Prevent ED and inpatient admissions of vulnerable population for adverse outcomes of COVID-19 through:

- Identification of individuals who are at high risk of hospitalization and/or mortality from COVID-19 should they get infected
- Provide guidance for criteria on identifying vulnerable members
  - Identification of vulnerable members using claims
  - Identification of vulnerable members using the EMR
- Provide a risk scoring system for prioritizing members for outreach

**CDC Criteria for Vulnerable Patient Identification**

- **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 on what we know now, those at high-risk for severe illness from COVID-19 are:
  - 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
      Many conditions can cause a person to be immunocompromised, including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications
    - 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
    - People who are homeless and/or have housing insecurity
    - People who are pregnant

Note: Audio-video visits may be conducted. Document in the EHR as if the telehealth visits were an in-person visit. Include the time spent and any deviation in the service because the visit was not performed in-person. All care provided via telehealth should be documented in the EHR. Coding and billing for tele-video visits are to follow current processes for in-person visits per current payer guidance.
Mayo Clinic Criteria

The Mayo Clinic developed scoring criteria to assign a risk score for the COVID-19 Vulnerable Population. The Mayo Clinic stratifies risk as follows:

- **High risk**: 6 points or higher
- **Medium risk**: 3-5 points
- **Lower risk**: 2 points or less

### Mayo Clinic Scoring Criteria

<table>
<thead>
<tr>
<th>Factor</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immune compromise (HIV, chemotherapy, immunosuppression)</td>
<td>1 point if any factor is present</td>
</tr>
<tr>
<td>Age</td>
<td>1 point if age 60-69</td>
</tr>
<tr>
<td></td>
<td>2 points if age 70-79</td>
</tr>
<tr>
<td></td>
<td>3 points if age 80+</td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>1 point</td>
</tr>
<tr>
<td>Congenital heart disease</td>
<td>1 point</td>
</tr>
<tr>
<td>Coronary artery disease</td>
<td>1 point</td>
</tr>
<tr>
<td>Nursing home residence</td>
<td>1 point</td>
</tr>
<tr>
<td>End stage renal disease</td>
<td>1 point</td>
</tr>
<tr>
<td>End stage liver disease</td>
<td>1 point</td>
</tr>
<tr>
<td>Chronic pulmonary disease (COPD, asthma, or ILD)</td>
<td>1 point</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1 point</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>1 point</td>
</tr>
</tbody>
</table>

### Factors not included in original Mayo scoring

<table>
<thead>
<tr>
<th></th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe obesity</td>
<td>1 point</td>
</tr>
<tr>
<td>Homelessness</td>
<td>1 point</td>
</tr>
</tbody>
</table>


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Trinity Health Criteria

Trinity Health has developed criteria for risk stratification of the COVID-19 Vulnerable Population based on data source to assist our CIN and MGPS analytics teams to run reports that identify targeted populations for outreach.

A claims-based report will be provided from the System Office to RHM CIN and MGPS analytics leads the week of April 20, 2020. Analysts will provide this data and recommended supporting workflow to CIN and MGPS teams responsible for conducting patient outreach.

### Trinity Health Claims Based Criteria

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Definition (Code lists available in Excel file)</th>
<th>Scoring (Mayo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age in years</td>
<td>1 point if age 60-69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 points if age 70-79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 points if age 80+</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>Diagnosis codes for CHF</td>
<td>1 point</td>
</tr>
<tr>
<td>Congenital Heart Disease</td>
<td>Diagnosis codes for CHD</td>
<td>1 point</td>
</tr>
<tr>
<td>Coronary Artery Disease</td>
<td>Diagnosis codes for CAD</td>
<td>1 point</td>
</tr>
<tr>
<td>ESRD</td>
<td>Diagnosis codes for ESRD</td>
<td>1 point</td>
</tr>
<tr>
<td>End stage liver disease</td>
<td>Diagnosis codes for ESLD</td>
<td>1 point</td>
</tr>
<tr>
<td>COPD, asthma, ILD</td>
<td>Diagnosis codes for COPD, asthma, ILD</td>
<td>1 point</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diagnosis codes for Diabetes</td>
<td>1 point</td>
</tr>
<tr>
<td>Obesity</td>
<td>Diagnosis indicating BMI &gt; 40</td>
<td>1 point</td>
</tr>
<tr>
<td>Immunocompromised</td>
<td>Diagnosis for HIV, iatrogenic immunosuppression or NDCs for immunosuppressive medications or chemotherapy</td>
<td>1 point</td>
</tr>
<tr>
<td>Nursing home residence in past two years</td>
<td>POS 32 during the past two years</td>
<td>1 point</td>
</tr>
<tr>
<td>Homelessness and/or housing insecurity</td>
<td>Diagnosis codes for Homelessness</td>
<td>1 point</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>*Current pregnant status too difficult to capture in claims</td>
<td>NA</td>
</tr>
<tr>
<td>Risk Factor</td>
<td>Definition (Code lists available in Excel file)</td>
<td>Scoring (Mayo)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Age</td>
<td>Age in years from the EMR</td>
<td>1 point if age 60-69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 points if age 70-79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 points if age 80+</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>CHF on problem list and/or on CHF registry</td>
<td>1 point</td>
</tr>
<tr>
<td>Congenital Heart Disease</td>
<td>CHD on problem list and/or on CHD registry</td>
<td>1 point</td>
</tr>
<tr>
<td>Coronary Artery Disease</td>
<td>CAD on problem list and/or on CAD registry</td>
<td>1 point</td>
</tr>
<tr>
<td>ESRD</td>
<td>ESRD on problem list and/or on ESRD or chronic dialysis registry</td>
<td>1 point</td>
</tr>
<tr>
<td>End stage liver disease</td>
<td>ESLD on problem list and/or on ESLD registry</td>
<td>1 point</td>
</tr>
<tr>
<td>COPD, asthma, ILD</td>
<td>Chronic lung disease, COPD and/or asthma on problem list</td>
<td>1 point</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diabetes on problem list and/or on diabetes registry</td>
<td>1 point</td>
</tr>
<tr>
<td>Obesity</td>
<td>Obesity flag</td>
<td>1 point</td>
</tr>
<tr>
<td>Immunocompromised</td>
<td>HIV, iatrogenic immunosuppression on problem list and/or immunosuppressive medications or chemotherapy on medication list and/or HIV registry</td>
<td>1 point</td>
</tr>
<tr>
<td>Nursing home residence in past two years</td>
<td>Nursing home flag and/or nursing home registry</td>
<td>1 point</td>
</tr>
<tr>
<td>Homelessness and/or housing insecurity</td>
<td>Social influencers or social determinants of health</td>
<td>1 point</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Pregnancy flag</td>
<td>1 point</td>
</tr>
</tbody>
</table>
Note: this is an MGPS/CIN led process
Workflow is dependent on each RHM’s staffing resources and operational model. This workflow is meant to be guidance on how to address vulnerable patient outreach.

**COVID-19 Risk Screening Questions:**
- Any travel outside of US in last 14 days OR
- Any travel to LA, Boston, Detroit, New Orleans, NY,NJ, CT or WA in last 14 days OR
- Close contact with confirmed COVID 19 + person or person under investigation for COVID 19 in last 14 days OR
- Advised by provider or state to self monitor or self quarantine in past 14 days
- Ask the patient if the are experiencing any:
  - Fever
  - Cough, shortness of breath or difficulty breathing
  - Signs of upper respiratory illness such as runny nose, congestion, or sore throat
  - Vomiting or Diarrhea (common in Pediatric COVID-19 cases)
  - Any symptoms that are concerning that they believe may be COVID-19 related

If the patient has any of these emergency warning signs* for COVID-19 or has a medical emergency get medical attention immediately CALL 911:
- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

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**End**

No action needed

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Educate the identified outreach team on vulnerable population prioritize list

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Educate care team on:
- Outreach script
- Documentation in EHR
- Tracking on outreach spreadsheet

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Local MGPS/CIN receives stratified list from System Office analytics team

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Local MGPS/CIN disseminates stratified list sent to clinical care team responsible for supporting vulnerable patient outreach for practices

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Note: Distribution of stratified list is specific to each RHM depending on staffing models

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Clinician (physician/APP) determines:
- Most appropriate individual to contact patient based on risk factor and anticipated clinical need, including last appointment
- Patient outreach method

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Schedule video visit (reference QIQSoft or teleVideo workflow)

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Provider conducts visit and documents in EHR

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Process appropriate telehealth billing code

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End

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Educate care team on:
- Outreach script
- Documentation in EHR
- Tracking on outreach spreadsheet

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Local MGPS/CIN to identify MGPS/CIN team who will implement vulnerable population outreach

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Local RHM to identify MGPS/CIN team who will implement vulnerable population outreach

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Is COVID-19 screening needed?

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Yes

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Ask COVID-19 screening questions

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Document outreach discussion in EHR and update Outreach spreadsheet

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If an eligible clinician is conducting outreach, please implement Schmitt-Thompson Triage protocols

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If an eligible clinician is NOT conducting outreach, please forward call to clinical nurse to conduct Schmitt-Thompson Triage protocols

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Is COVID-19 screening needed?

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No

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End

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Note: if the patient indicates they need assistance filling medications, please make referral to appropriate staff member in the office

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Note: Initial data provided will be claims-based and additional data sources may follow

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Provide patient with following resources via preferred method of communication (e.g., text, email):
- Healthy at home resources
- Appropriate disease management zone sheets and medication needs (see note, right)
- How to contact office with questions/concerns
- Ask any food or housing insecurities (see note, left)

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Note: if the next week, do you need assistance with food?
1. In the next week, do you need assistance with food?
2. In the next week, do you need assistance with housing?
If yes to either question, please refer to Community Health Worker or social programs (e.g., 211 or Aunt Bertha)

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End