Sarah Hirner Abstract for MSA Capstone

**Objectives:** Purposefully designed and validated screening, triage, and severity scoring tools are needed to reduce mortality of COVID-19 in low-resource settings (LRS). This review aimed to identify currently proposed and/or implemented methods of screening, triaging, and severity scoring suspected COVID-19 patients upon initial presentation to the healthcare system, and to evaluate the utility of these tools in LRS.

**Design:** A scoping review was conducted to identify studies describing acute screening, triage, and severity scoring of suspected COVID-19 patients published between 12 December, 2019 and 01 April, 2020. Extracted information included clinical features, use of laboratory and imaging studies, and relevant tool validation data.

**Participant:** The initial search strategy yielded 15232 articles; 124 met inclusion criteria. **Results**: Most studies were from China (n=41, 33.1%) or the United States (n=23, 18.5%). In total, 57 screening, 54 severity scoring, and 23 triage tools were described. A total of 23 tools--16 screening, four triage, and three severity scoring--were identified as feasible for use in LRS. A total of 37 studies provided validation data: four prospective and 33 retrospective, with none from low-income and lower-middle-income countries.

**Conclusions:** This study identified a number of screening, triage, and severity scoring tools implemented and proposed for suspected COVID-19 patients. No tools were specifically designed and validated in LRS. A tool specific to resource limited context is crucial to reducing mortality in the current pandemic.