

COVID-19 Employee 1A Vaccination Clinic: Data Analytics

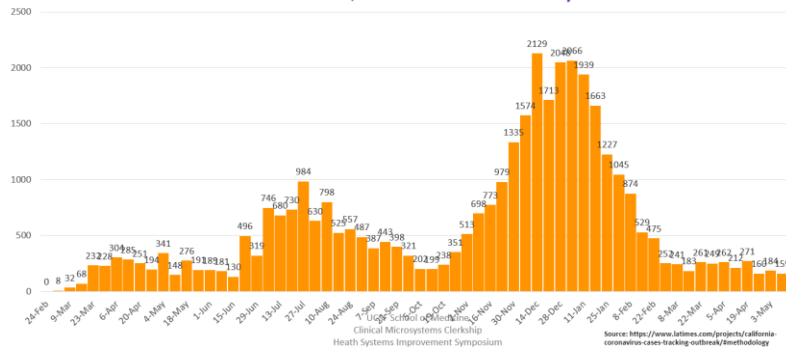
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Tutman

Departments: Health Informatics, Occupational Health, Clinical
Systems, Enterprise Analytics

Background

- November/December 2020: major surge in COVID-19 cases in the U.S.
- December 11, 2020: First COVID-19 Vaccines approved in use under emergency use authorization
- To help protect our employees, patients, and the community from the surging pandemic, UCSF Health had to establish a vaccination response and delivery system to serve over 28K identified frontline healthcare workers.
- Anticipated rapid approval of 2 total manufactured vaccines in December
- UCSF treated COVID-19 vaccines as a Scheduled 2 controlled substance requiring chain of custody documentation
- Political unrest and uncertainty of the safety of both vaccine delivery and vaccination locations
- Unknown adverse effects required post administration observation interval
- No existing robust supply chain to deliver vaccine

COVID-19 Cases by week
San Francisco, March 2020-May 2021



FDA NEWS RELEASE

FDA Takes Key Action in Fight Against COVID-19 By Issuing Emergency Use Authorization for First COVID-19 Vaccine

Action Follows Thorough Evaluation of Available Safety, Effectiveness, and Manufacturing Quality Information by FDA Career Scientists, Input from Independent Experts

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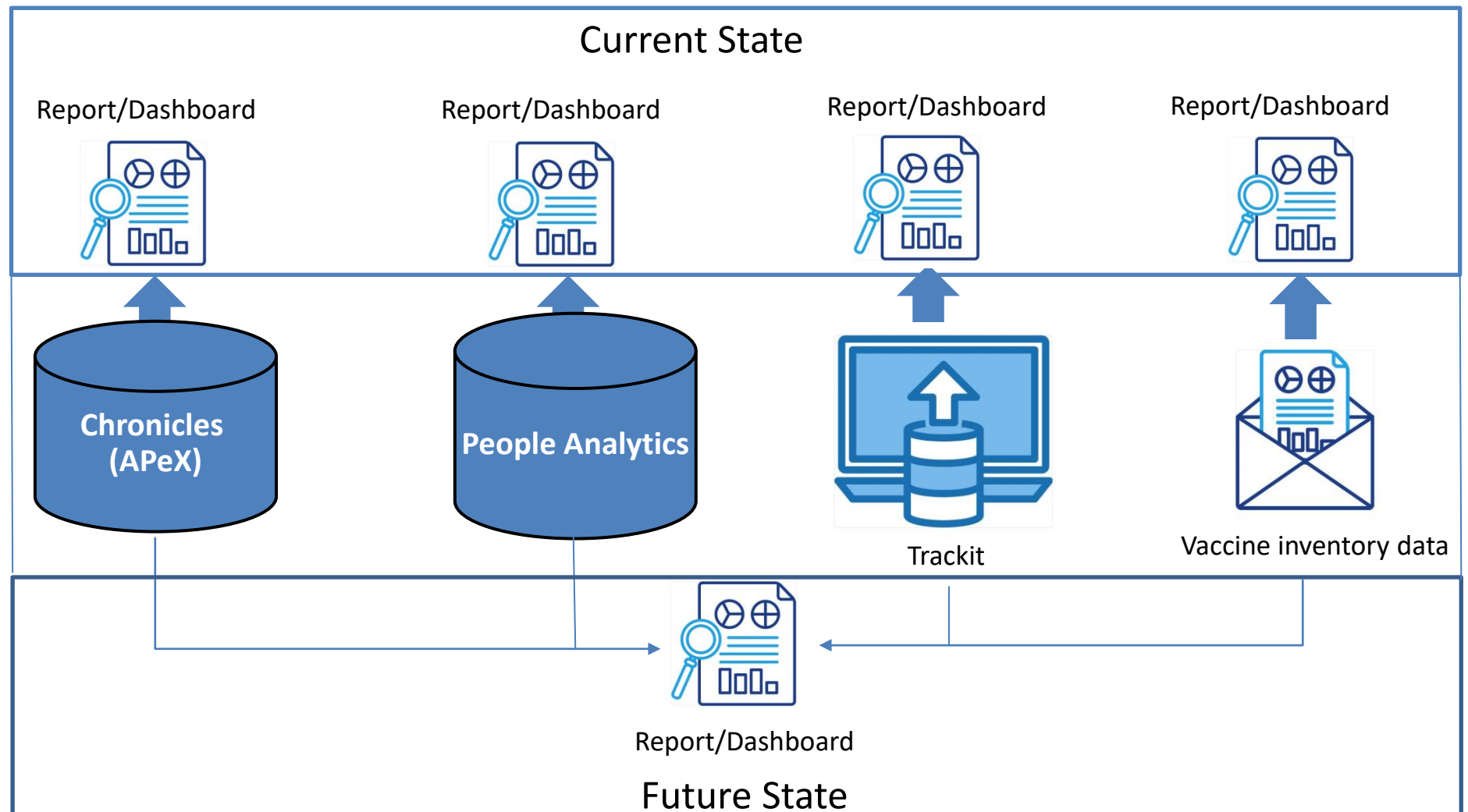
For Immediate Release: December 11, 2020

UCSF Health Improvement Symposium 2021

Project Goals

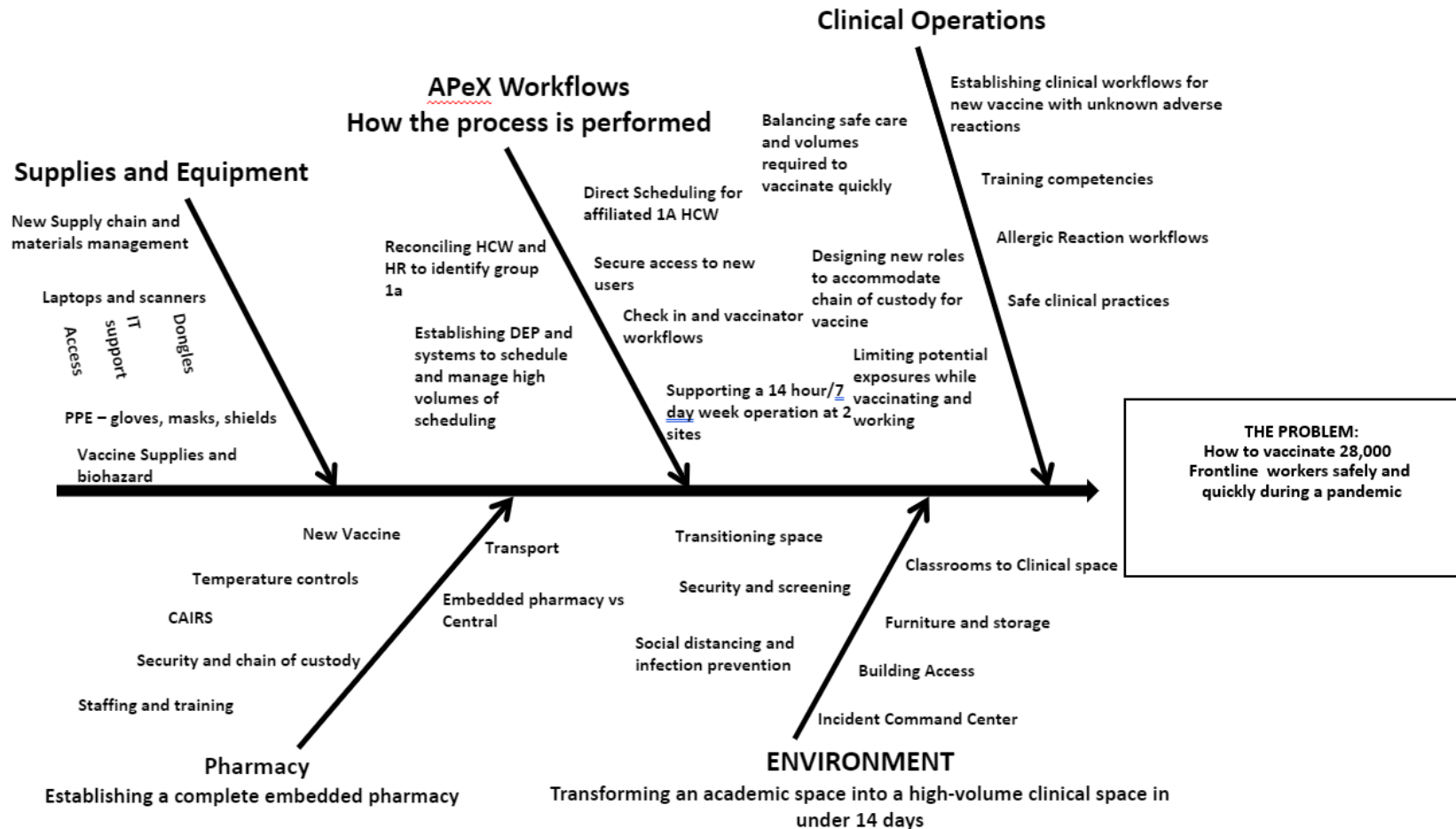
Goals:

- Provide timely and accurate data to project leaders to support technical process
- Ensure data that was tracked manually could be automated for regular reporting
- Confirm data quality between systems
- Provide data transparency to UCSF community



Gap Analysis

Fishbone Worksheet



Gap Analysis

- Data sets were disparate and ability to pull overall view of vaccine clinic was difficult
- Data was not integrated between various systems
- Vaccine inventory tracking outside of system
- Manually tracked datasets made integration difficult



Availability of Data



Data Transparency



Data Consistency

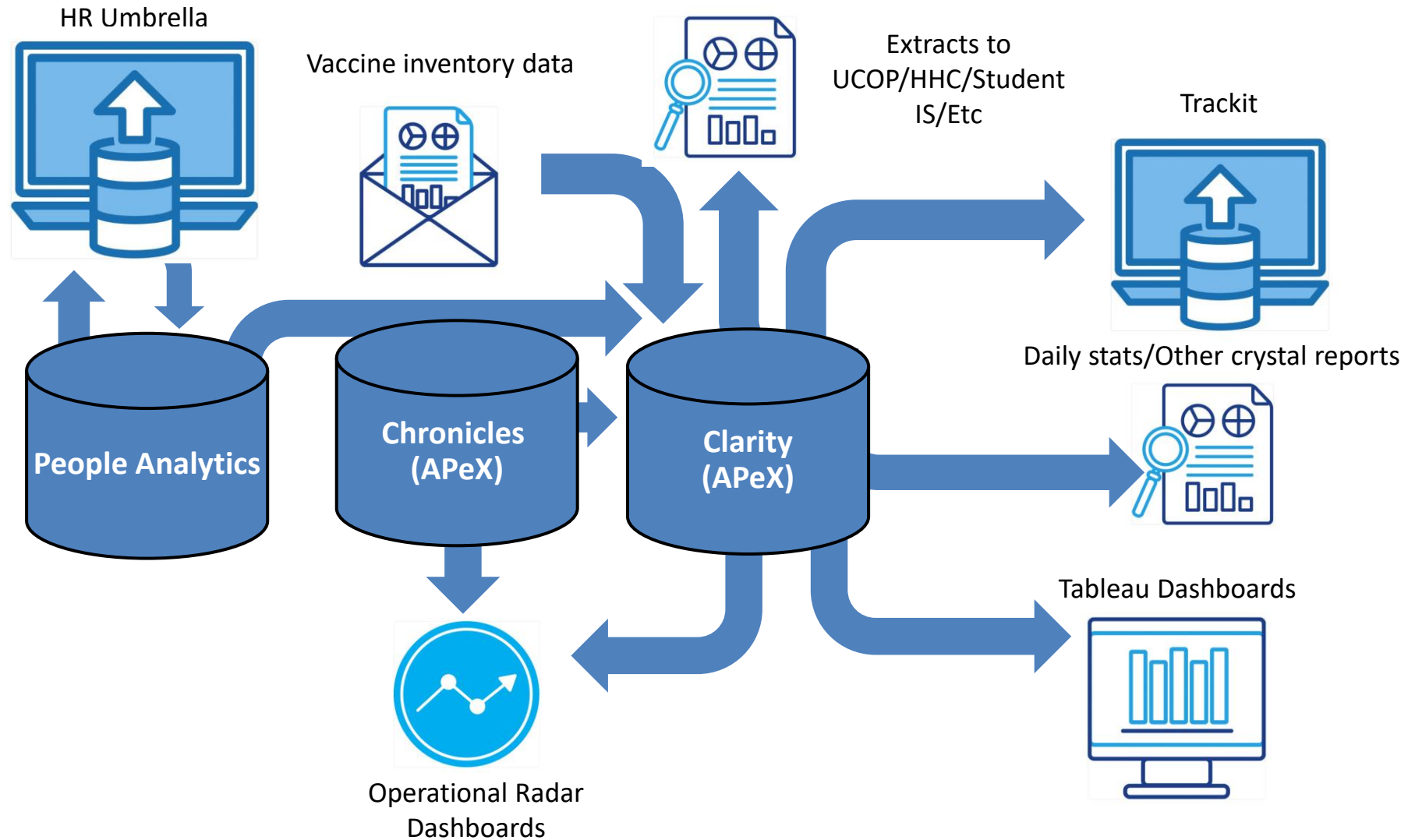


Data Automation



Enterprise Analytics Solutions

Project Plan & Interventions



* This diagram is subject to change and continues to evolve

UCSF Health Improvement Symposium 2021

Project Evaluation & Impact

Vaccination Underway

	Population Size*	Active on MyChart	Offered Vaccine	Consented	1st Dose Scheduled
Phase 1A Subgroup a	6,131	5,767 94% of population	99% (5730 / 5767)	84% (4862 / 5767)	82% (4722 / 5767)
Phase 1A Subgroup b	10,956	9,625 88% of population	99% (9512 / 9625)	79% (7568 / 9625)	76% (7280 / 9625)

Current Inventory Pfizer:8,052 Moderna:11,120 Johnson & Johnson:3,345 Total Shipments: Pfizer Dose 1:8,052 Moderna Dose 1:11,120 J & J Dose 1:3,345

GRAND TOTALS:	170,153	103,005
TOTAL ADMINS	TOTAL DOSE 1 ADMINS	TOTAL DOSE 2 ADMINS
WEST BAY TOTALS:	162,588	98,408
HCW PARN	TOTAL:	23,479
HCW PARN	DEC 2020	6,148
HCW PARN	JAN 2021	8,035

COVID VACCINE INVENTORY

Timestamp: 08-09-2021 13:18

INVENTORY

DATE: [Date Picker]

DOSES & LOCATION

WEST BAY EAST BAY

Pfizer [Dropdown] Moderna [Dropdown] J&J [Dropdown]

SHIPMENTS

DATE: [Date Picker]

DOSES SHIPPED

DOSE 1 DOSE 2

Pfizer [Dropdown] Moderna [Dropdown] J&J [Dropdown]

COVID Vaccine Component Validation Dashboard

COVID Vaccine Scheduled Doses (1)

Data collected: Wed 4/20 12:53 PM

Vaccine Locations: Parnassus

0 Remaining Total 0 This Hour 0 Next Hour

	Open Slots	Scheduled	Given	Remaining	Now-1300	1300-1400
Parnassus	0	0	0	0	0	0
First Dose	-	-	-	-	-	-
Pfizer	-	-	-	-	-	-
Moderna	-	-	-	-	-	-
Total	0	0	0	0	0	0

COVID Vaccine Scheduled Doses (2)

Data collected: Wed 4/20 12:53 PM

Vaccine Locations: Mission Bay

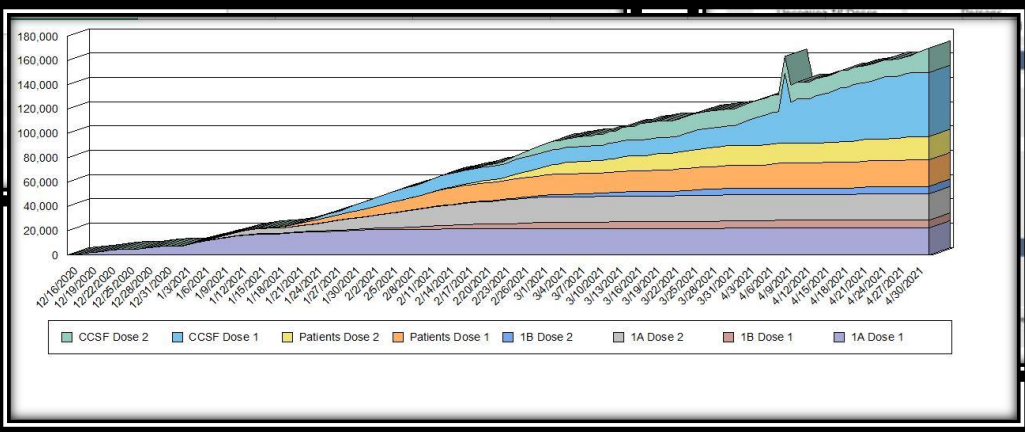
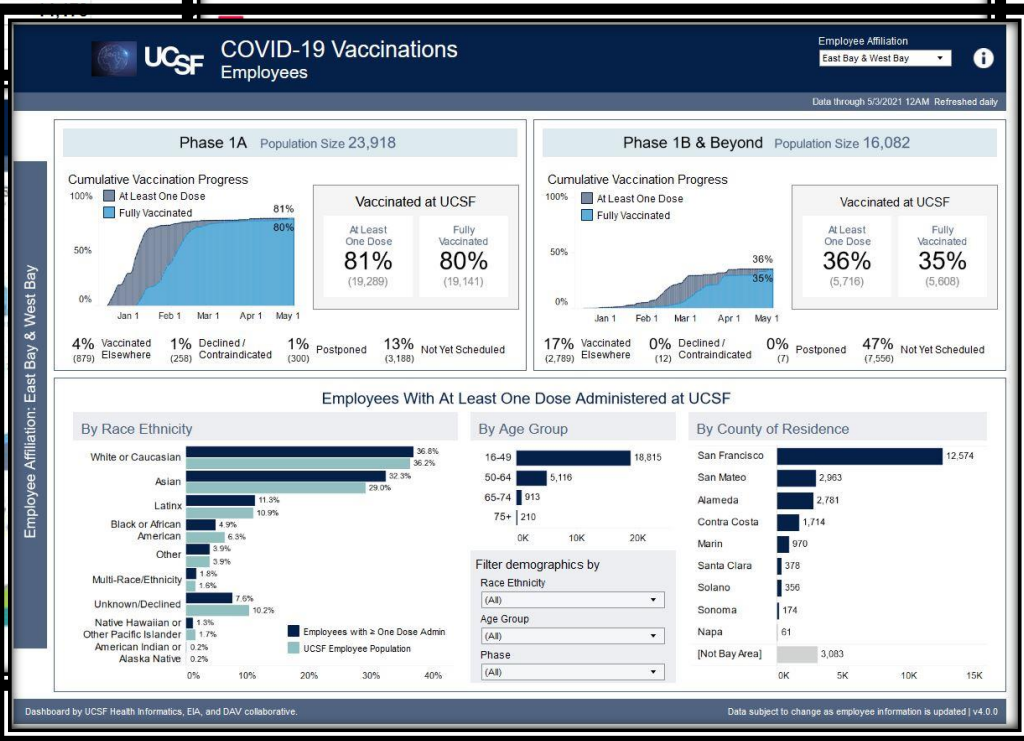
337 Remaining Total 0 This Hour 61 Next Hour

	Open Slots	Scheduled	Given	Remaining	Now-1300	1300-1400
Mission Bay	140	696	0	337	0	61
First Dose	37	-	-	-	-	-
Pfizer	103	696	-	337	-	61
Moderna	-	-	-	-	-	-
Total	140	696	0	337	0	61

UCSF COVID-19 Vaccinations Summary

Vaccinations and Inventory

183,030 Total Doses Received	160,878 Total Doses Administered (88%)
7	62,181



Next Steps & Lessons Learned



Collaboration
between teams is
critical



Must be able to
adapt to dynamic
environments



Develop data
solutions that are
scalable and
sustainable



Consistency
between systems
helps build trust
in the data



[Link to live dashboard of COVID vaccination efforts to date](#)