

Exploring Medical Innovation

New for 2019-2020

This event is new for middle school students only. It has been modeled after the previous “Existing Medical Innovation” event. The event rubric has been updated to a new format. Competitors will not be required to show event guidelines at ILC.

Purpose To encourage HOSA members to research and explore an existing 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 improved medical technology, innovative products, devices, medical apps and other inventions and findings that have influenced global healthcare.

Description Teams consisting of two to four (2-4) competitors shall research an existing medical innovation, develop an exhibit and present their findings to a panel of judges. Competitors will be judged on their understanding and insight into the use and value of the medical 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 Middle School division ONLY (in grades 6-8 during the 2019-2020 school year).
 2. Competitors must be familiar with and adhere to the [“General Rules and Regulations of the HOSA Competitive Events Program \(GRR\).”](#)
 3. The medical innovation must be presented by a team of two to four (2-4) HOSA members.

The Medical Innovation Research and Exhibit Content

4. The team will select a medical innovation that demonstrates something unique, and/or important in medicine or the delivery of healthcare. The team will research and explore everything they can about the innovation, and then present their findings to a panel of judges.
5. Topics could include, but are not limited to:
 - Medical or healthcare innovation
 - Emerging technologies in health
 - Advances in medicine

Two websites that may provide useful information are:

- [The Global Center for Health Innovation](#)
- [Johnson and Johnson Innovation Lab](#)

6. **Exhibit and Presentation Contents:** Teams will be judged on how effectively the exhibit and presentation informs the judges about the medical innovation. Information should include, but is not limited to, the below items. Teams can

decide what information is best represented in the exhibit and what information is best shared verbally with the judges, or both. Anyone viewing the exhibit materials should be able to have a general idea of the medical innovation without having someone there to speak about it.

- What the innovation is and what it does/how it is used
- How the medical innovation has/or will change healthcare
- Why the team chose the medical innovation
- Provide a history of the innovation, including information about its creator(s) and how it was discovered.
- What benefits/challenges are associated with this innovation
- Cost of the innovation for the consumer and/or the healthcare system
- Career implications – where does this innovation fit in the healthcare field? What practitioners or consumers are using it?

7. 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.

8. Any sources used for data or information collection must be published on a Reference page, visible on the exhibit space; 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>.

9. There will be one or two teams per table. Once assembled on the table the maximum exhibit dimensions allowed are:

WIDTH: 48 inches DEPTH: 24 inches

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 furthest 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.
10. 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.
 11. 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.
 12. 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**.

The Competitive Process / Presentation

13. 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 exhibit. Only registered competitors will be allowed to setup the exhibit, unless a proxy is being used for the Orientation. The time for assembly is to set up what the team has previously created in preparation for judging.
14. Use of Exhibit During Presentation: 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 table/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.
15. Teams should assemble materials so that the overall exhibit can stand-alone. This may include any pre-recorded materials on battery powered devices.
16. The team will report to their exhibit at their assigned appointment time to present a five (5) minute prepared oral presentation to the judges. A [photo ID](#) must be presented prior to competing.
 - 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. All team members must take an active role in the presentation.
17. At the conclusion of the five (5) 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.
18. 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.

19. By entering this event, the competitor grants permission for photos of his/her exhibit to be used in HOSA publications and on the HOSA website. 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.

Competitor Must Provide

- [Photo ID](#)
- All exhibit materials/display items, including the Reference page
- #2 Pencil for evaluation
- All audio visual equipment needed (optional)
- Index cards or electronic notecards for presentation (optional)

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

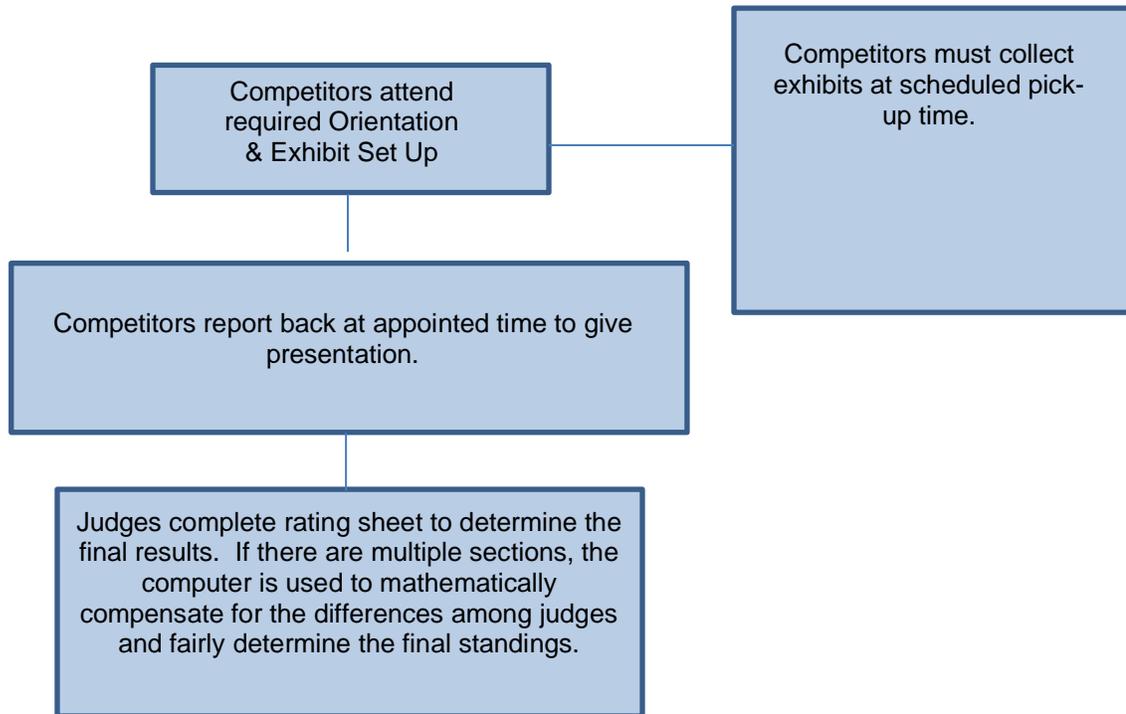
Required Personnel

- One Event Manager
- One Judge Manager (JM) 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 exhibits per table, usually placed in one long row per section. (see sample [HOSA Room Set](#))
- Competitor list for check-in
- Tape measure-one per section
- Method for identifying team table spots
- Rating sheets– one per judge per team
- Evaluation Forms – competitor, judge, and personnel
- #2 lead pencils (for judges & evaluations)
- Clipboards for judges
- Copy of guidelines for judges
- Hand Sanitizer (alcohol based handrub)
- Flash card for 1 minute remaining
- Stopwatch or timer, one per section

Event Flow Chart



EXPLORING MEDICAL INNOVATION Judge's Rating Sheet

Section # _____
Team # _____

Judge's Signature _____
Division: MS _____

A. Exploring Medical Innovation						JUDGE SCORE
<p>No partial points are given in Section A.</p> <p>All six items MUST be completed to receive 35 points.</p> <p>If any portion is missing, Section A is scored a 0.</p> <p>For more information on the all/none points, please visit: http://www.hosa.org/judge</p>	<p>A. Points for following Guidelines:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Visual exhibit is no more than 48" wide x 24" deep and safely stands on the table <input type="checkbox"/> Reference page is included in exhibit <input type="checkbox"/> Exhibit materials do not extend beyond the edge of the table. <input type="checkbox"/> Exhibit/equipment is safe and poses no hazards. <input type="checkbox"/> Exhibit is in English. <input type="checkbox"/> Nothing shown to judges except exhibit items. <p style="text-align: center;">All or nothing:</p> <p style="text-align: center;">35 points</p> <p style="text-align: center;">or</p> <p style="text-align: center;">0 points</p>					
B. EXHIBIT & PRESENTATION CONTENT	Excellent 15 points	Good 12 points	Average 9 points	Fair 6 points	Poor 3 points	JUDGE SCORE
<p>1. Balance of Information between Exhibit and Presentation</p>	<p>The content placed between the exhibit and presentation was balanced and effective. Anyone viewing the exhibit materials would be able to have a general idea of the medical innovation without having someone there to speak about it. The content shared in the presentation added value to the overall project. Overall, there was excellent balance between information shared in the exhibit and information shared in the presentation.</p>	<p>Overall, the balance was good and effective between information shared in the exhibit and information shared in the presentation.</p>	<p>Overall, the balance seemed okay between information shared in the exhibit and information shared in the presentation, but judges were left with a few questions unanswered in either the exhibit or presentation.</p>	<p>There was a somewhat imbalance of information shared. Either the exhibit or the presentation had more content than the other, which made it difficult to follow the overall project.</p>	<p>There was a clear imbalance of information shared. Either the exhibit or the presentation had the majority of the content, which made for an ineffective overall project.</p>	
	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 1 points	JUDGE SCORE
<p>2. Description of Innovation</p>	<p>The team provides an excellent description of the innovation, what it does and how it is used. The judges can clearly visualize what it is.</p>	<p>The team provides a good description of what the innovation is, what it does, and how it is used. The judge has a few unanswered questions.</p>	<p>The team provides an average description of what the innovation is, what it does, and how it is used, but the judge is left with many unanswered questions.</p>	<p>The description of the innovation does not describe what it is, does or how it is used.</p>	<p>No description or of the innovation was provided.</p>	

	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 1 points	JUDGE SCORE
3. Impact on Healthcare	The team provides a detailed and relevant description for how the medical innovation has or will change/impact healthcare.	The team provides good detail for how the medical innovation has or will change/impact healthcare.	An average description for how the future of healthcare will be/has been impacted by this innovation.	Little detail was provided on how the innovation has or will change/impact healthcare.	No description was provided on how the innovation will change/impact healthcare.	
4. Why this Innovation?	Compelling examples of why the team chose this medical innovation were given. Relevant and engaging stories were shared that brought the presentation to life and made it clear to the judges why this was the innovation chosen by the team.	The team provided engaging examples of why they chose the medical innovation. Stories were shared to add a personal touch why the medical innovation was selected, but the wow-factor was missing.	The team told the story for why they chose their medical innovation but were unable to provide relevant examples to bring the story to life.	The team attempted to tell a story of the significance of choosing their medical innovation, but the relevance of the story fell short of expectation.	The team was unable to connect the story for why they chose their medical innovation.	
5. History of the Innovation	Extensive history of the creation of the innovation was provided and included rich details about its creator(s) and how it was discovered.	A history on the creation of the innovation was provided, along with a description of who created it and how it was discovered.	A brief history was provided on the creation of the innovation. Some details about the creator(s) and background of discovery was provided.	Little history was provided about the history of the innovation, who created it or how it was discovered.	No history or details of how this innovation was founded were provided.	
6. Benefits & Challenges	Benefits and challenges associated with the innovation were highlighted in extensive detail by the team.	Benefits and challenges were shared by the team.	Benefits and challenges associated with the innovation were shared but did not go into great depth.	Benefits and challenges associated with the innovation were briefly mentioned.	No mention of the benefits or challenges of the innovation were included.	
7. Cost	Detailed information about the cost of the innovation for the consumer and/or the healthcare system was shared.	NA	Information was shared about the cost of the innovation but judges were left with unanswered questions.	NA	No relevant information was shared about the cost of the innovation.	
8. 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.	

C. EXHIBIT	Excellent 10 points	Good 8 points	Average 6 points	Fair 4 points	Poor 2 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 display 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 display incorporates balanced design choices, showcasing some artistic features. Some of the design lacks artistic details that took away from the overall visual of the display.	Basic levels of artistic design are incorporated into the display. Better design/color choices should be incorporated to assure the artwork on the display is pleasing to the eye,	The design is simplistic and not visually appealing.	
2. Creativity / Originality	The display incorporates creativity and innovation that make it unique. The display has the "wow-factor" and stands out in the room above all others.	The display is innovative and creative. It offers something unique but is missing the wow-factor.	The display has moderate levels of creativity and originality.	Basic elements of creativity and innovation were captured in this health career display. It blends in with the other competitors.	Little creativity or originality was captured in the display of this health care display. More effort needed.	
3. Appearance / Organization	The display is exceptionally neat, organized, and error-free. Information is clearly displayed and easy to understand and follow.	Display is neat and organized. The content has a logical flow with only minimal errors.	The display was basic and could use more organization and thought to be understood. .	The display lacked organization and/or contained several spelling errors. The flow of information seemed to be out of order.	The display is either too busy or lacks enough detail to support the content.	
D. PRESENTATION DELIVERY	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 1 points	JUDGE SCORE
1. Voice Pitch, tempo, volume, quality	The speaker's voice was loud enough to hear. The speaker varied rate & volume to enhance the speech. Appropriate pausing was employed.	The speaker spoke loudly and clearly enough to be understood. The speaker varied rate OR volume to enhance the speech. Pauses were attempted.	The speaker could be heard most of the time. The speaker attempted to use some variety in vocal quality, but not always successfully.	The Speaker's voice is low. Judges have difficulty hearing the presentation.	Judge had difficulty hearing and/or understanding much of the speech due to low volume. Little variety in rate or volume.	
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 speaker 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.	The speaker's posture, body language, and facial expressions indicated a lack of enthusiasm for the topic. with the speech. 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.	

D. PRESENTATION DELIVERY	Excellent 5 points	Good 4 points	Average 3 points	Fair 2 points	Poor 1 points	JUDGE SCORE
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.	
4. 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.	N/A	The team worked together relatively well. Some team members spoke more than others.	N/A	One team member dominated the presentation.	
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.	
6. 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 (145):						

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

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