

The Journey Continues!

Welcome to the MSRC SPUTUM BOWL 2019

Congratulations on your team's decision to compete in the exciting MSRC Sputum Bowl 2019 – The Journey Continues.

As you embark on your journey, you will find some new twists and turns along the way. New questions and challenges await you as you walk the path that may lead you to the national competition in New Orleans!

The attached information includes the “rules and tools” you will need to prepare for the competition as follows:

- The Changes for Sputum Bowl 2019
 - The Rules of Competition
 - The Reference List and Question Requirements
 - Due Date for Application Submission (March 1st, 2019)
 - Due Date for Question Submission (March 8th, 2019)
 - Due Date for MSRC membership (April 1st, 2019)
 - Due Date for MSRC Registration (April 1st, 2019)
 - MSRC Sputum Bowl Past Winners List
 - Mandatory Captain's Meeting (April 3rd, 9 am)
 - Optional Sputum Bowl Practice Session (April 2nd, 7pm) – **Must RSVP**
1. **Captain's Meeting:** The captain of each team (or a designee) must be present for competition seeding and questions at The Radisson Plaza Hotel in Kalamazoo, on Wednesday, April 3rd, 2019 at 9:00 AM. The competition will begin immediately following (approximately 9:30 AM).
 2. **Practice Session:** **Must RSVP** Optional but worth attending: - Teams are invited to attend a “Sputum Bowl Practice Session” will be held on Tuesday evening April 2nd at 7pm and is highly recommended, especially for teams competing for the first time (check at registration desk for location). This session is designed to put you at ease, give you a chance to check out the rules and provide you with practical tips and strategy on playing the game, as well as a little impromptu practice with the buzzers (what fun)!

A New Game - An Exciting Journey

We think the inventor of the game, Ron Koncher, would be pleased with the direction that we have chosen to take his game which is so loved in Michigan as well as nationally. Again, thank you Mr. Koncher.

We wish you well as you take your first step on the path toward New Orleans!

Let the Games Begin!

Jeanine "Ginger" Steinaway

2019 Sputum Bowl Coordinator

(734) 712-1756 or email to: jeanine.steinaway@stjoeshealth.org

Sputum Bowl 2019 Changes / Reminders

The required number of questions for student submission is 20.

The categories for student question submission are now: Name That (Disease, Drug, Device, etc), Asthma Guidelines, COPD Guidelines and Visual (see IX. A)

Video or audio recording of any competition is prohibited. If a team member or supporter is found to be video or audio recording of any match, that team will be disqualified. (VIII. H)

Alcohol consumption by team members during any match is prohibited. (VIII. O)

- **New References for 2019**

Scanlan, C. Comprehensive Respiratory Therapy Exam Review Preparation Guide. 3rd. ed. Burlington, MA: Jones and Bartlett; 2019.

Difficult Airway Society 2015 guidelines for management of unanticipated difficult intubation in adults.

Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016.

- **Team Composition**

- There is a limit on the number teams eligible for competition. A total of 4 practitioner teams and a total of 16 student teams will be accepted for this year's competition. Both practitioner and student team preliminary competition will be held in a bracketed, double-elimination format. Practitioner and student teams can have up to the standard 3-person arrangement with one alternate. Teams will be entered into the competition on a first come first serve basis. A college may reserve a spot by having the Program Director submit an application prior to the deadline. The rule is in place due to the fact that some schools have a

competition after the application deadline to determine their representative. All teams are encouraged to submit applications as soon as possible.

- **Risk / Reward (Preliminary, Finals, Overtime)**

- The determination of a team being “At Risk” is made by the moderator. While the goal of the committee is to maintain consistency throughout the competition, this a judgement call depending upon the moderator during each match maintaining consistency throughout the competition is a goal of the committee.

- **Ask the Expert (Preliminary competition only)**

- In **Preliminary** competition, each team must identify the name of their “Expert” to the Sputum Bowl committee **prior** to the start of each game, if one is being used. The “Expert” must sit in a pre-defined seat. The team may choose whomever they wish except anyone on the Sputum Bowl Committee or any judge who is presiding during the round. When a team responds to a question and wishes to use their expert, they will announce to the moderator that they would like to “Ask the Expert”. The team will have 20 seconds to begin an answer. This life line can only be used once during a game and is only available during the first eight minutes of the match. “Risk/Reward” will apply when using your expert. An “Expert” may be disqualified if found to be providing clues or using any form of social media to assist the teams or otherwise not participating in the spirit of the game.

- **Call the Posse (Finals competition only)**

- In **Finals** competition, each team may select up to (6) people to form their posse prior to the contest. The “Posse” will sit at the tables reserved for the teams near the competition site. The team may choose whomever they wish except anyone on the Sputum Bowl Committee or any judge who is presiding during the game. When a team responds to a question and wishes to use their posse, they will announce to the moderator that they would like to “Call the Posse”. This request can only be used once and only within the first 16 minutes of the game. A member of the “Posse” will be responsible to answer the question **without** consultation with their team. The posse will have 20 seconds to begin an answer. The posse can only be used once during a game. “Risk/Reward” will apply when using your “Call the Posse”.

- **Section VI, C** - The judges shall rule on the response to any question when so desired by the moderator and indicate whether they accept or reject a team's answer. All decisions shall be final and not subjected to the protest process.
- **Section VIII, E.** If Team A responds to a question before the moderator has read the complete question, then Team A will have to attempt to answer the unfinished question. All questions during the competition, prior to the Bonus Phase, shall be played under a Risk/Reward policy, whereby if a team responds by buzzing in prior to the completion of the question being read, **the moderator** will identify that they are at risk. If the team answers correctly, they rewarded with one point. If they do not answer correctly, they lose one point, and the moderator will re-read the complete question for the opposing team.
- **Section VIII, F.** If neither team responds to a question within ten seconds after the moderator has completed its reading, the question will be set aside and questioning will continue. A team cannot have points taken away that would result in a negative score.

MSRC SPUTUM BOWL

April 3rd and 4th, 2019

RULES OF COMPETITION

The prime objective of the Sputum Bowl is to stimulate interest in the current knowledge and practice of respiratory care. The competition shall be held in a spirit of professionalism and good sportsmanship. Teams should conduct themselves with this spirit in mind. There are no losers in this contest. All should gain a greater understanding of respiratory care from this experience.

I. Submission of Teams

- A. An application must be received by the MSRC office no later than Friday, March 1st, 2019.
- B. The Sputum Bowl Committee Representative must receive the submitted questions from each team by Friday, March 8th, 2019 at 5:00 pm. Please refer to Rule X and Appendices A - D. If questions are not received on time, the team will be disqualified unless previous arrangements have been made.
- C. Membership to the MSRC and conference registration must be received by April 1st, 2019.

II. Team Composition

- A. A team shall consist of not more than four (4) team members (three players and 1 alternate)
- B. Team members (herein considered the team) must be current members in good standing of the Michigan Society for Respiratory Care. An MSRC member may have the status of Active, Associate, Student or Life Member. Team members who have just recently become MSRC members but do not have an MSRC number yet will still be able to submit an application for the competition. However, the Sputum Bowl Coordinator must receive the new MSRC membership numbers from the MSRC office prior to the start of the competition or else the entire team will be disqualified from the competition.
- C. All team members of the championship practitioner and student teams shall be ineligible to compete in their respective class for a period of one year. The winning student team may come back the following year to compete as a

practitioner team. The only exception to this rule is that a first year student team winning the competition may return as a second year student team the following year.

- D. Team members who possess a credential from the NBRC must compete as a practitioner.
- E. Team members must be registered for at least one day of attendance at the MSRC Annual Spring Seminar.

III.Format for State Competition

- A. The State Competition will be held in conjunction with the MSRC Spring Seminar.
- B. Preliminaries will be held on the first day of the conference. A random draw will determine the initial pairings of competition. When it is feasible first year students will be placed in a pool separate from second year students for the initial draw.

Competition will continue throughout the day until only two (2) teams from the practitioner class and four (4) teams from the student class remain.

- C. Finals will be held on the second evening of the conference. There will be one championship game for the practitioners. There will be two (2) semifinal games prior to the one student championship game for the students.

IV. Sputum Bowl Coordinator and Committee

- A. The Sputum Bowl Coordinator is in charge of marketing, managing and evaluation of all phases of the event.
- B. The Sputum Bowl Coordinator shall review the team eligibility prior to and during the actual competition to determine if any irregularities exist.
- C. The Sputum Bowl Coordinator and Committee shall be responsible for the physical setup of the contest site, the proper functioning of all equipment, questions and all other necessary arrangements to ensure a smoothly run game.
- D. All matches will be videotaped. It is the responsibility of the Sputum Bowl Coordinator to ensure that this is undertaken. The videotape will be made available to the judges upon request.

V. Moderator

- A. The moderator shall be someone familiar with terminology of the profession and shall be appointed by the Sputum Bowl Coordinator.
- B. The moderator shall have the option to accept or reject an answer without asking for the judges' ruling.
- C. The moderator shall determine if a team is "At Risk".
- D. During the playing of the game, the moderator is responsible for maintaining order of the match.
- E. Question selection is at the discretion of the moderator.
- F. The moderator shall review all questions prior to the competition to determine the limits of acceptable alternate responses to each question and determine sets of questions for use during each round of play.

VI. Judges

- A. The judges shall be individuals who are qualified within their respective fields.
- B. When feasible, the judges shall not be directly related to teams involved in any specific contest. A judge who has a relationship to a team will abstain judging the match.

- C. The judges shall rule on the response to any question when so desired by the moderator and indicate whether they accept or reject a team's answer. All decisions shall be final and not subjected to the protest process.
- D. The judges will keep the official score for each game. Any irregularity in scoring between the official score and the scorekeepers score should be rectified immediately by the judges notifying the moderator.

VII. The Competition

A. Preliminary Matches

1. A game will consist of two teams in competition.
2. Each game will be ten (10) minutes in length. The team scoring the most points at the end of ten minutes is the winner of that game.
3. Pairings of teams for the first round of competition is to be done by random draw. Teams shall only compete within their class (e.g. practitioner, student).
4. Team pairings will use bracket methodology.
5. When a team fails to take their seats within one minute of being called at the time of their game, they shall forfeit that game.

B. Final Matches

1. Four student teams will advance to the Finals. There will be two semifinal matches (10 minutes) with the winners playing in the Student Championship game (20 minutes).
2. Two practitioner teams will advance to the Finals and will play in the Practitioner Championship game.
3. Each Championship match will be twenty (20) minutes in length.
4. The winner of the championship match will be awarded first place. The runner-up will be awarded second place.

VIII. General Rules

- A. The moderator shall signal the beginning of each match.
- B. The Score/Timekeeper shall time the length of play and announce the end of the match. The score/timekeeper shall maintain a running score, which is visible to all participants and the audience.

- C. The moderator will ask the pre-selected questions, indicate the team that has responded first and await the answer. The moderator will judge the first answer given as to its correctness, and if correct, indicate so to the scorekeeper.
- D. Each team, after responding to a question, shall have ten (10) seconds to begin an answer. Failure to begin to answer within ten seconds will give the opposing team an opportunity to answer within ten seconds. An attempt to stall by saying "The answer is..."(or any other such phrase that really is not a part of the answer) will not be judged as the beginning of an answer. Team members have the liberty to confer during this time period.
- E. If Team A responds to a question before the moderator has read the complete question, then Team A will have to attempt to answer the unfinished question. All questions during the competition prior to the Bonus Phase shall be played under a Risk/Reward policy, whereby if a team responds by buzzing in prior to the completion of the question being read, the moderator will identify that they are at risk. If the team answers correctly, they are rewarded with one point. If they do not answer correctly, they lose one point, and the moderator will re-read the complete question for the opposing team.
- F. There will be a Bonus Phase during the last two minutes of preliminary matches and during the last four minutes of Finals games. During the Bonus phase, if team A buzzes in and is correct they will receive (2) two points. If team A is incorrect then (-1) one point is deducted. If team A is incorrect then team B will get a complete reading of the question. If team B is correct they will receive 1 point and if incorrect (0) points will be deducted.
- G. If neither team responds to a question within ten seconds after the moderator has completed its reading, the question will be set aside and questioning will continue. A team cannot have points taken away that result in a negative score.
- H. **Video or audio recording of any competition is prohibited. If a team member or supporter is found to be video or audio recording of any match, that team will be disqualified.**
- I. If, due to moderator error, a question must be thrown out after Team A has already missed it and before Team B has had a chance to answer the question, the very next question will be read to Team B, who will have ten seconds to respond. Any points lost by Team A on the first question shall stand. Team B shall

- earn points on the next question based upon their correct answer. The moderator shall have the freedom to select questions in any order and throw out questions at any time.
- J. Risk/Reward – All questions prior to the bonus phase during the competition shall be played under a Risk/Reward policy, whereby if a team responds by buzzing in prior to the completion of the question being read, the moderator will identify that they are at risk. If the team answers correctly, they are rewarded with one point. If they do not answer correctly, they lose one point, and the moderator will re-read the complete question for the opposing team.
- K. Ask the Expert – This is for the Preliminary matches only. Each team can choose an expert as a lifeline that can be used once during a match. If the team would like assistance with a question, they can use this lifeline. The expert can consult with the team, and either the expert or any team member must answer the question within 15 seconds after the team has requested to use the lifeline. The expert must be identified prior to the match to the moderator and will be seated in proximity to the teams. The Sputum Bowl Committee Chair has the right to disqualify any expert that is either providing the teams with clues or is otherwise not participating in the spirit of the game.
- L. Call the Posse – This is for the Final matches only and can only be used once during the match. Each team will have a designated table at the beginning of the match. This table would have their team's posse, which may include up to 6 people. If the team would like assistance with a question, they can use this lifeline. The posse must answer the question within 15 seconds after the team has requested to use the lifeline. **Risk / Reward remains in effect during this time.**
- M. Tie games at the end of regulation play shall be resolved an overtime by a sudden death playoff with no time limit. The first team to score three (3) points shall be declared the winner. **Risk / Reward remains in effect during this time.**
- N. If a question is asked and a team commits to answer as the time clock runs out (00.00), they will be allowed to complete their answer. If not answered correctly,

- the opposing team will have the opportunity to answer the question in accordance with the above rules.
- O. Alcohol consumption during any match is prohibited.
 - P. The winning team(s) at the state competition must be able to field a team in accordance with the AARC rules for all eligible matches at the National level. The winning student team must be enrolled in a Respiratory Therapy program at the time of state competition. If the team is unable to do so the next place team will be offered the opportunity to compete.

IX. Questions / Requirements for Student Teams

- A. All student teams will be required to submit 20 questions from the following list. The Sputum Bowl Committee (SBC) believes the game will benefit from questions that are clinically relevant. The question matrix is listed below. The number indicates the maximum number of questions from that question type. So any combination of question types may be used as long as they do not exceed the maximum listed and the total equals 20.

Question Type	Max. #
Name That (Disease, Drug, Device, etc)	5
Respiratory Care Journal (2017 – 2018)	5
Asthma Guidelines	5
COPD Guidelines	5
Difficult Airway Guidelines	5
Surviving Sepsis Guidelines	5
Visual Questions	5

- B. The questions shall represent the level of didactic and clinical proficiency an respiratory therapist is expected to possess.
- C. All questions shall be referenced to the list in Appendix A.
- D. All traditional questions shall pertain to one of the categories in Appendix B.
- E. Questions shall be submitted following the required format:
1. Questions should be entered into the Excel spreadsheet (Appendix G) and sent via e-mail to the MSRC to **jcoddington@mhsa.com**
 2. Questions will include the category, question, answer, reference and page number, and team name (See example in Appendix C).
- F. The following types of questions are **UNACCEPTABLE**:
1. True/False and Yes/No questions
 2. Multiple choice questions
 3. Fill in the blank questions
- G. All questions shall be reviewed prior to the competition. Those questions that are not written in accordance with the above rules will be sent back to the submitting team for

revision. Teams that have to revise their questions will be given a one-week extension on the aforementioned deadline.

- H. Questions pertaining to clinical practice are preferred.
- I. Visual questions shall follow the format outlined in Appendix C.

X. Challenging the Competition

- A. Team captains are asked to wait at the contest site for five minutes after the completion of a game to learn of any protests relative to that contest.
- B. All competition will be video recorded to provide a record of the proceedings.
- C. The team captain must submit a written protest (Appendix F) to challenge any portion of the competition within five minutes after the completion of the game in which the protest is claimed.
- D. All Sputum Bowl Competition references are on site for use by the Review Committee only.
- E. The Review Committee shall consist of:
 - 1. Sputum Bowl Coordinator
 - 2. Moderator
 - 3. Timekeeper / Scorekeeper
 - 4. Judges

- F. Review shall consist of:
1. Protesting team captain stating discrepancy and any supporting material (limited to three minutes).
 2. Any rebuttal from the opposing team captain (limited to three minutes).
 3. Committee reviews all material pertinent to the proceedings.
 4. Final decision voted upon and decided by the majority of the judges shall be completed prior to the next match. A member of the Review Committee shall announce the final decision and rationale.
- G. A special limiting provision to a challenge is that a team cannot win a game solely based upon a protest decision. In other words, the only outcome of a decision in favor of the protester is the possibility of a tie game, and therefore a chance to win in a sudden death playoff. If the losing team is behind by only one or two points, it is possible that a favorable decision will bring the team's score up to that of the winning teams score (i.e. a tie). If the teams are tied anyway at the end of regulation play, challenges are moot (since the best a team can get is a tie score via a protest decision). This eliminates the possibility of a losing team defeating the winning team based solely on the decision of the judges.

XI. Electronics System

- A. In the case of an electronic malfunction, the moderator will stop the match. The clock will be reset to the time when the malfunction was first noticed. The question in progress will be thrown out. The moderator shall signal the resumption of the game and begin with a new question. No points will be awarded on the question thrown out nor may they be deducted if the team answering was at risk. Prior to restarting play the moderator shall make certain that all systems are operational and clear.

XII. The Trophy

- A. In order to safeguard the trophy, it will be kept by the MSRC Sputum Bowl Committee.
- B. Team plaques will go home with the winners.

APPENDIX A: Approved References

1.	American Academy of Pediatrics and American Heart Association; John Kattwinkel, MD, FAAP, Editor. <i>Neonatal Resuscitation (NRP) Textbook</i> –7 th ed. American Academy of Pediatrics and American Heart Association; 2016.
2.	American Association for Respiratory Care. <i>AARC Clinical Practice Guidelines</i> . CPG published through December 2018, (available at www.aarc.org).
3.	American Heart Association. 2015 BLS for Health Care Providers Student Manual, 2016.
4.	American Heart Association, Advanced Cardiovascular Life Support (ACLS) Provider Manual; 2015 Guidelines; 2016.
5.	Heuer AJ & Scanlan CL. <i>Wilkins' Clinical Assessment in Respiratory Care</i> .8 th ed. St. Louis, MO: Mosby-Elsevier; 2018.
6.	Malley WJ <i>Clinical Blood Gases: Assessment and Intervention</i> .2 nd ed. Maryland Heights, MO: Saunders-Elsevier; 2005.
7.	DesJardins T & Burton GG. <i>Clinical Manifestations and Assessment of Respiratory Disease</i> .7 th ed. Philadelphia, PA: Mosby-Elsevier; 2016.
8.	Kacmarek RM, Stoller JK & Heuer AJ. <i>Egan's Fundamental of Respiratory Care</i> .11 th ed. St. Louis, MO: Mosby-Elsevier; 2016.
9.	Mottram, C. <i>Ruppel's Manual of Pulmonary Function Testing</i> .11 th ed.St. Louis, MO: Mosby-Elsevier; 2017.
10.	Cairo JM. <i>Pilbeam's Mechanical Ventilation: Physiological and Clinical Applications</i> . 6 th ed.St. Louis, MO: Mosby-Elsevier; 2015.
11.	Cairo JM. <i>Mosby's Respiratory Care Equipment</i> .10 th ed.St. Louis, MO: Mosby-Elsevier; 2018
12.	Gardenhire DS. <i>Rau's Respiratory Care Pharmacology</i> . 9 th ed.St. Louis, MO: Mosby-Elsevier; 2015.
13.	Scanlan, C. <i>Comprehensive Respiratory Therapy Exam Review Preparation Guide</i> . 3rd. ed. Burlington, MA: Jones and Bartlett; 2019.
14.	Respiratory Care: The Official Journal of the AARC. January 2017 - December 2018.
15.	Desjardins, T. <i>Cardiopulmonary Anatomy & Physiology, Essentials for Respiratory Care</i> , Delmar Cengage Learning; 6 th ed. 2013.

16.	Walsh BK. <i>Perinatal and Pediatric Respiratory Care</i> . 4th ed. St. Louis, MO: Saunders-Elsevier 2014.
17.	Guidelines for the Diagnosis and Management of Asthma, Summary Report 2007. NAEPP, Expert Panel Report 3. http://www.nhlbi.nih.gov/guidelines/asthma/asthsumm.pdf
18.	Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2018. Pocket Guidelines https://goldcopd.org/wp-content/uploads/2018/02/WMS-GOLD-2018-Feb-Final-to-print-v2.pdf
19.	Beachey, W. <i>Respiratory Care Anatomy & Physiology, Foundations for Clinical Practice</i> . 4 th ed. Mosby-Elsevier; 2017.
20.	Difficult Airway Society 2015 guidelines for management of unanticipated difficult intubation in adults, <i>British Journal of Anaesthesia</i> , 115 (6): 827–48 (2015)
21.	Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016, <i>Critical Care Medicine</i> : March 2017 - Volume 45 - Issue 3, p 486 - 552.

APPENDIX B: Question Categories and Types

QUESTION CATEGORIES

- A. Airway Management
- B. Anatomy and Physiology
- C. Bronchial Hygiene
- D. Chemistry/Physics
- E. Diagnostics
- F. Emergency Care
- G. Gas Therapy
- H. History
- I. Humidity/Aerosol
- J. Management/Professional Practice
- K. Mechanical Ventilation
- L. Microbiology
- M. Neonatal/Pediatrics
- N. Pathology
- O. Patient Assessment
- P. Pharmacology
- Q. Pulmonary Rehab/Long-Term Care

QUESTION TYPES

- A. Traditional Question
- B. Calculate This
- C. Interpret This
- D. Name That (Disease, Drug, Device, etc) / Question Category

- E. Respiratory Care Journal (2017 – 2018)
- F. Daily Double

APPENDIX C: Visual Question Format

A. Visual Question Criteria

1. Subjects for visual questions should predominantly be items or scenes a typical respiratory care practitioner can reasonably be expected to recognize. The visual questions should require recognition or analysis of the visual image to compose a correct answer and not simply provide a visual background to a traditional, oral question.
2. Each visual question shall consist of an image attached in digital format (jpeg preferred) along with a numbered question on a PowerPoint slide. The information required for each question is listed below. The images submitted do not have to appear directly in the

reference but the content of the question and answer shall be referenced to the list in Appendix A.

B. Suggested Visual Question Types

1. Interesting scenes of any aspect of the actual practice of respiratory care by respiratory therapists.
2. Realistic, staged illustrations of the practice of respiratory care.
3. Items of equipment
4. Clear technical diagrams

C. Unacceptable

1. Equations
2. Slides consisting only of words
3. Copyrighted photographs or cartoons

D. Visual questions will be submitted electronically as a PowerPoint slide. The question should be included in the Notes section of the PowerPoint slide. Below is a sample picture and question.

Visual #1

Airway Management

Q: The RCP pictured here is performing what emergency procedure for the benefit of a conscious choking victim?

A: Heimlich maneuver (or subdiaphragmatic Thrusts)

AHA BLS Manual, 2011, p. 99

Submitted by: Vic and the Ventilators/2019



APPENDIX D: Sample Questions

A. Question Types

1. Traditional

CHEMISTRY/PHYSICS

Q: In what units is absolute humidity normally expressed?

A: Grams per cubic meter, or milligrams per liter

Ref: RC Journal, Oct. 2016, p.12

Submitted by: Joe SCOOP and the Bent Stents/2019

2. Calculate This! / Mechanical Ventilation

- a) These questions will require a team to perform a calculation to determine the correct answer. Each team will have available a simple calculator, pencil and paper.

Calculate This / Mechanical Ventilation

Q: Listen carefully; a patient receiving mechanical ventilation has a set respiratory rate of 12 bpm and a set tidal volume of 500 ml's. The patient is currently apneic. Calculate the patient's minute volume.

A: 6L or 6000 mls

Ref: Egan's Fundamental of Respiratory Therapy, pg.232

Submitted by: Deadspace, 2019

3. Interpret This! / Diagnostics

- a) These questions will require making an interpretation of patient related data. This may include: ABGs, PFTs, EKGs, Ventilator Graphics, etc.

Interpret This / Diagnostics

Q: Listen carefully a patient has the following ABG results. pH 7.50, PaCO₂ 55 and HCO₃ 20. What is the most likely interpretation of this data?

A: Erroneous blood gas result

Ref: Egan's Fundamental of Respiratory Therapy, pg. 371-372

Submitted by: Aspirations, 2019

4. Name That Disease, That Drug, That Device, etc / Pathology (Category)

- a) These types of questions would include a minimum of 3 clues going from general to specific. As more clues are given the answer becomes clearer.

Name That Disease / Pathology

Q: a) I am classified as an obstructive condition. b) I am less likely to occur now than in the past due to antibiotic therapy c) I often accompany cystic fibrosis d) I may be classified as varicose, saccular or fusiform. Who Am I?

A: Bronchiectasis

Ref: Egan's Fundamental of Respiratory Therapy, pg. 521-22

Submitted by: Spit Bulls, 2019

5. Respiratory Care: The Journal

- a) These questions will be taken from the last 2 years of the journal Respiratory Care. Identify the month and year in the question.

Microbiology

Q: In the November 2015 issue of Respiratory Care, there was an article that studied the difference in pathogen between COPD Exacerbation and Community-Acquired Pneumonia. What was the most common pathogen found in COPD exacerbation?

A: Pseudomonas aeruginosa

Ref: RC Journal Nov. 2018, pg. 345

Submitted by: Great Expectorations, 2019

6. Daily Double

- a) Two related questions will move from basic to more complex. The team buzzing in first will gain control if their 1st answer is correct. If correct they will get an opportunity to answer the 2nd question. As long as a team keeps answering correctly than they could gain a total of 2 points. If the answer is incorrect, than the 2nd team will have an opportunity to answer correctly and gain control of the next question in the series.

Emergency Care

Q1: What emergency airway is abbreviated LMA?

Q2: What size LMA is recommended for a child weighing 50 Kg?

A1: Laryngeal Mask Airway

A2: #3

Ref: RC Journal Nov. 2018, pg. 345

Submitted by: Great Expectorations, 2019

APPENDIX E: Pairings

- A. First Round Pairings will be done by a random draw. There will be a separate random draw for practitioner teams, 2nd year teams and 1st year teams. If there are an odd number of student teams then a 2nd year team may be paired against a 1st year team.
- B. After the first round, all pairings will be done with the bracket methodology.

APPENDIX F: Challenge Form

Team Submitting Challenge: _____

Team Captain: _____

The following protest is being presented:

Opposing Team: _____

Team Captain: _____

The following is our response to the above challenge:

Resolution: DENIED UPHELD

Summary of Challenge

Sputum Bowl Review Committee Member: _____

Appendix G: Question Submission Information

A. Question Submission

1. All questions must be submitted electronically using the Excel spreadsheet found at [MSRC website](#).
2. Email questions and visuals to: **MSRC to Joanna Coddington**
jcoddington@mhsa.com

Appendix H: Sputum Bowl Past Winners

1979	Kalamazoo	Bruce Brenn, Homer Engert, James Taylor
1980	Providence	Tammy Chiesa, Germaine Fritz, Rick Zahodnic
1981	Kalamazoo	Bruce Brenn, Homer Engert, James Taylor
1982	Kalamazoo	Bruce Brenn, Homer Engert, James Taylor
1983	Aspirations	Laura Hume, Anna Ibrahim, Vicky Long, Jeff Ibrahim
1984	Kalamazoo	Bruce Brenn, Homer Engert, James Taylor
1985	Adrenochromes	Anna Ibrahim, David Panzlau, Rick Zahodnic, Jeff Ibrahim
1986	Great Expectorations	Delisa Hudson, Sue Mazzara, Bill Poma
1987	Adrenochromes	Anna Ibrahim, David Panzlau, Rick Zahodnic, Jeff Ibrahim
1988	Spit Bulls	Jan Fields, Polly Bunce, Jim Ross
1989	Spit Bulls	Jan Fields, Polly Bunce, Jim Ross
1990	Great Expectorations	Delisa Hudson, Bill Poma, Jackie Milosevski, Sue Labiak
1991	Beta-3	Al Moss, Phil McLaughlin, Gary Duncan, Rod Albrecht
1992	Kalamazoo	Al Moss, Bruce Brenn, Homer Engert, James Taylor (AARC Champs)
1993	Adverse F/X	David Panzlau, Robin McIntosh, Anna Ibrahim, Jan Fields (AARC Champs)
1994	Tracheal Deviants	Al Moss, Valerie Willis, Teresa Keppler, Mary Meldrum
1995	Knights Who Say "NEEP"	Laura Gifford, Tim Kelly, Connie Guyor, Larrie Eskamalgi
1996	Oxy Hoods	Vickie Drouillard, Liz Lucero, Michael McMinn
1997	Chief Complaint & the Manifestations	Becky Barnett, Wanda Brooks, Michael McMinn, Daniel Stasik
1998	Chief Complaint & the Manifestations	Becky Barnett, Michael McMinn, Daniel Stasik
1999	Mike and the Mucoids	Becky Barnett, Wanda Brooks, Michael McMinn,
2000	The Four Respiteers	Brian Coltson, Gerard White, Earl Gregory, Randy Kenyon
2001	Smells Like Psuedo But It's Snot	Rod Conklin, Brian Wicker, Jason Ekel, Vikas Sharma
2002	The Four Respiteers	Brian Coltson, Earl Gregory, Randy Kenyon, Tim Dillard
2003	The Hackers	Rachael Caleca, Michael McMinn, Paula Wood
2004	The SubAcuties	Becky Becker, Amy Culver, Joshua Young (Practitioner)
2004	Foreign Bodies	Sherri Bryan, Emma Hatt, Jeannine Mesler, Stephanie Smolinski (Student - Mott Community College)
2005	Rolling Stomas	Nancy Graff, Jim Harpster, Kathy Kammeraad (Practitioner)

2005	Huff 'n Puffs	Terry Tighe, Tara Inman, Krista Scott (Student - Monroe County Community College)
2006	The SubAcuties	Becky Becker, Amy Culver, Joshua Young (Practitioner)
2006	Auto PEEPS	Jaya Bawa, Sara Hubbard, Jim Johnson (Student – Mott Community College)
2007	Mucus Among Us	Al Moss, Rod Albrecht, Jill Deamud, Rene Spahr (Practitioner)
2007	Rapid Response	Lakshmi Balasubramamyan, Archana Jagtap, Bittu Mammen, Nylene Otto (Student – Oakland Community College)
2008	Respirados	Amy Culver, Becky Becker, Cindy Shellenbarger (Practitioner)
2008	Das Boot	Lindsay Jacobs, Margaret Schichtle, Jason Juergens, Jason Pagaduan (Student - Macomb Community College)
2009	Das Boot	Margaret Schichtle, Jason Juergens, Jason Pagaduan, Lindsay Patrick
2009	Ace Venturi Snot Detective	Sierra Black, Nelson Pagaduan, Michelle Sopchak (Student - Macomb Community College)
2010	Ace Venturi Snot Detective	Sierra Black, Nelson Pagaduan, Mary Alstead (Practitioner)
2010	Acid Droppers	Anthony Iannetta, Stephania Synod, Steve Manning (Student - Macomb Community College)
2011	Rapid Unresponsive Team	David Panzlau, Vickee Drouillard, Kathy Gurin, Shari Markel (Practitioner)
2011	Rapid Responders	Tony Nguyen, Monika Caruso, Lizabeth Nikollaj, Paula Visingardi (Student - Macomb Community College)
2012	Rapid Responders	Monika Caruso, Tony Nguyen, Lizabeth Nikollaj (Practitioner)
2012	Alpha Agents	James Ouiles, Alex Cole, Jessica Silmi, Jennifer Vang (Student – Macomb Community College)
2013	Kalamazoo	Al Moss, Rod Albrecht, Kristi Holmes, Kathy Bedford (Practitioner) (AARC Champs)
2013	O2 High Ons	Suruchi Gupta, Alex Drouin, Val Derieu, Andy Yatooma (Student – Macomb Community College)
2014	Acafellas	Nick Prush, Chris Cutler, Shane Spaulding
2014	FLBs	Brian Leideker, Katie Shedlock, Jaclyn Zanotti, Mudasir Hussain (Student – Macomb Community College)
2015	MEOW	Sierra Elberson, Katie Shedlock, Adrienne Christ

2015	The Sword and the Stoma	Steve Pattison, Lucienne Levan, Elizabeth Prybys, Alyssa Padsiadly (Student – Macomb Community College)
2016	Oh My GERD	Elizabeth Prybys, Alyssa Padsiadly, Lucienne LeVan
2016	Spit Happens	Michael Thomas, Rebecca Davis, Spencer Hanson, Angela Alayoubi (Student – Macomb Community College)
2017	Visibly Soiled	Rena Laliberte, Mark Stronati, Hamza Lakhani, Joseph Hodson
2017	Snot Rockets	Spencer Hanson, Renee Sassin, Alexandra Worde, Steve Morrow (Macomb Community College)
2018	The Bronchoprovocators	Steven Morrow, Marie Angst, Jason Gates, Jesse St. Louis (Macomb Community College)
2019		COULD BE YOU!

Appendix I: Sputum Bowl Checklist

- A. One of the keys to have success and fun at the Sputum Bowl is to be prepared. To make sure you have dotted the i's and crossed the t's, here is your SB Checklist.

1.	Submission of a complete and accurate Team Application to the MSRC Office - Due March 1st, 2019.	
2.	Submission of Questions to Data Base Coordinator and SB Coordinator - Due March 8th, 2019.	
3.	Submission of MSRC membership complete by April 1st, 2019.	
4.	Submission of MSRC registration complete by April 1st, 2019.	
5.	Attend Sputum Bowl Practice Session (Optional but Recommended) – April 2nd, 2019 @ 7pm. - RSVP	
6.	Attend Captain's Meeting – April 3rd, 2019 @ 9am.	

Revised January, 2019

2019 Sputum Bowl Committee:

Jeanine “Ginger” Steinaway, Kathy Gurin, David Panzlau, Rick Zahodnic, Nicholas Prush, Spencer Hanson and Liz Prybys