

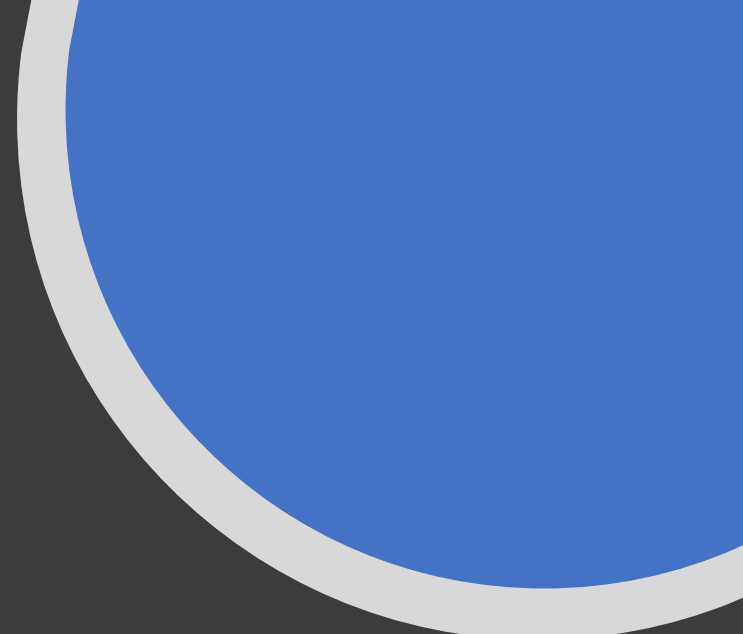
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Dr. Joe Sullivan, OHA

Quality Health Outcomes Committee, OHA

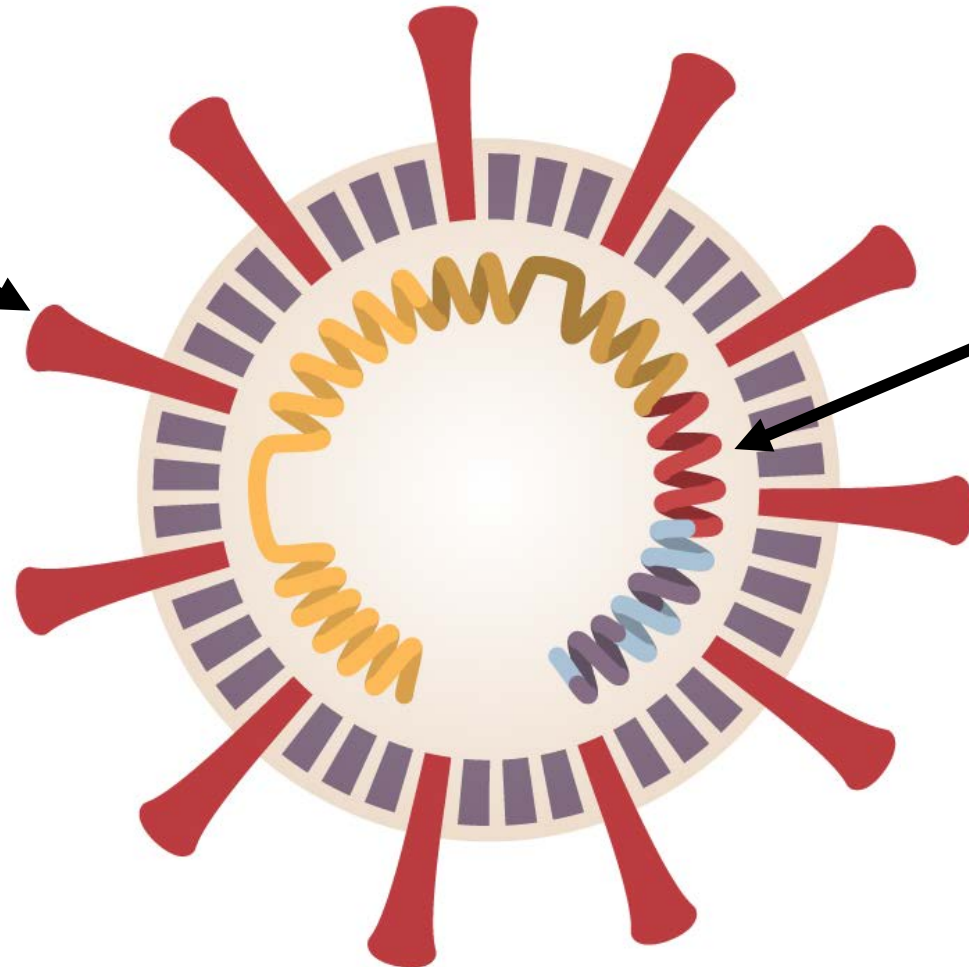
COVID-19

Vaccine



SARS-CoV-2 Virology

Spike Protein

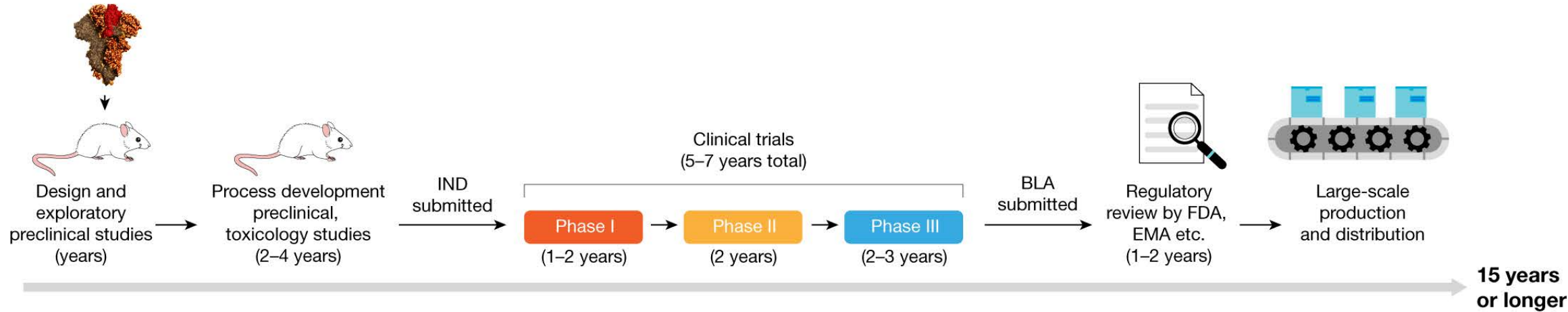


**Spike Protein
Gene (ssRNA)**

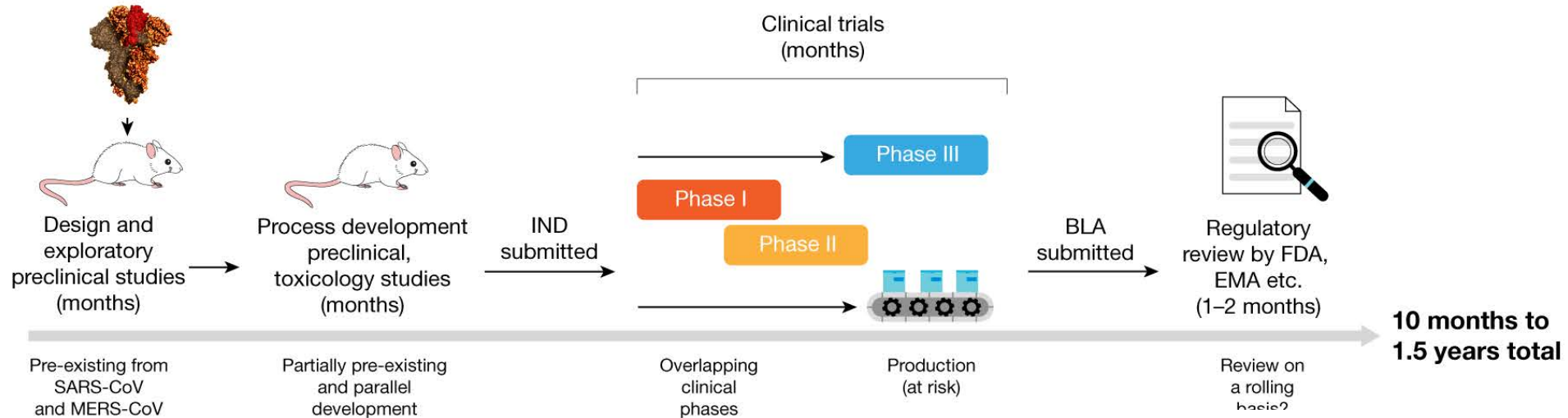


Vaccine Timeline

Traditional development



SARS-CoV-2 vaccine development



mRNA vaccines

Pfizer

mRNA codes for prefusion spike protein

2 doses 21 days apart

Vaccine Effectiveness = 95%

162 cases of symptomatic disease in placebo; 8 in vaccine group

10 cases of severe disease; 9 in placebo, 1 in vaccine

Effectiveness in those over

65 years old = 94%

Requires ultra- cold transport

Moderna

mRNA codes for prefusion spike protein

2 doses 28 days apart

Vaccine Effectiveness=94.1%

185 cases of symptomatic disease in placebo; 11 in vaccine group

30 cases of severe COVID and 1 death, all in placebo group

No difference in effectiveness

by age or ethnicity

Normal freezer temp

Non-Replicating Viral Vector Vaccine AstraZenica (AZD1222)

How it works: It adds DNA that code for the SARS-CoV-2 spike protein into a weakened cold virus (Simian adenovirus) that infects human cells and hijacks the cellular mechanism to produce the spike protein.

Phase 3 trial interim analysis of 131 cases(from press release 11/23/20) <https://www.astrazeneca.com/media-centre/press-releases/2020/azd1222h1r.html>

11,000+ volunteers (2,744 in UK and 8,895 in Brazil) showed an average efficacy of 70%

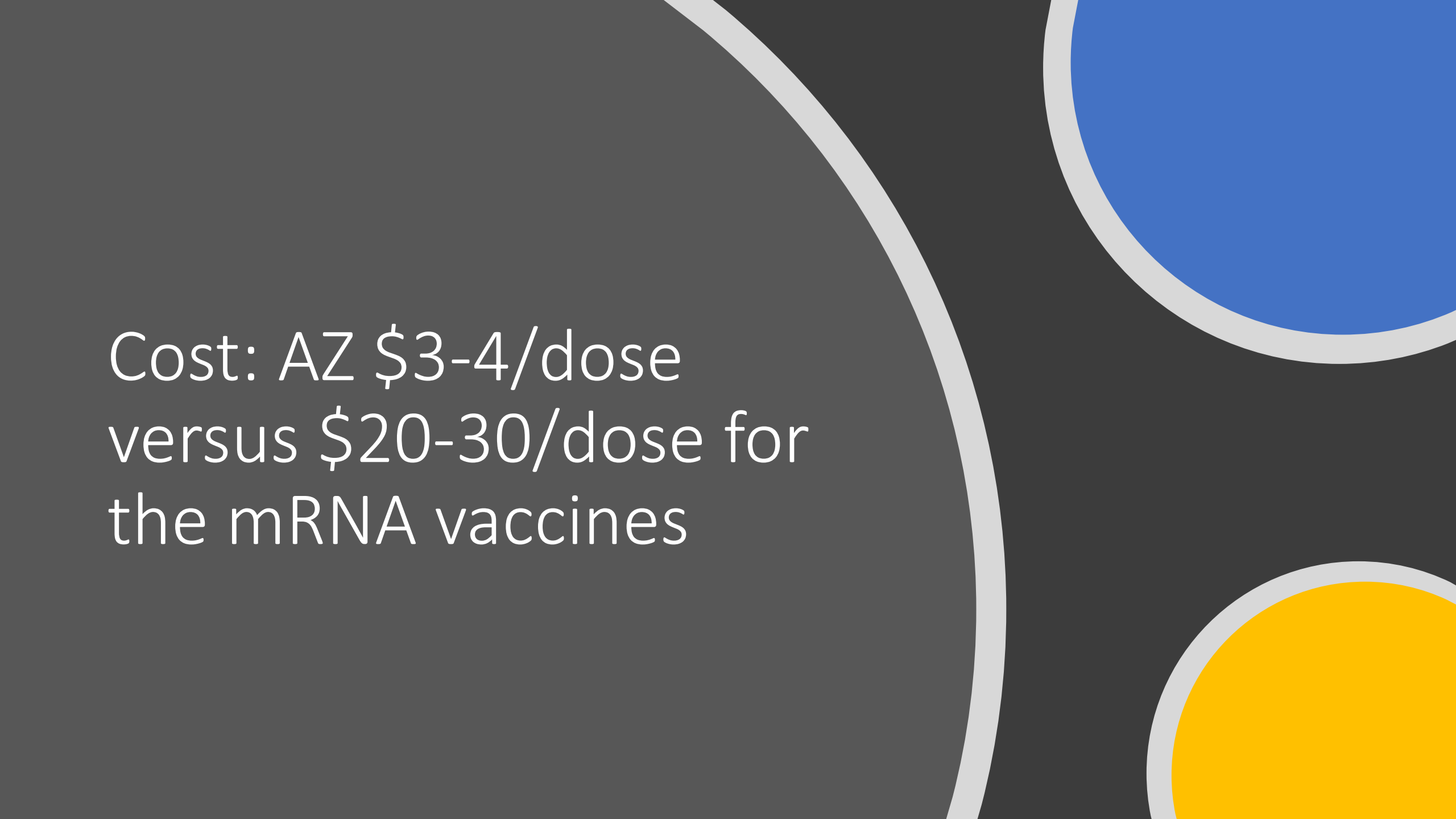
2 different dosing regimens showed between 62-90% effectiveness

No hospitalization or severe cases of COVID-19 in participants given AZD1222 vaccine

No serious safety events related to the vaccine have been confirmed.

AZD1222 was well tolerated across both dosing regimens

2 shots 28 days apart- Store in normal refrigerator



Cost: AZ \$3-4/dose
versus \$20-30/dose for
the mRNA vaccines

Factors Affecting Timeline

-EUA submission (Pfizer-current, Moderna- 11/30/20 , AstraZenica – coming soon)

-Vaccines and Related Biological Products Advisory Committee (VRBPAC) – Advises the FDA- Meets December 8th, 9th and 10th to review the Pfizer EUA application and December 17th to consider the Moderna EUA

**-Advisory Committee on Immunization Practices (ACIP) – Advises the CDC regarding the guidelines for usage. This process begins simultaneously while VRBPAC committee is deliberating but their guidelines come out after official FDA authorization.

-Western States Scientific COVID-19 Vaccine Safety Workgroup-Also will work concurrently with other committees

-Pfizer vaccine was shipped to Oregon mid-December and Moderna shipment occurred about a week after.

Expectations and Hopes

-The US Government has purchased 100 million doses of each mRNA vaccines and 300 million of the AZ vaccine with an option to purchase more.

-Timeline is uncertain but supposedly the US will get these cumulative doses by April/May 2021

22 million Pfizer and 18 million Moderna in December

30 million Pfizer and 20 million Moderna in January

35 million Pfizer and 25 million Moderna in February and March – This should take us through most of the 1a and 1b groups.

- Additional vaccines may speed this timeline:

AstraZenica-

Janssen

Oregon's Initial Allocations and Implications

- Allocation is based on a pro rata (population based) basis .
Oregon has roughly 2% of the US population
- It appears that with initial allocations of Pfizer and Moderna vaccines Oregon will be given enough vaccine to fully vaccinate over 100K HCWs and staff in December (Though to fully vaccinate this group will extend into January)
- This number will be inadequate to cover all healthcare workers and others in group 1a. (290,000 HCWs in Oregon)
- Some sub-prioritization will be necessary.
- Most if not all hospitals will likely receive the Pfizer ultra-cold mRNA vaccine
- A hub and spoke distribution method is being developed to address the ultra-cold requirement for the Pfizer vaccine

Phased Roll Out

	Phase 1c Adults with high -risk medical conditions Adults 65+
	Phase 1b Essential workers (examples: Education Sector, Food & Agriculture, Utilities, Police, Firefighters, Corrections Officers, Transportation)
Phase 1a HCP LTCF residents	

Phase 1a group for vaccination

Frontline healthcare workers and staff- hospital based

EMS providers who care for patients

Workers in long-term care facilities, corrections facilities

Residents in long-term and congregate care settings

HCWs in out-patient settings, now including dentists and chiropractors

Phase 1a Operations Update

- All **hospitals** in Oregon are making substantial progress towards vaccinating their healthcare personnel (HCP)
 - Majority hospitals have received enough doses to cover all HCP
 - Final few hospitals to receive remainder first dose allocations this week
 - Second doses are allocated by CDC and distribution began last week
 - Administration of second doses will roll out for several more weeks ahead
- Vaccination of residents and staff at **skilled nursing homes** is steadily progressing as Part A of the Federal Pharmacy Partnership

Phase 1a Operations Update (cont'd)

LPHAs working through logistics and administration for others identified in Group 1:

- EMS
- First Responders
- Tribal Health Clinic distribution underway
- Memory care: through Federal Pharmacy Part B
- Working through logistics for others part of Group 1:
 - Contractors
 - Traditional Health Workers who provide services in a hospital.
 - Health Care Interpreters who provide services in a hospital.

Lessons Learned

- Different than distributing and administering large numbers of influenza vaccines
- Scheduling, physical distancing, observation period impacts
- Pfizer especially complex
- Operational complexities due to the need to prioritize
 - Some groups simple: hospitals, EMS, long term care
 - Some groups complex: unaffiliated HCP

Sequencing Update


- Much of Phase 1a Group 1 is complete
- Need to simplify the remainder of Phase 1a
- Activate remainder of Federal Pharmacy Program for long term care and various congregate care sites
- Implement simplified distribution chains
 - Hospitals
 - Retail pharmacies

Vaccine Prioritization Re-emphasis

- Will be dictated by ACIP, OHA
- Prioritizes hospital workers at highest risk in first distributions – Phase 1A Groups
- SHS COVID-19 Vaccine Workgroup is monitoring vaccine rollout, working with all 3 county health departments
- As of this morning, 3800 Samaritans have received their first round doses, and on Friday, some frontline hospital workers have already received their second dose.

Current CCO Activities

- Reach out to clinics to understand where they are in the vaccination process
- County HHS collaboration
- Regular LPHA meetings for planning
- Partnerships with LPHA (shared roles, etc)
- CCO customer service assisting in scheduling vaccinations for health systems
- Provider outreach and vaccination education
- Beginning to identify members with a risk stratification approach
- Established internal COVID taskforce for planning and action
- Planning larger community vaccination campaign
- Establishing satellite and remote distribution sites for rural areas



There is
light at the
end of the
tunnel!

- In the interim – double down on social distancing, hand washing, mask wearing.
- The **current** science is clear – masks work!
- Full participation while waiting for widespread vaccination will save additional lives and decrease the potential of overwhelming the hospital system. (No new ICU beds, ICU physicians or ICU nurses)