



# Engineering World Health

## EWH Design Competition Judging Criteria for Design Submissions

All submissions must include the following information:

- Definition of problem to be solved
- Definition of technical, performance, and cost requirements
- Adequate documentation of final design (prototype, detailed drawings, etc)
- Evidence that design meets customer needs and solves original problem (validation and test results)
- Statement of impact on global healthcare (increased access, lower cost, etc.)

Entries are to be evaluated in each of the following categories:

1. Technical Feasibility (20%)

- a. Has project team provided evidence that the final design is functional and will meet all technical and performance requirements
- b. Does product comply with applicable standards (if any)?

2. Clinical Utility (20%)

- a. Are you convinced that the product will solve the clinical problem it was designed to solve?
- b. Does the product provide advantages over existing solutions?
  - increased safety
  - improved efficacy
  - ease of storage and use
  - improved serviceability
  - lower cost
  - increased durability
  - increased portability
  - increased or alternative power options
  - reduced operative time
  - increased accuracy
  - better method of treatment or diagnosis
  - improved comfort, fit
  - reduced patient trauma
- c. What impact could the product have on healthcare?
- d. Does the product have the potential to reach underserved populations?

3. Economic Feasibility and Market Potential (20%)

- a. Are you convinced that there is a demand for the product?
- b. Who and how many people would benefit from this product?
- c. Does the estimated manufacturing cost meet cost requirements?
- d. What are the existing competitive technologies/devices?
- e. What regulatory requirements apply to this product?
- f. What are the sales forecast and potential selling price?
- g. Who is the target customer? NGOs/charities? End users in developing world health care settings? How does this affect the pricing and marketing plan?

4. Novelty and Patentability (10%)

- a. Is the product design novel and innovative?
  - new application of existing technology to solve problem
  - innovative use of materials or components
  - innovative manufacturing process or design changes to significantly reduce manufacturing cost
- b. Did the project team provide an adequate assessment of potential infringement based on the results of a patent search and/or search for prior art?
- c. Has team included a discussion or plan regarding whether to seek intellectual property rights and how this would affect the profitability and/or potential market for the technology?

5. Impact on Global Healthcare (30%)

- a. Has the project team convinced you that their product has the potential to make a significant impact on global healthcare?
  - improved access to healthcare
  - lower cost solution
  - potential for local production
  - other benefits
- b. Has team included a discussion or plan for how the product/technology will be manufactured and distributed?