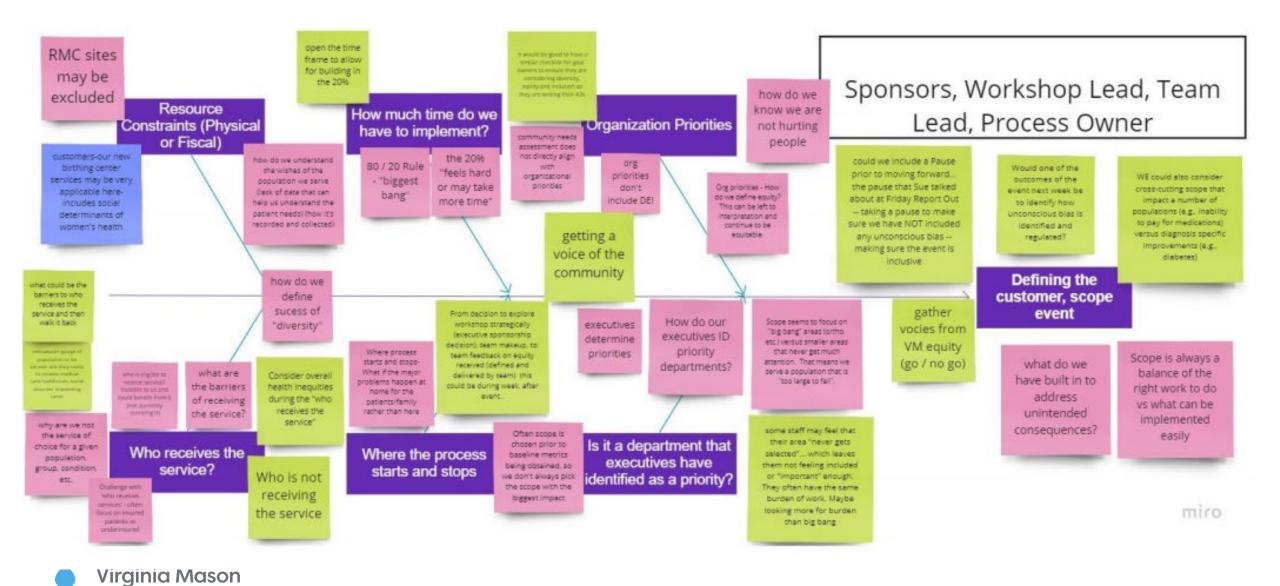


Virginia Mason Franciscan Health<sup>®</sup>

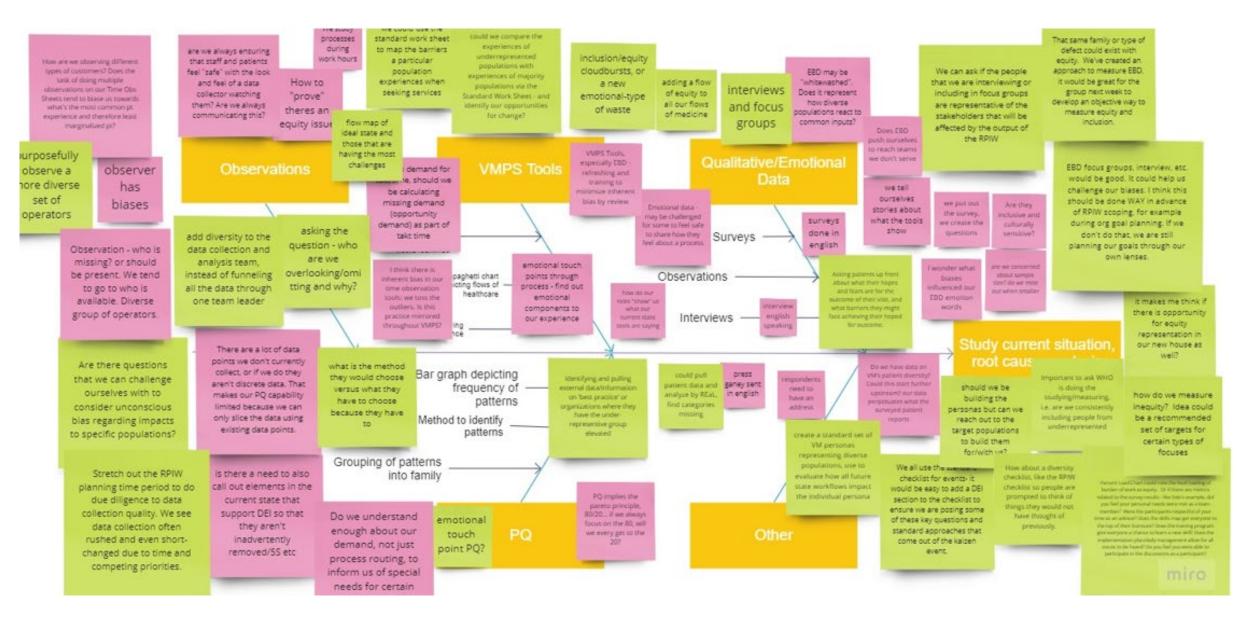
## Systematize Equity into VMPS



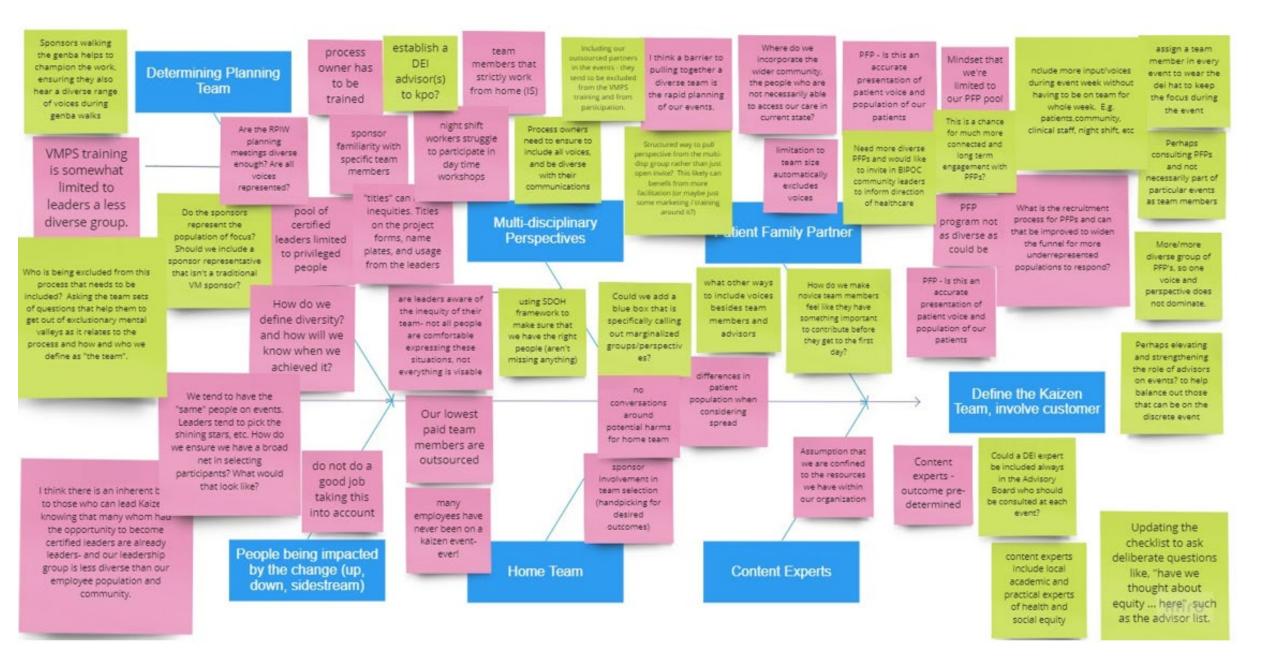


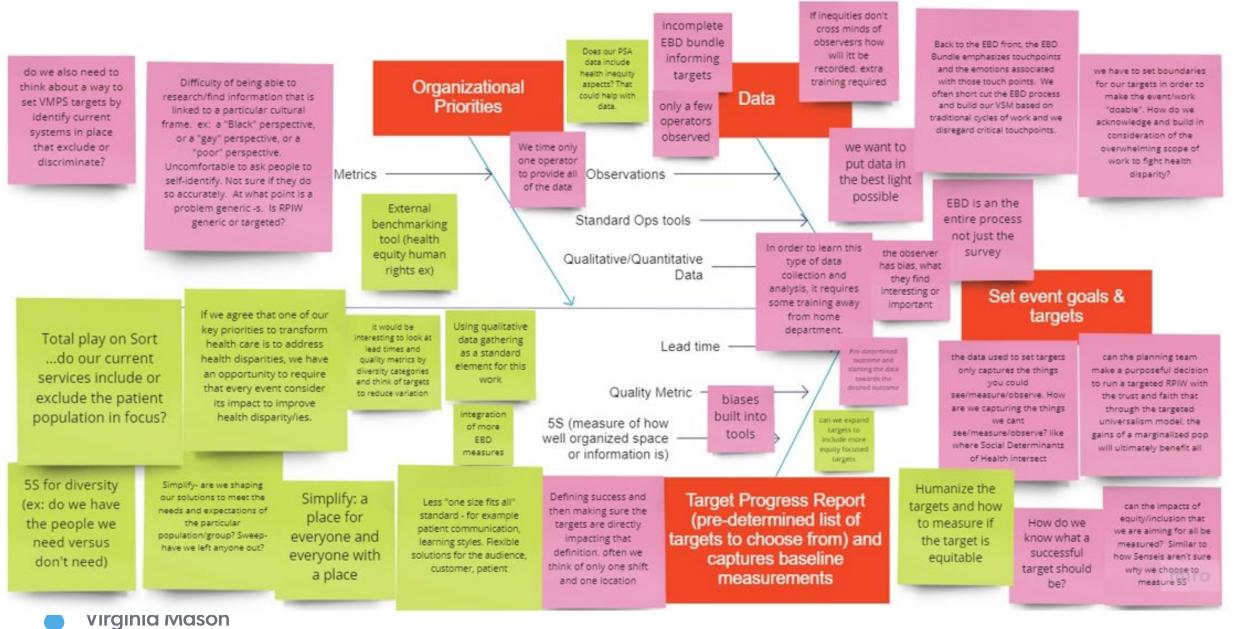


Franciscan Health

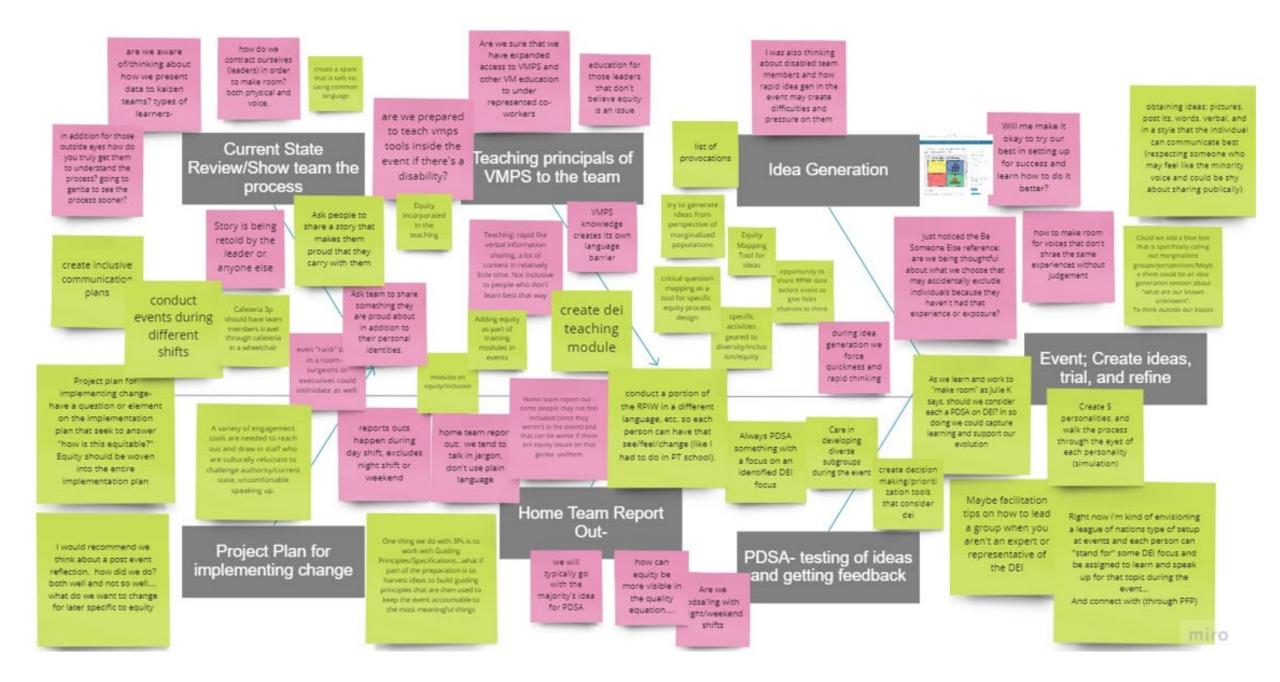








Franciscan Health



## Rapid Process Improvement Workshop

- Intentional about team make-up
- First day focused on discussions around equity
- Modified typical RPIW activities to include equity components
- PDSA'D new products same day







## Inequity Waste Wheel

Depicts how inequities can show up in our environment

**Blue Wastes** Common behaviors displayed by people with power and privilege

**Purple Wastes** Common inequities experienced by people without power and privilege





Key

## **Equity Pause**

#### Spontaneous Equity Pause

"Hold on - let's take a few minutes and discuss this further to be sure we're considering equity."

#### Planned Equity Pause\*

"How can we increase equity in this process?"

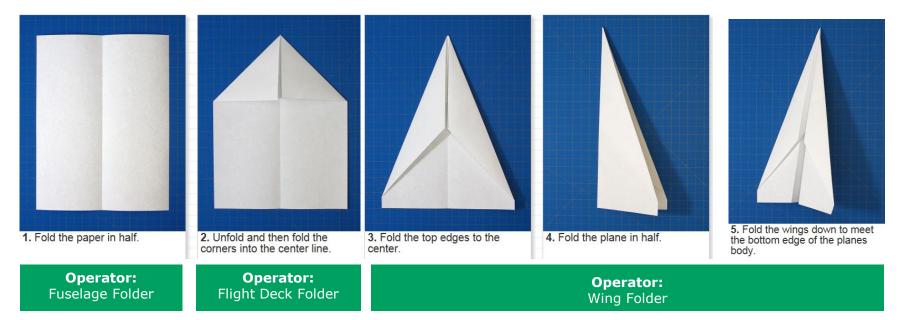
Торіс	<b>Reflection Prompts</b>	Activity	Activity Length	Post-Activity Reflection	
Implicit Bias	Let's try to notice implicit biases that may be present and learn ways to combat them.	<u>Check your privilege</u> video	3m 15s	Were we successful in ensuring	
		<ul> <li><u>Language and translation needs</u> video</li> </ul>	1m 49s	equity by addressing (or "interrupting") our own implicit biases individually? How?	
		Example of interrupting bias: "How to Outsmart Your Own <u>Unconscious Bias"</u> TED Talk		Were we successful in preventing systemic racism and	
		Implicit Bias Interventions from King County Office of Equity and Social Justice and R. Godsil	20m	bias in our improvement work or discussions? How?	
		<ul> <li>Ask each small group to identify, then share with the large group: Which interventions in the above guide would be most useful for the work we are doing together?</li> </ul>		What would we do differently next time?	
Awareness	What would you like to say that hasn't been said?	<u>The History of Construction of</u> <u>Race and Citizenship in the United</u> <u>States</u> (Frederickson, GM, 2003)	17m	Were we successful in ensuring equity through expanding our self-awareness and/or our	
	Have we sought feedback from people	<u>Stereotypes and Biases Reflection</u> <u>Activity</u>	25m	awareness of the experience of others?	
	who add a new	Washington Employers for Racial Equity	5m	How did we do it?	
	perspective? What inequities exist in the process, program or project we're working on together?	<ul> <li>Given the above commitment from VMMC and other local organizations, ask each small group to envision and identify a newpaper headline they'd like to see in 10 years that reflects investment in community development</li> <li>Share the headlines with the large group</li> </ul>		What would we do differently next time?	
		Inequity Waste Wheel	20m		



## Flow Exercise

#### **Folding instructions:**

Station #2 – fuselage Station #3 – flight deck Station #4 – wing Station #5 – inspector



Assign an inequity to two team members. For example:

- The wing deck operator only has one hand
- Raw materials are delivered by scooter
- Standard work presented in a foreign language

Add a resource/advantage to one:

- A thorough training- video and one on one
- Extra help
- A cheerleader





#### **Discussion:**

First, our people

- Is the work balanced?
- Are workers waiting?
- How is morale for each member?
- Are the workers concerned with quality or quantity?

What additional VMPS methods can help us design a better factory?

- Mistake-proofing
- Continuous flow
- Pull production
- Cellular layouts
- Respect for People

## 5S Achievement Grid Update

**6S Levels of Achievement in Process Improvement** 

#### 6<sup>th</sup> S- for safety

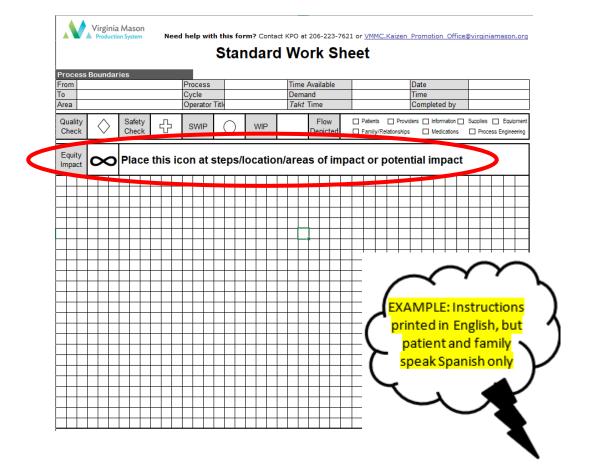
- Physical and space
- Psychological
- Emotional



	Safety	Sorting (Physical safety)	Simplifying (Addressing various abilities)	Sweeping (Incorporating diverse perspectives)	Standardizing (PSA/WSA reporting)	Self-Discipline
<b>Level V</b> Continuously Improve	People are accountable for improving support mechanisms and equity pauses to ensure holistic safety for all; systemic improvements are implemented to eliminate disparities	Physical safety concerns are identified before events occur; cleanliness problem areas are identified, and mess-prevention actions are in place	Map has been created for each item in storage room showing general location, accessibility options, layout of materials and can be retrieved quickly with minimal effort	Potential issues are identified, perspectives from all people are easily included, and countermeasures are documented	Reliable methods and standards are shared throughout similar work areas; PSAs and WSAs are always reported	Root causes are eliminated, and improvement actions focus on developing preventive methods
Level IV Focus on Reliability	Equity pauses reliably occur; implicit biases are consistently identified and addressed; people empower one other to disclose safety and equity concerns	Physical safety practices and the work area have documented responsibilities and schedules, and the assignments are consistently followed	Items move from storage to use accessible to people of all abilities; visual control; created to identify point of use	Inspection of area occurs daily inclusive of multiple perspectives, and work areas and equipment are restocked and organized	Reliable methods and standards are adhered to by all members of the work group; reporting PSAs and WSAs is incorporated reliably into workflows	Sources and frequency of problems are documented as part of routine work, root causes of noncompliance are identified, and corrective action plans are developed
<b>Level III</b> Make it Visible	Equity pause prompts are visible; people can access resources to support safety and equity concerns; implicit biases discovered in the system are visible	Physical safety cues visible; initial cleaning has been completed; items are disposed of according to action disposition	Needed items are outlined, dedicated locations are properly labeled with accessibility options, and required quantities are determined	Visual controls and indicators are established and marked for work area equipment, files, supplies, and missing perspectives and assumptions are known	Documentation for all visual controls exists; lessons learned and countermeasures from WSAs and PSAs are communicated	Work group routinely checks area to maintain 5S agreements
Level II Focus on Basics	Equity pauses are built into improvement work processes; leaders and teams foster sharing to disclose safety and equity concerns; people identify implicit biases in processes	Physical safety concerns addressed; needed and not- needed items are identified, and those not needed are removed from work area	Needed items are stored and organized according to frequency of use, and are accessible to people of all abilities	Work group has agreed on items to be checked, and acceptable performance levels are documented; assumptions still exist; input from historically oppressed groups isn't reliably incorporated	Work group has documented agreements for needed items, organization, and work area controls; PSAs and WSAs are under-reported	Documentation of completed 5S is posted in work area; 5S is incorporated into new hire orientation
<b>Level I</b> Just Beginning	Awareness of implicit biases is low or not universally acknowledged; psychological, physical, and emotional safety are missing	Physical safety is not considered; necessary and unnecessary items are mixed throughout the work area	Items needed are in various places throughout the work area and are not accessible to people of all abilities	Perspectives from historically oppressed people are missing; key work items are missing, and current location is not known	Standards for work area organization are not followed or documented; Patient Safety Alerts (PSAs) and Workforce Safety Alerts (WSAs) are not reported	Work area checks are not done regularly, and there is no visual measurement of 5S performance

<sup>1</sup> Workforce Safety Alerts (WSAs) and Patient Safety Alerts (PSAs) escalate issues to leaders and executives to ensure the issues are addressed with visible improvements to prevent reoccurrence.

## **Standard Operations Tools**





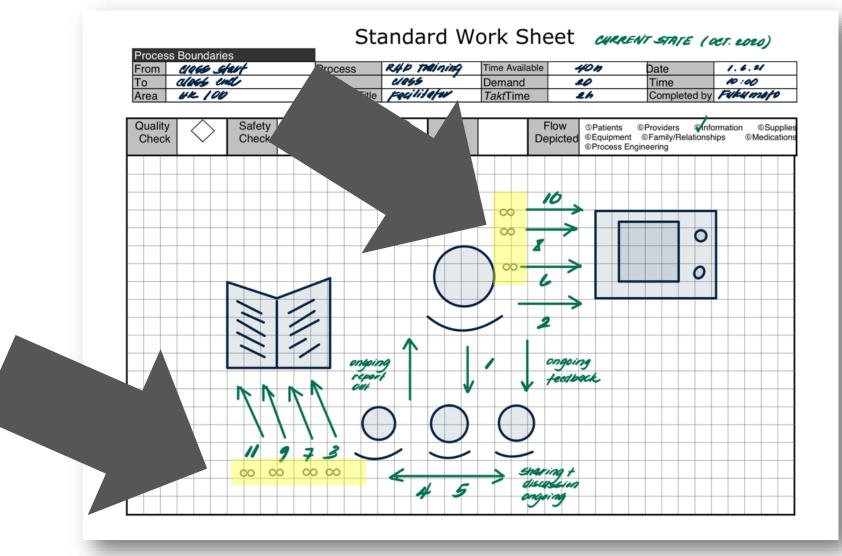
Kaizen Lightning Burst (opportunities): (opportunities – be sure to include those related to equity, inclusion, diversity, health equity, environment, emotions, etc.)



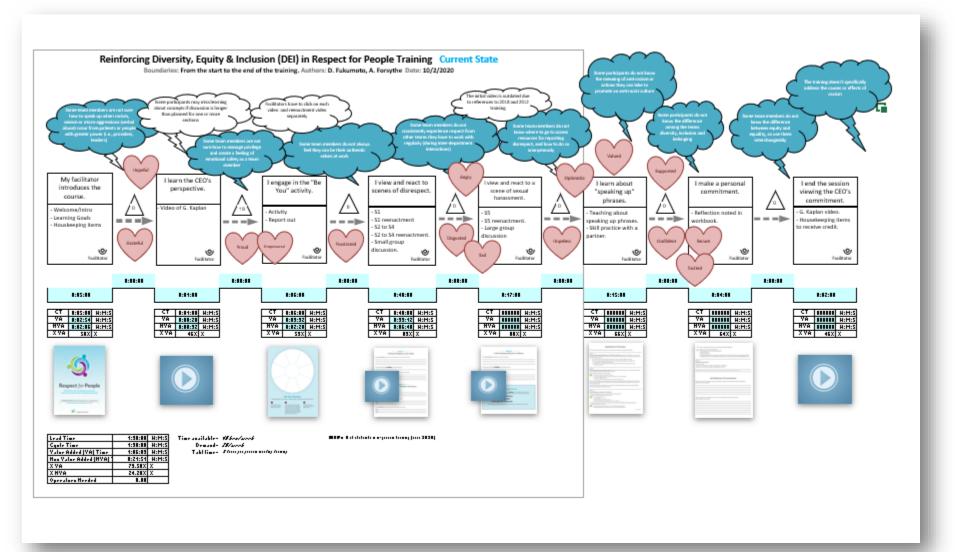
Need help with this form? Contact KPO at 206-223-7621 or <u>VMMC.Kaizen\_Promotion\_Office@virginiamason</u>

#### Time Observation Form (Detailed) Observation Date: Process: Story Collection: Intentional observations of environment, respect for people, equity, emotions, inclusion, diversity, etc. Collect these stories for sharing during planning Step # Stap # and adding to cloudbursts. These may not necessarily be time CT СТ **Description of Operation Description of Operation** Examples: 15 . . . . . . Discharge instructions printed in English, but patient and family primarily speak Spanish. Family nodded as if they understood during instructions with RN, but told each other 2) 16 they were confused as soon at the RN left the room. Registerd dietician (RD) instructed patient to eat more fresh fruits and vegetables, but patient resides in a food desert area **3**1 17 of Seattle, RD offered no further advice. Transgender patient with finacial services- sent to collections due to not fixing gender in records. Pt. already ....**t**s 18 homeless, now unable to get a phone due to the credit ding. Fincial services cannot help them, even though it was a VM 5) 19 error. 20 6 .....7 21 **....8**, 22 . 9 23 10 24 25 12 26 13 27 14 28 Notes:

## Standard Work Sheet Example Using Equity Symbols

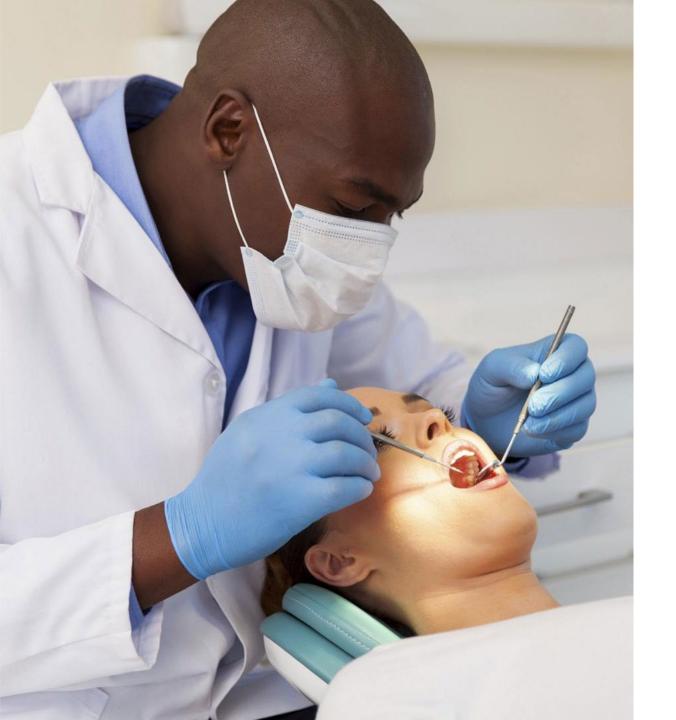


## Value Stream Map Example w/ Equity Cloudbursts



# Products so far...





## **Current State**

ALL potential transplant recipients must have a dentist sign a dental clearance form stating they are free from active infection

- Clearance is good for 2 years
- No post-transplant plans for oral hygiene are needed



% of patient panel



Million Americans without dental insurance





% seniors without dental insurance



regulations from CMS and UNOS requiring dental clearance

# Outcome Removal of Dental Clearance



## If we eliminate racebased eGFR

- Identify severe chronic kidney disease earlier
- Get wait listed sooner
- Get transplanted



All Results PCM	04/23/2021 00:00 PDT	
Differential: Absolute Count (Automated)		
Lymphocytes, Absolute Count		
Monocytes, Absolute Count		
Neutrophils, Absolute Count		
Eosinophils, Absolute Count		
Basophils, Absolute Count		
General Chemistry		
Sodium Level		
Potassium Level		
Chloride Level		
Carbon Dioxide Content (CO2)		
🔟 Anion Gap, Blood		
CREATININE		
eGFR (NonAfrican-American)		
eGFR (African-American)		
🔟 Urea Nitrogen		
📃 Total Protein Plasma		
Albumin Level		
Calcium Level		
Phosphorus Level		
Alkaline Phosphatase		
ALT (SGPT)		
AST (SGOT)		
Bilirubin Total Level		
🗾 Glucose Random		
Lipid Studies		
		-

# Outcome Removal of African American eGFR



## Where to Start

- Executive Champions
- Use your tools to facilitate the work
- Systematize by focusing on existing tools/processes
- Engage stakeholders
  - From front line to executives
  - Community stakeholders
- Challenge mental valleys



## Challenges/Key Learnings

- Balancing speed with kaizen
- Offer grace to everyone wherever they are on their equity journey.
- KEEP THE FIRE GOING

