White Paper
April 17, 2020

A Plan to Protect Our Nursing Home Residents

- COVID-19 has infected one in five nursing homes nationwide. At least 7000 residents are known to have lost their lives to COVID-19 as of April 17, 2020, and many more have been hospitalized—and these are only the known infections. Infection control efforts have thus far failed to reduce the spread of disease substantially (both between and within senior congregate settings).[1]
- Emerging data suggest that few nursing facilities have the organizational structure, training, resources (staffing, PPE, testing), physical plant, and operational capability to successfully fend off COVID-19 infections.
- Key infection prevention strategies (such as cohorting patients, universal masking of patients/staff, focused ventilation, universal testing, and preventing movement of healthcare workers between facilities) are being applied inconsistently and haphazardly.
- Infrastructure and staffing efforts must effectively integrate knowledge and understanding of the nursing home industry.
- We recommend that facilities with cases of COVID-19 operate under emergency preparedness policies and procedures, and thus be transitioned to an incident command management structure. This would allow state, local and facility resources to help support each nursing home with staff, training, PPE, engineering, and real-time expert-driven recommendations.
- COVID-19 Positive Post-Acute Care Centers and nursing homes with existing COVID-19 cases can be more effectively overseen by a *virtual centralized Support and Guidance Center* that disseminates real-time expert-driven recommendations to the traditional organizational structure.
- Clinical and operational aspects of this proposal are based on emergency preparedness principles, allowing the Nursing Home Administrator (NHA), Director of Nursing (DON) and Medical Director to focus on their leadership abilities, rather than wasting energy and time trying to micromanage every department in the facility during a time of extreme burden and limited resources.
- While this approach is aspirational, the principles delineated in this document can be used to guide policy decisions as our state works to mitigate the impact of this virus.

Why California Should Take This Approach

Nursing homes have struggled with all types of infection prevention historically, just given the age and health of the population they serve and the close proximity between many of the residents.[2] Sending more COVID-19 positive patients to a facility that has a mix of infected and uninfected patients risks overrunning a facility that is already unprepared, and risks increasing morbidity and mortality in that facility and in surrounding hospitals. The *New England Journal of Medicine* concluded "proactive steps by …facilities to identify and exclude potentially infected staff and visitors…are needed to prevent the introduction of Covid-19."[3] Drs. Grabowski and Joynt also have made the case in their recent article in *JAMA*, "Postacute Care Preparedness

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[1] McMichael TM, Clark S, Pogosjans S, et al. COVID-19 in a Long-Term Care Facility — King County, Washington, February 27–March 9, 2020. MMWR Morb Mortal Wkly Rep 2020;69:339-342. DOI: http://dx.doi.org/10.15585/mmwr.mm6912e1

[2] https://khn.org/news/infection-lapses-rampant-in-nursing-homes-but-punishment-is-rare/

[3] https://www.nejm.org/doi/full/10.1056/NEJMoa2005412

for COVID-19.[4] Hence, the concept of COVID-19 Positive Postacute Centers. This same concept is applicable to separate wings in a traditional nursing home. Furthermore, the management principles laid out in this document are also applicable to any nursing home faced with COVID-19 infection.

The idea of moving COVID-19 negative residents out of existing facilities to repurpose those facilities into COVID-19 positive facilities has significant drawbacks. First, there is literature on the impact of transfer trauma in nursing home residents.[5] Second, there is the clear risk of introducing the virus during the transfer process.[6] Third, there is no guarantee that the facility that they are moved to will be COVID-19 negative.[7] There are also civil rights issues at play. These nursing facilities are "home" to these residents. Forcibly moving them may have a variety of untoward consequences. Transitions such as these are known to introduce an increased risk of errors and potential harm.[8][9]

Efforts are already underway to create alternative sites of care for COVID-19 positive patients that require a skilled nursing level of care. Plans to create the infrastructure and to provide staffing are moving forward.[10] This proposal helps to effectively integrate knowledge and understanding of the industry that is vital to the successful implementation of these efforts. *It does not add to the work already going on*, it just helps to ensure that those efforts will not be wasted.

The COVID-19 pandemic is a medical emergency. This calls for the utilization of an incident command approach in COVID-19 positive facilities. Traditional nursing homes are managed top-to-bottom by a Nursing Home Administrator (NHA). This proposal allows the NHA to focus on their leadership abilities, rather than wasting energy and time trying to manage every department in such a facility. Management of each department will be supported at the state level by an incident command focused structure that provides real-time expert driven *direction* to the department heads of COVID-19 positive facilities.

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[4] https://jamanetwork.com/journals/jama/fullarticle/2763818

[5] Dosa D, Hyer K, Thomas K, Swaminathan S, Feng Z, Brown L, Mor V. To evacuate or shelter in place: implications of universal hurricane evacuation policies on nursing home residents. Journal of the American Medical Directors Association. 2012 Feb 1;13(2):190-e1.

[6] Kimball A, Hatfield KM, Arons M, et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. MMWR Morb Mortal Wkly Rep 2020;69:377–381. DOI: http://dx.doi.org/10.15585/mmwr.mm6913e1

[7] ibid

[8] https://psnet.ahrq.gov/primer/long-term-care-and-patient-safety

[9] Davidson GH, Austin E, Thornblade L, Simpson L, Ong TD, Pan H, Flum DR. Improving transitions of care across the spectrum of healthcare delivery: A multidisciplinary approach to understanding variability in outcomes across hospitals and skilled nursing facilities. The American Journal of Surgery. 2017 May 1;213(5):910-4.

[10] "Designating Certain Post-Acute Care Facilities As COVID-19 Skilled Care Centers Can Increase Hospital Capacity And Keep Nursing Home Patients Safer, " Health Affairs Blog, April 15, 2020. DOI: 10.1377/hblog20200414.319963

As a simple and easily implementable start to this process, the Boards of the California Association of Long Term Care Medicine (CALTCM) and The Infectious Disease Association of California (IDAC) have formally requested that the Governor require that every nursing home in California give their Infection Preventionist (IP) full-time status. CALTCM and Health Services Advisory Group (HSAG), the Quality Improvement Networks-Quality Improvement Organizations (QIN-QIO) for California, are prepared to provide the ongoing education and training of the IPs in nursing homes throughout the state as an actionable initial step toward implementing this proposal.

The clinical guidance for addressing COVID-19 in nursing homes and the nursing home population has been led by The Society for Post-Acute and Long-Term Care Medicine (AMDA). This guidance has been developed by experts on the front lines in real time and is now supported by expert panels created by The California Association of Long Term Care Medicine (CALTCM), and convened by Health Services Advisory Group (HSAG), and can be readily disseminated throughout the state's skilled nursing facilities. California needs to take full advantage of the resource they already have in over 130 certified medical directors (CMDs). Certified medical directors are known to improve quality.[11] As a pandemic requires the engagement of medical experts, nursing homes must fully engage their medical directors in providing safe, compassionate and up-to-date care and treatment to their residents. CALTCM and AMDA stand ready to support every medical director in the state.

COVID-19 demands a well-reasoned, evidence-based approach to creating and supporting COVID-19 Positive Post-Acute Care Centers and separate COVID-19 Positive wings. The resources and guidance provided by a centralized virtual support and guidance center can also be utilized to stem the tide of the COVID-19 infection in all nursing homes throughout the state. This involves real-time dissemination of best practices through an incident command-driven model developed specifically to stop the spread of this deadly pandemic and to limit the morbidity and mortality in these most vulnerable members of our population.

Details on How To Accomplish This Goal from a Virtual Support and Guidance Incident Command Center

Pandemics wait for no one. Not for individuals, not for governments, not for elected officials, and certainly not for nursing homes or the frail elders who reside there. Emergency situations, whether they be earthquakes, hurricanes or the COVID-19 pandemic, are best approached through an Incident Command response. Nursing homes themselves should be operating under their emergency preparedness policies and procedures, which dictate an incident command response. The challenge is that a highly contagious and deadly pandemic like COVID-19, with long incubation periods and asymptomatic community spread, has never been seen before. This places a strain on every nursing home and the systems historically set up to regulate and monitor them. Addressing this challenge is at the core of the **ICOS** response. **ICOS** stands for **I**nfrastructure **C**linical, **O**perations and **S**taffing. It can quickly be put together virtually at the state level. Its purpose is to bring real time expert support and guidance to every

[11] Rowland, Frederick N. et al. Impact of Medical Director Certification on Nursing Home Quality of Care. Journal of the American Medical Directors Association, Volume 10, Issue 6, 431 - 435

nursing home in the state, including COVID-19 Positive Post-Acute Care Centers. It is described below.

INFRASTRUCTURE

During natural disasters, entities such as FEMA, the Army Corp of Engineers, Army Medical Corps and regulatory bodies would coordinate the building, retrofitting, and supplying of temporary housing or health facilities for those who need it. During this pandemic, there is clearly a need to house COVID-19 positive older adults. The problem is that the agencies that are ready and prepared to act on this do not have a full understanding of what is required to create successful, efficient, safe skilled nursing facilities. It is essential that these bodies effectively interact with skilled nursing facility physical plant and maintenance experts to create a standard template and to effectively coordinate the repurposing and creation of COVID-19 positive facilities or wings.

Modeling algorithms are being created to determine the number of stand-alone facilities needed to meet the expected demand. In the meantime, there is clearly a need to create and repurpose existing space as nursing homes literally *become de facto* COVID-19 facilities. However, we should absolutely NOT consider facilities with significant COVID-19 outbreaks to take on the role of becoming COVID-19 Positive Post-Acute Care Centers just on the basis of having outbreaks already existing there, unless there are clear and scientifically based guidelines to assess the readiness of such facilities.[12] Sending patients to facilities that are unprepared and do not meet basic "readiness" criteria does not make sense. Current literature and clinical experience suggests that policy decisions that do not effectively take "readiness" into account will not mitigate morbidity and mortality, and in fact are likely to exacerbate the loss of life by increasing the number of cases of the illness in this highly vulnerable population.

It cannot be overstated that adequate stores of PPE and other supplies and equipment are critical to a skilled nursing facility's ability to defend against the COVID-19 infection. We also need to engage the use of technology that allows for the delivery of clinical care and finding ways to increase socialization while minimizing transmission of the virus.

CLINICAL

The Clinical component of the ICOS proposal recognizes that the COVID-19 infection brings with it little in the way of evidence-based research and experience. It is thus necessary to use real-time clinical experience and incorporate a modified Delphi process to develop an approach to care.[13] It's not enough to have Delphi-based guidelines, however. To deliver true person-centered care during this pandemic means that we must also contextualize the decision-making process.[14] Our solution to this challenge is to develop expert multidisciplinary teams working with AMDA, CALTCM, CDPH and other organizations. These expert panels incorporate feedback from clinicians in the field who are dealing with COVID-19 outbreaks. A normal modified

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[12] ibid

[13] Staykova, MP. Rediscovering the Delphi Technique: A Review of the Literature. *Advances in Social Sciences Research Journal, 2019,* 6*(1)* 218-229.

[14] Weiner SJ, Schwartz A., Contextual Errors in Medical Decision Making: Overlooked and Understudied. Acad Med. 2016 May;91(5):657-62. doi: 10.1097/ACM.0000000000001017.

Delphi process might take several months. In a pandemic, that time frame must be reduced to weeks, days and sometimes hours, based on the information rapidly becoming available.

This type of process is already guiding decision-making in the field around the country; it just has not been formalized. There is a clear opportunity to develop guidance in real time for CO-VID-19 Positive medical Care. These expert-supported clinical recommendations can be developed in real time for Directors of Nursing and Medical Directors. An example of a recommendation that has come out of this process is the need for bluetooth-enabled pulse oximetry to reduce viral transmission while monitoring COVID-19 positive residents who might need acute hospitalization.

As expert clinical recommendations are developed, they will be delivered back to the COVID-19 Positive Post-Acute Care Centers and all skilled nursing homes throughout the state utilizing the QIN-QIO to assist in the dissemination of this information. Weekly webinars can continue to be utilized, such as the ones already developed by CALTCM.

OPERATIONS

The typical nursing home runs from the top down with a nursing home administrator (NHA) in charge. The training of NHAs is unlikely to have prepared them for the COVID-19 pandemic. It is critical that nursing homes immediately shift into their emergency preparedness policies and procedures, which means that facilities must immediately being functioning in an incident command mode. The idea of a "morning stand-up" meeting where the NHA meets with all of the department heads is no longer sufficient to manage this crisis. Unfortunately, because this is a medical crisis, the NHA and DON may be ill-prepared for the management decision-making that is essential to effectively run a nursing home during a crisis.

In a pandemic, each department in a NH needs up-to-date, actionable information that is unlikely to be effectively shared through the traditional chain of command structure and function. Hence, the concept of operational multidisciplinary teams led by experts in a virtual Support and Guidance Center that provides daily management guidance to each department in a COVID-19 Positive Post-Acute Care Canter. This Center can also readily provide education and training to every nursing home in the state that is grappling with this infection.

The virtual Support and Guidance Center is set up by department, following a traditional NH organizational chart. The departments represented are as follows:

- Incident Commander: NHA
- Incident Management Team: NHA, DON, Medical Director, Infection Preventionist (IP)
- Staffing
- Education and Training
- Physical Plant/Maintenance
- Housekeeping
- Dietary
- Central Supply-logistics
- CNAs
- Licensed Nurses

- Pharmacy
- Rehabilitation
- Social Services & Activities
- Admin/Business Office/Finance
- Planning function

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Each Department in the virtual Support and Guidance Center would develop actionable recommendations through a similar modified Delphi expert approach taken by the clinical leadership already discussed. They would then feed this information daily back to COVID-19 Positive Post-Acute Care Centers directly to facility department heads. This information would also be shared regularly and integrated with individual facility incident command teams on a working in conjunction with the QIN-QIO in a fashion similar to that already outlined.

It is critical to reiterate that a pandemic of the nature of COVID-19 necessitates the development of incident command approaches that shift facility staff from "drinking information from a firehose," to getting them information that they can ingest through a straw. This approach is actually not very complicated. Once it is set up at the state level, the daily dissemination of information will flow rather simply and easily, as will the response to questions and the need for feedback from individual facilities. We must avoid one-on-one education and training interactions as much as possible. There are just not enough people to achieve that level of support and guidance, nor is it a practical or logical approach to developing a scalable solution to overseeing nursing homes challenged by COVID-19 infections. The scalability of this solution is based on the concept of effectively providing expert based best practices on a daily basis to the department heads of every nursing home in the state of California.

STAFFING

A lot of people are out of work in the industries that have applicability to the nursing home workforce, e.g., housekeeping from hotels, dietary from restaurants, activities from leisure and entertainment. We also need to find and engage RNs and LVNs. It should be possible, and is probably already happening, that the state is able to engage entities such as the National Guard and Army Medical Corps. We also need more Certified Nursing Assistants (CNAs), as they are the backbone of nursing homes. The main requirement for CNAs is that they are caring human beings. There appear to be models occurring throughout the country that provide for on-the-job training, and these programs just need to be expanded. Licensing and certification regulations need to be relaxed and streamlined to allow for on-the-job training, and again, this appears to be happening already. There is a clear opportunity to utilize existing education and training approaches, waiving all fees, though they may need to quickly adjust to more rapid training. Finally, it is critical that all of these training programs fully integrate education specific to the needs of frail older adults, in particular those with cognitive dysfunction.

It is critically important that facilities have adequate staffing to meet the needs of their residents. Many facilities have already instituted efforts to reduce unnecessary tasks that consume nursing time, such as unnecessarily frequent vital signs and deprescribing unnecessary medications. Additional time in COVID-19 Positive Post-Acute facilities will be required with donning and doffing PPE and related tasks. Nursing homes should not be expected to take on more residents than those for whom they can safely provide care and treatment, and some of the

requirements for staff and training have been waived. In some cases, local, state or national agencies may provide additional manpower during this crisis. Some researchers (e.g., Charlene Harrington, RN, PhD, FAAN) have suggested specific recommendations for nursing staffing ratios, and certainly anytime the acuity level of a facility's case mix increases, the need for nursing hours will also increase.[15][16][17] The ICOS structure can help ensure adequate staffing for nursing homes during this crisis.

[15] Schnelle JF, Schroyer LD, Saraf AA, Simmons SF. Determining nurse aide staffing requirements to provide care based on resident workload: A discrete event simulation model. *JAMDA*. 2016; 17:970-977

[16] Harrington C, Kovner C, Kayser-Jones J, Berger S, Mohler M, Burke R. et al. Experts recommend minimum nurse staffing standards for nursing facilities in the United States. *Gerontologist.* 2000; 40 (1):1-12.

[17] Coalition of Geriatric Nursing Organizations (CGNO). Nursing staffing requirements to meet the demands of today's long-term care consumer recommendations, 2013. http://nadona.org/pdfs/CGNO%20Nurse%20Staffing%20Position%20Statement%201%20page%20summary.pdf