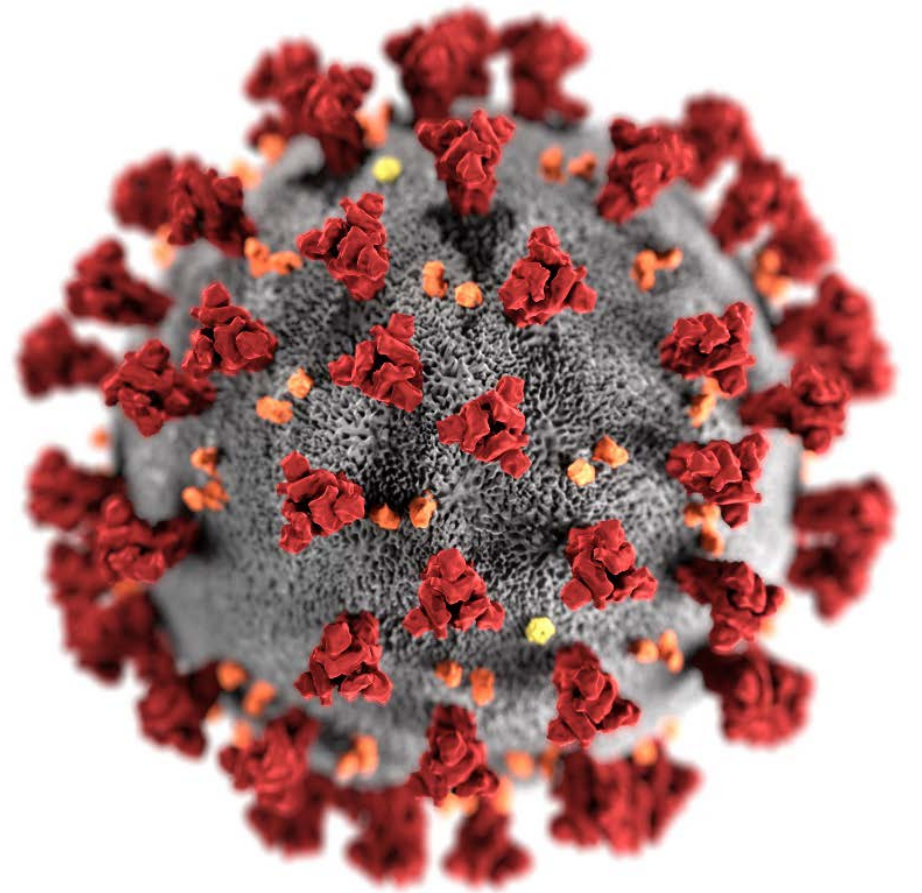


Phased Allocation of COVID-19 Vaccines

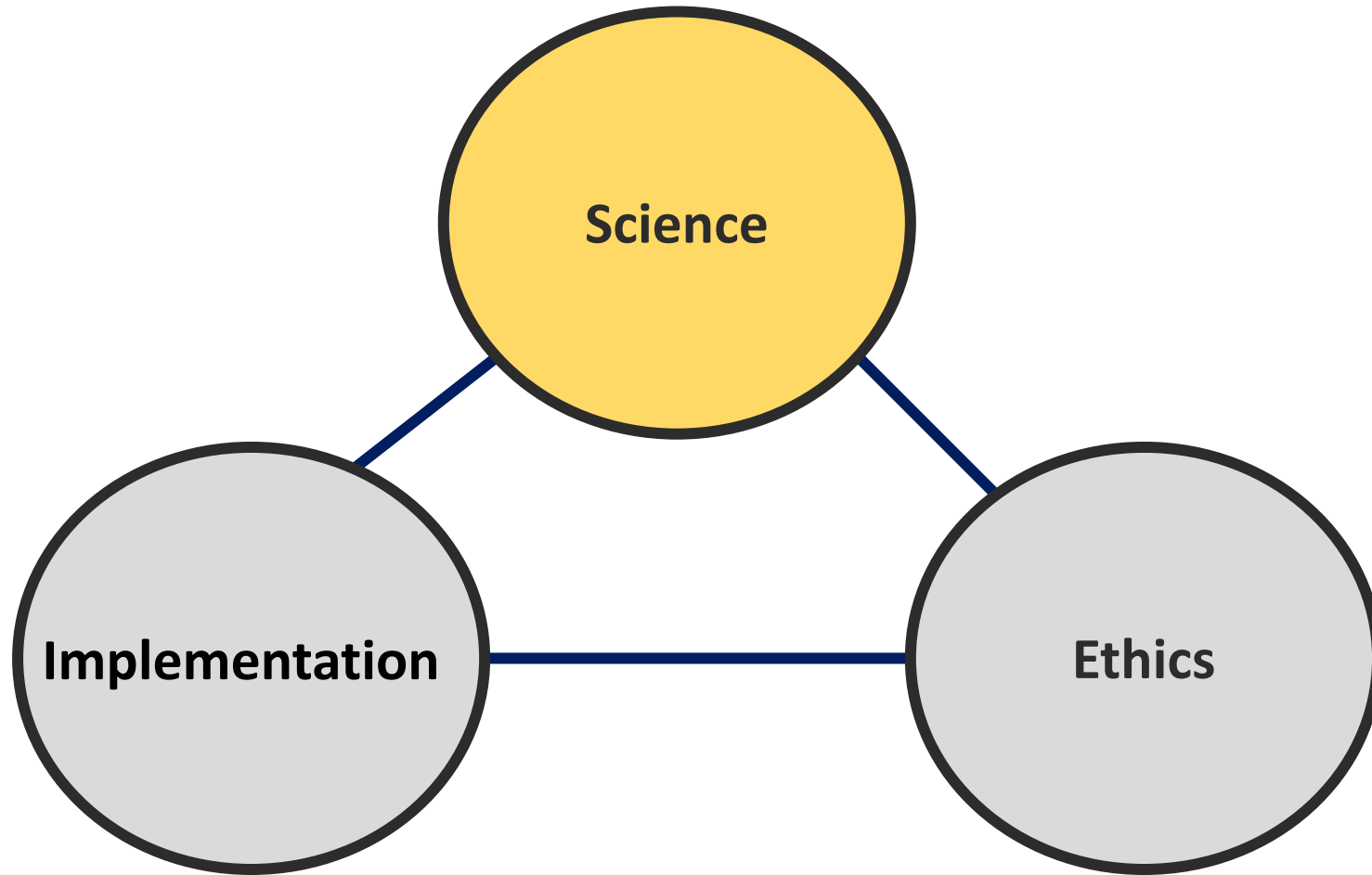
Kathleen Dooling, MD, MPH
ACIP meeting
December 1st, 2020



Policy Question:

- **Should health care personnel and residents of long-term care facilities be offered COVID-19 vaccination in Phase 1a?**

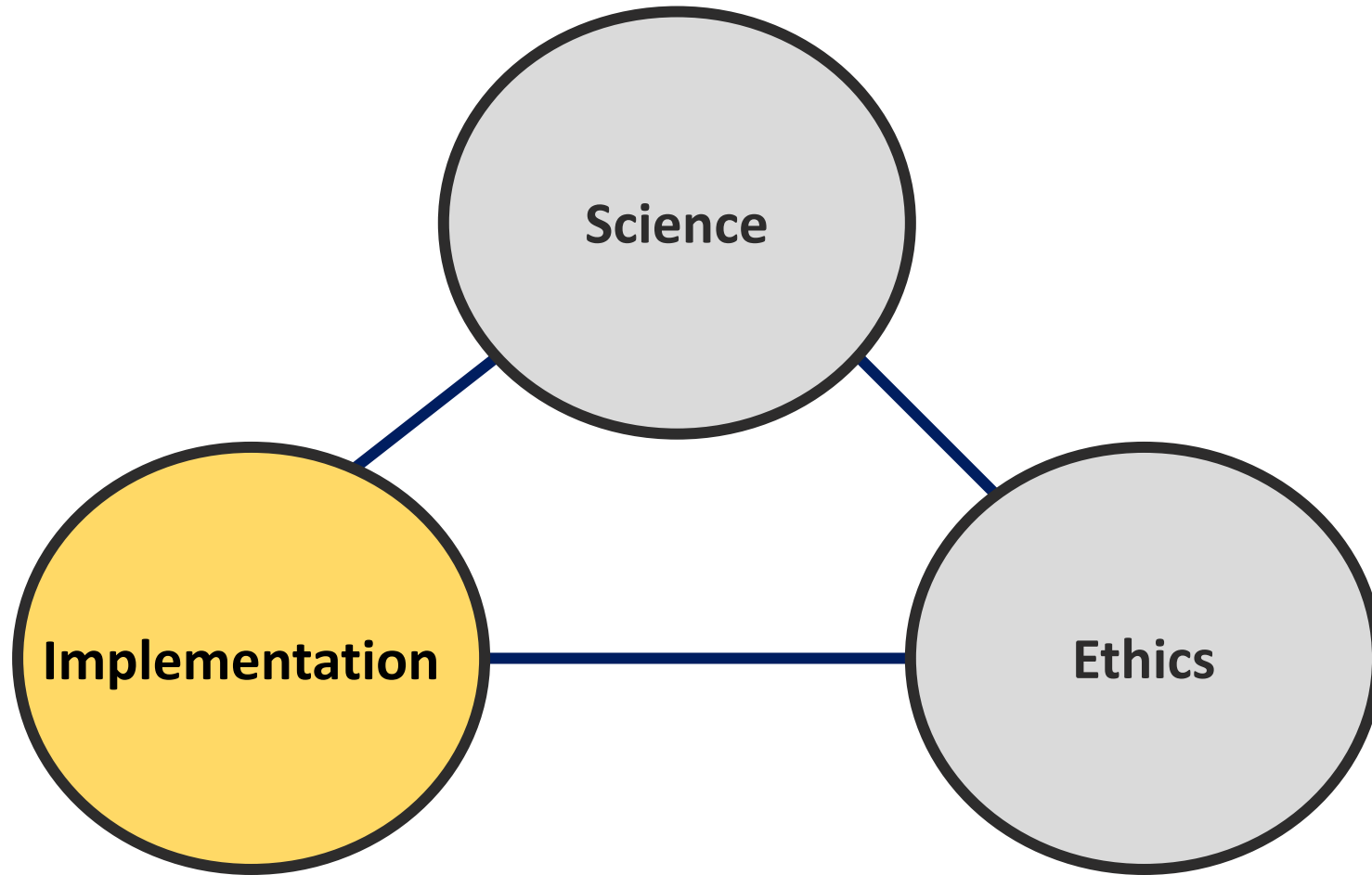
Allocation of initial COVID-19 vaccine: Phase 1a



Science:

- COVID-19 disease burden
- Balance of benefits & harms of vaccine

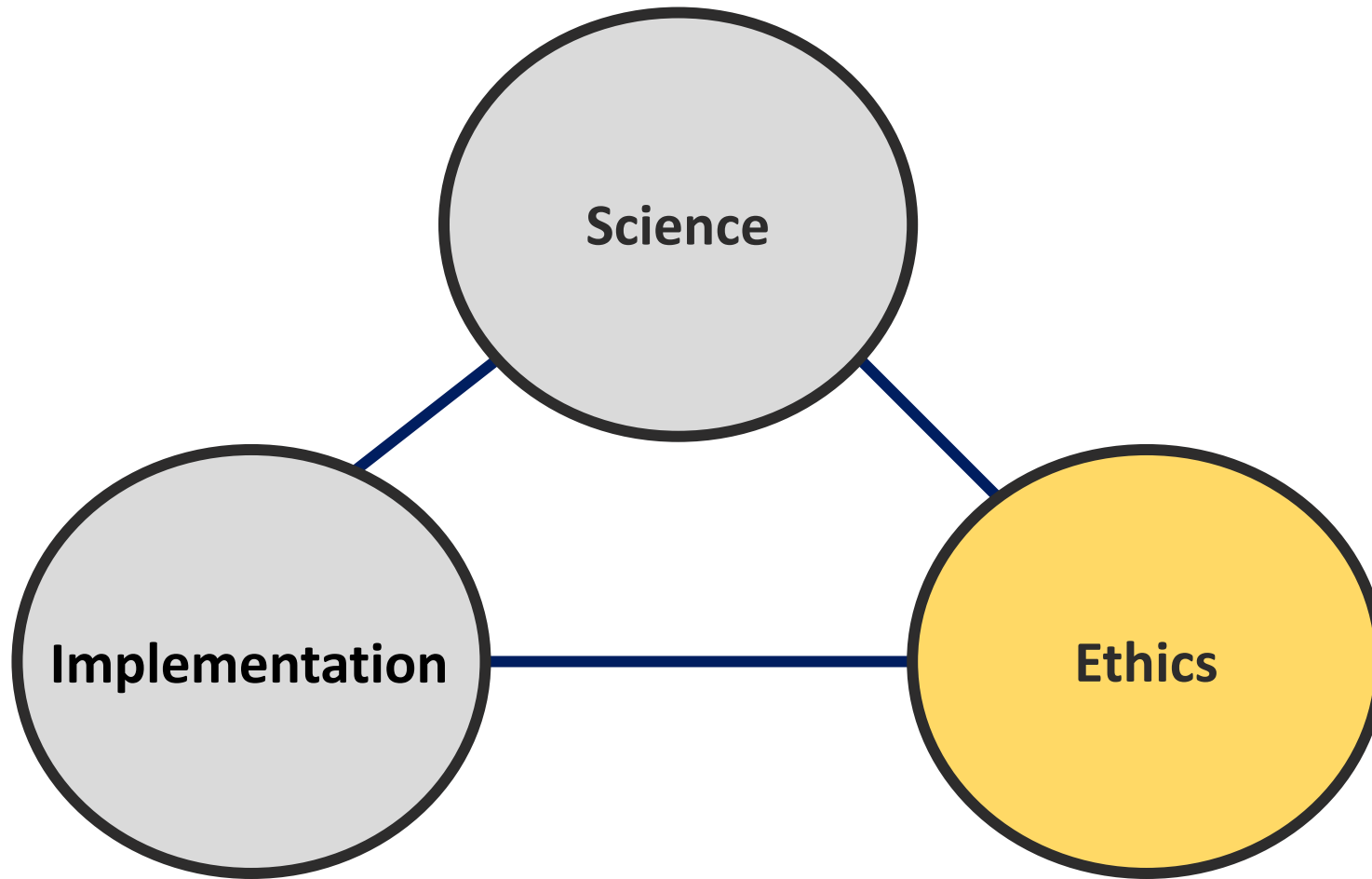
Allocation of initial COVID-19 vaccine: Phase 1a



Implementation:

- Values of target group
- Feasibility

Allocation of initial COVID-19 vaccine: Phase 1a



Ethical Principles:

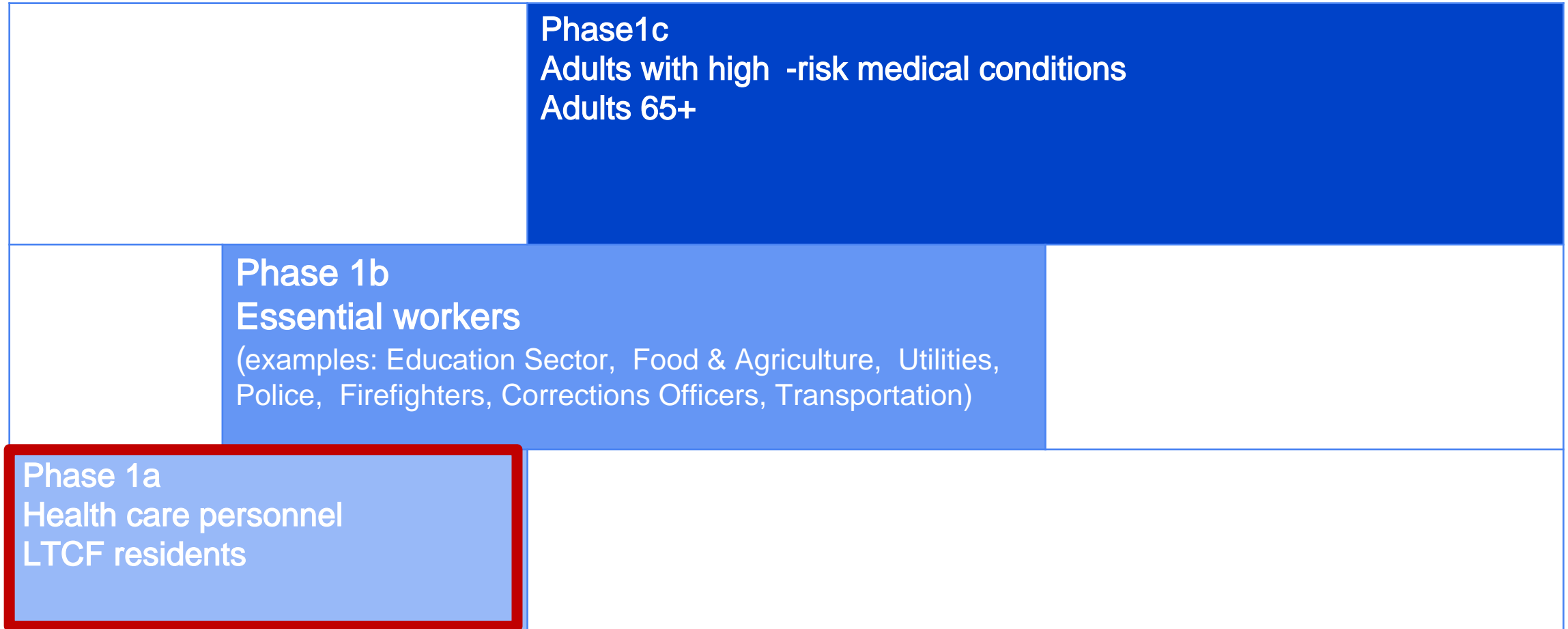
- Maximize benefits & minimize harms
- Promote justice
- Mitigate health inequities
- Promote transparency

Work Group Proposed Interim Phase 1 Sequence

	Phase1c 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 Health care personnel LTCF residents		

Time

Work Group Proposed Interim Phase 1 Sequence



Time

Proposed groups for Phase 1a vaccination

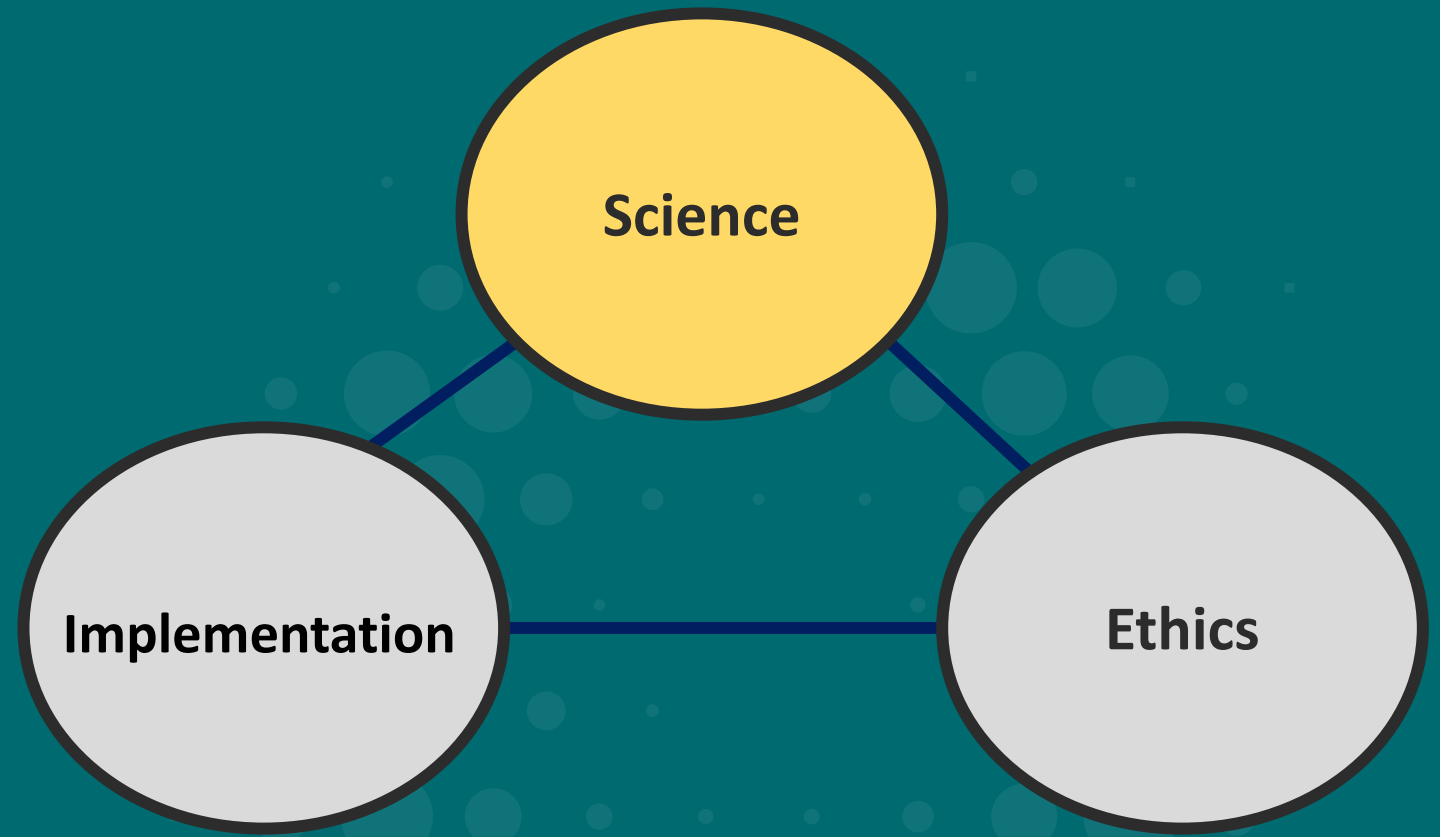
Health care Personnel ^{1,2} (HCP) (~21million)	Long-Term Care Facility (LTCF) Residents ³ (~3M)
Examples	
<ul style="list-style-type: none">• Hospitals• Long-term care facilities• Outpatient clinics• Home health care• Pharmacies• Emergency medical services• Public health	<ul style="list-style-type: none">• Skilled nursing facilities (~1.3 M beds)• Assisted living facilities (~0.8 M beds)• Other residential care (~0.9 M beds)

1. <https://www.cdc.gov/infectioncontrol/guidelines/healthcare>

2. <https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce>

3. <https://www.cdc.gov/longtermcare/index.html>

Science



Summary of Work Group considerations supporting vaccinating health care personnel in Phase 1a

- As of Nov 30, at least 243,000 confirmed COVID-19 cases among HCP, with 858 deaths¹
- LTCF modeling demonstrates more cases and death averted at the facility by vaccinating staff compared to vaccinating residents²
- COVID-19 exposure (inside and outside the healthcare setting) results in absenteeism due to quarantine, infection and illness. Vaccination has the potential to reduce HCP absenteeism

¹ <https://covid.cdc.gov/covid-data-tracker/#health-care-personnel>

² Slayton, Modeling Allocation Strategies for the initial SARS-CoV-2 Vaccine Supply, ACIP Aug 21, 2020, <https://www.cdc.gov/vaccines/acip/meetings/slides-2020-08.html>

Older adults in congregate settings are disproportionately affected by COVID-19

- Long-Term Care Facility (LTCF) residents and staff accounted for 6% of cases and 40% of deaths in the U.S.¹ (Nov 24, 2020)
 - Skilled Nursing Facilities (~1.3M)
 - ~496,000 confirmed + probable cases (as of Nov 15, 2020)²
 - >69,000 deaths
 - Assisted Living Facilities (~0.8M)
 - 27,965 confirmed + suspected cases (as of Oct 15/2020, based on 23 states³)
 - 5,469 deaths (as of Oct 15/2020, based on 20 states³)

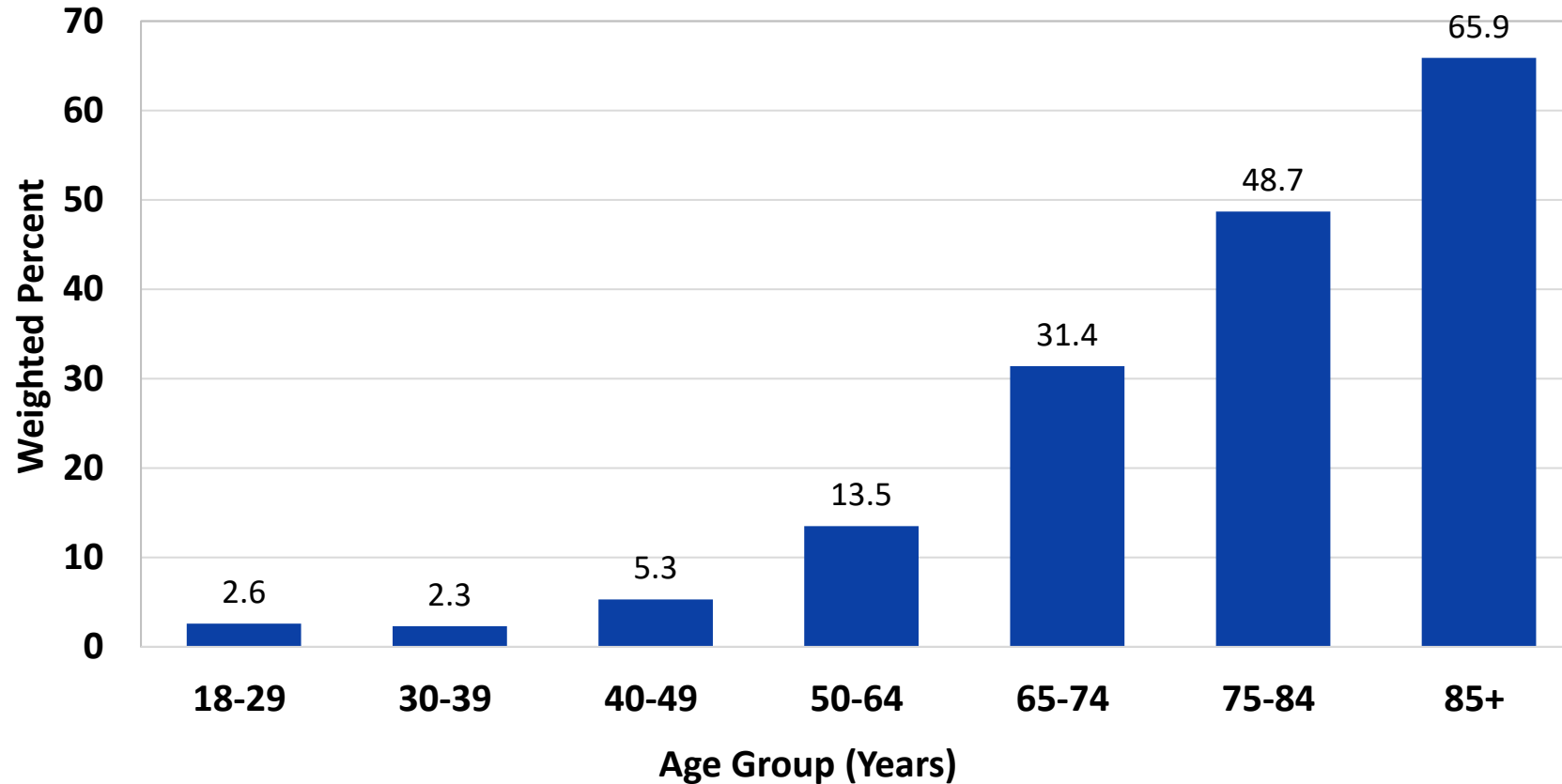
1. Kaiser Family Foundation. State data and policy actions to address coronavirus: COVID metrics by state. San Francisco, CA: Kaiser Family Foundation; 2020. <https://www.kff.org/health-costs/issuebrief/state-data-and-policy-actions-to-address-coronavirus/#long-term-care-casesdeaths>

2. CMS COVID-19 data: <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg/>

3. Yi SH, See I, Kent AG, et al. Characterization of COVID Assisted Living Facilities— 39 States, October 2020. MMWR Morb Mortal Wkly Rep 2020;69:1730-1735. DOI: <http://dx.doi.org/10.15585/mmwr.mm6946a3>

The majority of COVID-associated hospitalized patients older than 75 years, were admitted from a LTCF*

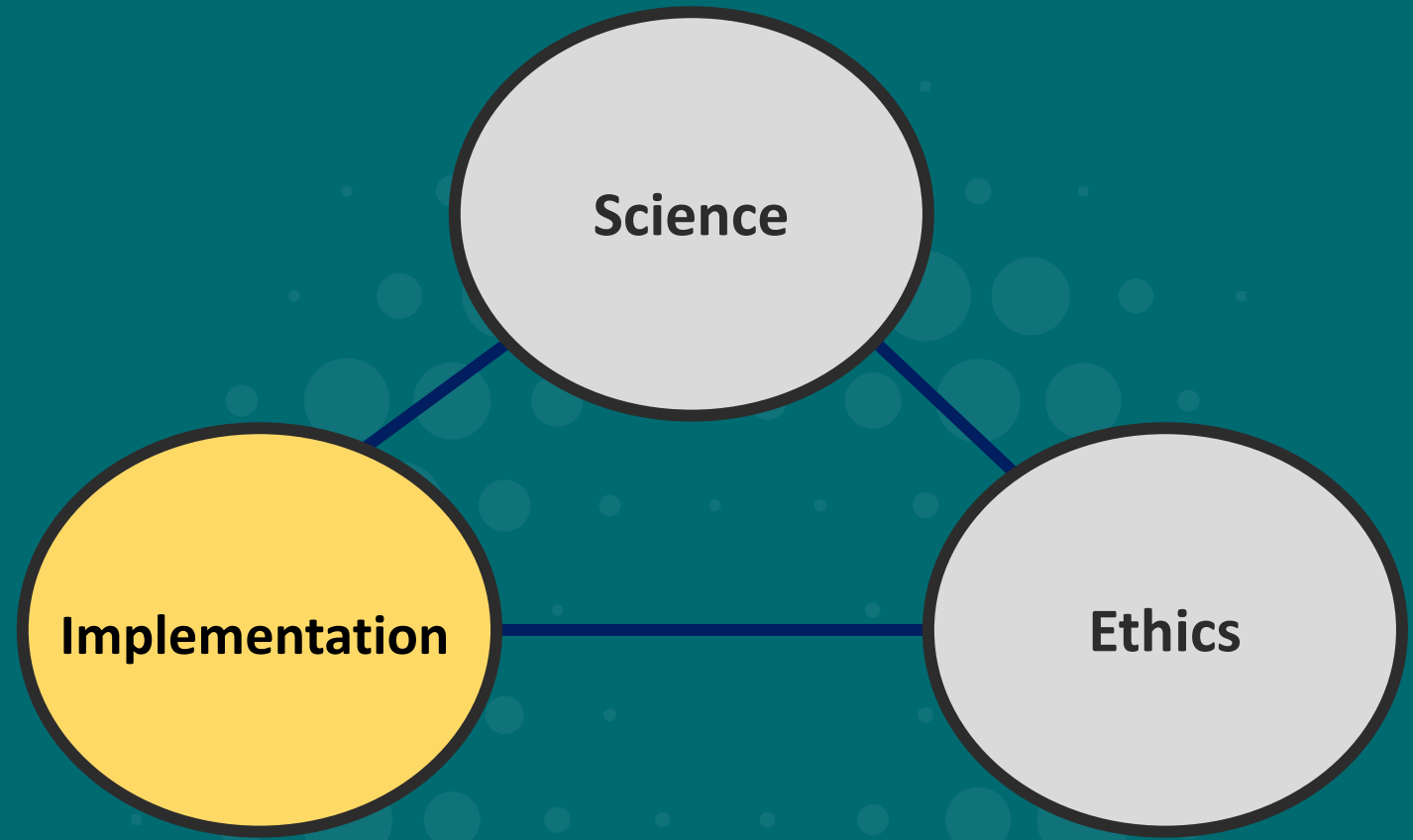
Proportion of COVID-associated hospitalized patients admitted from a LTCF*



*LTCF= Nursing home/skilled nursing facility, rehabilitation facility, assisted living/residential care, LTACH, group home/retirement, psychiatric facility, or other long-term care facility

Data Source: COVID-19 associated hospitalizations reported to Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) surveillance system. COVID-NET is a population-based surveillance system that collects data on laboratory-confirmed COVID-19-associated hospitalizations among children and adults through a network of over 250 acute-care hospitals in 14 states.

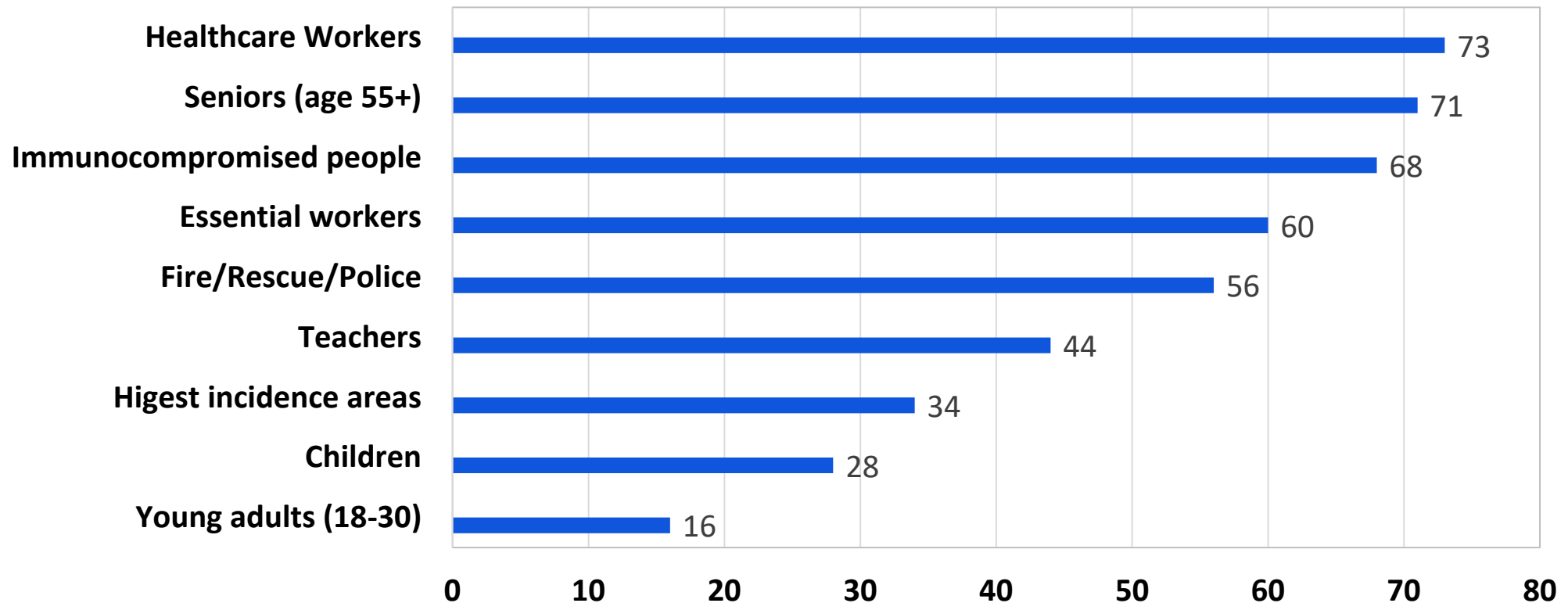
Implementation



Survey respondents supported early allocation of COVID-19 vaccine to health care personnel and seniors

Which of the following groups should receive priority when a COVID-19 vaccine is available?

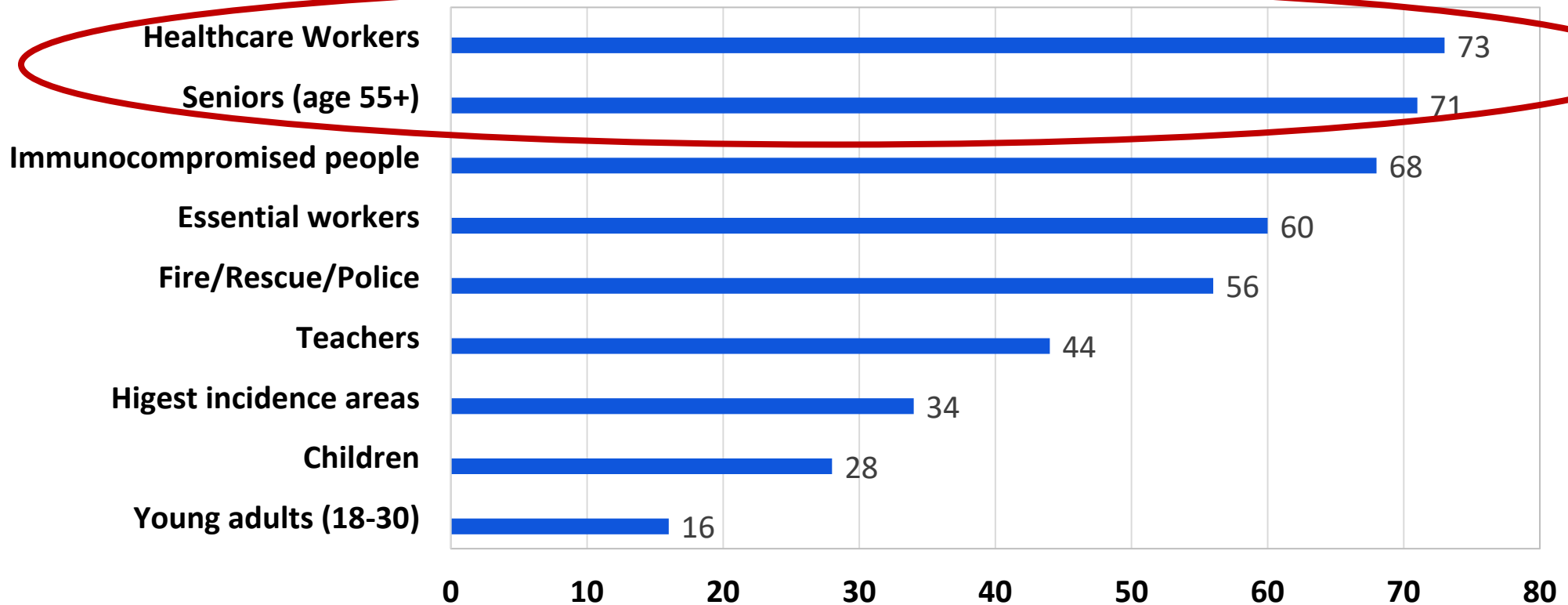
The Harris Poll, n=1399 U.S. Adults, August 14-16, 2020



Survey respondents supported early allocation of COVID-19 vaccine to groups proposed for Phase 1

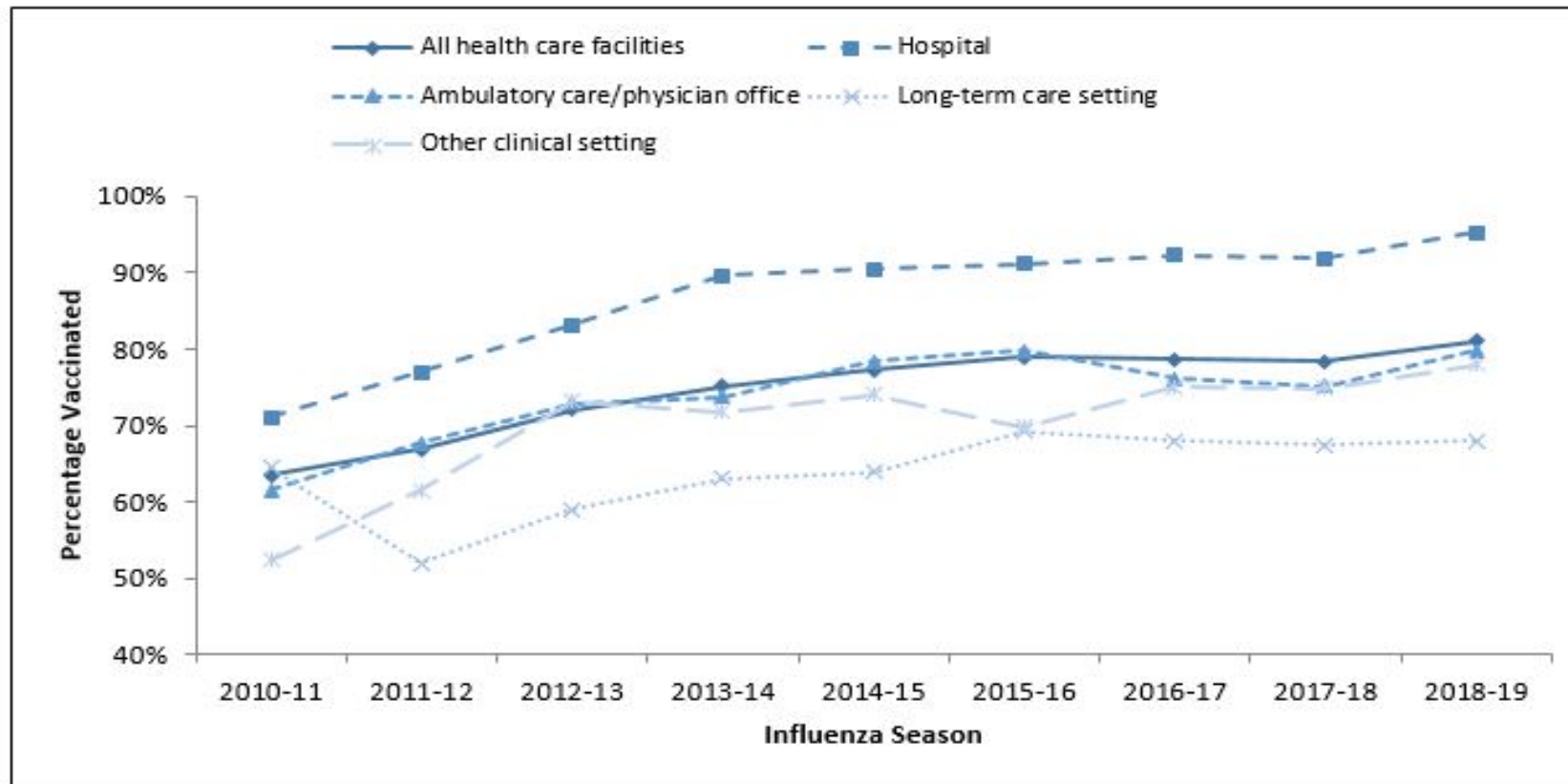
Which of the following groups should receive priority when a COVID-19 vaccine is available?

The Harris Poll, n=1399 U.S. Adults, August 14-16, 2020

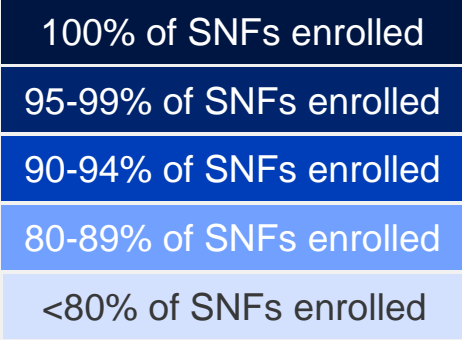
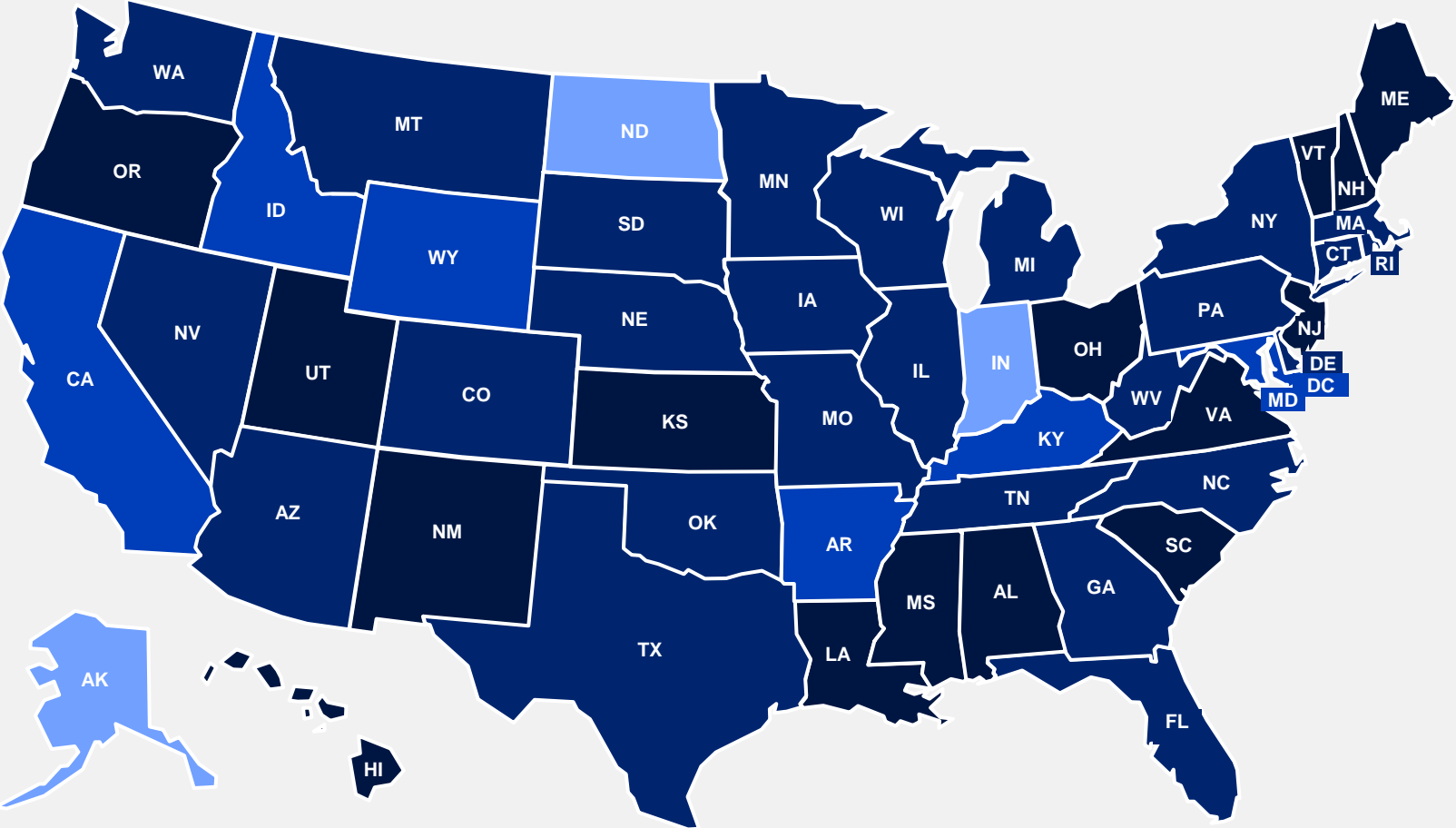


Hospital staff influenza vaccine uptake highest among health care personnel

Percentage of health care personnel who received influenza vaccination, by work setting* — Internet panel surveys, † United States, 2010–11 through 2018–19 influenza seasons



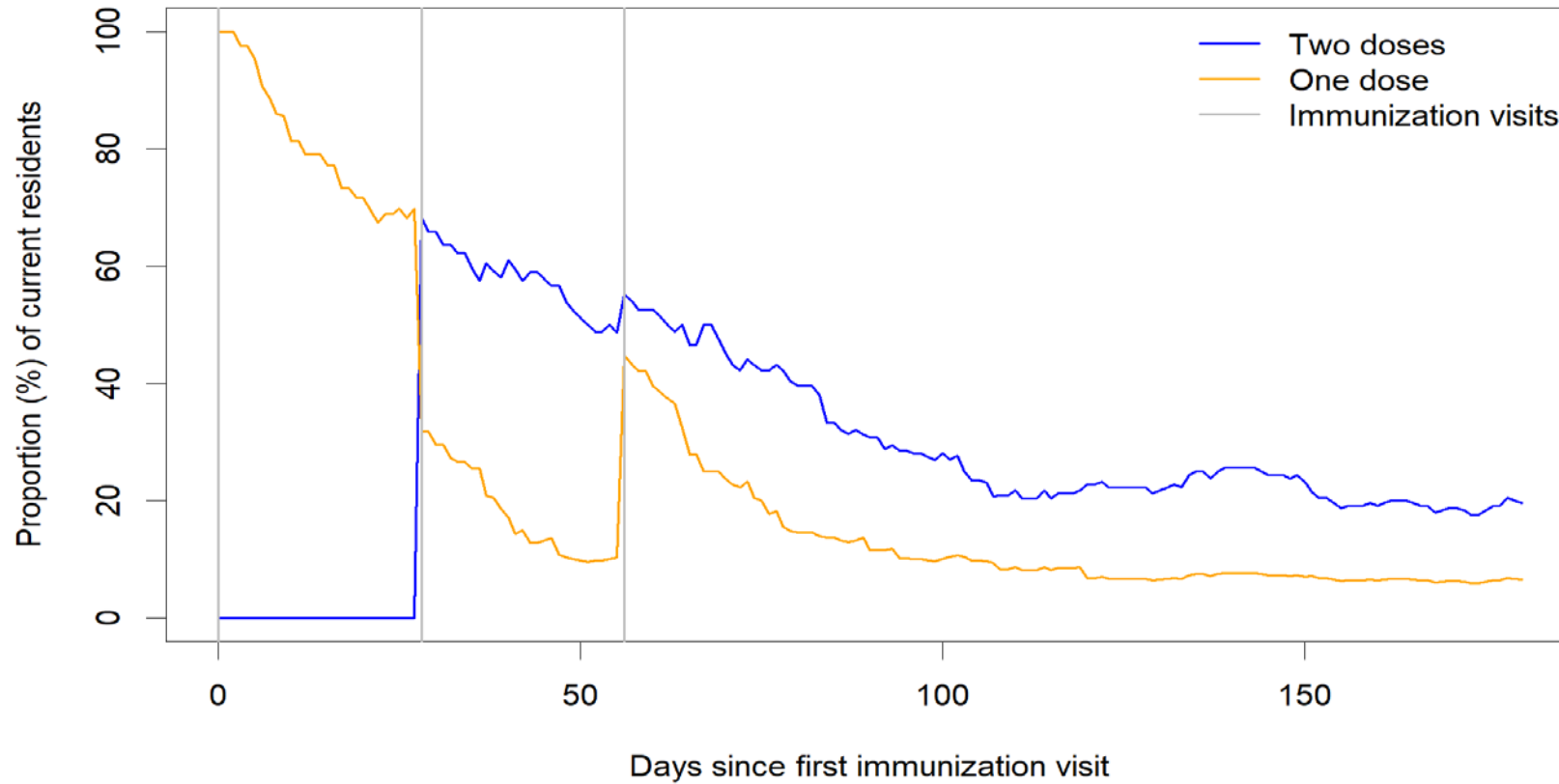
Skilled Nursing Facilities (SNFs) Enrolled in Pharmacy Partnership for Long-Term Care Program



99% of total SNFs nationwide have enrolled (N=15,353)

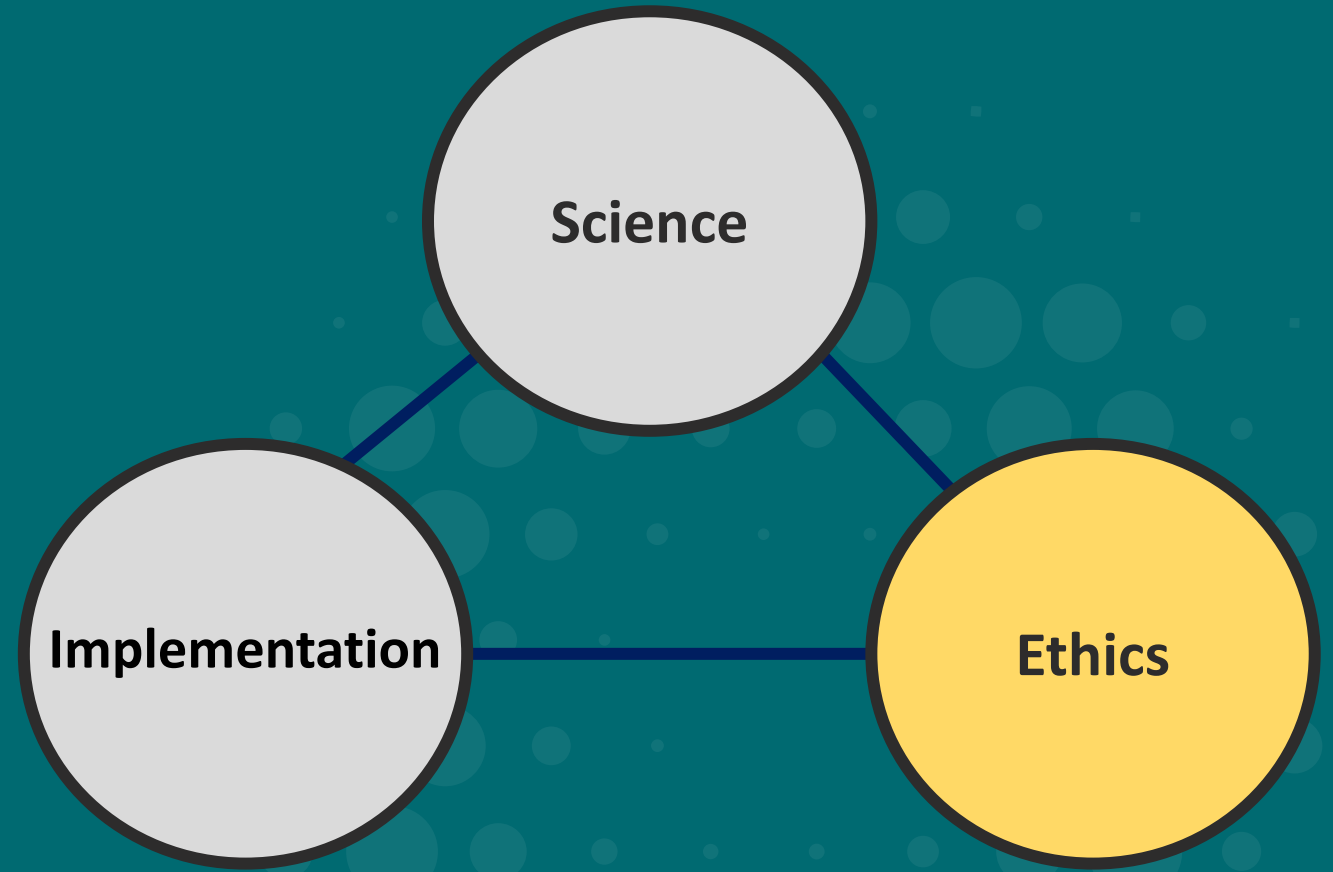
* States >100% enrollment: Numerator may include non-CMS-certified SNFs. Denominator is only CMS-certified.¹⁷

Example: One-dose and two-dose coverage among Skilled Nursing Facility residents



Note: Results from a simulation run based on SNF lengths of stay, excluding stays longer than a year. Discharge data from MCM Minimum Data Set, 2016

Ethics



Work Group assessment: Ethics

Ethical Principle	Health care personnel (~21 million)	Long-Term Care Facility Residents (~3 Million)
Maximize benefits & minimize harms	Multiplier effect - protection of HCPs and preservation of healthcare capacity	LTCF residents are at high risk for infection severe disease and death from COVID-19. Prevention may reduce hospital utilization
Promote justice	HCP provide care in high risk settings and will be essential for vaccine distribution	Federal Pharmacy Partnership Program will facilitate equal access to vaccine across most LTCFs
Mitigate health inequities	HCP includes broad range of occupations, inclusive of low wage earners and racial and minority groups	Federal Pharmacy Partnership Program will reach LTCF across the socioeconomic spectrum

Work Group assessment:

	Health care personnel (~21 million)	Long-Term Care Facility Residents (~3 Million)
Science	+++	+++
Implementation	+++	+++
Ethics	+++	+++

Additional Work Group considerations for Phase 1a

- This represents interim guidance for Phase 1a– allocation policy will need to be dynamic and adapt as new information such as vaccine performance and supply and demand become clear
- Gating criteria will be necessary to move expeditiously from one Phase to the next, as demand saturates
- Following vaccination, measures to stop the possible spread of SARS-CoV-2, such as masks and social distancing, will still be needed
- The U.S. government is committed to making COVID-19 vaccines available to all residents who want them, as soon as possible

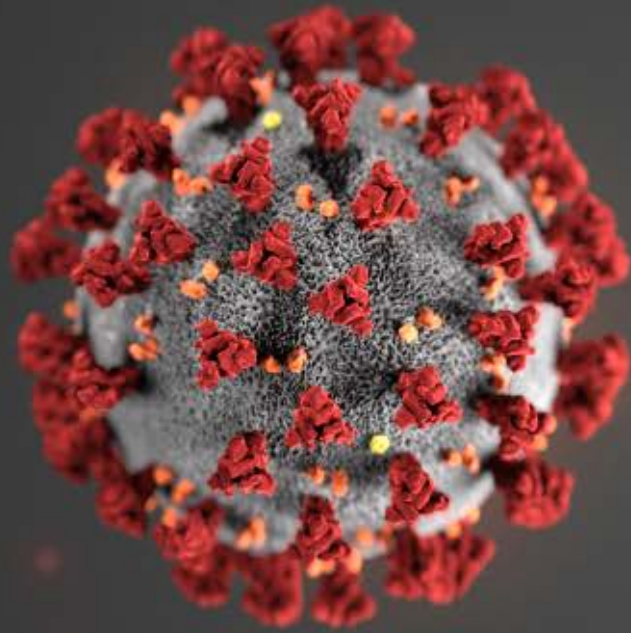
Feedback from ACIP meeting, November 23, 2020:

Health care personnel

- Guidance on sub-prioritization of HCP when vaccine supply is limited
- Address vaccination in pregnant/lactating HCP
- Reactogenicity following vaccination:
 - Guidance on scheduling to avoid potential clustering of worker absenteeism related to systemic reactions
 - Guidance on evaluation of systemic symptoms following vaccination

LTCF Residents

- Understanding of LTCF resident consent/assent for vaccination
- Reactogenicity following vaccination & safety monitoring



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

Thank you

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

