COVID-19 Clinical Complexity and Quality Measurement

WHAT MAKES FOR A SUCCESSFUL FUTURE FOCUS ON COVID-19 FROM A CLINICALLY KNOWLEDGEABLE, QUALITY MEASUREMENT AND INTERDISCIPLINARY APPROACH

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Agenda

1. Focus on 3 Covid-19 related clinically complex areas

- Cardiac
- Respiratory
- Dysphagia
- Neurological
- Mental Health

2. Review related QM and QRP Measurement Areas

- QRP Outcome measures
- ADL related QMs and residuals
- Hospitalizations/ED Visits/Community Discharges

3. Success Strategies

- Right care at the right time
- Patient and staff safety
- Hope for the future

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COVID-19 Medical Overview (JAMA)

- **Coronavirus Infections—More Than Just the Common Cold, Journal of the American Medical Association**

- *Human coronaviruses (HCoVs) have long been considered inconsequential pathogens, causing the "common cold" in otherwise healthy people. However, in the 21st century, 2 highly pathogenic HCoVs—severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV)—emerged from animal reservoirs to cause global epidemics with alarming morbidity and mortality. In December 2019, yet another pathogenic HCoV, 2019 novel coronavirus (2019-nCoV), was recognized in Wuhan, China, and has caused serious illness and death.*

- *Common symptoms of SARS included fever, cough, dyspnea, and occasionally watery diarrhea.[2] Of infected patients,* ***20% to 30% required mechanical ventilation*** *and 10% died, with higher fatality rates in older patients and those with medical comorbidities.*

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COVID-19:Risk Factors for Severe Disease (CDC)

COVID-19 is a new disease and there is limited information regarding risk factors for severe disease. Based on currently available information and clinical expertise, **older adults** and **people of any age who have serious underlying medical conditions** might be at higher risk for severe illness from COVID-19.

- **Based upon available information to date, those at high-risk for severe illness from COVID-19 include:**

•People 65 years and older
•**People who live in a nursing home or long-term care facility**
•People of all ages with underlying medical conditions, particularly if not well controlled, including
•**People with chronic lung disease or moderate to severe asthma**
•**People who have serious heart conditions**

•People who are immunocompromised
•People with severe obesity (body mass index [BMI] of 40 or higher)
•People with diabetes
•People with chronic kidney disease undergoing dialysis
•People with liver disease

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Post Intensive Care Syndrome (PICS)

- ***Post-intensive care syndrome*, or PICS, is made up of health problems that remain after critical illness. They are present when the patient is in the ICU and may persist after the patient returns home.**
- These problems can involve the patient's body, thoughts, feelings, or mind and may affect the family.
- PICS may show up as an easily noticed **drawn-out muscle weakness, known as *ICU-acquired weakness*; as problems with thinking and judgment, called *cognitive (brain) dysfunction*; and as other mental health problems**

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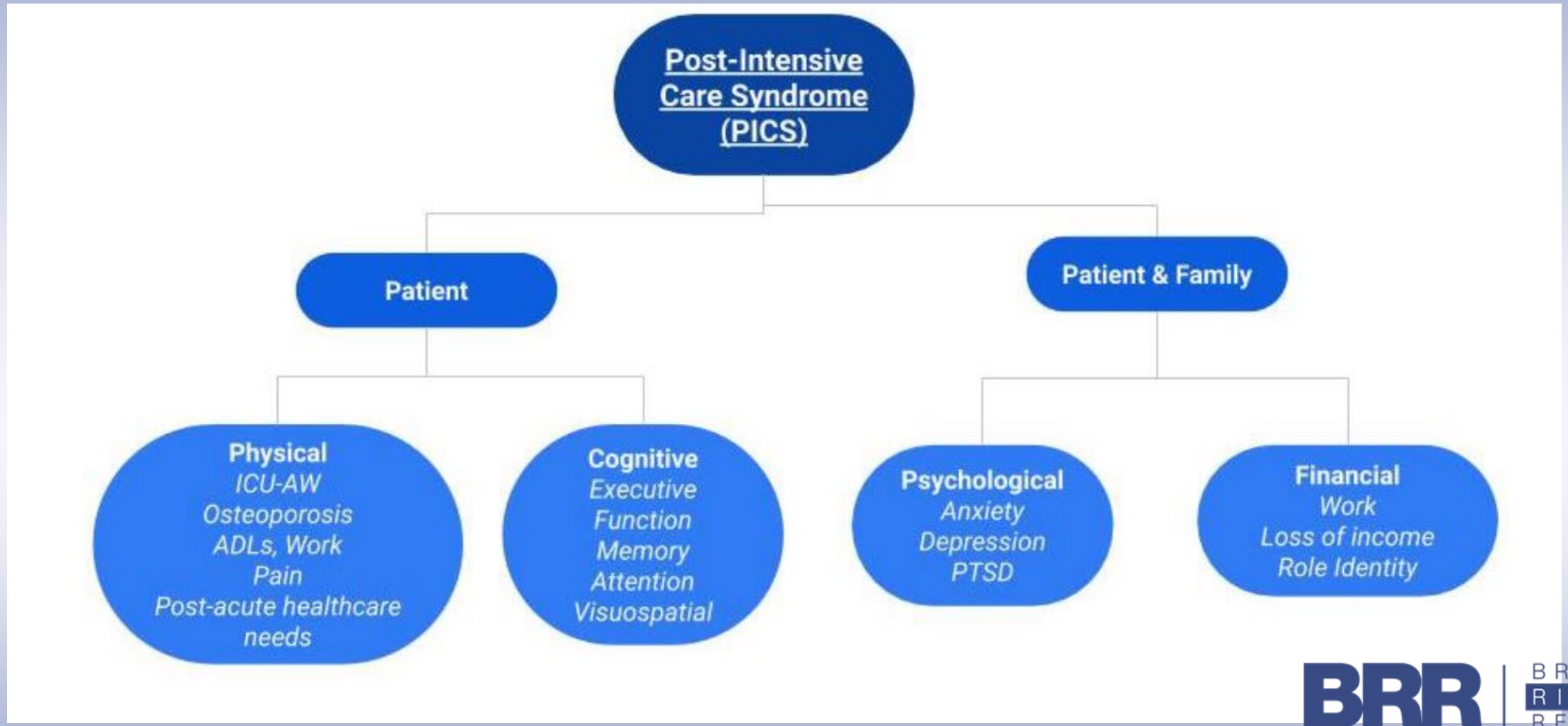
PICS: Considerations for SNF



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Cardiac Disease: Congestive Heart Failure

CHF is the inability of the heart to effectively deliver oxygen to the body as a result of impaired cardiac output. Cardiac output = amount of blood the heart pumps per minute.

Heart failure is the most frequent cardiac diagnosis associated with hospital admission and re-admissions.

- Fatigue
- Dyspnea
- Orthopnea
- Pulmonary edema
- Peripheral edema
- Fluid retention

JAMA Network™

From: **The Dilemma of Coronavirus Disease 2019, Aging, and Cardiovascular Disease: Insights From Cardiovascular Aging Science**

JAMA Cardiol. Published online April 03, 2020. doi:10.1001/jamacardio.2020.1329

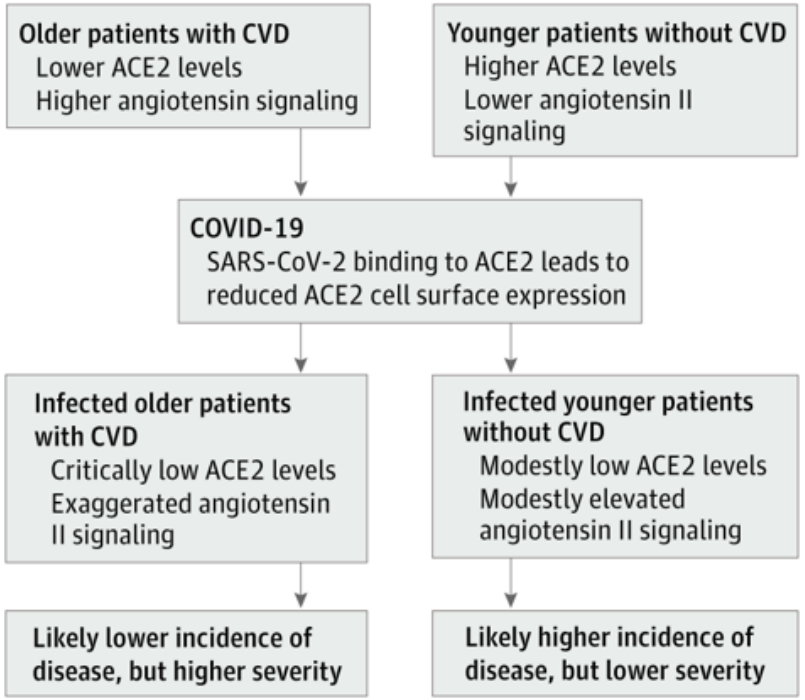
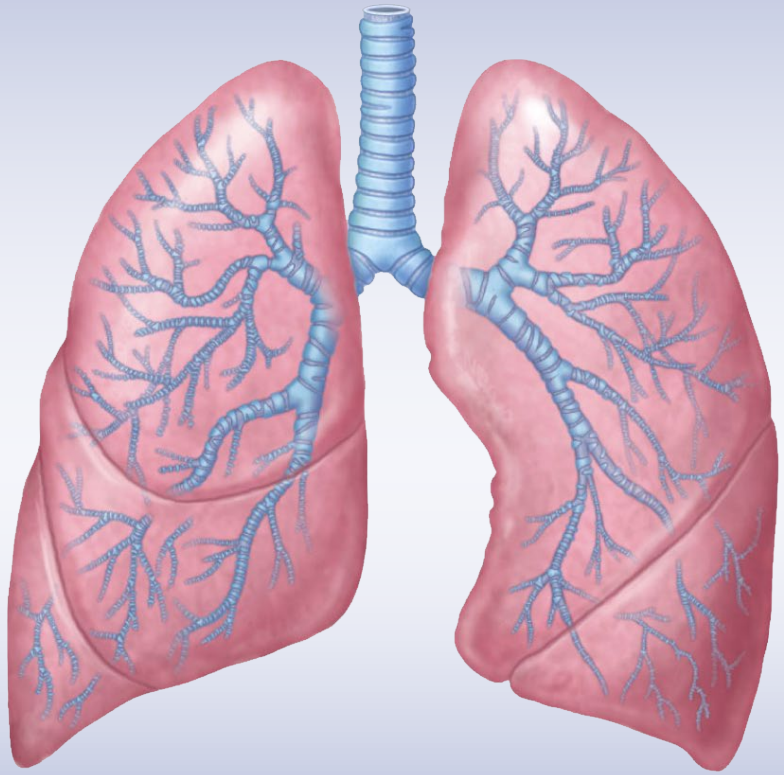


Figure Legend:

Schematic of Inflammatory Profile Before and After Coronavirus Disease 2019 (COVID-19) InfectionSimplified schematic of the preinfection inflammatory profile among predisposed older individuals vs their younger counterparts. ACE2 indicates angiotensin-converting enzyme 2; CVD, cardiovascular disease; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

Respiratory Disease: COPD



Chronic Obstructive Pulmonary Disease (COPD) is a group of chronic inflammatory diseases of the lungs that block airflow within the lungs, making it difficult to breathe.

COPD includes the diagnoses of:

- Chronic Bronchitis- Characterized by excessive sputum production and chronic cough
- Emphysema- Characterized by loss of elastic recoil within the lungs, over-inflation of the alveoli, and impaired gas exchange

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Aging Respiratory System

Diaphragm 25% weaker

Progressive disease due to exposure

Reduced chest wall, diaphragm muscle mass

Reduced alveolar and chest wall compliance

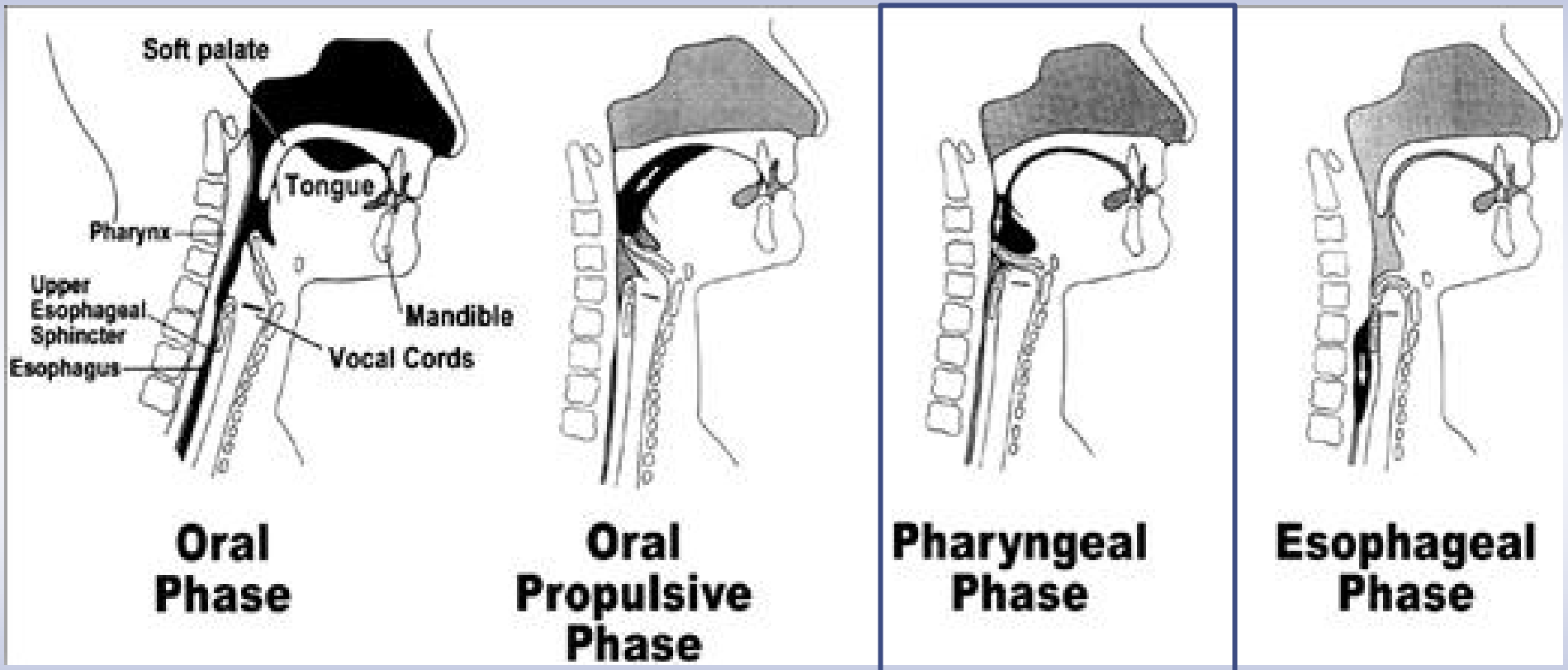
Spinal-chest anatomical changes

Breathing workload doubles (age 20 to 70)

Ventilation stops with swallowing (apnea)

Laryngeal penetration occurs normally in elderly (bolus enters larynx).

Swallowing: Four Phases



Pharyngeal Swallow/Extubation/COVID-19

Prolonged endotracheal intubation is a common cause of dysphagia swallowing disorders.

COVID-19 patients present with many risk factors associated with requirement for mechanical ventilation through an artificial airway, making each case a complex and unique puzzle.

- **Endotracheal intubation** is defined as placement of an artificial airway tube into the trachea.
- **Translaryngeal, orotracheal (through the mouth and then through the larynx) intubation** is the most common means of securing a patent airway in controlled settings such as the operating room, emergency department and ICU, as well as in uncontrolled situations in the field.

Respiratory Function & Swallow

A **period of apnea** which occurs during the swallow in addition to changes in breath patterns which are present during intake, makes meal- time experience more challenging for individuals with reduced respiratory functions

Symptoms COPD include shortness of breath, decreased capacity for physical activity, presence of a chronic obstructive cough, **loss of appetite with possible weight loss**, and increased fatigue (Connell & Richman, 2009).

COPD can also result in a multitude of problems, including voice, communication, and swallowing disorders.

Breathing and Swallowing Coordination

Swallow respiratory coordination		
Exhale	Swallow	Exhale
Respiratory Rate		
Young 16/min, elderly 20/min		
Swallow measures: total swallow duration, swallow apnea		
Increase with age		
Decrease with lower lung volumes		

Section: K0100 → Swallow Phase

K0100A, loss of liquids/solids from mouth when eating or drinking.	→ Oral Prep (weak lips) or Oral Phase (weak tongue)
K0100B, holding food in mouth/cheeks or residual food in mouth after meals	→ Oral Prep (weak lip seal) or Oral Phase (decreased tongue ROM)
K0100C, coughing or choking during meals or when swallowing medications.	→ Oral Phase (base of tongue) or Pharyngeal Phase
K0100D, complaints of difficulty or pain with swallowing.	→ Pharyngeal Phase or Esophageal Phase (pain)

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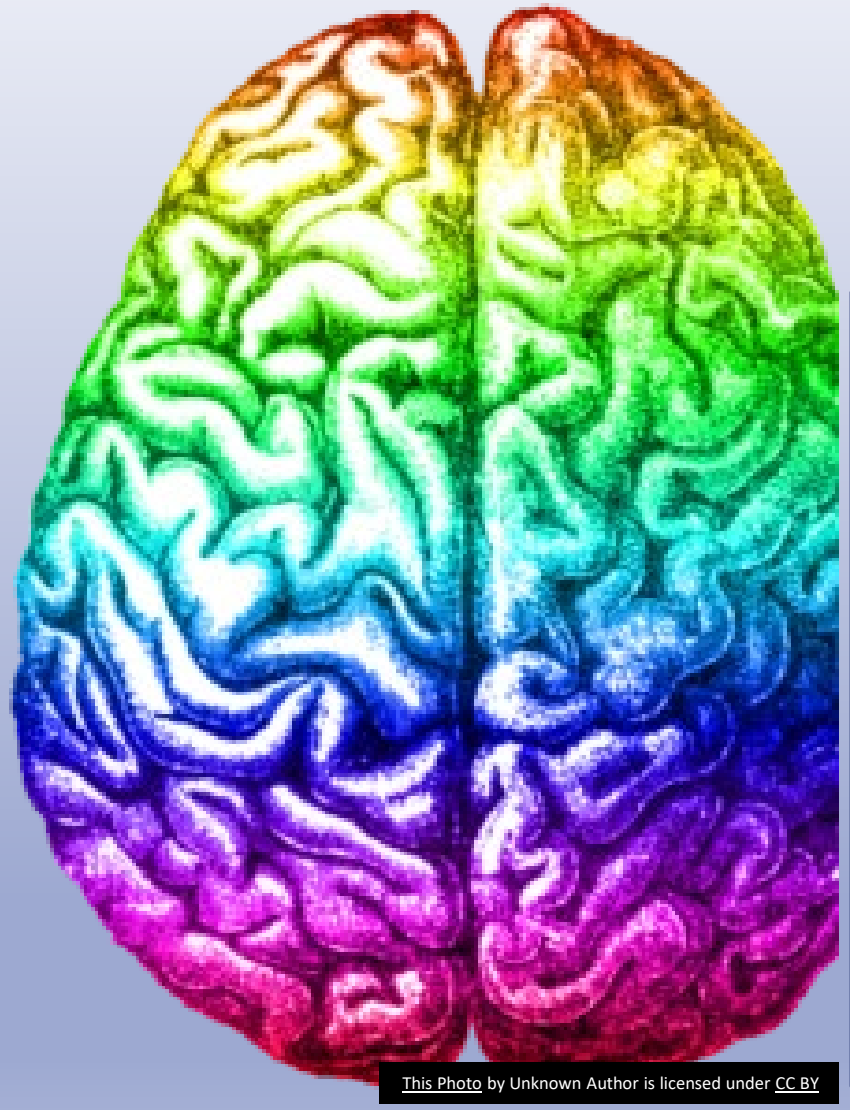

COVID-19 and Neurologic Disease

JAMA, Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China

Main Outcomes and Measures: Clinical data were extracted from electronic medical records, and data of all neurologic symptoms were checked by 2 trained neurologists. Neurologic manifestations fell into 3 categories: central nervous system manifestations (dizziness, headache, impaired consciousness, acute cerebrovascular disease, ataxia, and seizure), peripheral nervous system manifestations (taste impairment, smell impairment, vision impairment, and nerve pain), and skeletal muscular injury manifestations

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COVID-19 and Neurologic Disease

JAMA- The Spectrum of Neurologic Disease in the Severe Acute Respiratory Syndrome Coronavirus 2 Pandemic Infection, Neurologists Move to the Frontlines

Findings:

- 5 of 206 patients with SARS in Singapore developed large-vessel strokes. Four of these patients had their strokes in the setting of critical illness owing to SARS, and 3 were associated with significant episodes of hypotension.
- These neurologic manifestations ranged from fairly specific symptoms (eg, loss of sense of smell or taste, myopathy, and stroke) to more nonspecific symptoms (eg, headache, depressed level of consciousness, dizziness, or seizure).
- Whether these more nonspecific symptoms are manifestations of the disease itself or consistent with a systemic inflammatory response in patients who were quite illwill need to be defined in future studies

COVID-19 and Mental Health

Frontline health care workers caring directly for patients with COVID-19 reported higher levels of severe mental health symptoms than those in secondary roles.

Concern about protecting oneself from the virus because they are at higher risk of serious illness.

Concern that regular medical care or community services may be disrupted due to facility closures or reductions in services and public transport closure.

Feeling socially isolated, especially if they live alone or are in a community setting that is not allowing visitors because of the outbreak.

Guilt if loved ones help them with activities of daily living.

Increased levels of distress

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American Speech Language Hearing Association, Dysphagia Following Prolonged Endotracheal Intubation: Is There A Rule of Thumb?, derived from, https://pubs.asha.org/doi/10.1044/sasd23.2.80

Center for Disease Control and Prevention (CDC), Information for Healthcare Professionals: COVID-19 and Underlying Conditions, April 15th 2020, derived from, https://www.cdc.gov/coronavirus/2019-ncov/hcp/underlying-conditions.html

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- Journal of the American Medical Association (JAMA), Coronavirus Infections—More Than Just the Common Cold, Jan 23rd 2020, derived from, https://jamanetwork.com/journals/jama/fullarticle/2759815
- Journal of the American Medical Association (JAMA), Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China, derived from, https://jamanetwork.com/journals/jamaneurology/fullarticle/2764549
- Journal of the American Medical Association (JAMA), The Spectrum of Neurologic Disease in the Severe Acute Respiratory Syndrome Coronavirus 2 Pandemic Infection, Neurologists Move to the Frontlines, derived from, https://jamanetwork.com/journals/jamaneurology/fullarticle/2764548

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Covid-19 Future thinking, an Interdisciplinary approach

- Covid-19 has created new norms
- Specific risk factors and conditions contribute to and result from this disease.
- In the present crisis facilities are treating specific Covid-19 related issues
- Future thinking requires us to evaluate our capacity as interdisciplinary teams as we leverage the RAI to provide care (RAI – MDS, CAAs, Care Planning), be paid appropriately (PDPM) and achieve desired outcomes (Quality Measurement).

Quality Measurement and The Waivers

- The waivers do not replace the responsiblity for accurate assessments and a future focus on the residual of Covid-19
  - QRP https://www.cms.gov/files/document/guidance-memo-exceptions-and-extensions-quality-reporting-and-value-based-purchasing-programs.pdf
  - CMS is granting exceptions and extensions for certain deadlines to assist health care providers while they direct their resources toward caring for their patients and ensuring the health and safety of patients and staff.
  - In some instances, these exceptions and extensions are granted because the data collected may be greatly impacted by the response to COVID-19 and therefore should not be considered in the quality reporting program. For Skilled Nursing Facilities, the following Exception/Extensions apply.

Quality Measurement and The Waivers

- **SNF QRP** - CMS is granting an exception to the Quality Reporting Program (QRP) reporting requirements for all SNFs. These providers are excepted from the reporting of data on measures and standardized patient assessment data required under these programs for the post-acute care (PAC) quality reporting programs for calendar years (CYs) 2019 and 2020 for the following quarters.
  - October 1, 2019–December 31, 2019 (Q4 2019)
  - January 1, 2020–March 31, 2020 (Q1 2020)
  - April 1, 2020–June 30, 2020 (Q2 2020)
- **SNF VBP** - CMS will exclude qualifying claims from the claims-based SNF 30-Day All-Cause Readmission Measure (SNFRM; NQF #2510) calculation for the following periods:
  - January 1, 2020–March 31, 2020 (Q1 2020)
  - April 1, 2020–June 30, 2020 (Q2 2020)

Quality Measurement and The Waivers

- **Minimum Data Set -** CMS is waiving 42 CFR §483.20 to provide relief to SNFs on the timeframe requirements for Minimum Data Set assessments and transmission.
- **Other Waivers** - https://www.cms.gov/about-cms/emergency-preparedness-response-operations/current-emergencies/coronavirus-waivers
- **CMS is delaying** the Minimum Data Set (MDS) 3.0 v1.18.1 release, which had been scheduled for October 1, 2020, in response to stakeholder concerns.
- **No significant RAI** revisions in the recently released SNF FY 2021 PPS Proposed Rule. The proposed rule includes proposals required by statute and that affect Medicare payment to SNFs, as well as proposals that reduce provider burden and may help providers in the COVID-19 response.

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Quality Measurement and Covid-19

- The Waivers notwithstanding, quality measurement continues.
  - Care (RAI – MDS, CAAs, Care Planning), Payment (PDPM), Outcomes (Quality Measurement)
    - MDS Accuracy CAAs Care planning

CAA 1 - Delirium
CAA 2 - Cognitive Loss/Dementia
CAA 3 - Visual Function
CAA 4 - Communication
CAA 5 - Activity of Daily Living (ADL) Functional / Rehabilitation Potential
CAA 6 - Urinary Incontinence and Indwelling Catheter
CAA 7 - Psychosocial Well-Being
CAA 8 - Mood State
CAA 9 - Behavioral Symptoms
CAA 10 - Activities

CAA 10 - Activities
CAA 11 - Falls
CAA 12 - Nutritional Status
CAA 13 - Feeding Tubes
CAA 14 - Dehydration/Fluid Maintenance
CAA 15 - Dental Care
CAA 16 - Pressure Ulcer
CAA 17 - Psychotropic Medication Use
CAA 18 - Physical Restraints
CAA 19 - Pain
CAA 20 - Return to Community Referral

Quality Measurement and Covid-19

- Payment (PDPM): Covid-19 U07.1 (2019-nCoV acute respiratory disease) Maps to Pulmonary Clinical Category for PT, OT and SLP. Consider NSG and NTA
- **Example SLP:**

K0100A, loss of liquids/solids from mouth when eating or drinking.	→ Oral Prep (weak lips) or Oral Phase (weak tongue)
K0100B, holding food in mouth/cheeks or residual food in mouth after meals	→ Oral Prep (weak lip seal) or Oral Phase (decreased tongue ROM
K0100C, coughing or choking during meals or when swallowing medications.	→ Oral Phase (base of tongue) or Pharyngeal Phase
K0100D, complaints of difficulty or pain with swallowing.	→ Pharyngeal Phase or Esophageal Phase (pain)

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Quality Measurement and Covid-19

- Quality Measures Proper
  - QRP Reporting requirements waived, However Quality measures continue. CMS needs to issue more specific guidance, i.e. 5-Star
  - Facilities can continue to monitor QMs related to Covid-19 complexities with the CASPER report.

Measure Description	CMS ID	Data	Num	Denom	Facility Observed Percent	Facility Adjusted Percent	Comparison Group State Average	Comparison Group National Average	Comparison Group National Percentile
Hi-risk/Unstageable Pres Ulcer (L) ★	N015.03	C	5	53	9.4%	9.4%	8.6%	8.1%	65
Phys restraints (L)	N027.02	C	1	68	1.5%	1.5%	0.2%	0.2%	**95 ***
Falls (L)	N032.02	C	34	68	50.0%	50.0%	44.9%	45.4%	62
Falls w/Maj Injury (L) ★	N013.02	C	4	68	5.9%	5.9%	3.6%	3.5%	**83 ***
Antipsych Med (S) ★	N011.02	C	0	39	0.0%	0.0%	1.6%	2.0%	0
Antipsych Med (L) ★	N031.03	C	9	60	15.0%	15.0%	14.5%	14.1%	62
Antianxiety/Hypnotic Prev (L)	N033.02	C	1	18	5.6%	5.6%	8.3%	6.4%	56
Antianxiety/Hypnotic % (L)	N036.02	C	22	62	35.5%	35.5%	31.3%	19.5%	**92 ***
Behav Sx affect Others (L)	N034.02	C	4	64	6.3%	6.3%	20.6%	20.8%	16
Depress Sx (L)	N030.02	C	2	66	3.0%	3.0%	6.0%	6.1%	60
UTI (L) ★	N024.02	C	2	65	3.1%	3.1%	3.3%	2.6%	68
Cath Insert/Left Bladder (L) ★	N026.03	C	1	61	1.6%	1.2%	2.2%	2.1%	46
Lo-Risk Lose B/B Con (L)	N025.02	C	11	23	47.8%	47.8%	54.7%	48.3%	48
Excess Wt Loss (L)	N029.02	C	6	59	10.2%	10.2%	7.3%	5.9%	**85 ***
Incr ADL Help (L) ★	N028.02	C	7	62	11.3%	11.3%	17.4%	15.0%	35
Move Indep Worsens (L) ★	N035.03	C	10	41	24.4%	24.3%	22.0%	17.9%	**76 ***
Improvement in Function (S) ★	N037.03	C	16	38	42.1%	45.4%	67.2%	67.6%	**9 ***

Measure Description	CMS ID	Numerator	Denominator	Facility Observed Percent	Facility Adjusted Percent	National Average
New/worse Pres Ulcer (S)[1] ★ **QRP**	S002.02	2	43	4.7%	3.3%	1.6%

[1] The Percent of Residents With Pressure Ulcers That Are New or Worsened (S002.02) measure is calculated using the SNF QRP measure specifications v3.0 and is based on 12 months of data (04/01/2019 - 03/31/2020).

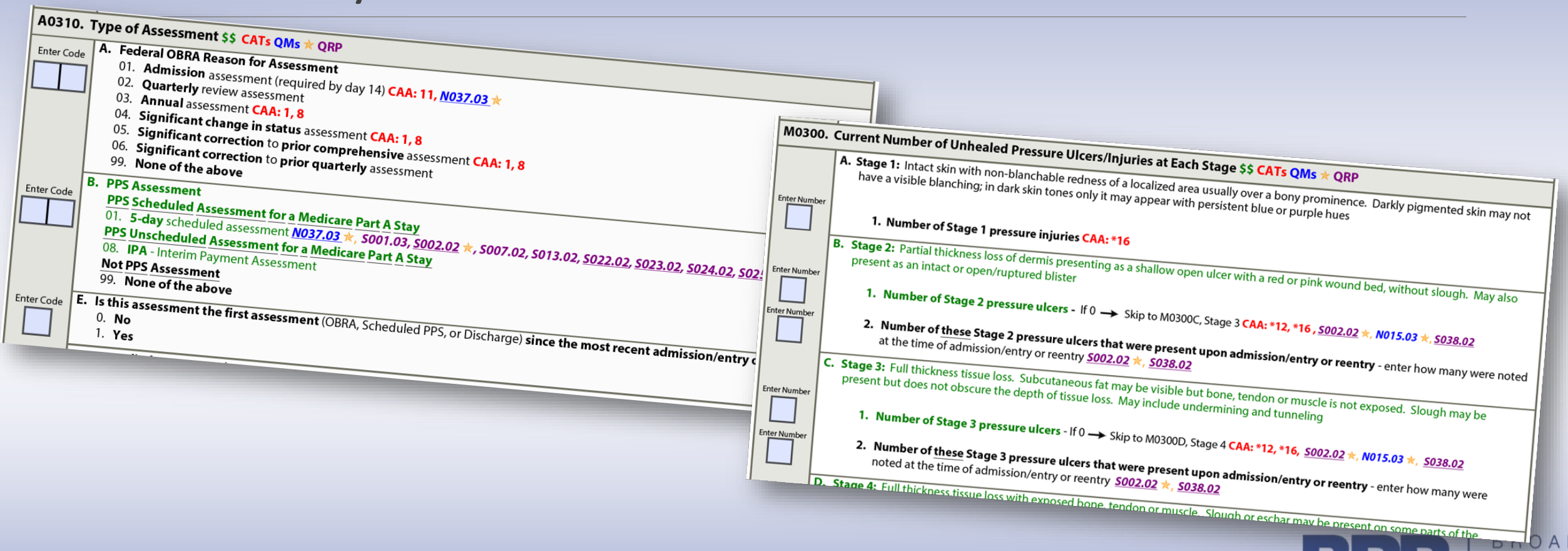
Quality Measurement and Covid-19

- **Percent of High-Risk Residents With Pressure Ulcers (Long Stay) -** This measure captures the percentage of long-stay, high-risk residents with Stage II-IV or unstageable pressure ulcers
- **Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay) -** This measure reports the percent of long-stay residents who have experienced one or more falls with major injury reported in the target period or look-back period.
- **Measure: Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long Stay) -** This measure reports the percent of long-stay residents whose need for help with late-loss Activities of Daily Living (ADLs) has increased when compared to the prior assessment.
- **Percent of Residents Whose Need for Help with Activities of Daily Living Has Increased (Long Stay) -** This measure reports the percent of long-stay residents whose need for help with late-loss Activities of Daily Living (ADLs) has increased when compared to the prior assessment.

Quality Measurement and Covid-19

- **Percent of Residents Whose Ability to Move Independently Worsened (Long Stay) -** This measure reports the percent of long-stay residents who experienced a decline in independence of locomotion during the target period.
- **Measure: Percent of Residents Who Made Improvements in Function (Short Stay) -** This measure reports the percentage of short-stay residents who were discharged from the nursing home that gained more independence in transfer, locomotion, and walking during their episodes of care.

Quality Measurement and Covid-19



A0310. Type of Assessment $$ CATs QMs ★ QRP

Enter Code

A. Federal OBRA Reason for Assessment

01. **Admission** assessment (required by day 14) **CAA: 11,** N037.03 ★
02. **Quarterly** review assessment
03. **Annual** assessment **CAA: 1, 8**
04. **Significant change in status** assessment **CAA: 1, 8**
05. **Significant correction** to **prior comprehensive** assessment **CAA: 1, 8**
06. **Significant correction** to **prior quarterly** assessment
99. **None of the above**

Enter Code

B. PPS Assessment

PPS Scheduled Assessment for a Medicare Part A Stay

01. **5-day** scheduled assessment N037.03 ★, S001.03, S002.02 ★, S007.02, S013.02, S022.02, S023.02, S024.02, S02

PPS Unscheduled Assessment for a Medicare Part A Stay

08. **IPA** - Interim Payment Assessment

Not PPS Assessment

99. **None of the above**

Enter Code

E. Is this assessment the first assessment (OBRA, Scheduled PPS, or Discharge) **since the most recent admission/entry c**

0. **No**
1. **Yes**

M0300. Current Number of Unhealed Pressure Ulcers/Injuries at Each Stage $$ CATs QMs ★ QRP

Enter Number

A. Stage 1: Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have a visible blanching; in dark skin tones only it may appear with persistent blue or purple hues

1. **Number of Stage 1 pressure injuries CAA: *16**

Enter Number

B. Stage 2: Partial thickness loss of dermis presenting as a shallow open ulcer with a red or pink wound bed, without slough. May also present as an intact or open/ruptured blister

1. **Number of Stage 2 pressure ulcers** - If 0 → Skip to M0300C, Stage 3 **CAA: *12, *16 ,** S002.02 ★, N015.03 ★, S038.02
2. **Number of these Stage 2 pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry S002.02 ★, S038.02

Enter Number

C. Stage 3: Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle is not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling

1. **Number of Stage 3 pressure ulcers** - If 0 → Skip to M0300D, Stage 4 **CAA: *12, *16,** S002.02 ★, N015.03 ★, S038.02
2. **Number of these Stage 3 pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry S002.02 ★, S038.02

D. Stage 4: Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the

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Success Strategies

- **Right care at the right time**
  - **CMS 100-2 Chapter 8, i.e. Observation and assessment of resident condition -** are skilled services when the likelihood of change in a patient's condition requires skilled nursing or skilled rehabilitation personnel to identify and evaluate the patient's need for possible modification of treatment or initiation of additional medical procedures, until the patient's condition is essentially stabilized
  - **Appropriate evaluation and care planning** create a roadmap for the right care, payment and quality outcomes
  - **Understand COVID-19 will impact clinical practice in new ways-** be accountable for being a life long learner

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Success Strategies

- **Patient and staff safety**
  - **Take care of each other** – CDC guidelines and new infection control survey guidelines, i.e. Proper use of PPE, monitoring, cohorting and isolating.
  - **Use the RAI** in all of its capacity. Follow your QM leads. Be interdisciplinary.
  - **Remain aware of regulatory change associated with therapy-** E-visits, telehealth, care from alternate locations “onsite”

Success Strategies

- **Hope for the future**
  - **You are a lifeline –** caring for the elderly population carefully and appropriately could mean the difference between life and death. We are the hope for the future health and safety of those we care for.
  -

QUESTIONS?

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