STEP UP

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THEMATIC REPORT

HEALTH CARE AND SOCIAL CARE INTERVENTIONS

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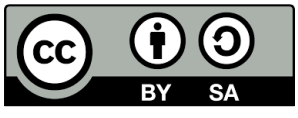

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Introduction and methods

The current COVID-19 pandemic is having a strong impact in everyday life and creating an unprecedented challenge to health and care systems worldwide. Numerous measures to respond to the urgent care needs of those impacted are being taken, while also trying to reduce the long-term impact on vulnerable people, in all ways possible. Since the first cases appeared, countries have developed several strategies, adapted services and a wide range of innovations came up, requiring flexibility, especially to address people's continued care. After the emergency state, a collaborative leadership approach will be essential and working together as a collective, investing in a participatory citizenship, will be key.

The emergency state, the use of teleworking, the social distance, all implied uncovering new methods of work, understanding society's biggest fragilities and will imply changes in work and training, tools and routines that will only be clear in the next months and years. In this process of living "remotely", by far younger generations had an easier adaptation. If, besides age, we address adults with lower qualifications and skills, as it is often the case in the care sector, this is more serious, as they are easily hampered in the search of reliable information due to missing digital skills.

Apart from all the innovations that are being developed and new ways of delivering services, there is the need to prepare bottom-up initiatives that build-up the competences of the professionals in the care sector so that they are prepared to deal with such emergency situations in the future.

STEP_UP intends to develop a training tool for social care professionals, community leaders, informal caregivers and volunteers, where they are introduced to the actual impact of behaviours in the spread of a pandemic/emergency situation. There they can learn about preventive measures, their impacts and different levels – individual, at work, in the family, at state level, among others.

Although there is plenty of information available online, it is difficult to know which one is reliable. Also, there is the need to prepare the right training methods to approach the care sector, in an adequate and engaging way.

The core of this tool will be an educational game but also a Virtual Library was created to allow measures to be shared, consulted and benchmarked..

Besides the other results, a manual on social and policy interventions will be delivered, offering targeted guidelines and insights on early detection, preventive measures, health and social care interventions and policy measures for EU countries.

Based on the desk research to identify measures to stop spreading the epidemic growth that are stored in the Virtual Library (link), the information from the first round of workshops

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and eventual additional publications, each partner of STEP_UP elaborates a thematic report in August 2021.

Each report addresses one of the crosscutting themes to combat epidemic diseases or pandemics such as COVID-19, SARS, Ebola virus or Yellow Fever. The reports will be used to build the Social and Policy Interventions Manual, to be delivered at the end of the project in national languages.

To be sustainable for the future and to detect overarching guidelines to stop epidemic growth, the thematic reports focus on more diseases than COVID-19 only. The length of the report is expected to be 12-15 pages at a minimum.

The crosscutting themes are divided among partners as follows:

Crosscutting theme WHO: pandemic and epidemic diseases include among others influenza (pandemic, seasonal, zoonotic), COVID-19, SARS, Ebola, The Plague, Yellow Fever, Cholera	Partner
Early detection: measures, methods and systems available in the partner countries and globally to detect a health emergency virus outbreak before it is widely spread.	AFEdemy
Prevention measures: Limit transmission of COVID-19 – these may be individual or organisational measures. Includes screening (e.g. temperature), washing hands, wearing masks, etc. It is the behaviour itself	SHINE
Healthcare and social care interventions: measures in healthcare organisations, public health, social care	CIPH
Policy measures: Minimize the impact of COVID-19 – these are measures defined / imposed by the government to specific individuals or society. E.g. wearing mask is a preventive measure but the policy measure is the obligation of using mask in the streets. Includes containment, mitigation and suppression measures	ISIS
Communication: governmental, experts communication	WISE

Epidemic diseases and pandemic

Communicable diseases have plagued mankind since time immemorial. In many cases, science has been able to find solutions to keep the spread and burden of these diseases under control. Sometimes, however, a new disease breaks out and increases unexpectedly in the number of disease cases (epidemic) or there is an exponential disease's growth, mostly affecting several countries and populations (pandemic) before effective solutions are found. The most recent example of such a pandemic is COVID-19.

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It is not possible to consider that no other health emergency situations will occur in the future. To enable the target group of adult learners of STEP_UP to be prepared for future outbreaks, this report also focuses on measures on epidemic diseases or pandemics that infested Europe in the past or are compatible to COVID-19. Main source: United States Center for Disease Control and Prevention.

Black Death/Plague

The Black Death or Plague is a bubonic plague that struck Europe and Asia in many different centuries in the past. The plague caused many casualties: estimations are that about 50% of the populations were killed. The plague is spread by a bacillus that travels from person to person through the air, or by bites of infected fleas and rats. Symptoms are that people are covered with black boils that oozed blood and pus. The disease was very effective: people could go to bed healthy and be dead in the morning. Prevention from the plague is to make the environment rodent-proof, avoid skin contact and control fleas on pets. Plague vaccines are in development but are not expected to be commercially available in the immediate future.[1]

1918 H1N1 / Spanish Flu

The 1918 H1N1 flu pandemic, sometimes referred to as the "Spanish flu," killed an estimated 50 million people worldwide. Mortality was high in people younger than 5 years old, 20-40 years old, and 65 years and older. An unusual characteristic of this virus was the high death rate it caused among healthy adults 15 to 34 years of age. At that time there was no vaccine to protect against influenza infection and no antibiotics to treat secondary bacterial infections. Control efforts were limited to interventions such as isolation, quarantine, good personal hygiene, use of disinfectants, and limitations of public gatherings.

SARS-CoV

Severe acute respiratory syndrome (SARS) is a viral respiratory illness caused by a coronavirus called SARS-associated coronavirus (SARS-CoV). SARS was first reported in Asia in February 2003. The illness spread to more than two dozen countries in North America, South America, Europe, and Asia, before the SARS global outbreak of 2003 was contained. Since 2004, there have not been any known cases of SARS reported anywhere in the world. In general, SARS begins with a high fever (temperature > 38 degrees Celsius). Other symptoms may include headache, discomfort and body aches. Some people also have mild respiratory symptoms at the outset. Most patients develop pneumonia. SARS is spread by close person-to-person contact and droplets spread by air.

2009 H1N1 / Mexican Flu Pandemic

In 2009 an influenza (flu) virus emerged that had never been seen before in humans. This virus contained a unique combination of influenza genes not previously identified in animals or people. The United States Center for Disease Control and Prevention estimated that

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150,000-575,000 people worldwide died during the first year the virus circulated. 80 percent of these deaths were estimated to have occurred in people younger than 65 years of age. This is quite different from typical seasonal influenze epidemics, during which about 70-90 percent of the deaths are estimated to be people older than 65. An effective vaccine is available and many younger people were vaccinated in 2010.

MERS

Middle East Respiratory Syndrome (MERS) broke out in 2012 and is an illness caused by a virus (more specifically, a coronavirus) called Middle East Respiratory Syndrome Coronavirus (MERS-CoV). Most MERS patients developed severe respiratory illness with symptoms of fever, cough and shortness of breath. About 3 or 4 out of every 10 patients reported with MERS have died. MERS-CoV can be spread through close contact, suc as caring for or living with an infected person. Preventive measures are washing hands, cover mouth and nose with a tissue, avoid personal contact and clean and disinfect frequently surfaces.

Introduction to the measures

At the start of the Stop epidemic growth through learning (STEP_UP) project, partners performed a desk research to identify measures that are used or recommended to stop the spreading of epidemic diseases or pandemics. The identified measures are categorized and stored in the virtual library on the project website.

The measures are categorized as follows:

- Early detection: measures, methods and systems available in the partner countries and globally to detect a health emergency virus outbreak before it is widely spread
- Prevention measures: Limit transmission of COVID-19 – these may be individual or organisational measures. Includes screening (e.g. temperature), washing hands, wearing masks, etc. It is the behaviour itself
- Healthcare and social care interventions: measures in healthcare organisations, public health, social care
- Policy measures: Minimize the impact of COVID-19 – these are measures defined / imposed by the government to specific individuals or society. E.g. wearing mask is a preventive measure but the policy measure is the obligation of using mask in the streets. Includes containment, mitigation and suppression measures
- Communication: governmental and experts' communication towards the general public

Based on this categorization of measures and additional information, each project partner prepared a thematic partner report. This report will become part of the manual on social and policy interventions, Intellectual Output 2 of the project. The manual will target adult learners that work as professionals in municipalities and welfare organizations as well as social and health care providers, mainly those in auxiliary positions and lower skills. Additionally,

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volunteers in associations, initiatives, and other community organisations will be provided with options and strategies to contribute for public awareness.

Measures described in this report are related to the healthcare and social care sector and how their working environments had to adjust and adapt to better help control the spread of COVID-19. Sources range from studies and analyses published in academic journals as well as expert articles.

Outbreaks of newly emerging or remerging infectious diseases present a unique challenge and a threat to healthcare providers (HCPs) and other frontline responders due to limited understanding of the emerging threat and reliance on infection prevention and control (IPC) measures that may not consider all transmission dynamics of the emerging pathogens. This has been a dynamic and trying time for health care workers and frontline staff which has also taught us many lessons and should make us more prepared for potential future outbreaks of other emerging pathogens. The dynamics of the pandemic have led to constant changes and alterations to recommendations and guidelines since the beginning of the outbreak. This was one of the first times in recent history that healthcare professionals were faced with the emergence of a respiratory virus which could spread quickly and affected every country of the world. Researchers needed time to catch up with data and evidence which would help in combating the disease and helping control outbreaks while taking into account all other social, economic, psychological aspects which people may encounter. While the pandemic has placed unparalleled demands on healthcare systems, it has adjusted quickly and brought new innovations to help in maintaining care for populations. Measures described in this report for the health care sector involve measures from previous knowledge about respiratory pathogens which have been adapted for the purposes of Sars-CoV-2 as we have learned more about the epidemiology of the disease.

One of the first crucial steps in managing the epidemic in each country was an effective and thorough way of identifying and confirming positive Sars-CoV-2 cases. One of the first measures introduced was testing using polymerase chain reaction (PCR) to confirm in both symptomatic and asymptomatic individuals presence of the virus. Following positive identification of a case epidemiologic history is necessary to further isolate any close contacts and slow the potential spread of the disease. It is vital to the control of the spread of disease to quarantine positive patients and isolate their contacts. As the pandemic progressed researchers mobilised quickly and efficiently and created vaccines for COVID-19, which would change the landscape of the pandemic once countries began rolling out national programs. Along with these measures general measures about physical distancing, masks, hand washing and respiratory hygiene will be discussed. Along with these measures it is important to implement administrative and engineering measures which have been proven to reduce the risk of infection and keep patients and health care personnel safe. The high human and

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economic costs associated with COVID-19 make it more important than ever to rapidly accelerate and scale medical innovations. Healthcare leaders should consider providing the tools, processes, and capabilities their teams will likely need to move quickly while ensuring that patient safety and quality of care remain central.

Aside from the healthcare sector another sector greatly affected by COVID-19 has been the social sector, which has in its care millions of people who are dependent day to day on the services offered. It is crucial that the social care sector makes the most of its resources, coordinating between professionals from different municipalities or associative entities. Social services have innovated by the launching of social and emotional support telephone services, especially for people with mental health problems that have exacerbated their situation during the pandemic and the emergence of new cases. Like the healthcare sector the social care sector had to adjust and change protocols and guidelines to keep one of the most at risk populations safe and healthy. Measures which needed to be taken in these settings used guidelines adapted by public health institutes which would help to ensure the safety and allow work to flow as uniformly as possible.

Measure 1 – Testing for infectious diseases

Once a new pathogen is identified it is important to determine which method is best for isolation and identification of the virus. There are multiple components to testing for an infectious disease which need to be considered when using testing as a measure to help control the spread of the virus. During a pandemic clinical laboratories must respond by developing, validating and implementing a variety of molecular and serologic assays to test for the presence of infection. This has played an essential role in identifying cases, informing isolation decisions and helping to curb the spread of the disease. Molecular tests, such as real-time PCR, have been the most common laboratory tool used to detect cases of COVID-19. SARS-CoV-2 molecular assays have become an integral part of a multicomponent strategy aimed at reducing transmission of the virus.

Two critical features of a successful response to a pandemic respiratory virus are early detection and isolation of potentially infectious individuals. The rapid development of a reliable diagnostic tool was of great value. Availability of diagnostics initially can be limited as well as throughout the epidemic dependent upon the country and ability to secure necessary testing material (financially, human resources, extra equipment and locations). Over time as the epidemic progresses and goes through different phases and magnitudes it has different implications for health care and society it is necessary to adjust the recommendations and guidelines for testing accordingly.

The key is to test individuals with high probability of being infected to identify them before symptoms appear. Widespread testing of those with suggestive symptoms of SARS-CoV-2

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infection or contact with a patient, followed by aggressive contact tracing, allows for isolation of those infected and quarantine of contacts.

Target groups of this measure depend on the supply of tests. According to the Infectious Disease Society of America a population can be divided into four groups (according to priority):

- First\High priority – critically ill patients with unexplained viral pneumonia or respiratory failure, patient with symptoms of coronavirus and close contact within 14 days, healthcare workers and other workers essential to the pandemic and immunosuppressed
- Second/ priority – other hospitalized patients and long-term care residents
- Third - Outpatients who meet criteria for influenza testing
- Fourth - Community surveillance as directed by public health and/or infectious diseases authorities

Results which can be expected through PCR testing vary in regards to different groups and the overall effect for the general population can be neutral. Although testing is required for surveillance of the COVID-19 pandemic (giving us information on the reproduction number, which is the number of cases generated from one case and identifying the extent of transmission) the direct contribution to the prevention of transmission may be limited to populations at high risk of acquiring infection and transmitting it to vulnerable people, like health care workers and social care workers (homes for the elderly). When COVID-19 incidence rates are high, testing is likely to be most useful to inform self-isolation contacts of suspected cases by excluding infection and allowing earlier exit from isolation/quarantine (as for HCWs self-isolating because of a symptomatic household member). Among these populations regular screening, even without symptoms, can prevent about one third of transmission.

The impact of testing can have an effect on many different areas but what needs to be considered is the phase of the epidemic, availability of tests, personnel as well as indication for requiring a test. When there is a shortage of tests and negative tests are a requirement to be able to go to certain essential appointments or get back to work there can be negative impacts on people and cause frustrations and unrest.

Recommendations for positive outcomes entail creating higher- and lower-priority streams for specimen collection and test processing where capacity is constrained. When asymptomatic and no known exposure to someone with COVID-19 individuals would like to get tested this can create pressure on testing and processing capacity. When this happens timely initiation of case management, contact tracing and quarantine are delayed. This measure gives us an important picture about the epidemiological situation but without

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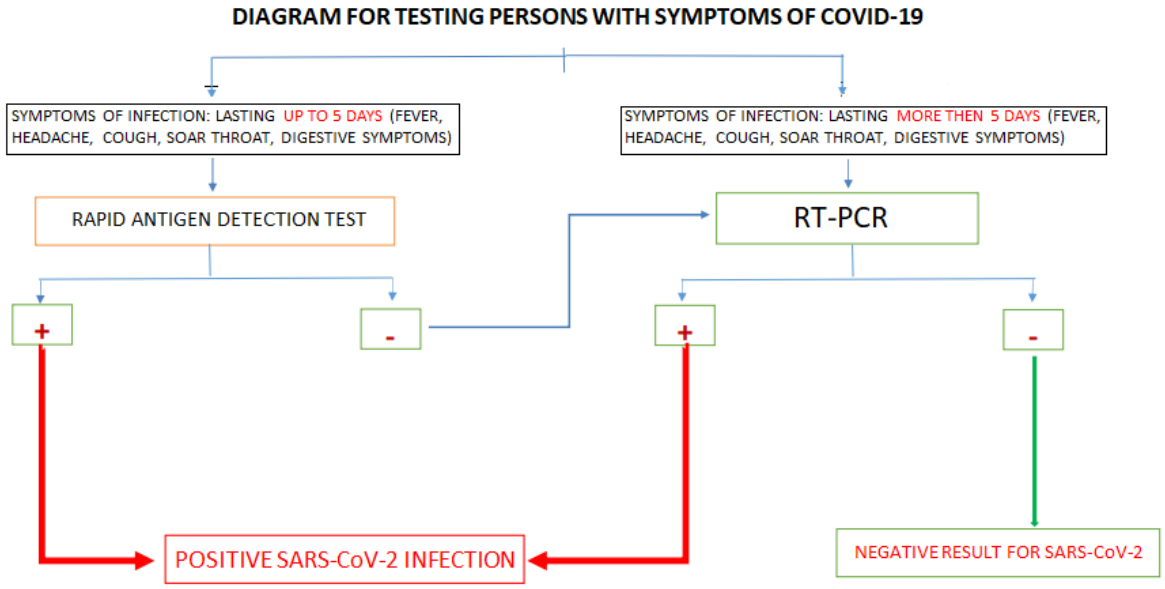
efficient self-isolation and contact tracing does not affect the spread of the epidemic. By continuous monitoring of COVID-19 test results, a clear temporal picture on whether control measures have been effective or not will be established, thus providing needed information for alternate measures to be explored, at any specific time.

Example: Ontario, Canada: Effective December 11, 2020, the province updated its testing guidelines. COVID-19 assessment centres will no longer accommodate individuals wishing to be tested before travelling. Travellers will be required to obtain tests through private laboratories for a fee. This initiative has diminished the public health human resources strain related to sample collection.



Measure 2: Contact Tracing

Contact tracing still remains an essential tool for countries to transition back to what we perceive as normal. The WHO defines contact tracing as the process of identifying, assessing and managing people who have been exposed to a disease to prevent onward transmission. According to the WHO there are five key components of contact tracing: a workforce which is trained in contact tracing and supervisors; support from the public and community engagement; thorough planning while taking into account local contexts; logistics which are needed to help support teams; and a platform in which data can be entered and stored and further analysed in real time. In many countries contact tracing is performed by trained staff such as doctors, nurses, pharmacists, newly qualified and retired doctors, public health professionals and volunteers. Most often contact tracing has been done through phone calls where the contact tracer identifies everyone the person has been in contact with while potentially being infective. With all of the technological advances we have seen over the last decades some countries also created apps which helped to inform people that they were in

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contact with someone who is positive, although it has only been observed that 1 in 5 people on average participate.

Contact tracing can differentiate dependent on the infection due to a few different factors such as: what we define as close contact for that infection, was there any PPE being worn, how long a person was in contact with an infected person and whether or not contact was indoors or outside. With each infectious disease the mode of transmission can be different and the barriers needed to lower risks can be different according to the properties of the virus.

Target groups of this measure are the general population who has tested positive for Sars-CoV-2 and have to be contacted by a trained professional to further isolate contacts of the individual.

Contact tracing followed by treatment or isolation, is a key control measure in the battle against infectious diseases. The results of contact tracing is to help isolate potential cases before they develop symptoms and have infected other people. This is a preventative measure which will have positive effects in slowing down the spread of the epidemic.

The effects of contact tracing and the outcome it can have on our populations is increased isolation away from family and friends which can in turn lead to mental health problems and time away from work and other obligations, having a negative effect on people. People may find the means for collecting information on where they were and who they were with invasive and they may be less inclined to give information as time goes on. Financially this has consequences on both resources and individuals who are not able to go to work because they are a close contact.

Contact tracing has been identified as a key element among others to control the spread of COVID-19. It is important to have good contact tracing strategies in place, additional resources must be invested in so that this measure can be executed thoroughly. However, even if countries have the appropriate resources to perform contact tracing, ensuring the system can identify possible cases quickly, as well as having adequate supervision and management of contact tracers in place are the main components of succuesfully managing cases. It has been found that most countries adopted a decentralised approach which was at the county/local public health level. This allows for the closeness of the community to be able to contact individuals at the local level, but this may have its geographical imbalances. To conclude, we understand that the success of a solid contact tracing strategy is very much intertwined with other strategies. These include the reinforcement of early detection of infection in primary care (by PCR or any other equivalent test), closer coordination with the epidemiological surveillance services, and compliance with isolation measures.

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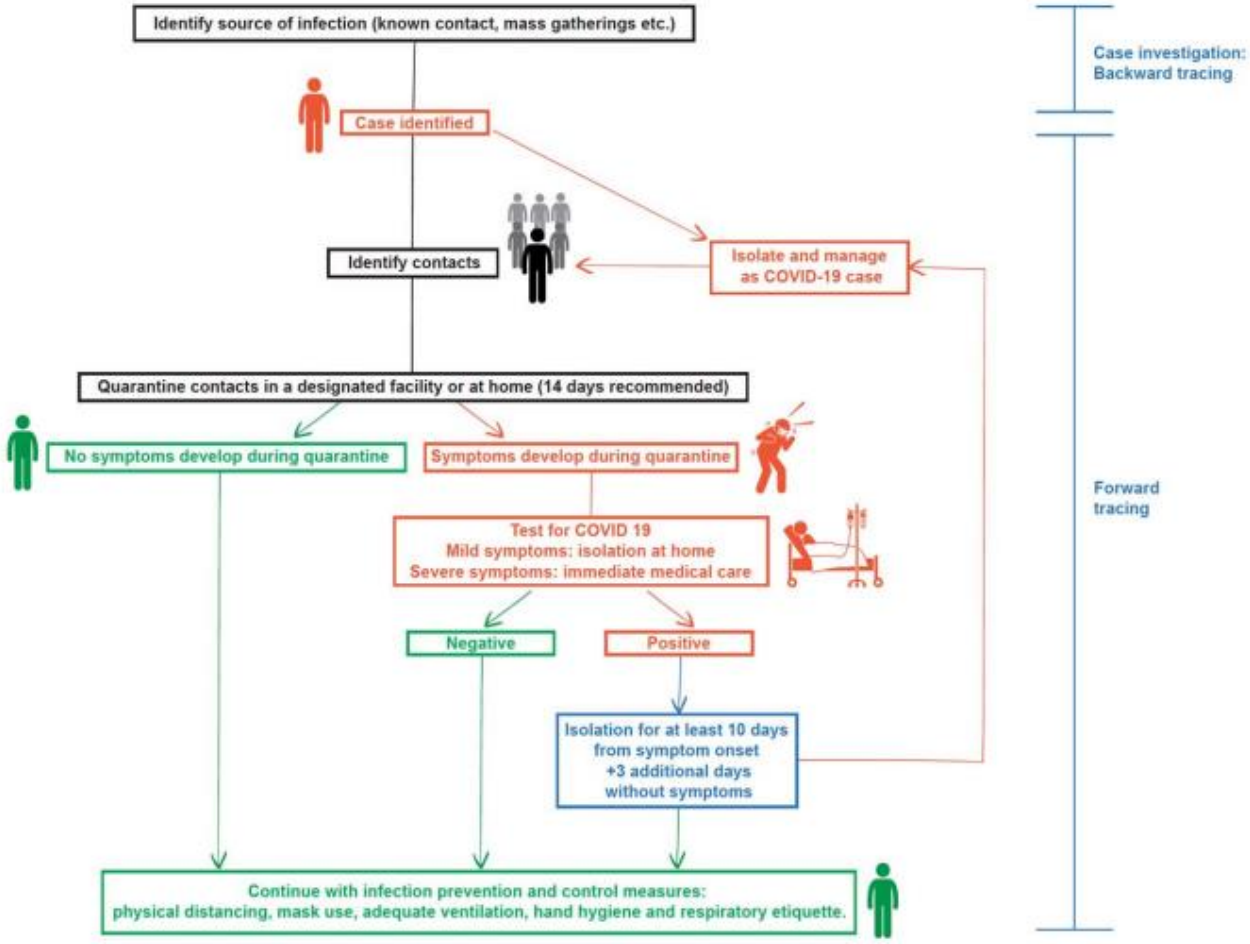

Measure 3: Quarantine/Isolation

Isolation and quarantine help protect the public by preventing exposure to people who have or may have a contagious disease. Isolation separates sick people with a contagious disease from people who are not sick. Quarantine separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick. There are specific instructions on how to properly isolate yourself from others that you may live in a household with. These include ensuring a space where you can live for the necessary amount of days with adequate food and water supply as well as a bathroom. If there was a need to be in the same room as other members of the household physical distancing was advised along with wearing a mask and disinfecting common areas.

The duration of quarantine and isolation depends on the infectious disease. For Sars-CoV-2 it is calculated as 14 days from the onset of symptoms or from the positive test if the person is asymptomatic. Throughout the course of the epidemic some countries had adjusted and

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changed the quarantine/self-isolation periods due economic reasons. Target groups of this measure is positive individuals and contacts of them in the general population.

Quarantine and isolation have for centuries been an effective measure in combating infectious diseases. These measures reduce the amount of new infections, deaths and the viral load leading to a better control of the epidemic. The impacts that these measures can have on humans due to the isolation is psychological ones such as emotional disturbance, depression, stress, low mood irritability among others. These measures can have impacts on the economy because people cannot go to work and due to the scope of this pandemic it has had repercussions especially for those who cannot work at home.

Recommendations for quarantine measures for people with verified Sars-CoV-2 infection should isolate for 10-14 days. The average incubation period for Sars-CoV-2 is approximately 6 days and it is because of this that a minimum of 10 days isolation is needed.

Guidance

SELF-ISOLATION

DO

- Stay at home, in a room with windows that can be opened and keep it aired as much as possible.
- Keep away from others in your home as much as you can.
- Check your symptoms – fever, cough, shortness of breath – phone you doctor when they appear, do not visit him/her.
- Cover your coughs and sneezes using a tissue that you later discard into the trash can and clean and disinfect your hands properly.
- Wash your hands properly with soap and water often.
- Use your own towel – do not share a towel with others.
- Clean your room every day with a household cleaner and/or disinfectant.

DON'T

- Do not leave your home unless absolutely necessary.
- Do not go to work, school, religious services or public areas.
- Do not share your things (e.g. dishes, glasses, cups, bed linen etc.).
- Do not touch your face, eyes, nose, mouth.
- Do not shake hands with anyone.
- Do not use public transport or taxis.
- Do not invite visitors to your home.

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Measure 4: Vaccination

Vaccination is a simple, safe and effective way of helping to protect individuals and populations from infectious diseases prior to coming into contact with them. Vaccines help to activate your immune system by creating antibodies like when you are exposed to a disease so that when you may be exposed in the future chances that symptoms will be mild or none at all is higher. Vaccines are made using several different processes. They may contain live viruses that have been attenuated (weakened or altered so as not to cause illness), inactivated or killed organisms or viruses, inactivated toxins (for bacterial diseases where toxins generated by the bacteria, and not the bacteria themselves, cause illness), or merely segments of the pathogen (this includes both subunit and conjugate vaccines).

Vaccines exist for numerous diseases and today routine immunizations have significantly reduced illness, death and spread of disease globally. Some examples of diseases for which there is a vaccine are: diphtheria, influenza, hepatitis A, hepatitis B, Herpes zoster, HPV, measles, mumps, whooping cough, pneumococcal disease, polio, rotavirus, rubella, tetanus and chickenpox.

Vaccination unlike many other public health interventions is the administration of a substance to an individual and carries with it some potential risks although they are very low and outweigh the risks of contracting the disease. At least one of the vaccines for COVID-19 has been approved for the entire population over the age of 12 while the others are recommended for those above 18. Governments all across the world are encouraging citizens to get vaccinated to help decrease the spread of the disease and the implications if has on people and the health care system.

Studies so far have showed us that authorized for use in most parts of the world are effective at protecting against symptomatic, lab-confirmed disease. In large clinical trials/studies where people were given the vaccines, all of the vaccines worked very well to prevent people from becoming sick with symptomatic, lab-confirmed COVID-19. It is important to receive all recommended doses of the vaccines, this helps to ensure longer-term protection against COVID-19. All of the COVID-19 vaccines authorized for use in the European Union are highly effective at preventing severe outcomes including hospitalizations, ICU admission, severe disease and death.

A vaccination program at any point in time has clear direct costs which come with rolling out a new program. These costs include the purchase of the vaccine, health care personnel and infrastructure to maintain this chain. The reduction in morbidity and mortality associated with successful vaccine programs, through a combination of direct and indirect protection, has led to reduced incidence of diseases and their associated treatments and healthcare costs.

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Vaccination has been one of the foremost scientific advances of the 21st century and it along with clean water and sanitation are undeniably responsible for improving health outcomes globally. COVID-19 vaccine are safe and effective and should be used as a tool for combating the epidemic in all countries. Successful vaccination campaigns require proactive communication strategies to inform the population and address vaccine concerns and hesitancy.

Recommendation – link to communication

Other recommendation: how to organise it by our learners. Vaccination strategy at operational level.

When organizing vaccination, we should keep in mind that the goal is to achieve the optimal level of organization of vaccination, and the rational use of available vaccine doses. Due to these facts, in organizing any services, there are certain users which have priority. For the COVID-19 vaccination these groups are as follows:

Number	Population
1.a	Care home residents social care institutions)
1.b	Care home employees (social care institutions)
1.c	Health care workers
2.	People >80 and older
3.	People 75-79 years old
4.	People 70-74 years old
5.	People 65-69 years old
6.	At risk population <65 years old
7.	General population

Measure 5: Physical distancing

In public health, social distancing, also termed physical distancing, is a measure intended to prevent the spread of a contagious disease by maintaining a physical distance between people and reducing the number of times people come into close contact with each other. It is maintaining the recommended amount of spatial separation between oneself and others.

Physical distancing helps limit the spread of COVID-19. Within public areas, this is enforced on the general population. This of course cannot be expected within a household or family. Physical distancing interventions were associated with reductions in the incidence of covid-19 globally. These findings might support policy decisions as countries prepare to impose or lift physical distancing measures in current or future epidemic and pandemic waves.

Physical distancing has impacted humans in many ways. One of the socioeconomic consequences are that stores and public areas had to reduce the number of people allowed

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in a confined space, which caused a decrease in the income of a company or facility. Another consequence of social distancing would be the social and mental effects. For example, physical distancing disrupts our normal social routines. This can cause people to feel alone and not have the proper social interactions that they were once used to, which can affect their mental health.

It is recommended that during the COVID-19 pandemic, the general population attempts to stay about 2 meters apart. It is important to maintain at least 6 feet of distance between yourself and others. Lastly, individuals should avoid crowded places, particularly indoors, and events that are likely to draw crowds.

Measure 6: Masks

A mask is a device that covers the nose and mouth to maintain aseptic conditions often for the prevention of the spread of infections (eg. COVID-19). It is advised that the general population wears a mask as this improves the general effectiveness of preventing the spread of certain respiratory conditions, such as COVID-19. Researchers note that mask-wearing is most effective when it's a communal effort.

People who should wear masks include children older than 2, who are not fully vaccinated, fully vaccinated people with weakened immune systems and, to maximize protection and prevent possibly spreading it to others, fully vaccinated people should wear a mask indoors in public. When used in conjunction with widespread testing, contact tracing, quarantining of anyone that may be infected, hand washing, and physical distancing, face masks are a valuable tool to reduce community transmission according to widespread sources including the WHO and CDC.

Some impacts that face coverings have had on humans include environmental considerations such as the fact that most disposable and single-use masks are mostly made of plastic. Growing quantities of disposable and single-use masks are being discarded in the regular garbage as there's little to no opportunity for recycling. This increases the amount of unrecycled waste going to landfills and plastic pollution in the environment or water sources. A solution to this would be choosing to use reusable masks. You can help prevent the spread of COVID-19 while also reducing your environmental impact.

It is suggested that when you go out, you use a face covering (non-medical mask, such as a cloth mask) in public indoor spaces and whenever physical distancing is a challenge. This includes public spaces (for example, inside stores, event spaces, entertainment facilities and common areas in hotels), workplaces, even those that are not open to the public, vehicles that operate as part of a business or organization, including taxis and rideshares. Face coverings will not stop you from getting COVID-19 but may help protect others. Medical

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masks (surgical, medical procedure face masks and respirators like N95 masks) should be reserved for use by health care workers, social workers and first responders.

Measure 7: Hand hygiene/disinfectant

Maintaining good hand hygiene and respiratory etiquette helps reduce the risk of becoming infected or spreading infection to others. Hand hygiene means washing your hands often with soap and water for at least 20 seconds. If soap and water aren't available, use a hand sanitizer containing at least 60% alcohol. For example, clean your hands before and after eating, before and after touching your mask, after using the washroom, and after touching frequently touched surfaces and objects. Avoid touching your eyes, nose or mouth with unwashed hands. Respiratory etiquette means, when coughing or sneezing: cough or sneeze into a tissue or the bend of your arm, not your hand (even if wearing a mask), dispose of any tissues you've used as soon as possible in a plastic-lined waste container, clean your hands immediately afterwards.

Hand hygiene and respiratory etiquette should be practiced frequently by the whole population. Hand hygiene is an important part of the response to the international emergence of COVID-19. Practicing hand hygiene, which includes the use of alcohol-based hand rub or handwashing, is a simple yet effective way to prevent the spread of pathogens and infections in healthcare settings. Hand hygiene has become more common throughout the course of this pandemic. There is sufficient evidence, that many years before the epidemic handwashing among healthcare workers (HCW) remained an area that needed improvement as well as in the general population.

The significant growth of interest in promoting handwashing behaviors since the start of COVID-19 pandemic should be harnessed and continued well after this outbreak is contained. Everyone should thoroughly and properly wash their hands and maintain respiratory etiquette whenever possible. This helps prevent the spread of COVID-19.

Measure 8: Administrative control measures

Administrative controls are aimed at reducing the risk of exposing people to infectious agents. Administrative control measures which exist include the following different aspects: risk assessment, training and education of healthcare professionals on infection prevention control, patient transfer precaution, source control, surgical masks for patients, early diagnosis, suspected case isolation, designated uses of medical equipment or disposable equipment, patients should be placed in single rooms, respiratory hygiene, waste management, visitor management, established reporting system, disposition of patients and contact and droplet precaution.

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Key points for preparedness in hospital settings:

- plan for rapid assessment and disposition of HCWs with symptoms compatible with COVID-19
- develop plans for the safe participation of support persons in patient care, especially for labour, delivery and postpartum support
- prepare to cancel or scale back on services of an elective or less urgent nature
- stockpiling essential equipment and supplies including medications
- develop plans to increase space and staffing, especially for medical wards and critical care services
- focus on keeping non-COVID-19 hospital wards and outpatient services COVID-19 free
- identify measures to mitigate hospital crowding such as standardizing admission and discharge criteria
- develop plans for training for HCWs who will be performing unfamiliar roles
- plan effective communications and staff support; and

When working in settings where there is a patient that is suspect or confirmed COVID-19 it is important to protect yourself and the patient. Health care workers providing direct care to patients with suspect or confirmed COVID-19, including nasopharyngeal and oropharyngeal swab collection should wear the following PPE: surgical/procedure (medical) mask, isolation gown, gloves and eye protection. Health care workers working with aerosol-generating medical procedures performed on suspect or confirmed COVID-19 patients should wear the same as previously mentioned except with a N95 respiratory as the appropriate face covering.

These measures are not specific to certain infections but can be used as a checklist for infection prevention and control in health settings as well as other places of work. These measures target the entire population of a country and affect the day to day operation of health care institutions. It is recommended that all places which are a high-risk areas for contracting the infection should have strict administrative measures in place which are proven to help control the spread of infection. These measures can also be used in other sectors, and although they may be an adjustment at first they are essential to helping reduce the transmission of disease.

Measure 9: Virtual Assessment and Triage

Virtual medicine also referred to as telemedicine or telehealth allows for your doctor to provide care for you without an in person office visit. Telehealth is done primarily online with internet access on your computer, tablet, or smartphone. Telemedicine is defined as a collection of means or methods for enhancing the health care, public health, and health education delivery and support using telecommunications technologies. This is of crucial importance during an epidemic of any kind because it is of utmost importance to maintain

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the health of the population which needs acute and chronic care and maintain the health during this time. Telehealth is the delivery of health care services by health care professionals, where distance is a critical factor, through using information and communication technologies (ICT) for the exchange of valid and correct information.

Target groups of this measure are anyone in the population who is in need of care either for an acute circumstance or are patients in need of follow-ups like cancer patients. This measure helps limit in person contact in settings which are high risk areas like hospitals and clinics.

There are various benefits in using technology of telehealth, especially in non-emergency/routine care and in cases where services do not require direct patient-provider interaction, such as providing psychological services. Virtual assessment has allowed health care workers to address the needs of the population remotely and improves the access to care, while minimizing the risk of infection. Telehealth can become a basic need for the general population, health care providers, social workers, and patients with COVID-19, especially when people are in quarantine, enabling patients in real time through contact with health care provider for advice on their health problems.

Measure 10: Engineering control

Engineering control means isolating the person from the hazard through physical or mechanical means. Engineering controls for ensuring the safety of patients and healthcare workers are as follows:

- getting vaccinated
- routine use of disinfectants - To be effective you need disinfection procedures for facilities, shared equipment and spaces, work area, and personal electronics
- Barriers, partitions, ropes to separate employees from public or building occupants, e.g. plexiglass screens, sneeze guards, theater ropes and stanchions, hazard warning tape, etc.

These measures can be adapted in all environments and specifically health care environments where there is a higher risk of contracting diseases. Creating physical barriers and guides for a walking flow can help reduce the amount of contacts and the distance between contacts and greatly decrease the risk of infection. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions. They typically do not interfere with worker productivity or personal comfort and make the work easier to perform rather than more difficult. The initial cost of engineering controls can be higher than some other control methods, but over the longer term, operating costs are frequently lower, and in some instances, can provide a cost savings in other areas of the process.

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Measures specific to social care

Older adults living in congregate settings are at high risk of being affected by respiratory and other pathogens, such as SARS-CoV-2. A strong infection prevention and control (IPC) program is critical to protect both residents and healthcare workers. Care homes and other social services where we have populations at a greater risk must sustain core IPC practices and remain vigilant for SARS-CoV-2 infection among residents and HCW in order to prevent spread and protect residents and HCW from severe infections, hospitalizations, and death. Social care during the COVID-19 crisis has faced one of the most challenging times to cover urgent social needs in an uncertain scenario.

Guidelines for measures which help decrease and lower the spread of infection are used in line with all evidence based medicine and infection control measures that have existed regularly in these settings:

- the user before direct contact must sign a statement that he has not had a temperature or respiratory symptoms and that to his knowledge he had not been in contact with an infected person
- the temperature is measured before entering the premises of the social center
- at the entrance to the premises of the social center the user must be allowed to disinfect hands (ensure the availability of disinfectants at the entrance)
- new clients are received at the reception office in such a way that after checking the measures self-isolation, statement signing and temperature measurements they can enter the reception office space one by one
- a special room must be provided for the work of the reception office where the new clients will be received
- professionals working in the admissions office take turns after three hours of direct work and an hour break must be provided between changes in which the space will be disinfected
- wherever possible, ensure that one or a maximum of two professionals work in the same room
- visitation to the clients family is performed in all situations when necessary, in accordance with the rules of the profession and with the use of protective equipment
- visits to homes of the clients should be kept as short as possible, and to be carried with all activities according to the rules of the profession
- whenever possible clients arrive at the exact agreed time, waiting their turn in an open space and after their appointment/or the procedure are not kept in the center for longer than needed

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Some essential roles that the social care sector has had to take on during this pandemic and lessons for the future to allow to quickly mobilize personnel and logistics that which allow for continuity of care are:

- Advocate for the SSW to be an essential workforce during COVID-19 response
- Coordinate work in inter-agency and interdisciplinary networks to establish and promote social service practice and service standards during the pandemic
- Educate – create and carry out information campaigns to keep communities safe and reduce stigma
- Train – provide remote training and mentoring to the SSW on practice adaptations
- Manage – ensure supportive supervision is provided and services are adapted
- Monitor – stay up to date on pandemic and protocols to keep staff and communities safe
- Identify vulnerable households at increased risk of severe illness due to COVID-19; ensure they receive support to help prevent illness
- Work with community leaders to identify community needs
- Provide remote psychosocial support, utilizing available technology to contact at-risk families to help them cope
- Reinforce gatekeeping mechanisms and family-based alternative care options
- Respond to issues raised via child help lines and domestic violence hotlines
- Carry out contact tracing to identify individuals at risk of COVID-19
- Provide protection and support for families affected by domestic violence, abuse, neglect, and exploitation
- Identify emergency alternative care options for children who are abused, separated, orphaned, and/ or transitioning from residential care institutions or detention centers
- Carry out case management processes – assessment, planning, referrals, etc.
- Provide or supervise psychosocial support
- Provide material support, food and medicines to impacted households
- Provide bereavement counseling and support alternatives to traditional mourning rituals

The impacts of the pandemic can be felt throughout all areas and walks of life. Measures implemented in the social care sector have consequences on staff and clients as well as the economy, jobs and social relations. When the strictest measures are in force the implications for client's mental health is at a higher risk and it affects them negatively. It reduces the ability of families, friends, and social care staff to provide support. There needs to be the best possible coordination between health and social care bodies, food-distribution systems, civil contingency, and military services to mobilize community resources to provide support to older adults and others in need of social care. Without such coordination some of those

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needing care may not get the full range of support they require, and services may prove less effective and efficient due, for example, to duplication of processes.

The response of civil society organisations to face the COVID-19 pandemic and the consequent restrictive measures adopted in Europe

After the World Health Organisation declared COVID-19 a pandemic, the governments of countries all over the world have responded differently to contain the spread of the virus. Possiblity exists that the restrictions that governments implemented have made it difficult for civil society organisations (CSOs) to continue with their traditional activities, thus, producing a substantial effect on the groups they work with. Due to this CSOs had to addapt and create new ways of providing services to those in need. There have been many inovative formats in different fields in which CSOs act and these are some of the highlights of successful practices in Europe:

Digitalization of services - several organisations working to protect women rights, older people rights and youth rights and foster their participation, inclusion and employability switched their services to digital (Youth Work Ireland).

Creation solidarity circles and new forms of civic activism - CSOs having to adapt to this new situation and still having as their core mission social care, but also other entities from the associative world aiming to different statutory objectives, have stepped in delivering aid to those who lack other forms of social protection and support, either through formal or even informal movements (Scout organization in Czech Republic)

Bringing awareness of the pandemic's impact on persons with disabilities – for example ceratin CSOs have pointed out the lack of accessible public information and communication, accessible distance education, adapted teaching materials and modalities as well as evaluation processes at school for deaf students and have pointed out that the use of facial masks makes lipreading impossible for people with a hearing disability so public information need to be accessible through live subtitling for the population with hearing loss (Spanish Confederation of Families of Deaf People (FIAPAS))

Studies and large-scale surveys have been conducted by the CSOs to gather information and gain better understanding of the situation

Innovative formats and methods for educational activities focused on the environment and sustainable development, when outdoor and group activities are restricted were developed.

Alternatives for recycling disposable materials that highly increased during the pandemic, such as masks and related protective materials were fostered.

Protection and promotion of the most fragile in society were advovated for. The main aim of this was to maintain and increase the societal agenda at the top of the priorities, namely by

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promoting awareness-raising campaigns to gather wide public support and ensuring the creation of the necessary channels to policy makers, especially during the forthcoming financial crisis.

Anti-epidemic measures for health facilities, staff and visitors

Prevention and early detection measures are being intensively implemented in all countries. Identification of persons potentially exposed to infection and their quarantine is one of the measures important to reduce the spread of the virus.

Given the route of transmission of COVID-19 disease, the basic rule is to maintain a distance between people that is, to avoid close contact which means avoiding close personal contact at a distance of at least 2 meters indoors and 1 meter outdoors.

When above mentioned measures aren't effective enough and there is a sharp increase in the number of patients, it is necessary to introduce stricter measures at the level of health care institutions which defines the obligations and ways of acting of health professionals and restricts access visitors.

Recommendations for anti-epidemic measures and stricter measures of social distancing in health institutes

Movement of health workers and patients within the institution should be regulated by the following rules:

- the existing pathways between departments and individual parts of the institution should be closed; communication between departments will take place only at the levels necessary for adequate functioning of institutions (logistical level)
- the movement of patients between wards is allowed only in case of necessary interventions, accompanied by a health worker (emergency health care on another ward)
- all employees must be provided with notification of exact routes / directions of movement
  for all the pathways by which patients will move between wards
- in the case of movement of a patient with symptoms of acute respiratory disease (elevated
  body temperature, cough, sore throat, sniffling, etc.), it is necessary that the patient carries a surgical mask, and a healthcare professional accompanying said patient has to wear appropriate protection (appropriate size, which is placed before contact with the patient)
- all protective equipment for healthcare professionals must be used in the correct manner (all health care providers must be provided with education and instructions

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for the use of protective equipment and each employee must confirm that he is familiar with the manner of the usage)

- the movement and relocation of staff and patients should be monitored and recorded
- it is necessary to designate staff with access to isolation rooms with patients infected with coronavirus and have records of these health workers

The role, rights and responsibilities of health professionals

Healthcare workers are at the forefront of every response to the epidemic and as such are exposed the dangers that put them at risk of infection by a pathogenic epidemic (in this case COVID-19). Hazards include exposure to pathogens, long working hours, psychological stress, fatigue, professional burnout, stigma and physical and psychological violence.

Rights and responsibilities of health professionals, including special measures necessary for safety at work:

- health workers at work in institutions are obliged to organize work so that the greatest possible mutual distance of workers is insured with the practice of measures of social distancing (in relation to colleagues and patients, but in accordance with the rules of the profession and health care)
- all health care workers are required to restrict movement in private life except arrivals and departures to work, and going out of the house in cases of emergency maintenance functioning of one's own household
- all health professionals have the right to all available preventive and protective measures by which they reduce exposure in the workplace and reduce health risk: they are entitled to appropriate personal protective equipment, depending on the type of medical activity they perform (masks, goggles, protective suits, suits, etc.)
- have the right to receive the latest information related to the disease in a timely manner
- they must be educated to use personal protective equipment, how to dress and take it off, and the manner in which and where it is disposed of
- health professionals are entitled to psychological assistance, which they are obliged to request if need be, for example in a situation of excessive effort, professional burnout, etc.
- it is desirable that healthcare professionals who must be in self-isolation due to exposure to the infection, have available psychological support in case of need
- all health professionals are required to follow the rules of the profession within the protocol submitted by the hospital management

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Patient accommodation and visitor access

- a hospital designated for the admission of patients with COVID-19 disease is required to make an assessment of number of beds for isolation and intensive care, and have a plan and measures to expand capacity for intensive care
- it is necessary to determine (according to the symptoms and progression of the disease) how the patients can be placed together (and how many of them) in rooms if necessary (e.g. criteria on patient with milder clinical picture in the same room with a person with a patient with a more severe form of the disease, or a patient without comorbidity in a room with a patient with comorbidity)
- Hospitals must establish criteria for the rapid discharge of patients and / or relocation of patients and / or treatment at home
- it is necessary to provide sufficient quantities and appropriate / different sizes of protective equipment for procedures in which an aerosol is generated in surgeries, halls or rooms for the isolation of the infected patients
- access to isolation rooms may only be granted to healthcare professionals who have previously been determined for this task and trained
- it is necessary to establish external triage points and designate triage staff (nurses and technicians trained in triage)
- triage must have predefined criteria (especially in the case of exceptional deterioration of situations and insufficient capacities - eg age, number of comorbidities, etc.)
- restrict the transport and movement of patients for purely medical purposes (e.g. consider a
  portable X-ray to avoid patients with suspected COVID-19)

Access to visitors in exceptional circumstances when visits are unavoidable

- patient reception and info-desk are in such places where it is possible to install barriers or where there are already partitions (eg glass or plastic) on the patient reception desks in order to limited close contact between medical staff and potentially infected patients
- in the event of a total ban on patient visits, institutions may decide on exceptions
  in the event of death or when the presence of a visitor is crucial to the well-being of the patient
- for such visitors define strict rules of entry into the institution, without the possibility of free
  movements around the institution (therefore they must be accompanied by hospital staff)

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- for visits to take place that are urgent, visitors should be provided with access protective equipment, with instructions for its use (dressing, wearing and removing)
- it is necessary to keep records of visitors

Good practices

Vaccine Rollout, Israel

As of the end of 2020, the State of Israel, with a population of 9.3 million, had administered 11.0 doses per 100 population COVID-19 vaccine doses.

The objective of the rapid vaccinations were to vaccinate as many people as possible in order to decrease the spread and transmission of COVID-19 and return to a normal functioning society as soon as possible. Older people experienced a disproportionately high burden of COVID-related deaths in Israel. To address this disparity, Israel relied on a simple vaccine prioritization process, with age being the only determining factor, with the exception of healthcare providers and first responders.

The healthcare workers and eligible workers vaccinate civilians willing to be vaccinated. The government supports the practice in hopes that life can return to normal as soon as possible and COVID-19 infection and transmission will decrease. The Israeli government provides anonymized age, sex and demographic data of vaccinated people to be analysed. This is made possible by the fact that Israel has a universal healthcare system and each person has a digitised health record.

Israel launched its COVID-19 vaccination campaign on December 20th, but preparations for it began months earlier. Over the course of 2020, Israel signed vaccine purchase contracts with several pharmaceutical companies at the forefront of COVID-19 vaccine development. In Israel you're notified that you're eligible to get vaccinated, either by an SMS, or you can just go into the site of your (healthcare provider), and immediately you see whether you're eligible or not.

Israel had the fastest growth of vaccine rollouts, which contributed to numerous positive factors. Results published in the New England Journal of Medicine about the safety and efficacy of the Pfizer/BioNTech Covid-19 vaccine concluded that a two-dose regimen of the vaccine offered 95% protection against Covid-19 in persons aged 16 years and older. Vaccine effectiveness against symptomatic SARS-CoV-2 infection, COVID-19-related hospitalisation, and COVID-19-related death exceeded 96% across all age groups, including older adults (aged ≥75 years and ≥85 years).

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Guidance for Long-term care homes during the pandemic, Croatia

The objectives of composing guidelines specific to long-term care homes are to lower the transmission and cases in facilities where some of the most vulnerable population in this epidemic lives. The target groups which should benefit from these recommendations are staff and clients of these homes.

The Croatian Institute of Public Health, like many other government institutions, issued guidelines specific to populations that are cared for in institutions within social care. This was of vital importance in helping to mitigate the damaging effects of the Covid-19 pandemic because it greatly aided this sector in having the correct protocols and information necessary for the workforce protect themselves and their clients. These recommendations involved visitation, procedures for isolation, what PPE was necessary for workers, triage, administrative and engineering controls. These practices should be implemented in all care homes, they have been around for many decades as infection prevention and control which have been modified to the characteristics of coronavirus. Support was received from public health institutes at local levels to assist care homes. These practices should always be in place when there is higher risks of infection, like epidemic situations.

Conclusions and recommendations

Public health measures are the crucial component of managing and controlling an epidemic. Specific measures are taken in special sectors to help lower the incidence of cases and protect the population. Specific measures related to healthcare can be organized into vaccine programmes, infection prevention, infection control and broader public health measures. As the world is progressing through this pandemic evidence is emerging in real time and we are building on previous knowledge we have in management of pandemics and epidemics. The ultimate strategy is to slow down or curb the spread of the overall disease burden—morbidity, severity, fatality, health complications and socio-economic consequences—and reduce the impact on health services. We can do this by implementing non-pharmaceutical interventions as well as effective vaccination programmes. These measures are most effective if integrated with enhanced personal hygiene, environmental sanitation and adequate and appropriate use of PPE (use of masks, handwashing and coughing etiquette). Early diagnosis and prompt management of confirmed cases by isolating (physical distance), timely follow-up and quarantine recommendations (10–14 days) for close contacts of a case are the core of controlling the COVID-19 pandemic.

It is crucial to identify as early on in a pandemic which groups are at risk. Health and social care workers are more vulnerable to the pandemic as they meet different people while discharging their duties. These workers in domiciliary care and care homes provide frontline services and are prone to the risk of contracting COVID-19 or even death. Social care institutions including those for older adults and younger children must turn to governments

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for guidance on how to safely continue to work and provide the necessary care to their patients and clients. An integrated and communicative approach between both sectors is necessary for the management of this pandemic and the return to normal.

Sources

BINNICKER M. (2020) Challenges and Controversies to Testing for COVID-19. *Journal of Clinical Microbiology*. [Online] 58(11). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7587118/ [Accessed: 24th June 2021]

BOSETTI P, KIEM C, YAZDANPANAH Y, FONTANET A, LINA B, COLIZZA V ET AL. (2021) Impact of mass testing during an epidemic rebound of SARS-CoV-2: a modelling study using the example of France. *Eurosurveillance*. 26(1). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7791601/ [Accessed: 24th June 2021]

BROOKS S, WEBSTER R, SMITH L, WOODLAND L, WESSELY S, GREENBERG N ET AL. (2020) The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet.* 395(10227):912-920. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7158942/ [Accessed: 24th June 2021]

COHEN, K., LESHEM, A. (2021) Suppressing the impact of the COVID-19 pandemic using controlled testing and isolation. *Sci Rep* 11. 6279. Available from: https://doi.org/10.1038/s41598-021-85458-1 [Accessed: 24th June 2021]

CROATIAN INSTITUTE OF PUBLIC HEALTH. (2020) *Guidance for Self-isolation*. [Online] Available from: https://www.hzjz.hr/wp-content/uploads/2020/03/letak-samoizolacija_EN.pdf [Accessed: 24th June 2021]

CROATIAN INSTITUTE OF PUBLIC HEALTH. (2020) *Anti-epidemic measures for health facilities, staff and visitors* [Online] Available from: https://www.hzjz.hr/wp-content/uploads/2020/03/Mjere_zdravstvo_bolnicke_ustanove-2.pdf [Accessed: 24th June 2021]

EAMES KT, KEELING MJ. (2003) Contact tracing and disease control. *Proc Biol Sci.* Dec 22;270(1533):2565-71. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1691540/ [Accessed: 24th June 2021]

European Observatory on Health Systems and Policies. (2020) *Effective contact tracing and the role of apps: lessons from Europe.* [Online] Available from: https://apps.who.int/iris/handle/10665/336294 [Accessed: 24th June 2021]

EVANS S, AGNEW E, VYNNYCKY E, ROBOTHAM J. (2021) The impact of testing and infection prevention and control strategies on within-hospital transmission dynamics of COVID-19 in

English hospitals. *Philos Trans R Soc Lond B Biol Sci.* 31;376(1829). Available from: https://doi.org/10.1038/s41598-021-85458-1 [Accessed: 24th June 2021]

GRASSLY NC, PONS-SALORT M, PARKER E, WHITE P, AINSLIE K, BAGUELIN M, ET AL.(2020) Report 16: Role of testing in COVID-19 control. Imperial College COVID-19 response team. Available from: https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/report-16-testing/ [Accessed: 24th June 2021]

INFECTIOUS DISEASES SOCIETY OF AMERICA. (2020) COVID-19 Prioritization of Diagnostic Testing. Available at: http://www.idsociety.org/globalassets/idsa/public-health/covid-19-prioritization-of-dx-testing.pdf [Accessed: 24th June 2021]

ISLAM MS, RAHMAN KM, SUN Y, QURESHI MO, ABDI I, CHUGHTAI AA, ET AL. (2020) Current knowledge of COVID-19 and infection prevention and control strategies in healthcare settings: A global analysis. *Infection Control & Hospital Epidemiology. Cambridge University Press*. 41(10):1196–206. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7253768/ [Accessed: 24th June 2021]

KAUR S, GUPTA V. (2020) COVID-19 Vaccine: A comprehensive status report. *Virus Research.*;288:198114. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7423510/ [Accessed: 24th June 2021]

KLINKENBERG D, FRASER C, HEESTERBEEK H. (2006) The Effectiveness of Contact Tracing in Emerging *Epidemics*. *PLoS ONE*. 2006;1(1):e12. Available at: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0000012 [Accessed: 24th June 2021]

MALIK A, MCFADDEN S, ELHARAKE J, OMER S. (2020) Determinants of COVID-19 vaccine acceptance in the US. *EClinicalMedicine*.26:100495. Available at: https://pubmed.ncbi.nlm.nih.gov/32838242/ [Accessed: 24th June 2021]

MONAGHESH, E., HAJIZADEH, A. (2020) The role of telehealth during COVID-19 outbreak: a systematic review based on current evidence. *BMC Public Health* 20, 1193. Available at: https://doi.org/10.1186/s12889-020-09301-4 [Accessed: 24th June 2021]

NUSSBAUMER-STREIT B, MAYR V, DOBRESCU A, CHAPMAN A, PERSAD E, KLERINGS I ET AL. (2020) Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. *Cochrane Database of Systematic Reviews*. Available at: https://pubmed.ncbi.nlm.nih.gov/32267544/ [Accessed: 24th June 2021]

PAN A, LIU L, WANG C, ET AL. (2020) Association of Public Health Interventions With the Epidemiology of the COVID-19 Outbreak in Wuhan, China. *JAMA*.323(19):1915–1923. Available at: https://jamanetwork.com/journals/jama/fullarticle/2764658 [Accessed: 24th June 2021]

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PATERSON C, BACON R, DWYER R, MORRISON KS, TOOHEY K, O'DEA A, SLADE J, MORTAZAVI R, ROBERTS C, PRANAVAN G, COONEY C, NAHON I, HAYES SC. (2020) The Role of Telehealth During the COVID-19 Pandemic Across the Interdisciplinary Cancer Team: Implications for Practice. *Semin Oncol Nurs.* 36(6):151090. Available at: https://pubmed.ncbi.nlm.nih.gov/33218886/ [Accessed: 24th June 2021]

POLACK F, THOMAS S, KITCHIN N, ABSALON J, GURTMAN A, LOCKHART S ET AL. (2020) Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. *N Engl J Med*.383(27):2603-2615. Available at: https://www.nejm.org/doi/full/10.1056/nejmoa2034577 [Accessed: 24th June 2021]

QUINN SC, KUMAR S. (2014) Health inequalities and infectious disease epidemics: a challenge for global health security. *Biosecur Bioterror*. 12(5):263-73. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4170985/ [Accessed: 24th June 2021]

RODRIGUES C, PLOTKIN S. (2020) Impact of Vaccines; Health, Economic and Social Perspectives. *Frontiers in Microbiology*.11. Available at: https://www.frontiersin.org/articles/10.3389/fmicb.2020.01526/full[Accessed: 24th June 2021]

ROSENTHAL PJ. (2020) The Importance of Diagnostic Testing during a Viral Pandemic: Early Lessons from Novel Coronavirus Disease (COVID-19). *Am J Trop Med Hyg*.102(5):915-916. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7204570/ [Accessed: 24th June 2021]

SALATH M, ALTHAUS C, NEHER R, STRINGHINI S, HODCROFT E, FELLAY J ET AL. (2020) COVID-19 epidemic in Switzerland: on the importance of testing, contact tracing and isolation. *Swiss Medical Weekly*. Available at: https://pubmed.ncbi.nlm.nih.gov/32191813/ [Accessed: 24th June 2021]

SEIDU A, HAGAN J, AMEYAW E, AHINKORAH B, SCHACK T. (2020) The role of testing in the fight against COVID-19: Current happenings in Africa and the way forward. *International Journal of Infectious Diseases.*98:237-240. Available at: https://www.sciencedirect.com/science/article/pii/S1201971220305257 [Accessed: 24th June 2021]

SULE WF, OLUWAYELU DO. (2020) Real-time RT-PCR for COVID-19 diagnosis: challenges and prospects. *Pan Afr Med J.* 35(Suppl 2):121. Available at: https://pubmed.ncbi.nlm.nih.gov/33282076/ [Accessed: 24th June 2021]

TAGEO V, DANTAS C, CORSELLO A, DIAS L. (2021) The response of civil society organisations to face the COVID-19 pandemic and the consequent restrictive measures adopted in Europe. European Economic and Social Committee. Available at:

https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/response-civil-society-organisations-face-covid-19-pandemic-and-consequent-restrictive-measures-adopted-europe-study [Accessed: 24th September 2021]

WANG Q, WANG X, LIN H. (2020)The role of triage in the prevention and control of COVID-19. Infection Control & Hospital Epidemiology. Cambridge University Press;41(7):772–6. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7231666/ [Accessed: 24th June 2021]

WASSIE G, AZENE A, BANTIE G, DESSIE G, ARAGAW A. (2020) Incubation Period of Severe Acute Respiratory Syndrome Novel Coronavirus 2 that Causes Coronavirus Disease 2019: A Systematic Review and Meta-Analysis. *Current Therapeutic Research*.93:100607. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7548076/ [Accessed: 24th June 2021]

WORLD HEALTH ORGANIZATION. (2009) Pandemic Influenza Preparedness and Response: A WHO Guidance Document. Geneva: 5, RECOMMENDED ACTIONS BEFORE, DURING AND AFTER A PANDEMIC. Available from: https://www.ncbi.nlm.nih.gov/books/NBK143063/ [Accessed: 24th June 2021]

ZITEK T. (2020) The Appropriate Use of Testing for COVID-19. *West J Emerg Med*.21(3):470-472. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7234686/ [Accessed: 24th June 2021]

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