

Original Medical Innovation

New for 2018-2019

Round Two has been added to this event. Video time has been reduced. At ILC, [photo ID](#) must be presented prior to competing in each round. At ILC, appointment times WILL NOT be distributed in hard copy to each competitor; appointment times will be posted on the HOSA App, HOSA website, and at CE Headquarters. Editorial updates and clarifications have been made to guidelines. Rating sheets have been updated to better align with guidelines.

Information from HOSA partner, [iGIANT](#), has been added as a potential resource for members.

Purpose To encourage HOSA members to create an original medical innovation that is certain to have a dramatic impact on the future of health and or the delivery of healthcare, and to share their innovation understanding and outcomes with others. This event includes new medical technology, innovative products, devices, medical apps and other inventions and findings that may influence global health care.

HOSA members are reminded that gender/sex-specific original innovations would be considered a part of this event. Gender/sex impacts every aspect of our daily lives. The same dosage of medication, for example, has different effects on men as compared to women, resulting in a need for us to understand the differential effects in the research and development process before doctors can effectively dose their patients. Similarly, although some products seem to have separate designs for men and women, it is important to distinguish between a simple change in aesthetics and a design that addresses the biological factors (i.e., body composition, bone structure, metabolism) that cause men and women to experience these products differently.

Therefore, a medical innovation to improve the safety and quality of life for men and women in all areas of health would be considered in this event. For more information about gender/sex equity, go to www.iGIANT.org.

Disclaimer If a competitor is interested in obtaining a patent for his/her original work, it is the responsibility of the competitor. More information on patents may be found at <https://www.uspto.gov/patent> or [European Patent Office](#). HOSA does not provide patent protection for this event.

Description Teams consisting of two to four (2-4) competitors shall develop a visual display and/or demonstration of an aspect of a medical innovation to be presented to the judges. Competitors will also create a 60 second video demonstration of their innovation to be uploaded to STEM Premier by May 15th. Competitors will be judged on their understanding and insight into the use and value of the medical innovation; the originality of their developed innovation; as well as their ability to present themselves and communicate the use and value of this medical innovation.

Dress Code Competitors must be in official HOSA uniform or in proper business attire. Bonus points will be awarded for [proper dress](#). All team members must be properly dressed to receive bonus points.

Rules and Procedures

1. Competitors in this event must be active members of HOSA in good standing in the division in which they are registered to compete (Secondary or Postsecondary/Collegiate).
2. Competitors must be familiar with and adhere to the [“General Rules and](#)

3. [Regulations of the HOSA Competitive Events Program \(GRR\)."](#)
The original medical innovation must be presented by a team of two to four (2-4) HOSA members.

ROUND ONE: The Medical Innovation

4. Prior to competing, the team will create an original innovation of their own idea and design. The innovation should be something that could lead to an advancement in medicine or the delivery of healthcare. They will build a prototype of their innovation, provide supporting evidence for why this innovation is needed, and then record a video demonstration of their vision for this innovation.
5. Topics could include, but are not limited to:
- Medical or healthcare innovation
 - Emerging technologies in health
 - Advances in medicine

Websites that may provide useful information are:

- [The Global Center for Health Innovation](#)
 - [iGIANT](#)
 - [The Medical Innovation Summit \(held October of each year\)](#)
6. Innovations in this event *must* be original ideas. It is the competitor's responsibility to perform due diligence to determine whether or not their idea/innovation already exists in publication or patent. Begin with an internet search. For more information, visit [STOPfakes.gov](#) or the [European Patent Office](#).
7. Teams will create a video demonstration of their innovation. The video demonstration should be 60 seconds max showcasing the innovation and its inventor(s). No need for music, graphics, special effects, or text. Video must include competitor's names, HOSA chapter & division, ages, hometown, and name of innovation. Video must explain how the innovation works and show it in action using the prototype created. You can view a sample video here: <https://www.youtube.com/watch?v=oNhlQHHdwoQ&feature=youtu.be>. The video will be uploaded to STEM Premier (see below for instructions). The purpose of this video upload is for HOSA marketing purposes and the archiving of samples of the high-quality work created by HOSA members. The content of the video is not judged on the rating sheet.
8. At ILC, all competitors shall report to the site of the event at the orientation time. A [photo ID](#) must be presented prior to competing. When instructed, the team will have **fifteen (15) minutes** to assemble their innovation and overall table display. The innovation and any associated materials needed to explain the innovation will be created prior to competition. The time for assembly is to set up what the team has previously created in preparation for Round One judging.
9. ROUND ONE will be a preliminary round and competitors will not attend. Judges will view the assembled innovations and will use the Round One rating sheet to rate each innovation.
10. The top secondary and postsecondary/collegiate teams from Round One will advance to Round Two, for the oral presentation. Number of advancing teams will be determined by criteria met in Round One and space available for Round Two.
11. There will be one or two teams per table. Once positioned on the table with three-dimensional display items, the maximum dimensions are:

HEIGHT: 36 inches WIDTH: 48 inches DEPTH: 24 inches

The display will be measured by the Section Leader or Event Manager before judging begins, from a beginning point to the furthest point of the display.

- A. Height will be measured from the tabletop to the highest point of anything on the display.
 - B. Width will be measured from the widest point of anything on the display to the opposite point.
 - C. Depth will be measured from the deepest point of anything on the display to the opposite point.
 - D. Display materials may not extend beyond the edge of the display table.
 - E. Dimensions include models, mannequins and all other display items.
 - F. Display will be submitted in English for judging.
12. The work **must** be the work of the competitors, including the artistic aspects of the display. Allowable artwork may include:
- A. Competitor produced illustrations, designs, and/or computer-generated graphics.
 - B. Clip art or other graphics used in compliance with copyright laws.
 - C. Photographs used in compliance with copyright laws.
 - D. Computer or machine generated lettering.
13. All teams will have the same size table. Displays must fit on this table without hanging off, as the next table may be in very close proximity. Teams may take things off the display to show the judges and utilize the space around the display, as long as they do not encroach on an equal distance from the next display.
14. Teams should assemble materials so that the overall display can stand-alone. Anyone viewing the innovation display materials should be able to have a general idea of the medical innovation without having someone there to speak about it.
15. Any sources used for data or information collection must be published on a Reference page, attached to the back of the display or on the table. One page only. *Points will be awarded for compiling a clean, legible reference page, but the formatting of the reference page is not judged.*
- Since the American Psychological Association (APA) is the most commonly used resource in the Health Sciences, this information is modified from the APA style to help HOSA members familiarize themselves with it. More information on APA formatting may be found at the [Purdue Online Writing Lab \(OWL\)](#).
- Your ONE PAGE 'References' title should be centered and sources alphabetized by the author's last name, first initial from the left margin. References should be single spaced and hanging indents should be used for sources requiring multiple lines. Alphabetize anonymous authors according to the web site or first main word in the title. ***Example:** Web Site (Professional):
- CDC.gov. (2017, Feb 15). Health services for teens. *Adolescent and School Health*. Retrieved from <https://www.cdc.gov/healthyyouth/healthservices/index.htm>.
16. Competitors are responsible for the safety and proper functioning of all equipment they bring to this event. Teams *may not* use any flames, body fluids, living organisms, sharps, any equipment/materials, simulated or otherwise, that could expose anyone to risk of bodily harm or danger. Invasive procedures and skin puncturing of any kind are **prohibited**.

17. Electricity will not be provided. Teams **MUST** use battery power instead of electricity for their displays if power is required. Any noise (bells, alarms, etc...) used in display/presentation must not interfere with neighboring displays/presentations.
18. No equipment/supplies (except tables) will be provided by HOSA-Future Health Professionals for this event. All equipment/supplies needed must be provided by the team. No Wi-Fi or internet service will be provided.

ROUND TWO: The Presentation

19. The team will report back to their innovation at their assigned appointment time to present a seven (7) minute prepared oral presentation to the judges. A [photo ID](#) must be presented prior to competing. Use of index card notes during the presentation are permitted. Electronic notecards (on a tablet, smart phone, laptop, etc...) are permitted, but will not be shown to judges. During the seven (7) minute prepared presentation, time cards will be shown with one (1) minute remaining and time will be called at the end of the 7 minutes.
20. Each team that advances to the presentation round will be judged on their ability to communicate information to the judges about their innovation. The presentation will explain, teach and demonstrate the medical innovation to the judges. The presentation may include why the team created this innovation, how it is used, its benefits, value, costs, training requirements, and career implications. The goal will be to deliver an engaging presentation that teaches the judges about the competitor's original innovation. Each team will be judged on their overall innovation and on their ability to communicate information to the judges about the need for their chosen innovation.
21. At the conclusion of the seven (7) minute prepared oral presentation, judges will have two (2) minutes to ask questions of the competitors. The timekeeper will notify teams when one minute (1) remains and notify the judges when these two (2) minutes have ended. All team members must take an active role in the presentation.
22. Scores from Round One will be added to Round Two to determine the final results.
23. In the event of a tie, a tiebreaker will be determined by the areas on the rating sheet section(s) with the highest point value in descending order.
24. All competitors in this event at the International Leadership Conference are **required** to attend the HOSA Project Display Time for this event. Team members will stand with their innovation and share event experiences with conference delegates.
25. By entering this event, the competitor grants permission for photos of his/her display to be used in HOSA publications and on the HOSA website. Displays must be picked up by competitors as instructed. Any displays not picked up within the given timeframe will become property of HOSA-Future Health Professionals.
26. For states that do not have a Round 1 and Round 2, they have the option of judging both the innovation display and the presentation with the same set of judges OR they may have different judges for each item and add the scores together; whichever is fastest and most convenient to them.

Uploading to STEM Premier

The competitor must create a profile on STEM Premier, an online platform that showcases talent and skills and brings students, colleges, companies, and possibilities together. Competitors will create their online profile by visiting – www.stempremier.com/hosa.

- a) The main purpose for the partnership with STEM Premier is two-fold: (1) to provide the HOSA member with a permanent, professional online portfolio to share with universities and future employers and (2) to obtain valuable analytical membership data for HOSA, including demographic, academic, and career interest information. Entities, outside of HOSA, CANNOT access this information without explicit member permission.
- b) Competitors must create a profile and upload a link to their video demonstration to the **Original Medical Innovation** competitive event opportunity on STEM Premier. Detailed instructions for doing this are in step g below or available at www.hosa.org/STEMPremier.
- c) Regional and State Process:
 1. Competitors should check with their state advisor to see if STEM Premier is being used at the state level. If so, competitors should find out the deadlines for any regional or state conferences.
 2. The link to the video demonstration must be uploaded prior to the state published deadlines.
 3. States will verify the link to the video demonstration has been uploaded prior to any regional or state conferences.
- d) ILC Process:
 1. For those who advance to the ILC, the link to the video demonstration must be uploaded to STEM Premier by May 15, 2019.
 2. HOSA-Future Health Professionals will verify the link to the video demonstration has been uploaded prior to the International Leadership Conference.
- e) Changing Content:
 1. If a competitor uploads the link to the video demonstration for the regional and/or state level, it does not need to be resubmitted for ILC. Uploading the link to the video demonstration ONCE is sufficient for all three levels of competition (regional, state, ILC).
 2. **However**, competitors ARE allowed to change the content of their link to the video demonstration between conferences. IF such content changes are made, competitors should replace their original upload on STEM Premier with the most current version of their link to the video demonstration.
 3. The link to the video demonstration that is in STEM Premier on May 15, 2019 is considered final and may be used for judging at ILC 2019.
- f) STEM Premier Instructions
 1. Join STEM Premier-
 - a. Go to www.stempremier.com/hosa.
 - b. Click the “Start Your Free Profile” button and create your account.
 - c. Add HOSA to your profile-
 - i. Click the white “Profile” tab at the top left of the screen.
 - ii. Click the blue “Edit Profile” button at the top right of the screen (underneath where your profile picture is located).
 - iii. Select “Associations” from the bar on the left side of the screen.
 - iv. Search for and add “HOSA-Future Health Professionals”.
 2. Search for HOSA Competitive Event-
 - a. Select “Opportunities” at the top of your screen when logged in.

- b. In the “Organization Name” search box type in “HOSA”; wait for the list of pre-populated organizations to appear, and then select your state association from the drop-down box (Example: HOSA-Future Health Professionals | California). Click the blue “Search” box.
 - c. Select your competitive event from the list that appears to the right (Make sure that you have selected the proper state!).
3. Submit Materials and Apply for Competitive Event-
 - a. Follow the steps and provide required information for your event.
 - b. Click “Apply Now” when ready to submit.
 - c. You have until the state deadline (contact state advisor) or ILC deadline (May 15, 2019) to change any content and re-upload your submissions. The material in STEM Premier as of May 15, 2019 is considered final for ILC.
 - d. To edit your submission-
 - i. Click the profile picture on the top right of your screen in STEM Premier.
 - ii. Click “My Opportunities” and select your event.
 - iii. Follow the instructions for editing your submission.

Competitor Must Provide

- Sixty (60) second video presentation/demonstration uploaded to STEM Premier by May 15th
- Event guidelines – one per team (orientation)
- [Photo ID](#)
- Innovation and any associated materials/display items, including the Reference page
- #2 Pencil for evaluation
- All audio visual equipment needed
- Index cards or electronic notecards for presentation (optional)

FOR SPECIFICS ON EVENT MANAGEMENT SEE [MANAGING COMPETITIVE EVENTS](#)

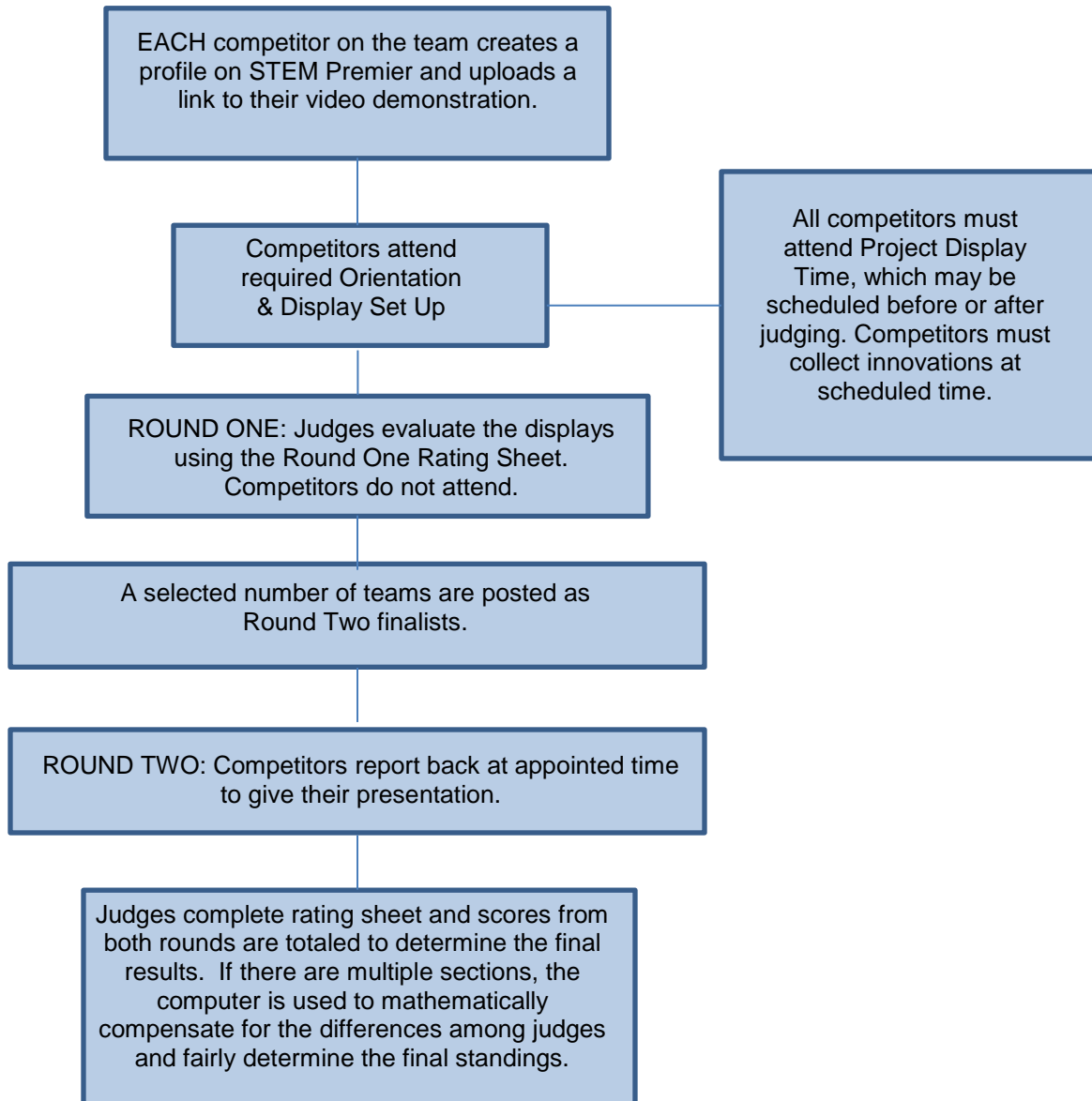
Required Personnel

- One Event Manager
- One QA to provide quality assurance for the event by ensuring that the guidelines are followed and all event documents are complete.
- One Section Leader per section
- One Timekeeper per section
- Two – three judges per section
- One-two event assistants per section

Facilities, Equipment and Materials (Per Section)

- Suggested set-up: If 8 ft. tables or banquet rounds are used, there may be two displays per table, usually placed in one long row per section. (see [HOSA Room Set](#))
- Competitor list for check-in
- Tape measure-one per section
- Method for identifying team table spots
- Rating sheets (both rounds) – one per judge per team
- Evaluation Forms – competitor, judge, and personnel
- #2 lead pencils (for judges & evaluations)
- Flash card for 1 minute remaining
- Stopwatch or timer, one per section
- Clipboards for judges
- Copy of guidelines for judges
- Hand Sanitizer (alcohol based handrub)

Event Flow Chart



Original Medical Innovation

JUDGE'S ROUND 1 RATING SHEET – THE INNOVATION DISPLAY

Section # _____ Team # _____

Division: _____ SS _____ PS/Collegiate

Judge's Signature _____

| Items Evaluated | Points Possible Superior ----- Poor | Points Awarded |
|--|--|----------------|
| No partial points are given in Section A. All seven items <u>must</u> be completed to receive 30 points. If any portion is missing, Section A is scored a 0. | | |
| A POINTS FOR FOLLOWING GUIDELINES <ul style="list-style-type: none"> <input type="checkbox"/> Display is no more than 36" high x 48" wide x 24" deep. <input type="checkbox"/> Reference page is included. <input type="checkbox"/> Video uploaded to STEM Premier, <i>by each team member, by deadline.</i> <input type="checkbox"/> Display materials do not extend beyond the edge of the table. <input type="checkbox"/> Display/equipment is safe and poses no hazards. <input type="checkbox"/> Display is in English. <input type="checkbox"/> A prototype is included. | 30 | 0 |
| B DISPLAY 1. <i>Information / Content</i> Display contains easy to follow elements of information that enhance the reader's understanding of the innovation. | 15 | 12 |
| 2. <i>Appearance</i> Display is neat, organized, and free from errors. Information is easy to follow with a logical flow. | 10 | 8 |
| 3. <i>Design</i> a. The innovation is <i>original</i> , well designed and understood. Information is unique, comprehensive and challenging. b. Possibility of impact on global healthcare. | 15 | 12 |
| 4. <i>Creativity</i> There are elements of innovation & eye-catching design that make the display unique. It stands out in the room. | 20 | 16 |
| TOTAL POINTS | 100----- | 0 |

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JUDGE'S ROUND 2 RATING SHEET – THE PRESENTATION

Section # _____ Team # _____

Division: _____ SS _____ PS/Collegiate

Judge's Signature _____

| Items Evaluated | Points Possible | | | | | | Points Awarded |
|--|-------------------|-------|------|---|---|---|----------------|
| | Superior | ----- | Poor | | | | |
| No partial points are given in Section A. Both items <u>must</u> be completed to receive 40 points. If any portion is missing, Section A is scored a 0. | | | | | | | |
| A POINTS FOR FOLLOWING GUIDELINES <input type="checkbox"/> Nothing shown to judges except display items. <input type="checkbox"/> Team participated in <u>required</u> Display Time | 40 | | | | 0 | | |
| B EVIDENCE OF TEAMWORK & KNOWLEDGE 1. Information presented was organized, clear, and included sufficient details. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 2. Presenters clearly had a command of the knowledge and effectively taught the judges about the original innovation. | 15 | 12 | 9 | 6 | 3 | 0 | |
| 3. Team effectively demonstrated the innovation prototype. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 4. Display is effectively incorporated into presentation | 5 | 4 | 3 | 2 | 1 | 0 | |
| 5. All team members took active role in the presentation | 5 | 4 | 3 | 2 | 1 | 0 | |
| C PRESENTATION STYLE 1. Voice (volume, pitch, tempo, quality); | 5 | 4 | 3 | 2 | 1 | 0 | |
| 2. Stage Presence - (Appearance, poise, posture, eye contact, enthusiasm). | 10 | 8 | 6 | 4 | 2 | 0 | |
| 3. Diction* and Pronunciation** | 5 | 4 | 3 | 2 | 1 | 0 | |
| 4. Answered judge questions effectively. | 5 | 4 | 3 | 2 | 1 | 0 | |
| D INNOVATION OUTCOME 1. <i>Design</i> The innovation was well designed and understood. Information presented was original, unique, comprehensive and challenging. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 2. <i>Relevance</i> The innovation would have a positive impact on healthcare, quality of life, or reducing care costs. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 3. <i>Overall effectiveness</i> The display and presentation leaves people excited about the innovation's potential to improve the delivery of healthcare. | 10 | 8 | 6 | 4 | 2 | 0 | |
| TOTAL POINTS | 140----- 0 | | | | | | |

* Definition of Diction – Choice of words especially with regard to correctness, clearness, and effectiveness.

** Definition of Pronunciation – Act or manner of uttering officially

Medical Innovation- Original JUDGE'S COMBINED RATING SHEET

(This form may be used by states who do not do round 1/round 2 and who would like the content combined into one rating form for easier use by judges)

Section # _____ Team # _____

Division: _____ SS _____ PS/Collegiate

Judge's Signature _____

| Items Evaluated | Points Possible Superior ----- Poor | | | | | | Points Awarded |
|--|--|----|----|---|---|---|----------------|
| No partial points are given in Section A. All nine items <u>must</u> be completed to receive 70 points. If any portion is missing, Section A is scored a 0. | | | | | | | |
| A POINTS FOR FOLLOWING GUIDELINES <input type="checkbox"/> Display is no more than 36" high x 48" wide x 24" deep. <input type="checkbox"/> Reference page is included <input type="checkbox"/> Video uploaded to STEM Premier, <i>by each team member, by deadline.</i> <input type="checkbox"/> Display materials do not extend beyond the edge of the table. <input type="checkbox"/> Display/equipment is safe and poses no hazards <input type="checkbox"/> Team participated in required Display Time <input type="checkbox"/> Prototype is included. <input type="checkbox"/> Display is in English. <input type="checkbox"/> Nothing shown to judges except display items. | 70 | | | | | | 0 |
| B DISPLAY TABLE 1. <i>Information / Content</i> Display contains easy to follow elements of information that enhance the reader's understanding of the innovation. | 15 | 12 | 9 | 6 | 3 | 0 | |
| 2. <i>Appearance</i> Display is neat, organized, and free from errors. Information is easy to follow with a logical flow. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 3. <i>Design</i> a. The innovation is <i>original</i> , well designed and understood. Information is unique, comprehensive and challenging. b. Possibility of impact on global healthcare. | 15 | 12 | 9 | 6 | 3 | 0 | |
| 3. <i>Creativity</i> There are elements of innovation & eye-catching design that make the display unique. It stands out in the room. | 20 | 16 | 12 | 8 | 4 | 0 | |
| C EVIDENCE OF TEAMWORK & KNOWLEDGE 1. Information presented was organized, clear, and included sufficient details. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 2. Presenters clearly had a command of the knowledge and effectively taught the judges about the original innovation. | 15 | 12 | 9 | 6 | 3 | 0 | |
| 3. All team members took active role in the presentation. | 5 | 4 | 3 | 2 | 1 | 0 | |
| 4. Team effectively demonstrated the innovative prototype. | 10 | 8 | 6 | 4 | 2 | 0 | |
| 5. Display is effectively incorporated into presentation | 5 | 4 | 3 | 2 | 1 | 0 | |
| D PRESENTATION STYLE 1. Voice (volume, pitch, tempo, quality); | 5 | 4 | 3 | 2 | 1 | 0 | |

| | | | | | | | | |
|---|------------|-------|---|---|---|---|----------|--|
| 2. Stage Presence - (Appearance, poise, posture, eye contact, enthusiasm). | 10 | 8 | 6 | 4 | 2 | 0 | | |
| 3. Diction* and Pronunciation** | 5 | 4 | 3 | 2 | 1 | 0 | | |
| 4. Answered judge questions effectively | 5 | 4 | 3 | 2 | 1 | 0 | | |
| E INNOVATION OUTCOME | | | | | | | | |
| 1. <i>Design</i> The innovation was well designed and understood. Information presented was original, unique, comprehensive and challenging. | 10 | 8 | 6 | 4 | 2 | 0 | | |
| 2. <i>Relevance</i> The innovation would have a positive impact on healthcare, quality of life, or reducing care costs. | 10 | 8 | 6 | 4 | 2 | 0 | | |
| 3. <i>Overall effectiveness</i> The display and presentation leaves people excited about the innovation's potential to improve the delivery of healthcare. | 10 | 8 | 6 | 4 | 2 | 0 | | |
| TOTAL POINTS | 240 | ----- | | | | | 0 | |