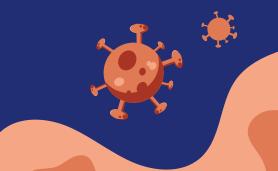


Hindsight Is 2020: Plan, Perform, Evaluate (P.P.E.)

Elisabelle Bocal, MS, MSW - SSW; Sean Callagy, OMS-I; Michaela Myerson, Doctor of Pharmacy Candidate 2022; William Rinaldi, OMS-I; Katie Santanello, MPH, OMS-I



"Behind every single one of these numbers of cases is a person. Every one of these cases represents someone's friend, spouse, mother, child, neighbor... So we continue to ask that we treat them with the humanity that they deserve."

-Dr. Nirav Shah

March 17, 2020 briefing

57,545

Cases detected in Maine

33% Fully

vaccinated





"Maine currently leads the nation in the percentage of its total population that is fully vaccinated, according to Bloomberg"

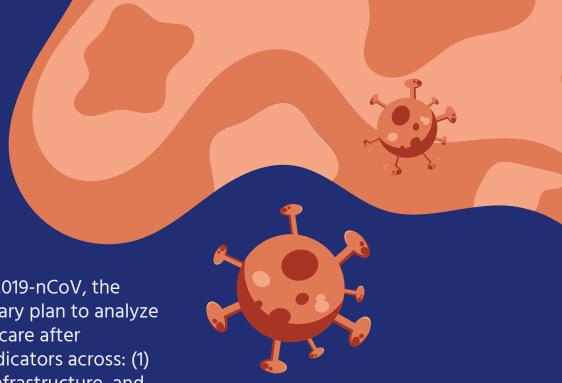
"This is the biggest vaccination effort in our history and one of the largest logistical challenges in generations. This milestone is a testament to the teamwork of the Maine Department of Health and Human Services, the Maine CDC, the Maine National Guard, our health care providers and volunteers across the state, who are working around the clock to protect Maine people from COVID-19" - Governor Mills

"Maine now leads the nation in COVID-19 vaccination rate"



INTRODUCTION

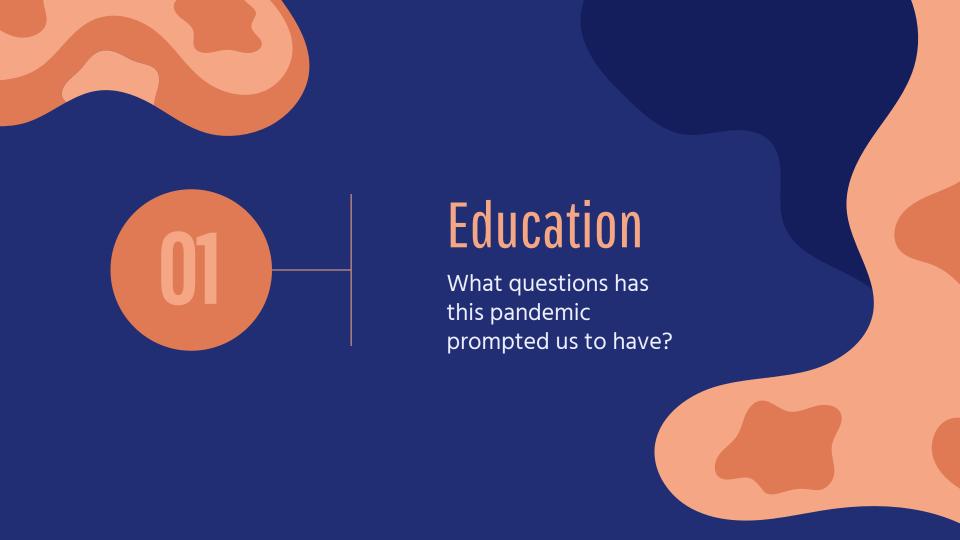
In light of the recent pandemic, 2019-nCoV, the team developed a multi-disciplinary plan to analyze best practices in client-centered care after evaluating failed performance indicators across: (1) education, (2) public health, (3) infrastructure, and (4) mental health-- which underpins all of these. While hindsight is 2020, we reference highlighted research to indicate what measures should be taken in the future to prevent the fallout if such significant catastrophes might occur.



Pandemic Playbook

Mental Health Education **Public Health** Infrastructure Recommendations Hybrid model: This is the best Grassroots organizations and In order to maintain public health Studies show mental illness way to assure that we can investment in them is while preserving the economy, our may soon be the most common keep schools open for necessary in order to garner government must: pre-existing condition - we must students that need access to community engagement. continue to train the next vital biological resources, a Decentralization of Provide aligned, early public generation of healthcare health messaging from public safe and productive learning recommendations is the key in providers in an interprofession manner to provide client care. environment, and the order to effectively health officials and government necessary tools to ensure for a communicate with many, officials Integrate mental health into the diverse communities. Create a strong, sufficient maximal learning experience. preparedness and response Specifically for urban schools. unemployment plan with plans for public health Accurate and timely one future direction may be to information sharing that incentives for businesses to emergencies from onset. develop and maintain impacts the health of the stay open Gather more data and conduct Offer support for businesses partnerships with community population must be mandated research on at-risk populations organizations to prevent food by global entities converting to telework across disciplines (e.g. Census, insecurities during school Best practices and globally Enforce the requirement of insurance, social service data) shared protocol must be closures due to pandemics or adequate safety measures for for pain points to access, usage, natural disasters. available on an easily employees who must physically stigma. Cohort Model- A part accessible platform in order to attend work online/part in-person plan that decrease morbidity and Offer childcare support for will promote integrative and mortality regarding illness parents who are working to efficient learning for all research, treatment and/or keep employees in their roles students, regardless of their immunization

social backgrounds.

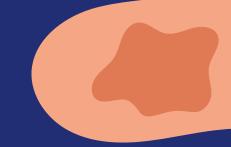




The Shift to Online Education

- Is the move to online education feasible?
 - Present research in one Romanian study (taking place during the summer of 2020) revealed that although approximately 70% of the students did not have any prior extensive experience in web-based learning, the majority of the sampled students supported the initiative, stating that the online learning platforms provided by the university enables them to accomplish their tasks quicker and also improving to some extent the quality of their work, while also having fun studying.







Detriments of Online Education



- What are the effects caused by the shift to online education?
 - -Food Insecurities
 - -Access to Technology
 - -Safety (we will discuss nex)
- How can we address or avoid these effects if we are faced with another pandemic?
 - -Community Partnership
 - -HYBRID APPROACH



What Can We Do for Students That Are Not as Fortunate?

-Suggested model: **Cohort approach**



-Smaller groups allowing for more social distancing while meeting the needs of these students.

- -In reality, different plans will work for students studying at different education levels (grade school, high school, college).
- -But if we start implementing successful plans with younger students, the plans targeting all students will begin to come naturally.





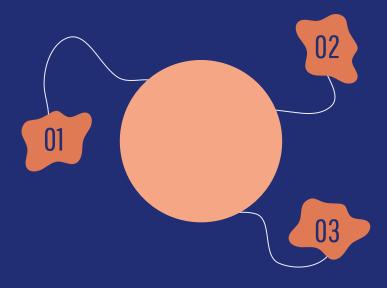
Public Health

How do we prioritize the health of our community members?

PUBLIC HEALTH CONSIDERATIONS

Community

Grassroots organizations must be the link between their communities and the scientific communities' guidelines.



Information Sharing

Clear and timely sharing of information related to the health of the population must be mandated.

Best Practices

An easily accessible platform must be developed and made available for sharing of recommendations for specific patient populations.

COMMUNITY - PREVIOUSLY

- Pandemic responses historically involved federal entities telling communities what to do and how to do it.
- For example, the approach to the Ebola outbreak of 2014 at the national level caused distrust in the affected communities.
- It was only grassroots organizations that were able to garner community involvement in order to improve outcomes such as disease tracking.





COMMUNITY - MOVING FORWARD

- Grassroots involvement, especially those in marginalized and vulnerable communities, understand the needs of their specific community.
- They are the "boots on the ground" that can identify and implement innovative but practical solutions.
- We must fund appropriately and give these grassroots organizations a seat at the proverbial table in order for effective communication of the guidelines set forth by the scientific communities.



INFORMATION SHARING PREVIOUSLY

- The world is connected on several levels and information and infectious agents can spread faster than ever before.
- This necessitates a timely sharing of accurate information in order to mitigate the spread.
- However, the decoded genome of 2019-nCoV was delayed for more than a week from being shared with the research community due to information controls and supplemental data was further delayed in getting to the World Health Organization (WHO) regarding case numbers and patient outcomes.



INFORMATION SHARING - MOVING FORWARD

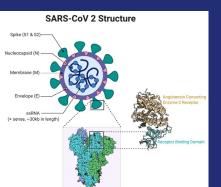
 While it is difficult to suggest that entire countries should change their information controls, it is necessary when it comes to the health of the global population.

 Global organizations, such as WHO, must strengthen their mandates surrounding information sharing guidelines and implement stricter consequences to discourage

Subgenomic RNAs

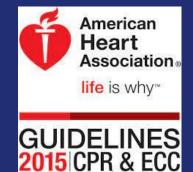
hoarding of information.

This action will also aid in alleviating circulating misinformation.



BEST PRACTICES - PREVIOUSLY

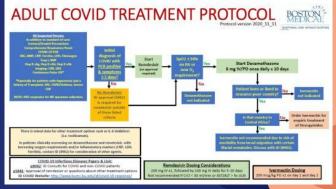
- It is understood that scientists do not typically share their data for a multitude of reasons, including lack of funding and insufficient time.
- Further, medical best practices are typically updated at longer intervals, during a large meeting or conference.
- In a time of unprecedented speed of changing clinical presentations, research approaches, and therapeutics as seen in a pandemic setting, there is a need for communication and collaboration on best practices both generally and for specific populations.

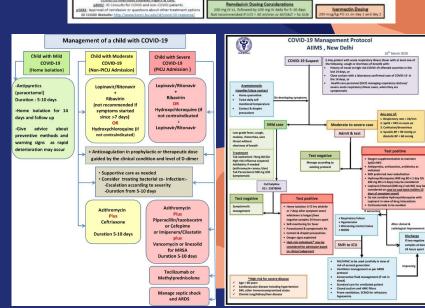




BEST PRACTICES - MOVING FORWARD

- There is a need for constant updating of medical best practices and treatment algorithms during any pandemic causing illness.
- An easily accessible infrastructure is needed for each of the various medical subspecialties in order to connect practitioners to the approaches and therapeutics that are working and those that are not.
- This also applies to illnesses in which vaccines become available during the pandemic and distribution must be stratified.







Infrastructure

Government and Economy Considerations

OUR ECONOMY

Major Consideration: How do we retain jobs, support families, and protect businesses while maintaining public health?

Keep folks employed

Support for businesses to convert to telework

Government-enforced requirements of adequate safety measures for employees who must physically attend work

Protect both the unemployed and business who lay-off employees

Create a strong, sufficient unemployment plan with incentives for businesses to stay open

> Ensure additional support for small businesses

Reduce experiencerated tax increases for small businesses during economic recovery.

Provide childcare support for parents who are working

Subsidize childcare costs for parents

Support small childcare businesses and provide incentives to increase staffing levels

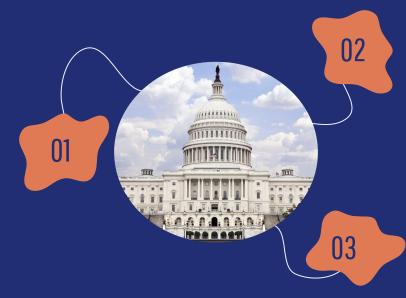
Provide early training for parents who choose to educate their children at home



GOVERNMENT CONSIDERATIONS

Messaging

Aligned, early messaging from public health officials and government officials



Involving the Community

Involvement of local and community leaders in messaging

Enforcement of Regulations

Require all states to follow basic safety measures

Who is Most Affected by Page Changes In Our Economy?

During the COVID-19 pandemic, the la vment losses were in the leisure and hospitality industries

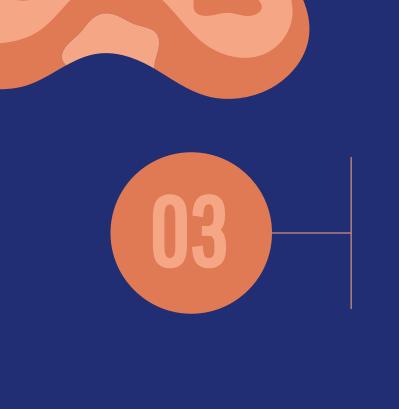
- Food services
- Educa.
- Arts
- Entertainment
- Recreation

The workers most represented include those who are **single**

We must protect those who are most vulnerable to negative economic shifts

rest employment losses largely ted, and working part time.

During the COVID-19 sees were searly all industries. However, African-American business were hit especially sees periencing a 41-percent drop in employment, and Latin second business owners' employee the fell by 32 percent. Immigrant business owners experienced employment loss of 36 percent.

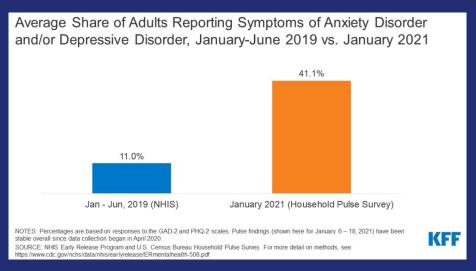


Mental Health

Integration of Mental Health into Preparedness + Response Plans for Public Health Emergencies

IMPLICATIONS OF COVID-19 FOR MENTAL HEALTH

According to studies from the CDC, during the pandemic **about 4 in 10 adults** in the U.S. have reported symptoms of anxiety or depressive disorder **up from one in ten adults** who reported these symptoms from January to June 2019.



Research from prior economic downturns shows that job loss is associated with increased depression, anxiety, distress, and low self-esteem and may lead to higher rates of substance use disorder and suicide.

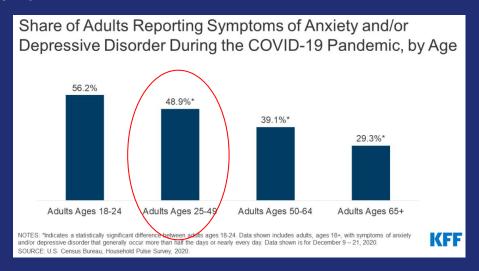
IMPLICATIONS OF COVID-19 FOR MENTAL HEALTH (CONT.)

Socioeconomic status, gender, and marginalization populations:

- During the pandemic, adults in households with job loss or lower incomes report higher rates of symptoms of mental illness than those without job or income loss (53% vs. 32%).
- Research during the pandemic points to concerns around poor mental health and well-being for children and their parents, particularly mothers, as many are experiencing challenges with school closures and lack of childcare.
 - a. Women with children are more likely to report symptoms of anxiety and/or depressive disorder than men with children (49% vs. 40%). In general, both prior to, and during, the pandemic, women have reported higher rates of anxiety and depression compared to men.
- The pandemic has disproportionately affected the health of communities of color. Non-Hispanic Black adults (48%) and Hispanic or Latino adults (46%) are more likely to report symptoms of anxiety and/or depressive disorder than Non-Hispanic White adults (41%).
- Many essential workers continue to face a number of challenges, including greater risk of contracting the coronavirus
 than other workers. Compared to non-essential workers, essential workers are more likely to report symptoms of
 anxiety or depressive disorder (42% vs. 30%), starting or increasing substance use (25% vs. 11%), and suicidal
 thoughts (22% vs. 8%) during the pandemic.

IMPLICATIONS OF COVID-19 FOR MENTAL HEALTH (CONT.)

Breakdown by age: Of note, here in Maine as of reporting last week - people younger than 30 accounted for 41% of the new cases reported Friday, April 16, 2021.



Source: https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/
Source: https://www.pressherald.com/2021/04/16/maine-reports-5-more-deaths-572-new-cases-of-covid-19/



MENTAL HEALTH - MAINE IN CRISIS

Maine Crisis Line (Opportunity Alliance) 1-888-568-1112

- Calls increased by 20% + calls to their less urgent need line by 40%.
- Oct. '19 Oct. '20 fielded 95,401 calls, then increased from 250 calls/ day to 300+ since (more than half per day are reported as 'pandemic related').





Sweetser's Warm Line

- 1-866-771-9276
 - Pre-pandemic, line averaged 1,958 calls/ mo. since 4/1/20, increased to 2,829 calls/ mo.
 - Each call time has **increased by 50%** as well.

Increase + Intensity

- Trained staff note seeing not only seeing increase, but intensity of calls.
 - "We're hearing from people who have never experienced mental health issues."



MENTAL HEALTH - BARRIERS TO CARE

- <u>Studies</u> show that mental illness may soon be the most common pre-existing condition we see as healthcare providers.
- There are a variety of ways the pandemic has affected mental health, particularly with widespread social isolation resulting from necessary safety measures.
 - a. A broad body of research links social isolation and loneliness to both poor mental and physical health. The widespread experience of loneliness became a public health concern even before the pandemic, given its association with reduced lifespan and greater risk of both mental and physical illnesses.
- Additionally, both those newly experiencing mental health and those already diagnosed before the pandemic may require mental health services but could face additional barriers because of the pandemic.
- "The COVID-19 pandemic has been a stark reminder of the importance of integrating mental health into preparedness and response plans for public health emergencies," said Dévora Kestel, Director of the Department of Mental Health and Substance Use at the World Health Organization, after the discussions had taken place.

MENTAL HEALTH - RECOMMENDATIONS

- 1. Based on studies showing mental illness soon becoming the most common pre-existing condition, train the next generation of healthcare professionals in an interprofession manner to provide patient care incorporating mental health into core of biopsychosocial model at inception.
- 2. Integrate mental health into preparedness and response plans for public health emergencies **from onset**.
- 3. Gather more data and conduct research on at-risk populations across disciplines (e.g. Census, health insurance, social service provision data) for pain points to access, usage, stigma.



"We're Mainers; we kind of hold on." - Greg Marley, **NAMI** Maine

COVID-19 + Mental

MENTAL HEALTH - STATEWIDE RESOURCES: MAINE

Substance Use

Maine currently leads the U.S. in vaccination rates, however people younger than 30 account for 41% of the new cases report this past Friday* (reported on 4/16/2021).	Health	Disorder + Mental Health	Access to care	Filone Flext Lines
	211 for all COVID-19 related information	<u>Portland Recovery</u> <u>Community Center</u>	Legislation, 3/19/20 - <u>The</u> <u>Made for Maine Health</u> <u>Coverage Act</u>	24/7 Statewide Crisis Line: 888-568-1112
	<u>StrengthenME</u>	Portland Public Health's <u>Needle Exchange Program</u>	<u>Maine Care</u>	24/7 Peer Support Warm Line: 866-771-9276
	<u>Alliance Maine</u>	Resources for mental health, substance use, and domestic violence	<u>The Maine Bureau of</u> <u>Insurance</u>	NAMI Maine's Teen Text Line: (207) 515-8398
	Maine's CDC COVID-19 <u>page</u>		Maine's <u>Office of</u> <u>Behavioral Health</u> Guidance + Resources	24/7 Suicide Hotline: 800-273-TALK (800-273-8255)

Access to Care

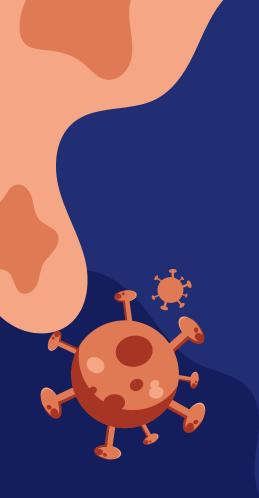
Phone + Text Lines

MENTAL HEALTH - NATIONWIDE RESOURCES

Taking care of yourself can better equip you to take care of others. The Center for Disease Control offers informative resources across verticals to better assess critical needs that have arisen during the pandemic.

Everyone	Families + Children	People at Higher Risk for Serious Illness	Healthcare Workers, First Responders	Working Adults
<u>How Right Now</u>	Infographic: Care for Yourself (<u>Parents</u>)	Infographic: Care for Yourself (<u>Older Adults</u>)	Infographic: Care for Yourself (<u>First</u> <u>Responders</u>)	<u>Teachers: Encourage</u> <u>Your Students on</u> <u>Self-Care</u>
Coping with a Disaster/ Traumatic Event	Infographic: Care for Yourself (<u>Students</u>)	Serious Illness Care Program COVID-19 Response Toolkit	Infographic: Care for Yourself (<u>Clinicians</u>)	Infographic: Care for Yourself (<u>Working</u> <u>Adults</u>)
Infographic: Care for Yourself (<u>General Public</u>)	Teen Depression	HHS ASPR TRACIE COVID-19 Behavioral Health Resources	Healthcare Personnel & First Responders: How to Cope with Stress & Build	Infographic: Care for Yourself (<u>Critical</u> <u>Workers</u>)
Infographic: Care for Yourself (<u>Young Adults</u>)	Helping Children Cope during the Pandemic		Resilience During the COVID-19 Pandemic	How to Cope with Job Stress in the Pandemic

Source: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html



THANKS

Do you have any questions?

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