

Medical Innovation

New for 2021- 2022

The list of suggested websites to review has been updated.
Editorial changes have been made for clarity.

Event Summary

Medical Innovation provides HOSA members with the opportunity to gain knowledge and skills required to impact the future of health and or the delivery of healthcare through the development of a new medical innovation. This competitive event consists of 2 rounds and each team consists of 2-4 people. In Round One, judges will evaluate the created medical innovation and the top scoring teams will advance to Round Two for the oral presentation. This event aims to inspire members to be proactive future health professionals by sharing their medical innovation, understanding, and outcomes with others.

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.

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.

General Rules

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 Regulations of the HOSA Competitive Events Program \(GRR\)."](#)
3. The original medical innovation must be presented by a team of two to four (2-4) HOSA members.
4. All competitors shall report to the site of the event at the time designated for each round of competition. At ILC, competitor's [photo ID](#) must be presented prior to ALL competition rounds.

ROUND ONE: The Medical Innovation

5. 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.
6. Topics could include, but are not limited to:
 - a. Medical or healthcare innovation

- b. Emerging technologies in health
 - c. Advances in medicine
7. Websites that may provide useful information are:
- a. [Johnson and Johnson](#)
 - b. [Cleveland Clinic](#)
 - c. [Deloitte](#)
8. 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](#).

ROUND ONE: The Process

9. At ILC, all competitors shall report to the site of the event at the designated set-up time. When instructed, the team will have **fifteen (15) minutes** to assemble their innovation and overall table exhibit. Only registered competitors will be allowed to setup the exhibits. 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.
10. ROUND ONE will not be attended by competitors. Judges will view the assembled innovations and will use the Round One rating sheet to rate each innovation.
11. 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.
12. There will be one or two teams per table. Once positioned on the table with three-dimensional exhibit items, the maximum dimensions are:
 WIDTH: 48 inches DEPTH: 24 inches
13. The exhibit will be measured by the Section Leader or Event Manager before judging begins, from a beginning point to the furthest point of the exhibit.
- a. There is no maximum height limit, however exhibits must be stable enough to sit on the table without assistance or fear of falling.
 - b. Width will be measured from the widest point of anything on the exhibit to the opposite point.
 - c. Depth will be measured from the deepest point of anything on the exhibit to the opposite point.
 - d. Exhibit materials may not extend beyond the edge of the exhibit table.
 - e. Dimensions include models, electronics, mannequins and all other exhibit items.
 - f. Exhibit must be submitted in English for judging.
14. The work **must** be the work of the competitors, including the artistic aspects of the exhibit. 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.
15. All teams will have the same size table. Exhibits must fit on this table without hanging off, as the next table may be in very close proximity. Teams may take

things off the exhibit to show the judges and utilize the space around the exhibit, as long as they do not encroach on an equal distance from the next exhibit.

16. Teams should assemble materials so that the overall exhibit can stand-alone. Anyone viewing the innovation exhibit materials should be able to have a general idea of the medical innovation without having someone there to speak about it. This may include any pre-recorded materials on battery powered devices.
17. Reference Page: List the literature cited to give guidance to the exhibit. American Psychological Association (APA) is the preferred resource in Health Sciences. One page only. Reference page must also include: Event Name, Team Member Names, HOSA Division, HOSA Chapter #, School Name, Chartered Association, Chosen Innovation. *Points will be awarded for compiling a clean, legible reference page, but the formatting of the reference page is not judged.*
18. 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 that could expose anyone to risk of bodily harm or danger. Invasive procedures and skin puncturing of any kind are **prohibited**.
19. Electricity will not be provided. Teams **MUST** use battery power instead of electricity for their exhibits if power is required. Any noise (bells, alarms, etc...) used in exhibit/presentation must not interfere with neighboring exhibits/presentations.
20. 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

21. 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. 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.
 - b. 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.
 - c. All team members must take an active role in the presentation.
22. 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. Judges will then have two (2) additional minutes to complete the rating sheets.
23. 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 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.

24. OPTION: Additional time may be given to competitors to set up again (reset their materials) for round two depending on how the event is scheduled at the chartered association and ILC levels, at the discretion of HOSA staff.
25. Exhibits must be picked up by competitors as instructed. Any exhibits not picked up **within the given timeframe** will become the property of HOSA-Future Health Professionals and may be discarded.
26. Scores from Round One will be added to Round Two to determine the final results.
27. 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.
28. 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. Failure to attend Project Display Time will result in a 15 point deduction, assessed in Tabulations.

Final Scoring

Required Digital Uploads

29. The following items must be uploaded as a single document, pdf preferred, by ONE member of the team:
 - a. Reference page & 1-3 photos of the exhibit.
 - b. Upload to Tallo for Secondary & Postsecondary/Collegiate divisions.
 - c. Uploads for ILC will be open from April 15th -May 15th for ILC qualified competitors only.

Instructions for uploading materials to Tallo can be found [HERE](#).

NOTE: *Chartered Associations have the option to use hard copy submissions instead of digital submissions. Please check with your State Advisor to determine what process is used in your chartered association. For ILC, only digital submissions will be used for judging if uploaded by May 15th.*

30. Reminder to refer to [GRR #24](#): By entering this event, competitor's materials become property of HOSA – Future Health Professionals, and are not returned to the competitors. Teams are encouraged to retain all original documents and videos, so that between each level of competition materials can be submitted as indicated. Materials will NOT be mailed or shared from Chartered Association to International competition.

Competitor Must Provide

- 1-3 photos of exhibit and reference page uploaded to Tallo by published deadline by ONE member of the team
- [Photo ID](#)
- Innovation and all associated materials/display items
- #2 Pencil for evaluation
- All audio visual equipment needed
- Watch with second hand (optional-Round Two only)
- Index cards or electronic notecards for presentation (optional)

MEDICAL INNOVATION
Judge's Round 1 Rating Sheet – The Innovation Exhibit

Section # _____ Judge's Signature _____
 Team _____

One PDF file with Reference Page and 1-3 photos Uploaded Online*:
 Yes ____ No ____
 *If the materials are not uploaded, please note that applicable items on the rubric below cannot be judged.

A. Medical Innovation – The Innovation Exhibit – Round 1						JUDGE SCORE
A. Overview	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	
1. Prototype	Prototype shown in uploaded photos	N/A	N/A	N/A	Prototype not shown in uploaded photos OR no photos uploaded.	
2. Safety	Exhibit/equipment is safe and poses no hazards.	N/A	N/A	N/A	Equipment presents safety/hazard concern.	
3. Reference Page	Reference page is included as a digital upload - and contains Event name, Competitor/Team Member Names, HOSA Division, HOSA Chapter #, School Name, Chartered Assoc, & Chosen Innovation	N/A	N/A	N/A	Reference page is not included OR all requirements are not met.	
4. Innovation Setup	Exhibit materials do not extend beyond the edge of the table and safely stands on the table AND exhibit is no more than 48" wide x 24" deep.	N/A	N/A	N/A	Exhibit does not meet requirements.	
B. EXHIBIT CONTENT	Excellent 15 points	Good 12 points	Average 9 points	Fair 6 points	Poor 0 points	JUDGE SCORE
1. Innovation Design	The quality of design of the innovation is exceptional. The unique design is comprehensive and original. The design pushes the boundaries of originality and takes innovation to the next level.	The innovation consists of mostly original design. The information appears to be well-designed and comprehensive.	The design innovation is moderately original showcasing some unique features. Some of the design lacked details that took away from the overall comprehension of the innovation	Information on the design seem to be missing key elements. More information is needed for the design innovation to be effective.	The design is simplistic and does not offer an original approach to the content. Components of the design appear to be missing and judges are left with more questions than answers.	

EXHIBIT CONTENT	Excellent 15 points	Good 12 points	Average 9 points	Fair 6 points	Poor 0 points	JUDGE SCORE
2. Innovation Impact / Relevance	The relevance of this medical innovation is significant and timely. This product/process definitely has the potential to positively impact the future of healthcare, increase the quality of life or reduce healthcare costs.	This medical innovation exhibits promising indicators of having a positive impact on the future of healthcare but may or may not significantly affect quality of life or reduction of care costs.	This innovation suggests a minimal impact on the future of the healthcare industry, improvement of quality of life or reducing healthcare costs.	The impact on the healthcare industry by improving quality of life or reducing healthcare costs is questionable at best.	This design is already in existence or does not add value to the global healthcare market.	
3. Content / Information	Content is written clearly and concisely with a logical sequence of ideas and supporting information. The exhibit gives the audience a clear understanding of the innovation. Information is accurate and current.	The content is mostly clear, and ideas are sequenced in a logical manner. The exhibit provides the audience with a general understanding of the innovation.	The content is vague in conveying a point of view and does not create a strong sense of purpose. Some of the information does not support understanding of the innovation.	Sequencing of ideas does not flow logically. Exhibit includes little information – only one or two details about the topic with little support for claims/ evidence.	Information on the exhibit is unclear and does not provide understanding of the innovation.	
C. EXHIBIT VISUALS	Excellent 10 points	Good 8 points	Average 6 points	Fair 4 points	Poor 0 points	JUDGE SCORE
1. Artistic Design	The artistic quality is exceptional. The artwork is vibrant, balanced, visually pleasing and pushes the boundaries of artistic expression. The design choices take the exhibit to the next level.	The artistic quality is good; the artwork stands out. The design elements seem to be well-thought out and comprehensive.	The exhibit incorporates balanced design choices, showcasing some artistic features. Some of the design lacks artistic details that took away from the overall visual of the exhibit.	Basic levels of artistic design are incorporated into the exhibit. Better design/color choices should be incorporated to assure the artwork on the exhibit is pleasing to the eye,	The design is simplistic and not visually appealing.	
2. Creativity and Originality	The exhibit incorporates creativity and innovation that make it unique. The exhibit has the “wow-factor” and stands out in the room above all others.	The exhibit is innovative and creative. It offers something unique but is missing the wow-factor.	The exhibit has moderate levels of creativity and originality.	Basic elements of creativity and innovation were captured in this exhibit. It blends in with the other competitors.	Little creativity or originality was captured in the exhibit of this health care exhibit. More effort needed.	
3. Appearance / Organization	The exhibit is exceptionally neat, organized, and error-free. Information is clearly displayed and easy to understand and follow.	Exhibit is neat and organized. The content has a logical flow with only minimal errors.	The exhibit was basic and could use more organization and thought to be understood. .	The exhibit lacked organization and/or contained several spelling errors. The flow of information seemed to be out of order.	The exhibit is either too busy or lacks enough detail to support the content	
Total Points (95):						

MEDICAL INNOVATION

Judge's Round 2 Rating Sheet – The Presentation

Section # _____
 Team # _____

Judge's Signature _____
 Division: SS _____ PS/Collegiate _____

Medical Innovation – The Presentation – Round 2						JUDGE SCORE
A.PRESENTATION CONTENT	Excellent 15 points	Good 12 points	Average 9 points	Fair 6 points	Poor 0 points	JUDGE SCORE
1. Explain & Teach	The team shared exceptional depth of knowledge on the innovation content and effectively taught the judges about their innovation.	The team shared knowledge and understanding of the original innovation with the judges.	The team shared an average amount of knowledge on the original medical innovation.	The team demonstrated some command of the knowledge but failed to effectively teach the judges about the original innovation.	The team shared little to no knowledge of the medical innovation with the judges or repeated information.	
2. Demonstration of Prototype	The team did an outstanding job demonstrating the medical innovation prototype. The audience feels competent about how to use the prototype.	The team did a good job demonstrating the innovation prototype.	The presentation of the medical innovation prototype was mediocre.	The team attempted to demonstrate the innovation prototype but experienced challenges.	The presentation of the medical innovation prototype was poor. The prototype did not function correctly.	
3. Why this Innovation? Value & Benefit	The team provided clear rationale for the purpose behind the innovation, why it is needed and how it will add value and benefit the healthcare system.	The team was able to explain the value and benefit of the medical innovation to the healthcare industry.	The team provided a short explanation for how the medical innovation will benefit the healthcare industry.	Little demonstration for why this innovation will add value or benefit the healthcare system was given.	The team was unable to explain or demonstrate why this medical innovation will add value or benefit to the healthcare system.	
4. Overall Innovation	The exhibit and presentation are an excellent combination to get people excited about the innovation and could have a profound effect on the future of healthcare.	The exhibit and presentation resonated with the audience and made a positive impact. The audience left feeling positive about the new innovation.	The overall effectiveness of the innovation demonstrates some potential to impact the future of healthcare.	The medical innovation needs additional focus in order to gain excitement	The presentation and exhibit need more polish and attention to detail in order to improve the delivery of healthcare. The overall innovation lacks effectiveness and attention to detail.	
A.PRESENTATION CONTENT	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE
5. Cost	Detailed information about the cost of the innovation for the consumer and/or the healthcare system was shared.	N/A	Information was shared about the cost of the innovation but judges were left with unanswered questions.	N/A	No relevant information was shared about the cost of the innovation.	

A.PRESENTATION CONTENT	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE
6. Training Requirements	A detailed description of the training requirements to use or implement the medical innovation was shared.	A description of the training requirements was provided.	A short description of the training requirements was provided.	An incomplete description of the training requirements was provided.	There is no description of the training requirements for the medical innovation.	
7. Career Implications	Detailed information was shared about how the innovation fits within the healthcare field and what practitioners / consumers are needed to implement it. It is clear how and what healthcare careers are affected by this innovation.	Mostly relevant information was shared about the career implications of this innovation.	Some information was shared about the career implications of this innovation.	A fair amount of information was shared about the career implications of this innovation, but more detail is needed to be relevant.	No information was shared about the career implications of this innovation.	
B.PRESENTATION DELIVERY	Excellent 10 points	Good 8 points	Average 6 points	Fair 4 points	Poor 0 points	JUDGE SCORE
1. Voice Pitch, tempo, volume, quality	Each competitor's voice was loud enough to hear. The competitors varied rate & volume to enhance the speech. Appropriate pausing was employed.	Each competitor spoke loudly and clearly enough to be understood. The competitors varied rate OR volume to enhance the speech. Pauses were attempted.	Each competitor could be heard most of the time. The competitors attempted to use some variety in vocal quality, but not always successfully.	Judges had difficulty hearing /understanding much of the speech due to little variety in rate or volume.	The competitor's voice is too low or monotone. Judges struggled to stay focused during the majority of presentation.	
2. Stage Presence Poise, posture, eye contact, and enthusiasm	Movements & gestures were purposeful and enhanced the delivery of the speech and did not distract. Body language reflects comfort interacting with audience. Facial expressions and body language consistently generated a strong interest and enthusiasm for the topic.	The competitors maintained adequate posture and non-distracting movement during the speech. Some gestures were used. Facial expressions and body language sometimes generated an interest and enthusiasm for the topic.	Stiff or unnatural use of nonverbal behaviors. Body language reflects some discomfort interacting with audience. Limited use of gestures to reinforce verbal message. Facial expressions and body language are used to try to generate enthusiasm but seem somewhat forced.	Most of the competitor's posture, body language, and facial expressions indicated a lack of enthusiasm for the topic. Movements were distracting.	No attempt was made to use body movement or gestures to enhance the message. No interest or enthusiasm for the topic came through in presentation.	
3. Diction*, Pronunciation** and Grammar	Delivery emphasizes and enhances message. Clear enunciation and pronunciation. No vocal fillers (ex: "ahs," "uh/ums," or "you-knows"). Tone heightened interest and complemented the verbal message.	Delivery helps to enhance message. Clear enunciation and pronunciation. Minimal vocal fillers (ex: "ahs," "uh/ums," or "you-knows"). Tone complemented the verbal message	Delivery adequate. Enunciation and pronunciation suitable. Noticeable verbal fillers (ex: "ahs," "uh/ums," or "you-knows") present. Tone seemed inconsistent at times.	Delivery quality minimal. Regular verbal fillers (ex: "ahs," "uh/ums," or "you-knows") present. Delivery problems cause disruption to message.	Many distracting errors in pronunciation and/or articulation. Monotone or inappropriate variation of vocal characteristics. Inconsistent with verbal message.	

B.PRESENTATION DELIVERY	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 0 points	JUDGE SCORE
4. Organization and Flow	The presentation was exceptionally organized, clear and coherent. It flowed seamlessly.	The presentation was well-organized, clear and included sufficient detail.	Information shared by presenters was somewhat organized and presented fairly well. The presentation included some details to help with the delivery.	Presentation was not delivered in a clear and concise manner.	The presentation was scattered and unclear; did not flow, and left judges with more questions than answers.	
5. Exhibit Incorporated into Presentation	The exhibit enhanced the messaging of the innovation and helped bring the presentation to life.	The exhibit helped tell the story of the innovation. It complemented the presentation effectively.	The team did an adequate job of using the exhibit to support the presentation.	The exhibit somewhat enhanced the presentation on the innovation yet seemed to miss key points of emphasis.	The exhibit seemed to be an "afterthought" to the presentation. There was a disconnect between what was featured on the exhibit and the presentation.	
B.PRESENTATION DELIVERY	Excellent 10 points	Good 8 points	Average 6 points	Fair 4 points	Poor 0 points	JUDGE SCORE
6. Team Participation	Excellent example of shared collaboration in the presentation of the project. Each team member spoke and carried equal parts of the project presentation.	All but one person on the team was actively engaged in the project presentation.	The team worked together relatively well. Some of the team members had little participation.	The team did not work effectively together.	One team member dominated the project presentation.	
7. Answered judge questions effectively.	The team provided excellent answers to judge's questions, shared important details and maintained a high level of professionalism and poise throughout the presentation.	The team answered the judge's questions accurately and provided some important details about the medical innovation.	The team was able to answer most of the questions effectively, could have provided more details regarding the innovation process.	The team answered some of the questions but failed to expound on the details of the medical innovation.	The team had trouble answering the judge's questions. More evidence is needed to demonstrate a basic understanding of the medical innovation.	
Total Points (135):						

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

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