COVID-19 Testing Task Force

California COVID-19 Testing Task Force Hospitals & Health Systems Update

May 14, 2020

Agenda

COVID-19 Testing Task Force

- Introductions and logistics
- Objectives
- Approach
- Progress
- Next steps
- Questions

Logistics

- **Participation by invitation only** – please send participation requests to testing.taskforce@state.ca.gov
- All of this is to facilitate a **trusted, open dialogue** in a highly fluid situation
- **A newsletter** will follow this meeting and can be used to share with/update others in your community

Introductions

COVID-19 Testing Task Force

Today's speakers

- **Dr. Charity Dean**, Assistant Director, California Department of Public Health
- **Paul Markovich**, President and CEO, Blue Shield of California

List of Task Force leaders provided on Task Force website at testing.covid19.ca.gov

Roles in this public-private partnership

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- Appropriate state officials **always** make decisions

- Individuals from the private sector are providing important support at a critical juncture and **do not** make decisions

Two types of COVID-19 tests mentioned in these materials

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	PCR (molecular diagnostic)	Serological tests
Detection of…	Virus	Antigens or antibodies
Common sample type	Nose nasal or throat swab	Blood/plasma
Key considerations	Gold standard for diagnostic testing	Do not diagnose infection, but can be useful for antibody detection

Task Force goals and approach

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Our goals

Increase total number of tests

24-hour turnaround

90% accuracy

Equitable and convenient access

Our approach

Access: Establish statewide collection sites for equitable access

Test processing: Maximize throughput and turnaround time of labs

Statewide distribution: Establish a smart distribution of scarce supplies

Facilitate innovation: Provide recommendations on new, promising tests

Data and analytics: Track and report results

Community-driven workforce needs: Maximize using members of the community for the work

Reaching our goals will require taking a range of actions

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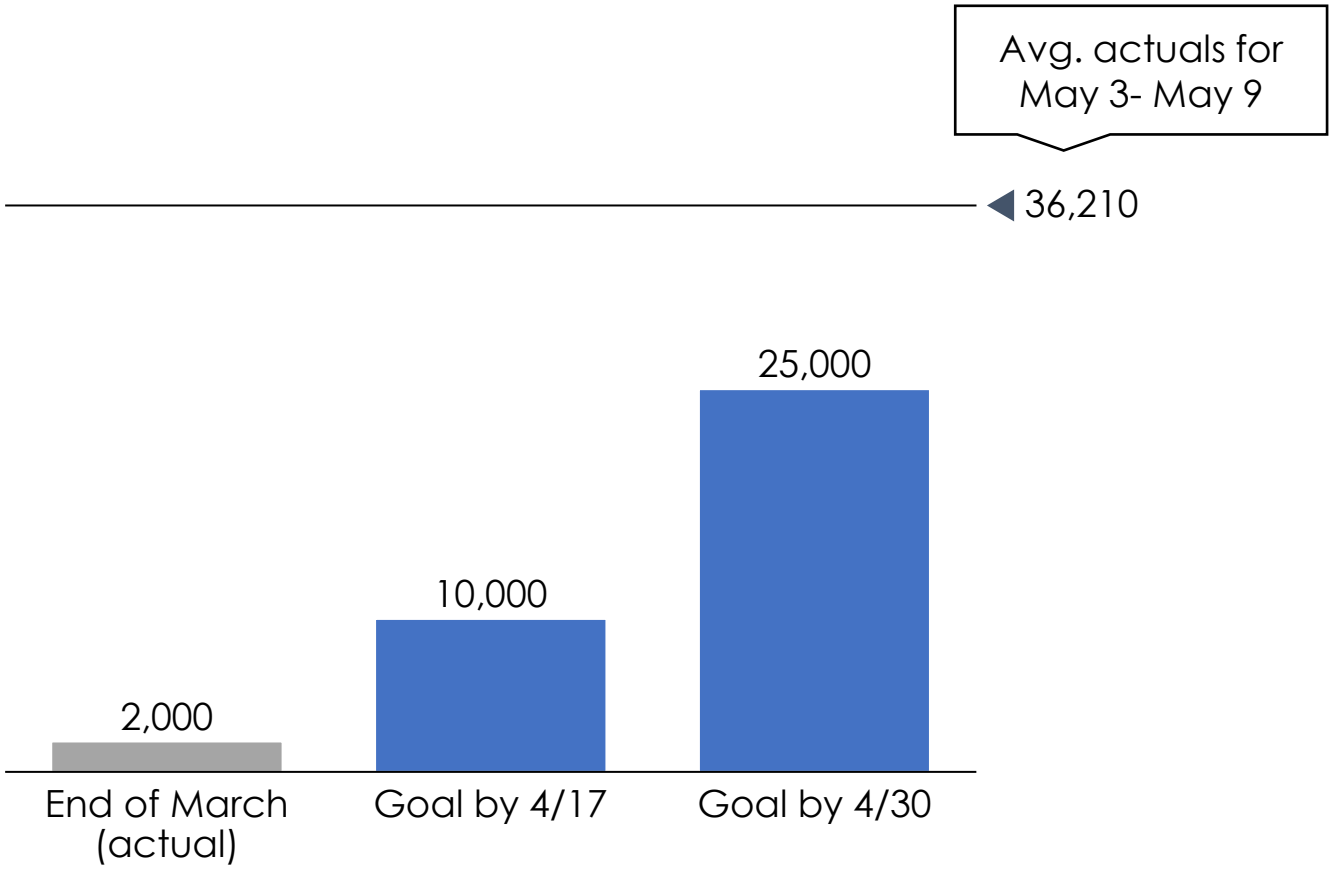
Current as of 05/12

Current and expected number of COVID-19 tests in California

Tests/day (PCR Tests)



Actions to increase test volumes:

- Increase capacity for existing labs to process tests
- Increase number of specimens collected for processing
- Assess and deploy new tests (e.g., point of care, serology)

Task Force is optimizing end-to-end testing workflows

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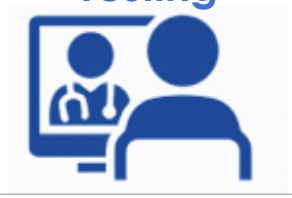
Providers

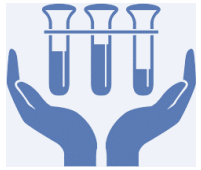
Patient Referred for Testing



Work with local public health officials to provide guidance on expanded access to testing and prioritization

Sample Collection sites

Collection Site Collects Samples



- Work to set up a state-wide network of new collection sites
- Secure sufficient supplies for sample collection

Sample Processing sites

Network of Organizations Processing Tests

- Optimize supply distribution for existing tests
- Identify and scale promising new tests

Test results captured and reported

Track results and make them available in aggregate to the public.

CA Task Force Team

The Task Force is working with OptumServe to open 80 new sample collection sites across the state

Current as of 05/12

	Type of site for sample collection	Number of sites
Existing sites	Drive through collection sites	30+
Existing sites	Clinics (including VA), physician offices, urgent care centers	40+
Existing sites	Hospitals (with or without own labs)	200+
New sites	Community testing sites (in partnership with OptumServe)	80

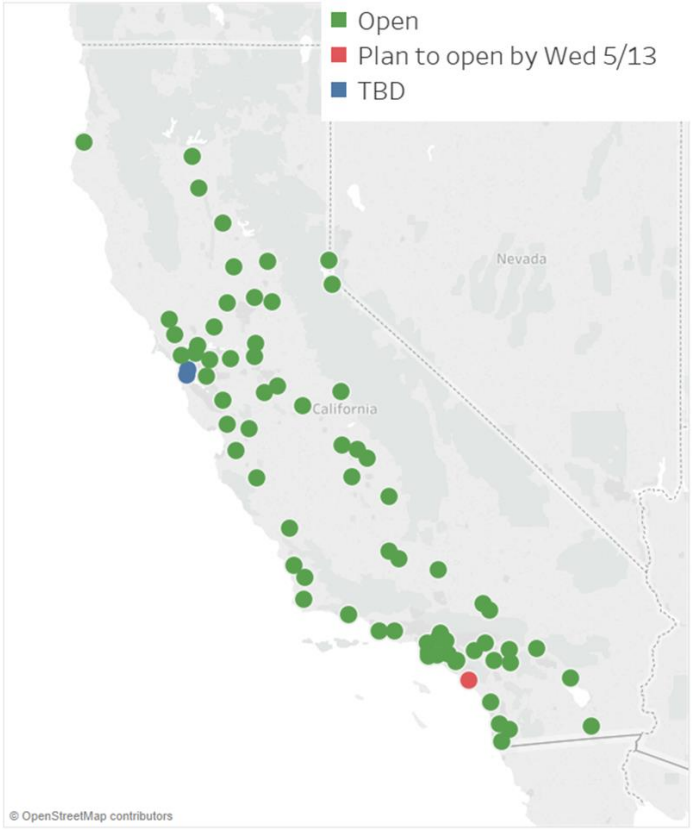
Additional sites are being established to provide equitable access across the state

Current as of 05/12

Criteria for recommendation of additional sites:

- Ensure access to testing in underserved communities
- Ensure a collection site within approx. **30 min** driving time in urban areas and within approx. **60 min** in rural areas
- Ensure there is sufficient capacity at each site to handle projected volume

New COVID-19 collection sites in CA (in partnership with Optum) – as of 5/5/2020



The Task Force has developed a playbook to stand up new collection sites and mobile testing units

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Current as of 05/12

Goals for the playbook:

- Enable launch of new collection sites rapidly
- Maintain standard workflows, data sharing
- Meet community-driven needs

TABLE OF CONTENTS

- **Section One:** State-wide network of specimen collection sites
- **Section Two:** "Playbook" for establishing a specimen collection site
- **Section Three:** How to implement network

SAMPLE CONTENTS

CASE STUDIES

WellChild, Los Angeles[1]

Utah Department of Health[2]

Utah Department of Health staff set up a mobile testing clinic in Navajo Mountain April 13-14. The state has also deployed mobile testing teams to nursing homes, correctional facilities and homeless housing units.

Operational highlights:

- Population served: Navajo Nation
- Equipment: Van, 1500 test kits, PPE
- Team: 3 nurses
- Documentation: Conducted through Utah Navajo Health System
- Testing capacity/day: >160 tests/day[3]
- Follow-up: Patients notified 4-5 days post specimen collection; Free mental health counseling
- Lab used: Utah state lab in Salt Lake City

The Task Force is making progress to secure scarce collection supplies

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Supplies needed for specimen collection and transportation

- Swabs
- Transport medium
- Collection tubes
- Biohazardous bags
- Personal protective equipment (e.g., N95 masks, gowns, gloves)

California has sufficient lab capacity to meet the Task Force's daily testing goal

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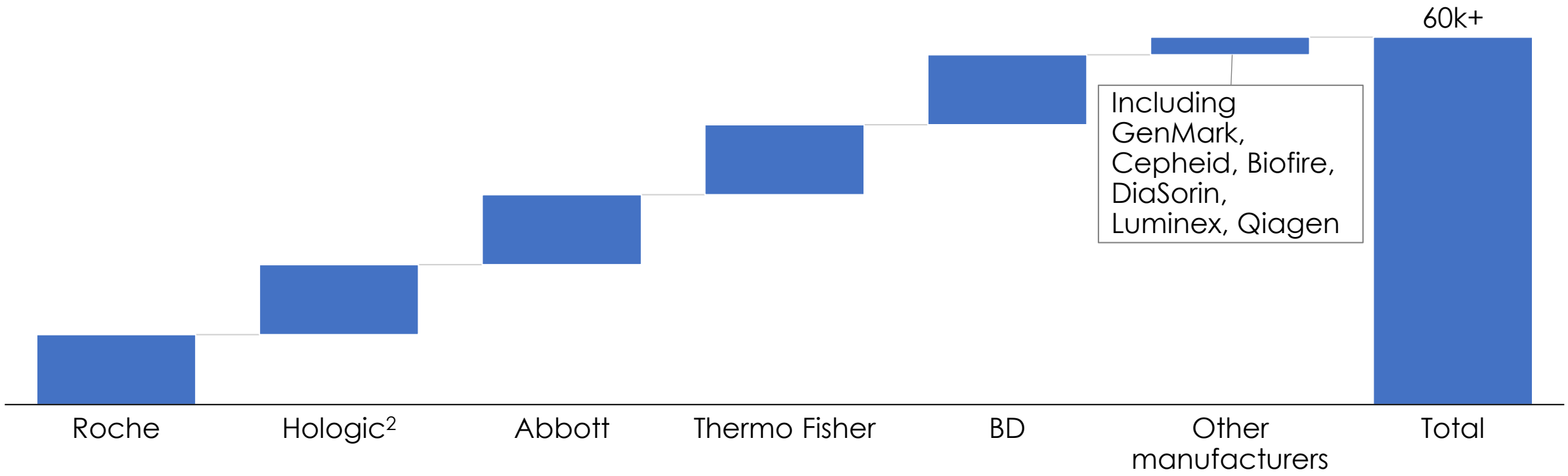
Capacity for PCR COVID-19 test processing in California[1]

Current as of 05/12



1 Relative capacity takes into account availability of supplies for test processing and lab operating hours
2 Calculation based on lab reported install base, assume same throughput as Panther Fusion once test kit is approved
SOURCE: Install base aggregates data reported by labs; information is being refined through targeted outreach

We are tracking tests/day daily

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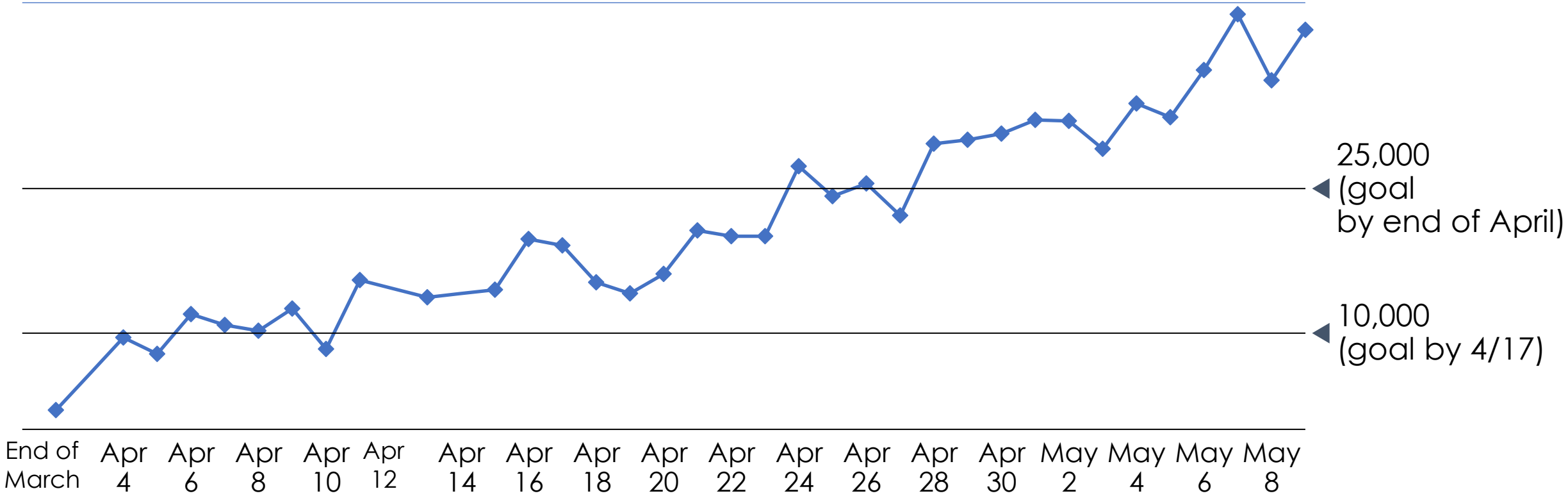
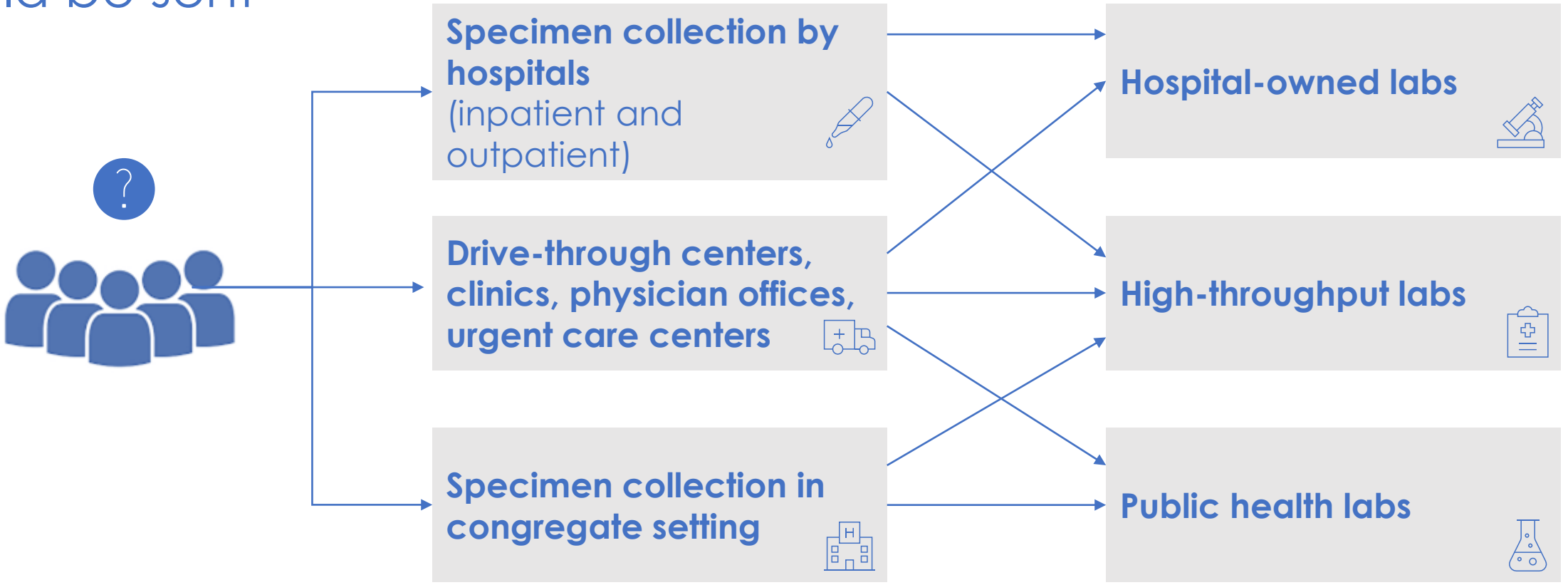
Total testing volume in California, tests/day

Current as of 05/12



We will use this information to provide recommendations as to where collected specimens should be sent



Role of the Task Force

Guide people toward staffed and supplied collection sites

Match collection sites to labs that have capacity for faster test processing turnaround

The Task Force is developing a dynamic model to inform where supplies should ideally be distributed

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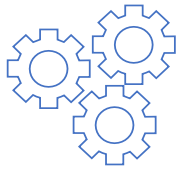
Maximum capacity for COVID-19 testing in California

Testing volume by lab

Supply inventory in labs and collection sites

Expected supply shipments for distribution



Model engine:
identification of bottlenecks and opportunities to increase throughput

Allocation decisions (made by appropriate state authorities)
Allocation based on criteria approved and prioritized by state decision-makers

Projected changes in testing volumes

We are also examining new tests and alternative methods

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	Assessment approach
Serology tests *(details follow)*	Technical assessment that includes a comprehensive set of performance metrics and follows a systematic multi-step approach
Rapid point of care tests	Focus on congregate settings, vulnerable populations, and first responders
Specimen pooling	Assessment focused on feasibility and identification of low prevalence areas where pooling may be beneficial

The Task Force has developed recommended minimum performance levels for serology tests

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Current as of 05/12

Assessment scheme

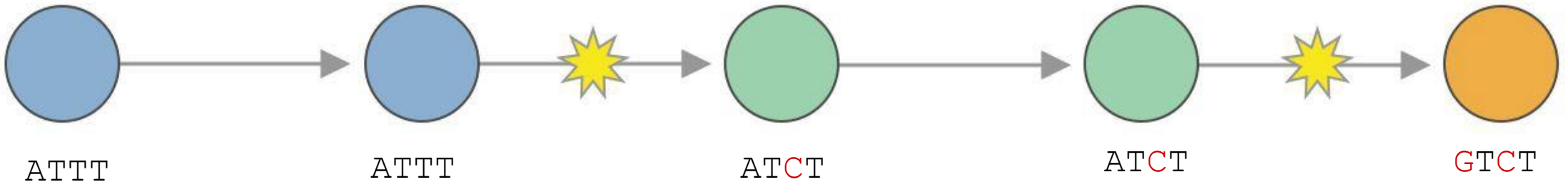
Step 1 — **Does the testing method have performance data derived from clinically and scientifically valid methods?**

Step 2 — **Does the testing method have adequate clinical sensitivity (min 90%) and specificity (97%)?**

Step 3 — **What is the relationship of sensitivity/specificity and predictive values for each test method?**

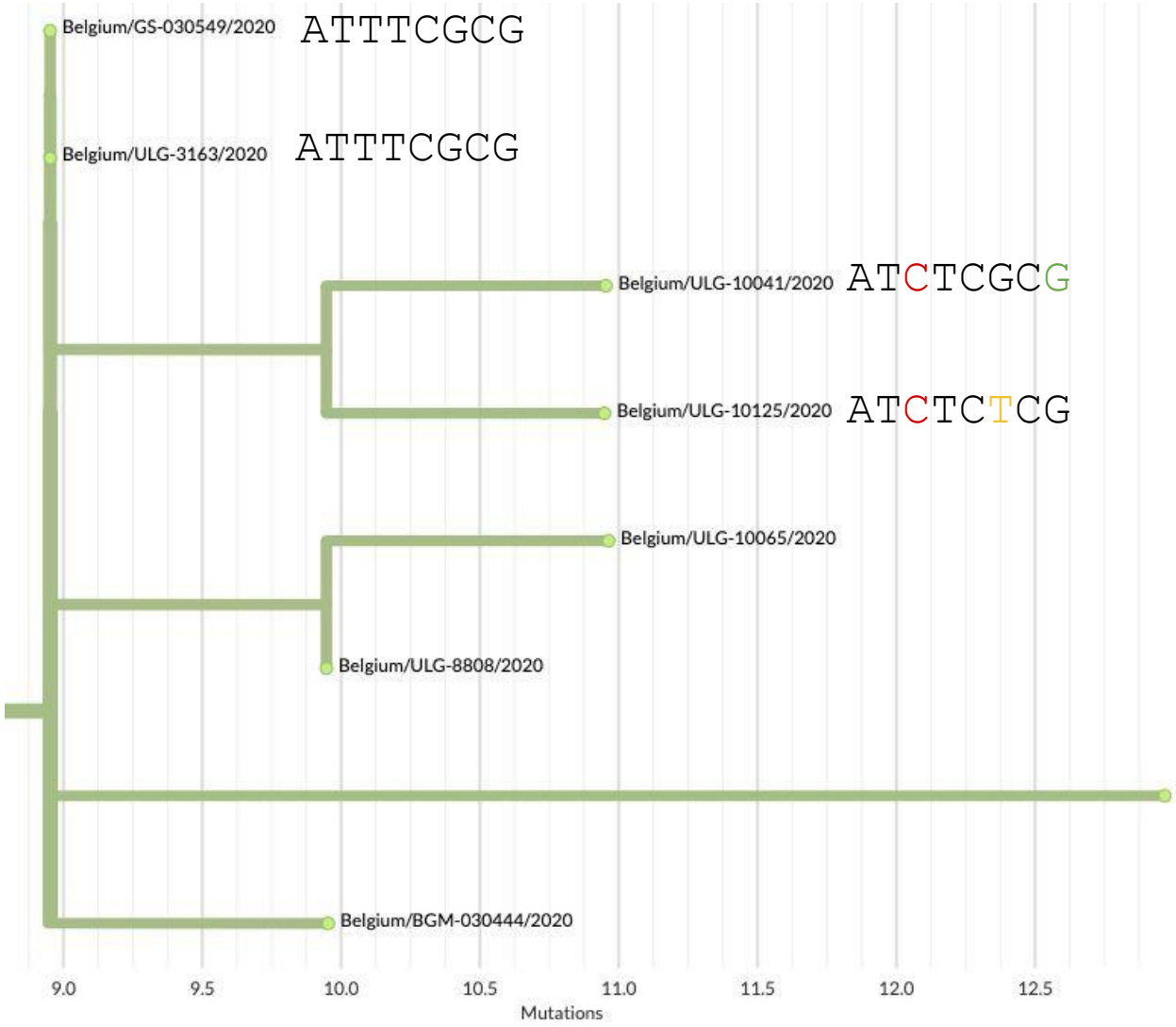
Step 4 — **What are additional available performance metrics** (e.g., turnaround time, specimen type, reagent stability and availability)?

Quick SARS-CoV-2 Genome Tutorial



- SARS-CoV-2 genome is ~30,000 bases long and mutates once every 1-2 weeks. Every ~2-3 transmission events is marked by a new mutation.
- By tracking these mutations across the population, we can monitor the dynamics of viral transmission and circulation.

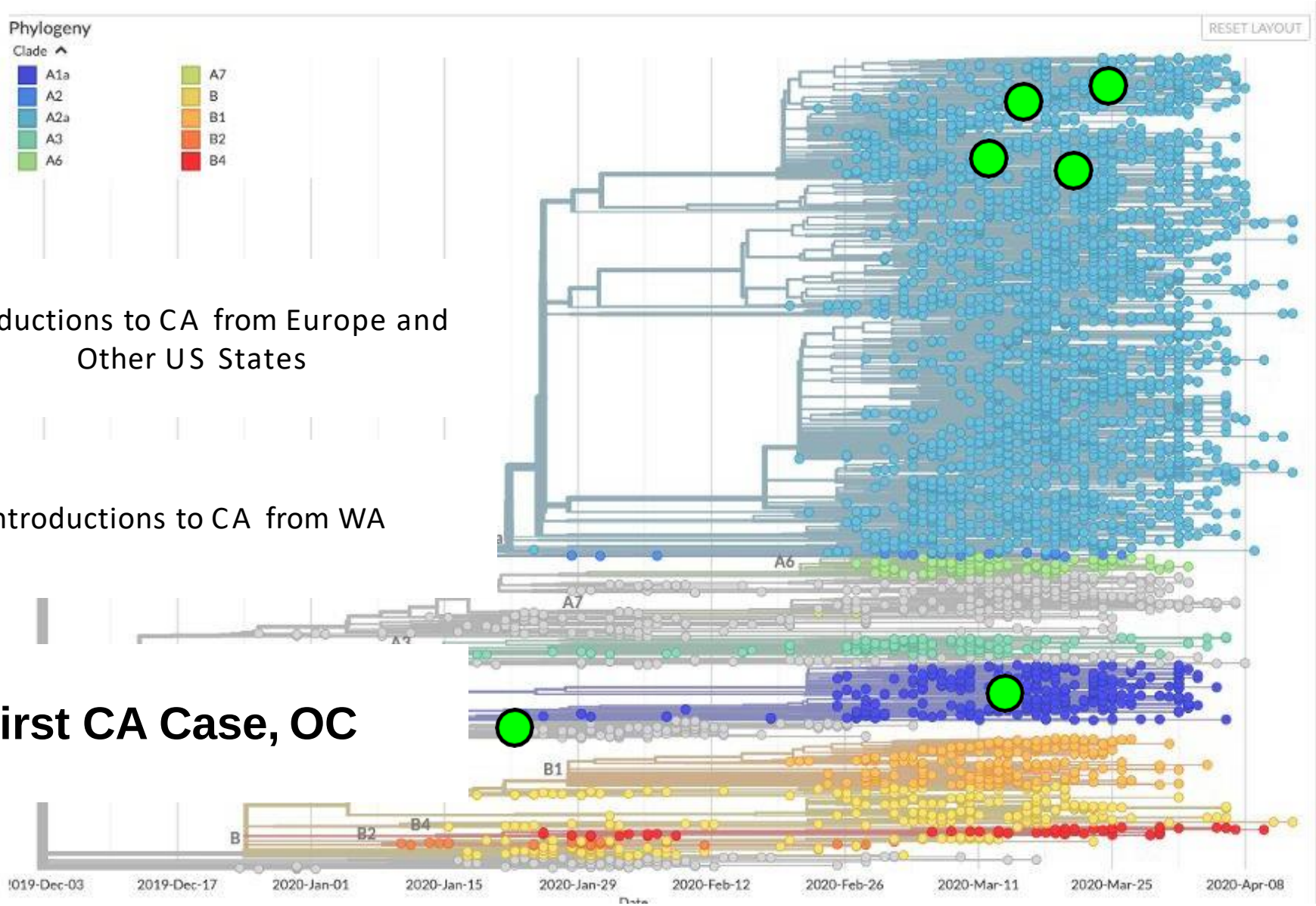
Viral Phylogenetic Tree Provides Context



- If we have many sequences, we can place them on a tree that shows how their genomes are related.
- We can infer common ancestors of sequences based on which mutations are shared, even if those missing cases were not detected by surveillance systems.

The distance between two samples along this tree gives the number of mutations separating them.

SARS-CoV-2: The **California** Picture



Introductions to CA from Europe and Other US States

Introductions to CA from WA

First CA Case, OC

New York

US/Europe

Netherlands/Finland

Australia / Canada

US/Europe

US / Washington
Spain
Wisconsin

Genomic Data Offers New Tools for Public Health

1. Identify or rule-out clusters and common exposures
2. For unknown exposures, identify potential sources of transmission
3. Build support for local actions to mitigate introductions and spread
4. Trace sources of introduction into counties, region or state
5. Estimate number of undetected cases in a community
6. Identify functional differences in circulating lineages

What we hope you take away from this session

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- We have developed a comprehensive but highly manual picture of testing in CA
- Picture is dynamic, changing every day
- Task Force is working hard to help:
  - Optimize distribution of testing supplies and equipment where needed
  - Recommend when new tests should be put into widespread use
  - Propose resources needed to expand testing capacity
  - Ensure equitable and appropriate statewide access to testing
- Efforts are gaining traction as we have moved from ~2,000 tests per day when we started, to going past our 25,000 tests per day goal by end of April
- We have a path to further increase tests per day to 60,000-80,000 per day and plenty of work left to do to achieve it

Next Steps

- Newsletter with updates about our work

- Please reach out to testing.taskforce@state.ca.gov if you have any questions about the Task Force efforts