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Policy Recommendations regarding Skilled Nursing Facility Management of COVID-19: Lessons From New York State

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**Title** - Policy Recommendations regarding Skilled Nursing Facility Management of COVID-19: Lessons From New York State

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**Brief summary –**

We describe a comprehensive policy approach to managing COVID-19 in the Skilled Nursing Facility setting including issues related to staff, patients, communication, and infection control.

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1 Policy Recommendations regarding Skilled Nursing Facility Management of COVID-19: Lessons  
2 From New York State

3

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ABSTRACT

5 To provide policy recommendations for managing COVID-19 in Skilled Nursing Facilities  
6 (SNFs), a group of certified medical directors from several facilities in New York state with  
7 experience managing the disease used email, phone, and video conferencing to develop  
8 consensus recommendations. The resulting document provides recommendations on  
9 screening, and protection of staff, screening of residents, management of COVID-19 positive  
10 and presumed positive cases, communication during an outbreak, management of admissions  
11 and readmissions, and providing emotional support for staff. These consensus guidelines have  
12 been endorsed by the Executive Board of the New York Medical Directors Association and the  
13 Board of the Metropolitan Area Geriatrics Society.

14

15 COVID-19 has rapidly affected the health care systems in New York. The impact of this  
16 pandemic has been widely recognized in hospital systems but guidelines for care for this  
17 disease in the Skilled Nursing Facility (SNF) are sorely lacking.

18 One of the biggest challenges we have faced in SNFs is the transmission by  
19 asymptomatic carriers and patients. As a result, COVID-19 can insidiously spread prior to  
20 awareness of the first case, which leads to rapid spread within the facility.<sup>1</sup> Many older adults  
21 manifest COVID-19 with low grade temperatures, diarrhea or fatigue, and may not have overt  
22 respiratory symptoms – causing rapid spread without detection.

23 We describe expert consensus policies for SNFs to prepare for and manage COVID-19.

#### 24 METHODS

25 The consensus statements presented here have been formulated by the authors who  
26 had experience with outbreaks of COVID-19 as the SNF community needed to rapidly adapt to  
27 the dynamic changes which occurred in these healthcare facilities during this unprecedented  
28 pandemic. The authors are actively working Certified Medical Directors, are Board Members of  
29 the New York Medical Directors Association (NYMDA) and serve as Medical Directors or  
30 Rochelle & Rochester). The guidelines included in this paper are based on current knowledge at  
31 the time of manuscript transmission (May 22, 2020) and may change over time – especially  
32 regarding medication management and laboratory testing. Literature review through PubMed  
33 was conducted and review of studies at ClinicalTrials.gov.

34 Our suggestions should not take precedence over local Department of Health (DOH) or  
35 Centers for Disease Control (CDC) recommendations. It is imperative to recognize that

36 recommendations regarding COVID-19 are frequently evolving and providers and facilities  
37 should adapt accordingly.

38

39

#### RECOMMENDATIONS:

40

##### Measures Regarding Staff

41

- Screen all employees when reporting for duty for fever, symptoms of respiratory illness,  
42 and other COVID-19 symptoms. Do not let anyone enter if they have fever or symptoms  
43 of COVID-19. Screener should be wearing a surgical mask.

44

- If your community might participate in contact tracing, then a written sign-in log should  
45 be maintained for anyone who enters the facility.

46

- Provide a face mask daily to each staff member to be worn at all times while in the  
47 facility. This mask should be available at the front entrance, prior to contact with the  
48 screener. The screener should be stationed at least 6 feet away from the area of those  
49 entering the facility.

50

- Periodic point-prevalence COVID-19 testing of staff should be conducted based on  
51 regional prevalence only if:

52

- Utilized on staff not previously diagnosed with COVID by PCR or antibody testing,

53

- Conducted on a serial basis with a series of at least 3 rounds of testing 1 week

54

apart to allow for newly infected staff to convert, and

55

- Point of care technology is utilized so to avoid the trauma of repeated

56

nasopharyngeal swabbing and to ensure quicker results, and

57

- There is a plan in place to manage potential staffing shortfall.

- 58       • Staff should have a place to eat meals that allows them to practice appropriate social  
59       distancing while eating without masks.
- 60       • Usage of locker rooms should follow social distancing guidelines while protecting  
61       employees' rights.
- 62       • *Note: The following are mandatory once COVID-19 is known to be in the facility, are  
63       strongly recommended if COVID-19 is becoming prevalent in your community, and  
64       should be strongly considered if equipment is available regardless of local COVID-19  
65       prevalence.*
- 66             ○ Provide N95 (or similar mask) to clinical staff to be worn during direct patient  
67             care and to cleaning crew and others when in patient areas.
- 68             ○ Provide eye-shields to all clinical staff to be worn during direct patient care and  
69             to cleaning crew and others in patient areas. This practice is becoming more  
70             common in both COVID positive and COVID negative areas as it is becoming clear  
71             that the main way to prevent spread is with aggressive PPE use.
- 72             ○ Assign staff (including PT/OT) to particular units when possible. This will lead to  
73             easier contact tracing in the event of positive COVID cases in the facility. It also  
74             limits spread to other units if a staff member is positive but asymptomatic.

75

#### 76       Screening Measures for Residents/Patients

77

- 78       • Screen all residents for COVID symptoms along with measurements of temperature and  
79       pulse oximetry at least twice daily. The facility medical director should set criteria for a  
80       positive screen.

- 81       • The SNF should be prioritized for rapid, point of care testing as it is the best way to  
82       manage the epidemic in real time. Until this is available, facilities should be provided  
83       with a sufficient supply of test kits for PCR testing to meet diagnostic needs of the  
84       facility on an ongoing basis with access to a laboratory that can provide results of PCR  
85       testing within 24 hours.
- 86       • Periodic point-prevalence COVID-19 testing should be conducted based on regional  
87       prevalence only if:
- 88           ○ Utilized on residents not previously diagnosed with COVID by PCR or antibody  
89           testing or clinical criteria,
- 90           ○ Conducted on a serial basis with a series of at least 3 rounds of testing 1 week  
91           apart to allow for newly infected residents to convert, and
- 92           ○ There is a plan to cohort residents who test positive.
- 93       • Avoid group activities (such as recreational activities and physical and occupational  
94       therapy) that do not allow for the maintenance of 6 feet social distancing. Notably, it is  
95       often difficult for ambulatory residents with dementia to follow social distancing rules.
- 96       • Since COVID-19 can spread prior to detection, to minimize risk of spread, convert  
97       nebulizer medications to MDI and stop nasal sprays which might spread virus.
- 98       • *Note: The following are mandatory once COVID-19 is known to be in the facility, are  
99       strongly recommended if COVID-19 is becoming prevalent in your community, and  
100       should be strongly considered if equipment is available regardless of local COVID-19  
101       prevalence.*

- 102           ○ Provide a clean face mask each day to all residents to wear throughout the day if  
103           tolerated... Efforts especially should be made for COVID positive residents to  
104           wear their masks when staff are in the room.
- 105           ○ Review your Rapid Response/ CPR team and strongly consider changing team to  
106           only 2 staff members who have N95 and face shield. One member provides chest  
107           compressions and the other provides bagging for respirations. This limits  
108           exposure of health care team to COVID-19 while awaiting EMS arrival.

#### 109           Management of COVID-19 Positive / Presumed Positive Cases

- 110           • Institute contact-droplet precautions and test for COVID-19 by PCR (if testing available)  
111           for any resident who is demonstrating symptoms. Maintain precautions while awaiting  
112           test results. If residents test positive, move as described below.
- 113           • Create a dedicated COVID-19 Unit and assign staff who do not work elsewhere in the  
114           facility to this area. This COVID-19 Unit should receive transfers from within the facility  
115           as well as new admissions/re-admissions from hospitals who are COVID-19 positive; if  
116           possible such a Unit should have a separate entrance/exit or try to install temporary  
117           walls or doorway at entryway.
- 118           • If not able to segregate COVID-positive patients in a separate Unit, cohort such patients  
119           in one area of the affected unit and assign dedicated staff to care for them.
- 120           • In addition to the use of face shields, gowns and gloves, provide N-95 masks (or similar),  
121           to staff providing direct care to COVID positive patients; use/re-use/store in accordance  
122           with CDC guidelines.<sup>2</sup>

- 123 • Monitor all patients who are Positive / Suspected for COVID symptoms along with  
124 measurement of temperature and pulse oximetry two or three times a day. The facility  
125 medical director should set criteria for a positive screen.
- 126 • The role for routine antibody testing in the SNF is currently unclear. In the future, it may  
127 be useful to assess for presence of immunity to guide room assignments. However, per  
128 the Infections Diseases Society of America, antibody tests are expected to be most  
129 useful as surveillance tools to estimate relative proportions of different populations that  
130 have been exposed to COVID-19.<sup>3</sup>
- 131 • Review all resident's Advanced Directives with resident and/or family – including do not  
132 resuscitate, do not intubate, do not hospitalize. Physicians, NPs/PAs, Social Work, and  
133 nursing can contribute to the discussion. Conversations should include an explanation of  
134 the limited success of mechanical ventilation in older adults with COVID-19 as well as a  
135 description of the type of care which the SNF can provide while avoiding hospitalization.
- 136 • Of note, COVID positive patients can have relatively minor symptoms but then quickly  
137 progress to fulminant shock and respiratory failure. This is likely due to the cytokine  
138 response related to COVID 19 infection.<sup>4</sup> Educate residents/families regarding this  
139 possibility and that comfort-based medications can be titrated if this occurs.
- 140 • More research is needed on symptom manifestation of COVID-19 in older adults,  
141 especially in the SNF, however the authors have noted several patterns: significant  
142 decline in PO intake, WBC normal or low, fatigue as a primary symptom, and acute  
143 kidney injury with hypernatremia or hyponatremia.

- 144 • Consistent with the resident's goals of care along with consideration of realistic goals of  
145 care, manage COVID-19 positive patients and, absent testing, those presumed to be  
146 COVID positive:
- 147 1. Provide anti-pyretic therapy with acetaminophen – consider PRN or standing doses.
  - 148 2. Provide supplemental Oxygen by nasal cannula if pulse ox <90% and titrate as  
149 needed. Advance to venti-mask if hypoxia not improved.
  - 150 3. Discontinue (or hold for 2-3 weeks) any non-essential medications such as MVI,  
151 calcium, vitamin D. Consider changing medications such as artificial tears and allergy  
152 medications to PRN. This reduces pill burden for the resident and reduces nursing  
153 administration time.
  - 154 4. Discontinue nebulizers (can change to MDI) and discontinue medications  
155 administered by nasal spray as these medications might spread virus.
  - 156 5. Published data shows that COVID-19 is pro-coagulant.<sup>5</sup> Additionally, patients with  
157 COVID-19 in the SNF are generally spending more time in bed or chair and are at  
158 increased risk of DVT from decreased mobility. Consider prophylactic  
159 anticoagulation therapy with heparin SQ or enoxaparin SQ for 2 weeks or longer  
160 (depending on course of COVID-19 and level of mobility). Some practitioners are  
161 measuring d-dimer levels and determining anti-coagulation based on current clinical  
162 guidelines and a patient's specific clinical condition. If patient is already on  
163 anticoagulation, additional DVT prophylaxis is not needed. Individual considerations  
164 including fall risk, bleeding risk, and concurrent use of anti-platelet medications  
165 must be factored into decisions about anti-coagulation.
  - 166 6. Consider antibiotics if concern for bacterial pneumonia.

- 167 7. Consider h2 blocker if resident is on an alternative treatment for Gastroesophageal  
168 Reflux Disease as there are studies underway for famotidine as treatment for COVID-  
169 19 and famotidine is a known treatment for gastric reflux so this is not off-label or  
170 experimental.<sup>6</sup>
- 171 8. Decisions regarding checking labs (CBC, ESR, CMP, C-Reactive Protein, Ferritin and D-  
172 Dimer levels) or Chest X-ray should be made based on access to lab testing/imaging,  
173 consideration of risk exposure to residents and staff, and consideration of whether it  
174 will change management.
- 175 9. Decisions regarding use of intravenous fluids should be made with consideration of  
176 realistic goals of care and other resident comorbidities. Intravenous fluids can  
177 worsen dyspnea and/or edema, especially in acute illness and at end-of-life.
- 178 10. Manage end-of-life symptoms on-site with palliative approaches – tailored to each  
179 patient based on comorbidities, renal function, liver function, prior or current opioid  
180 use, age, weight and symptom burden. Consider starting as PRN doses and transition  
181 standing doses with PRN in between - recognizing that a COVID-19 patient's  
182 symptoms can quickly worsen.
- 183 a. Parenteral concentrated opioids for pain and/or dyspnea
- 184 i. morphine 20mg/ml, consider start at 2.5mg or 5mg PO/SL q4-6  
185 hours– avoid repeated morphine doses if CrCl <30
- 186 ii. oxycodone 20mg/ml, consider start at 2.5mg or 5mg PO/SL q4-6  
187 hours
- 188 iii. higher doses may be appropriate for higher symptom burden and  
189 non-opioid naïve patients



- 211 i. At least 3 days (72 hours) have passed since recovery, defined as  
212 resolution of fever (greater than or equal to 100.0) without the use of  
213 fever-reducing medications **AND**
- 214 ii. Improvement in respiratory symptoms (e.g., cough, shortness of  
215 breath) **AND**
- 216 iii. At least 14 days have passed since symptoms attributed to COVID-19  
217 first appeared (or first positive test if asymptomatic)
- 218 o Test-based strategy:
- 219     ▪ Lack of fever (greater than and equal to 100.0), without fever  
220     reducing medications; **AND**
- 221     ▪ Improvement in respiratory symptoms (e.g., cough, shortness of  
222     breath) **AND**
- 223     ▪ Negative results from at least two consecutive COVID-19 molecular  
224     assays at least 24 hours or greater apart.
- 225     ▪ Note: for asymptomatic patients, testing may begin a minimum of 7  
226     days from the first positive test

227 **\*Note:** Based on observed failures of the non-test based strategy (recurrent illness  
228 and/or positive molecular assays after discontinuation of transmission based  
229 precautions), the majority of the authors have adopted a combination approach in  
230 which the benchmarks of the non-test based strategy are achieved and then the test-  
231 based strategy is used to confirm the discontinuation of transmission based precautions.

- 232 • Specialty Units (On-site Hemodialysis and On-site Ventilator Units)

- 233           ○ Fit test staff on ventilator/respiratory units for N95s pre-emptively given the patient  
234           population and higher possibility of aerosilization of the virus on these units
- 235           ○ Encourage use of face shields on these units regardless of COVID status
- 236           ○ On-site Hemodialysis (HD):
- 237                 ▪ Consider creating a “late shift” for hemodialysis for COVID-19 patients to  
238                 allow for additional disinfecting prior to the next day dialysis sessions.
- 239           ○ On-site Ventilator Units:
- 240                 ▪ Attempt to change nebulizer medications to MDI to reduce risk of spread of  
241                 COVID-19.
- 242                 ▪ Consider use of ambu-bags with hepa filters if possible to decrease spread of  
243                 virus when bagging patients

244

#### 245           Communication

- 246           • Consider use of Telehealth visits for Medical consultant providers (dermatology,  
247           podiatry, etc.) for use when necessary with proper cleaning of this equipment.
- 248           • Arrange for Video or Window Visits between residents and families.
- 249           • Provide regular updates on the status of COVID-19 in the facility to staff. This can be  
250           though written, email or video updates, and can improve morale. <sup>7</sup>
- 251           • Develop ID cards with prominent photo of staff with name and title, to help residents  
252           identify caregivers who are wearing PPE obscuring the face.
- 253           • Develop a color coding system for doors regarding COVID-19 status to remind staff to  
254           use appropriate PPE.

- 255 • Provide in-service to staff regarding proper use of PPE and hand washing, and post signs  
256 as reminders.
- 257 • Recognize that many older adults have hearing impairment. Many will have difficulty  
258 understanding health care providers wearing masks which muffles sound as well as  
259 eliminates ability to lip read. Consider basic communication boards in each room to ask  
260 residents questions in writing.
- 261 • The facility should develop a protocol to notify other patients and families residing in  
262 that facility regarding COVID status per local Department of Health regulations. Possible  
263 ways to achieve this include updating the facility website daily to inform families or  
264 utilizing a robo-call system.
- 265 • Inform residents directly (if cognitively aware) and family members/designated  
266 representatives about diagnosis of COVID-19. Share your treatment plan and discuss  
267 advance directives.
- 268 • Plan for a memorial / remembrance service following social distancing guidelines when  
269 acute management of the crisis has resolved sufficiently to allow for reflection and  
270 shared condolences.

#### 271 Admissions / Re-admissions

- 272 • The authors do not support the mandatory admission of COVID-19 patients from  
273 hospitals to Nursing Homes as it may force unprepared facilities to provide care to  
274 COVID patients without the necessary resources or precautions.
- 275 • Hospitalized patients who are known COVID-19 positive should be admitted to a “COVID  
276 Positive unit”.

- 277 • If space allows, hospitalized patients who are COVID-19 negative, or were not tested,  
278 can be admitted to a “transition” unit for 14 days while they are monitored for  
279 symptoms of COVID-19 and tested if indicated (and available).

280 Additional supportive measures for staff and residents:

- 281 • Unlike hospital staff who generally care for patients for short periods of time, the SNF  
282 staff care for SNF residents often for many years. This strong connection can make the  
283 death of SNF residents even more devastating. Emotional support should be provided to  
284 staff as they grieve loss of residents.
- 285 • Cheerful drawings and messages from the community can be uplifting to SNF workers  
286 and patients. They can be posted in hallways and distributed to residents.
- 287 • Many hospitals are touting their “success” stories as patients coming off a ventilator or  
288 being discharged. “Success” in the SNF, especially for long term care residents, is  
289 different.
- 290 • “Success stories” for the SNF which can be acknowledged:
- 291 ○ Nurses and other staff who were sick with COVID and recovered
  - 292 ○ Staff, clinicians, and administrators who come to work despite personal risk
  - 293 ○ Residents who are recovering from COVID
  - 294 ○ Residents who went to the hospital with COVID and returned to the SNF
  - 295 ○ Residents who died from COVID in the facility after being treated with dignity  
296 and comfort measures
  - 297 ○ Families who are grateful for the care their loved ones are receiving and the  
298 updates provided by SNF

299

DISCUSSION:

300 Managing COVID-19 in the SNF is uniquely challenging because the SNF serves both as a  
301 home and a medical facility. Additionally, the close quarters of SNFs and natural design of  
302 facilities for communal and group programs likely contribute to spread of the virus. Without  
303 periodic widespread testing of all employees and visitors entering the facility, it will be difficult  
304 to recognize when there is COVID-19 in the facility prior to its spread. Although our guidelines  
305 are limited because it represents experiences from only one state, authors represent both  
306 upstate and downstate, NYS has a high rate of COVID-19 in SNFs,<sup>8</sup> and there is limited data on  
307 COVID in SNFs.<sup>9</sup>

308 Implications for Practice and Policy: Older adults have high mortality rates from COVID-  
309 19<sup>10</sup> and those in SNFs are at higher risk because of frailty, medical conditions and need for ADL  
310 assistance which made them need SNF care. Research is needed into transmission patterns and  
311 to patient factors impact individual outcomes. In our current situation, we must endeavor to  
312 reduce spread of infections, support the SNF staff, assist our residents, and consider public  
313 health policy impact in SNF.

314

315 The authors have no conflicts of interest. These consensus guidelines have been  
316 endorsed by the Executive Board of the New York Medical Directors (NY Chapter of the Society  
317 for Post Acute & Long Term Care Medicine) and the Board Members of the Metropolitan Area  
318 Geriatrics Society (NYC/LI/Westchester Chapter of the American Geriatrics Society).

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