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COVID-19 Vaccine Information and Patient Opinions

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COVID-19 Vaccine Information

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Why Is This Necessary?

- As the vaccine becomes approved for emergency use by the FDA, patients are bringing questions to their visits
- With an abundance of information online and in the news, it can be difficult to boil down to the basics and know that the information you are reading is accurate
- Time spent discussing the COVID vaccine takes away from time discussing other chronic health conditions
- With information about the vaccine constantly evolving, distributing material with accurate information as well as trustworthy sites that are continually being updated is crucial

Cost Considerations

- COVID-19 has had an incredible financial impact worldwide
- Widespread distribution of the COVID-19 vaccine is one step towards returning to a state of “normal,” which would allow many operations and industries to return to the level of financial independence they experienced prior to the COVID-19 pandemic
- Patient education is critical for distribution of the vaccine, especially as it does not have the same level of efficacy and safety data or history as other vaccines

Summary of Federal COVID-19 Funding to Vermont as of 12/31/2020

Federal Coronavirus Relief Fund	\$1.2 billion
Small Business - Paycheck Protection	\$1.2 billion
Federal Unemployment Insurance ¹	\$758 million
Economic Impact Payments	\$571 million
Small Business - Economic Injury Disaster Loans	\$393 million
Hospitals	\$304 million
State	\$272 million
Coronavirus Food Assistance Program ²	\$70 million
Higher Education	\$24 million
Community Health Centers	\$24 million
FEMA Disaster Loans	\$17 million

¹ This represents Pandemic Unemployment Assistance (PUA) benefits, Federal Pandemic Unemployment Compensation (FPUC) benefits, and Pandemic Emergency Unemployment Compensation (PEUC) benefits. It does not include state unemployment payments, which total \$389 million.

² This program provides financial assistance to agricultural producers who continue to face market disruptions and associated costs because of COVID-19. Dairy farmers have received the majority of this funding in Vermont.

Perspective

- Umair Malik, MD (community member and physician at NCPC)
 - Healthcare providers are facing information distributed on platforms that many people trust (Facebook, Instagram influencers) with information that we cannot assure is 100% true
 - Inherent uncertainty makes it difficult to make assertive claims about benefits of the vaccine
 - Physicians have a duty to debunk false information that patients believe, or at least present evidence-based information
 - All of this must be done in a 15 minute visit during which other medical conditions must be addressed as well
- Robert Wilson (community member and board member of North Country Hospital)
 - It is important to get information out on multiple levels, including targeting various age groups, education levels, and medical conditions; this can be done all in one deliverable but must be clear and concise
 - Key information to include: a basic explanation of how the vaccine works, who it is safe for, and addressing the question of if the vaccine can infect patients with COVID

Intervention & Methodology

- In collaboration with Zeynep Tek, MS-3 a handout was created with many frequently asked questions about the COVID-19 vaccine identified by physicians and nurses
- State-specific information about vaccine distribution schedule was included on the back of the handout
- Claudia Russell, MS-3 developed surveys about patient thoughts on the vaccine that were distributed at three different sites in Vermont and Connecticut



COVID-19 Vaccine Patient Information

-Faith Wilson, UVM Medical Student at NCPC-Newport

In mid-December, the U.S. Food and Drug Administration approved both the Pfizer-BioNTech and Moderna COVID-19 vaccine for emergency use in adults (Pfizer-BioNTech for aged 16 years and older, Moderna for aged 18 years and older).

How does the vaccine work?

Both vaccines are mRNA vaccines, which means that our body is being given instructions (mRNA) on how to make the harmless spike protein that is found on the COVID-19 virus. This allows our body to make antibodies to fight the virus without contracting it. This impressive technology is critically important, as it is a safe and effective way to build immunity towards the disease.

Is there a chance I will get COVID-19 from the vaccine?

No. The vaccine is not a live virus and cannot infect you with COVID-19.

Can it change my DNA?

No. The vaccine is an mRNA vaccine, which does not get incorporated into your DNA. Instead, it tells your cells how to build the protein that is found on the surface of the COVID virus, so that the body's natural immune system can build antibodies against that protein. That is how your body naturally builds immunity.

Is the vaccine safe?

Although the timeline for this vaccine development was accelerated, the COVID-19 vaccine is being held to the same safety standards as all vaccines. The vaccine development process is typically slowed down by a shortage of funding and participants; since the COVID vaccines were well-funded with many eager participants, the timeline was significantly reduced.

Is the vaccine effective?

Both the Pfizer-BioNTech and Moderna vaccines have been proven to be about 95% effective at preventing the transmission of COVID-19. These vaccines were tested in diverse adult populations.

It is currently unknown how long protection after receiving the vaccine might last.

Can I get the vaccine if I have pre-existing health conditions?

Yes. Study trials found the vaccine to be as safe and effective in individuals with pre-existing medical conditions as it is in otherwise healthy individuals. Currently the only contra-indication to getting the vaccine is a history of severe allergic reaction to an mRNA COVID vaccine or an allergic reaction to polysorbate. Other food and medication allergies are not a contra-indication to the vaccine. Talk to your doctor if you have concerns about a specific medical condition.

What are the side effects of the vaccine?

The most common side effects are pain at the site of injection, headache, fever, chills, and muscle and joint pain. These side effects were especially noticed in the Moderna vaccine following the second injection, as your body is revving up its immune response. Many well-studied vaccines that are commonly given have similar side effects. Serious allergic reactions are rare but if you feel that you are having a severe allergic reaction please call 911 immediately.

What else do I need to know?

The COVID-19 vaccine is a 2-shot series, with the second shot given at least 21 days (for Pfizer-BioNTech) or 28 days (for Moderna) after the first. The vaccine is administered intramuscularly into the deltoid, similar to the influenza vaccine. Finally, the vaccine will continue to be studied to gather long-term data on the safety and efficacy in the coming months and beyond. For more information visit:

www.cdc.gov/coronavirus/2019-ncov/vaccines

Survey Results

- 51 Surveys were collected across three different sites in South Burlington (VT), Newport (VT), and Ridgefield (CT)
- Ages of participants:
 - 18-29: 1 (2%)
 - 30-49: 11 (21.5%)
 - 50-64: 18 (35.3%)
 - 65-79: 16 (31.4%)
 - 80+: 5 (9.8%)
- Gender: 23 participants were male (45.1%), 28 were female (54.9%)
- Of those surveyed, 40 said they would receive the vaccine (78.4%), 2 said they would not receive the vaccine (3.9%), and 9 were unsure (17.7%)
- When asked about why patients would not receive the vaccine, the following responses were collected:
 - I don't want it: 1
 - I worry I will get sick from it: 2
 - I worry about long term side effects: 6
 - I need more information: 5
 - I don't trust the vaccine: 2
 - Other answers: 5
 - Too many allergies: 3
 - I don't trust the vaccine up to 10 years coming out
 - I think it was rushed to be made
 - I want to wait

Effectiveness & Limitations

- The effectiveness of this deliverable has not yet been evaluated on a large-scale
- Proposed methods to evaluate this project:
 - Interviewing physicians and nurses before and after distribution of the handout to determine if it has decreased the amount of time discussing the COVID-19 vaccine
 - Interviewing patients before and after distribution of the handout to determine if they feel they are better able to make an informed decision about the vaccine when it becomes offered to them
- Limitations of this project:
 - Information that continues to change and evolve, creating the possible need to update the handout
 - Handout has only been developed in English
 - Distribution is currently limited to in-office, and making it more widespread could involve time and money for administration to reach patients that rely on physical mail

Recommendations for Future Interventions

- Distribute handout at more practices across Vermont
- Update handout with most accurate and current information available
- Analyze effectiveness using the methods outlined previously
- Interview patients about the data they are most curious and concerned about regarding the COVID-19 vaccine
- Write an editorial for local newspapers regarding information on the vaccine to reach a broader population

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