

CAEP Grant Competition QIPS Scoring Matrix

Question 1. Problem and Background

- 1 Unacceptable: Project is not relevant to emergency medicine or no description of a quality gap/problem to tackle
- 2 Poor: Minimal/vague information on the nature of the quality gap/problem
- 3 Good: Adequate information provided, but either not descriptive enough to ascertain
- **4 Very Good:** Well-described quality gap/problem relevant to emergency medicine but no local baseline data confirming local issue
- 5 Excellent: Presents epidemiological and local baseline data describing the burden of the quality gap/problem

Question 2. Rationale/Importance and Benefits

- **1 Unacceptable:** The quality gap/problem tackled is rare (or not relevant to EM), not important to patients/providers, and unlikely to lead to benefits if improved
- **2 Poor:** The quality gap/problem tackled is common, but not important to patients/providers and unlikely to lead to benefits if improved
- **3 Good:** The quality gap/problem tackled is common and important to patients/providers, but it is unlikely to lead to benefits if improved
- 4 Very Good: The quality gap/problem tackled is common, important to patients/providers, and it may lead to benefits if improved
- **5 Excellent:** The quality gap/problem tackled is frequent and relevant to EM, very important to patients/providers, and it will have significant benefits if improved

Question 3. Aim Statement

- 1 Unacceptable: No aim statement or objective/hypothesis provided
- 2 Poor: Inappropriate aim statement that is unlikely to be successful in the context of the project
- 3 Good: Vague aim/objective statement that lacks at least one of the components of a "4-score"
- 4 Very Good: Answers the question, "What, by when, and by how much?"
- 5 Excellent: SMART aim statement: Specific, Measurable, Actionable, Realistic, Time-defined

Question 4. REB, Scope and Infrastructure/Support/Context

- **1 Unacceptable:** The scope of the project is inappropriate (e.g., very unlikely to succeed), and/or there is no mention of REB approval/exemption
- **2 Poor:** The authors plan to seek REB approval/exemption based on their institution's requirements [also required for points 3/4/5], and the scope appears suboptimal (e.g., too large, poor focus)
- **3 Good:** REB addressed, scope manageable, but impact limited and/or context may prevent successful project development and completion
- 4 Very Good: REB addressed, scope realistic and impactful, with the local context potentially being challenging
- **5 Excellent:** REB addressed, scope feasible and impactful, and the local context is likely to allow successful project development and completion

Question 5. Measures & Evaluation Plan

- 1 Unacceptable: No measures/outcomes tracked or no clear evaluation plan
- 2 Poor: Measures chosen are inappropriate or impossible, and no plan to use QI methods for evaluation
- **3 Good:** Measure(s) are limited in number, scope or relevance, and/or the evaluation is planned as a before-and-after only
- **4 Very Good:** Includes outcome (patient-oriented), process (fidelity of intervention, surrogate outcomes) and/or balancing measures (unintended consequences), but measured infrequently/sporadically or as a before-and-afterç
- **5 Excellent:** Clearly defined and relevant family of (i.e. multiple) measures as above, with clearly delineated plan to track them over time with run/SPC charts

Question 6. QI Methods and/or Change Ideas Planned

- 1 Unacceptable: No intervention tested or implemented
- 2 Poor: Single intervention pre-planned prior to full project diagnostics undergone
- 3 Good: Only one well-done intervention linked to the problem being addressed
- 4 Very Good: Plan for multiple interventions with refinement or reflection between them
- **5 Excellent:** Deliberate use of QI methodology to drive improvement (e.g., e.g., Ishikawa diagram, process mapping, stakeholder mapping, Pareto chart, driver diagram), with a plan for multiple interventions clearly linked to quality gap/problem

Question 7. Milestones and Timelines

- 1 Unacceptable: Project very unlikely to successfully be completed at all
- 2 Poor: Timelines with inappropriate or missing many important milestones
- 3 Good: Well-detailed project development and implementation timelines, but feasibility problematic
- 4 Very Good: Well-detailed timelines with likely success of milestones, but project completion could be delayed
- 5 Excellent: Well-detailed timelines with likely success of milestones and project completion on time

Question 8. Project Leader, Sponsor, and Stakeholders

- **1 Unacceptable:** Gaps in the training, experience or preparation of the team leader or the executive sponsor is not relevant/supportive of the project
- **2 Poor:** Team leader is unprepared and does not have the relevant support, the project sponsor is not relevant and/or not supportive, or the resources are unlikely to be adequate
- **3 Good:** Team leader is untrained/inexperienced but has the relevant support (e.g., QI experts team members), the project sponsor is relevant and supportive, but the resources are unlikely to be adequate
- **4 Very Good:** Team leader is trained and/or experienced in QIPS, executive sponsor is adequate, but the plan for stakeholder engagement is suboptimal
- **5 Excellent:** Team leader is trained and/or experienced in QIPS, has access to adequate support to ensure success, relevant stakeholders will be included, and the project sponsor is relevant and likely to be able to ensure success

Question 9. Resources/Budget

- 1 Unacceptable: Funding used to fund unethical or unrelated issues
- **2 Poor:** Funding used primarily for the dissemination of the project (e.g., abstract/posters, conferences, publication) rather than the completion of it
- **3 Good:** Funding used primarily for ongoing expenses that would make the long-term sustainability of the project impossible
- **4 Very Good:** Funding used for a combination of one-off operational expenses, educational initiatives and project evaluation; it is highly likely feasible with the CAEP Grant but does not leverage other resources/funds
- **5 Excellent:** Funding used exclusively for the implementation/evaluation of the project while leveraging other funds for operational expenses, making the project more likely to be sustainable

Question 10. Overall Impression and Impact

- 1 Unacceptable: Definitely should not be awarded a CAEP Grant (e.g., red flags present please elaborate in next section)
- 2 Poor: Unlikely to have an impact locally or to be scaled/spread successfully
- 3 Good: Local impact likely and meaningful, but unclear sustainability and scale/spread of project
- **4 Very Good:** Could be awarded a CAEP Grant: definite sustainable local impact and likely scale/spread with dissemination more broadly through abstract submission
- **5 Excellent:** Should be awarded a CAEP Grant: significant and sustainable local impact with scale/spread, including eventual abstract submission at CAEP and peer-reviewed publication following SQUIRE Guidelines for broader dissemination