



# ASHP Clinical Skills Competition<sup>SM</sup> *Student Handbook*

Planned and Coordinated by:  
The ASHP Pharmacy Student Forum

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### National Case:

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## 2022 NATIONAL COMPETITION WINNERS

**1<sup>st</sup> Place** – Auburn University Harrison School of Pharmacy

Ella Domingo & Mary Rothenberger

**2<sup>nd</sup> Place** – Western University of Health Sciences College of Pharmacy

Destiny Farihi & Leslie Banuelos

**3<sup>rd</sup> Place** – University of Kansas School of Pharmacy

Emily Schaefer & Leah Nelson

Dear Student,

Thank you for your interest in the ASHP Clinical Skills Competition (CSC). This student handbook was developed to provide useful information about what the CSC entails, as well as how the competition works both on the local level at your school/college of pharmacy and on the national level during the ASHP Midyear Clinical Meeting. This handbook contains useful tips, advice, and guidance that can help make your experience a perfect synergy of learning, clinical skills development, and professional networking. And perhaps one of the best parts of it all, you'll have an opportunity to make great friends for life. Please contact us at [students@ashp.org](mailto:students@ashp.org) with any questions.

Regards,  
ASHP Pharmacy Student Forum

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### CSC General Overview:

- **ASHP Clinical Skills Competition** – A 2-hour written assessment and oral presentation in which you analyze a patient case with a teammate of your choice.
- **Preliminary Round, Local Clinical Skills Competition** – This round of the competition takes place at your local school or college of pharmacy where you will complete a written assessment and oral presentation of a patient case. You work in a team of two competing against your classmates. Your case is evaluated by local faculty and the winning team from this preliminary round is invited to compete at the national level during the Midyear Clinical Meeting.
- **Semi-Final Round, National Clinical Skills Competition** – This round of the competition takes place at the Midyear Clinical Meeting on the Saturday before the meeting officially begins. The semi-final round is only open to the winning teams of the Local Clinical Skills Competition who are current ASHP members. The students complete the written portion of the national case during this semi-final round.
- **Final Round, National Clinical Skills Competition**– This final round of the competition takes place at the Midyear Clinical Meeting on the Sunday before the meeting officially begins, and is only open to the top ten teams from the semi-final round. During this final round, the teams make their oral presentations to a panel of three judges.

### Frequently Asked Questions (refer to the following [document](#) for more details):

- **Does the competition cost anything?** There is no registration fee to compete in the preliminary round (local-level) competition; however, it is expected that the winning team will participate in the semi-final round (national-level) competition at the ASHP Midyear Clinical Meeting. As such, students may incur some travel and lodging costs associated with participation at the national-level.
- **Who is eligible to compete in the CSC?** Preliminary round (local-level) competition eligibility criteria are determined by each individual school or college of pharmacy. Advancement to the national-level competition at the ASHP Midyear Clinical Meeting and Exhibition is limited to ASHP student members enrolled in a full-time ACPE-accredited (or candidate status) Doctor of Pharmacy program who have not yet been licensed to practice or who hold a license but have not yet practiced.
- **What are the benefits of participation?** Participants develop their clinical skills, expand their professional network, make new friends, and learn market and industry information that may be useful during an upcoming job interview. There are also prizes for winners at both the local and the national levels. The winning team of the local-level competition receives a free registration to the Midyear Clinical Meeting.
- **How do I sign up?** Register for the competition through your local coordinator. If you don't know who that is, you can ask your SSHP Faculty Advisor, student activities director, or email ASHP at [students@ashp.org](mailto:students@ashp.org).
- **When is the competition?** The local-level competition is held at the discretion of the local coordinator, but must be held before November 1. The national level competition is held during the Saturday and Sunday before the ASHP Midyear Clinical Meeting officially starts.

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## Introduction

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The purpose of the Clinical Skills Competition (CSC) is to encourage and recognize excellence in clinical skill development for pharmacy students. The CSC is designed to facilitate an interactive, team-based analysis of clinical scenarios for health-system pharmacists. The CSC provides pharmacy students the opportunity to enhance their skills in collaborative practice with physicians in providing direct patient care.

### **The goals of the Clinical Skills Competition are to:**

1. Foster the development of clinical practice skills using all available resources;
2. Reinforce the pharmacist's responsibility for optimal drug therapy outcomes;
3. Facilitate the effective use of a systematic approach to clinical problem-solving; and
4. Utilize written and oral communication skills.

In the CSC, students work on a timed case study in pairs. Teams compete by demonstrating their skills in assessing patient information and current therapy, identifying and prioritizing drug therapy problems, identifying treatment goals, and formulating a comprehensive pharmacy care plan. A panel of judges then determines the winner of the competition using a standardized set of evaluation criteria.

Schools and colleges of pharmacy are encouraged to conduct Preliminary Round (local-level) Clinical Skills Competitions on their campuses in the Fall. One winning team from each ACPE-accredited institution will be invited to advance from the local level to the national-level Semi-Final Round competition held during the ASHP Midyear Clinical Meeting (MCM) in December. ASHP will provide each competing team of two students with a complimentary registration to attend the MCM.

## Preliminary Round (Local-Level) Competition

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### **Confidentiality**

ASHP and the CSC coordinators believe it is critical for students to conduct themselves in a manner consistent with the best ethical principles of the profession of pharmacy. Students should participate in the competition in accordance with the rules and regulations detailed in the CSC handbook. Students should not share knowledge of the case outside of their team or outside of the competition. The CSC registration form contains a confidentiality statement for the student competitors to sign.

### **Registration**

Eligible students are encouraged to register in self-selected teams of two. However, individual students may sign up to be placed in teams of two by the Preliminary Round (local-level) CSC faculty coordinator. Registrations must be completed at least two weeks before the competition. Although there is no registration fee for the preliminary round (local-level) competition, it is expected that the winning team from each school will participate in the national competition, and there are travel and lodging costs associated with participation at the national level.

### **CSC Cases**

ASHP will provide all participating schools or colleges of pharmacy with an electronic copy of the official local-level CSC case. The previous year's CSC national and local-level cases with answer keys will be available on the ASHP website for students to download to practice and prepare for their Preliminary Round (local-level) competitions. The website also contains national and local-level cases and answer keys for previous years. The national case is generally more challenging than the local-level case. Please note that competition cases are not limited to a particular practice setting, disease state, or type of drug therapy.

## **Part I: Written Case**

Each student team has two (2) hours to write a Pharmacist's Care Plan for the case provided.

### ***Patient Case***

This form will contain the patient's demographic, administrative, medical, laboratory, drug therapy, behavioral, and socioeconomic information. This is the information students will need to make patient-specific drug therapy decisions that reflect pharmaceutical care. **This form is for the students' reference only—it will not be scored by the judges.**

### ***Pharmacist's Care Plan***

**The Pharmacist's Care Plan is the only document that will be reviewed and scored by the judges.** Ideally, each team's Care Plan should clearly outline each drug-related problem found in the case, including (but not limited to) treatment of all acute and chronic disease(s), resolution of all actual and/or potential drug-related problems, recommendation of additional healthcare services from which the patient may benefit, and identification of appropriate risk factor reduction and disease prevention strategies.

Students should be instructed to complete their Care Plans in the following manner:

- "Health Care Problem" column: List all healthcare problems that need to be addressed in this patient.
- "Priority" column: Prioritize the problems by indicating the appropriate number where:
  - 1 = Most urgent problem (there can only be one urgent problem)
  - 2 = Other problems to be addressed immediately (or during this clinical encounter) **OR**
  - 3 = Problems to be addressed later (e.g. a week or more later/at discharge or next follow up visit)
- When identifying individual problems for the case, use more specific terms when possible vs. general disease conditions
- For each problem, describe the following:
  - Therapeutic goals
  - Recommendations for therapy
    - Pharmacologic and non-pharmacologic therapies
  - Monitoring parameters and therapeutic endpoints
    - Frequency of follow-up
    - Endpoints should be measured using defined parameters
      - Clinical, laboratory data, quality of life, etc.
      - Set target dates for achieving endpoints

*\*Please note, there should be only a "1", "2", or "3" listed in the priority column, and the number "1" should only be used once. When identifying individual problems for the case, use more specific terms when possible vs. general disease conditions. Also, use actual rather than weight-based doses when providing recommendations for therapy.*

### ***References***

It is best practice for student teams to have an adequate supply of references to consult during the written portion of the competition (at least one copy of each reference for every five teams is suggested). Schools are free to provide electronic or hard copy references for the local competition. Schools should inform participating students in advance which references will be available during the local competition. Core references supplied by the school should include texts that provide information on the following topics:

- Therapeutics
- Drug information
- Drug interactions
- Interpretation of laboratory data
- General medicine
- Pharmacokinetics

Students competing in local-level competitions will also have access to a free trial of Lexi-Complete® (generously provided by Wolters Kluwer) and may access it on their personal mobile devices during the written portion of their local competition.

For the Semi-Final Round (national-level) competition in December, students are encouraged to bring a fully-charged personal laptop and/or tablet (maximum 2 per team) to the competition room for the purposes of conducting research. ASHP will not provide devices (e.g., laptops or tablets) for student use.

Participants will have electronic access to AHFS® CDI™, AccessPharmacy (generously provided by McGraw Hill), and Lexi-Complete® (generously provided by Wolters Kluwer). They will also have unrestricted internet access throughout the Semi-Final Round. Students are welcome to visit additional websites such as UpToDate or Micromedex if they have those available (either personally or through their school). Students should review access instructions for AHFS® CDI™, AccessPharmacy, and Lexi-Complete® in advance of the national-level competition. Other computer software and/or electronic devices (e.g., smart phones, PDAs, etc.) will not be allowed at the national competition. **The use of personal or classroom notes and collaborative documents are prohibited at the national competition.**

ASHP is grateful for the support of McGraw Hill and Wolters Kluwer. Students will have full use of the free trial of Lexi-Complete® until after the close of the national competition in December. Those who do not already have a subscription can sign up using the flyer found on the CSC website.

## **Part II: Oral Case Presentation**

Upon completion of the written portion of the competition, each student team will give an oral presentation to the judges justifying their care plan recommendations. A total of ten (10) minutes will be allotted for each presentation, which includes a two (2) minute presentation period and an eight (8) minute question and answer period.

Two (2) minute student case presentations should include the following:

- The students' names and school or college of pharmacy
- Brief summary of the patient's condition, listing all health problems that require immediate attention
- Complete treatment plan **for the most urgent problem only**, including therapeutic goals, recommendations for therapy, monitoring parameters, and endpoints

Example:

“Hello, my name is Michael Smith and this is my teammate Sarah Jones. We are students at the ACME University School of Pharmacy. Our patient SJ is a 77-year old female admitted with a CVA, hypertension, and probable bacterial pneumonia, all of which require immediate attention. The CVA is his most urgent problem. After ruling out hemorrhagic stroke with a CT/MRI, our therapeutic goals are to stop progression of the intracranial thrombosis, prevent further neurological damage, and minimize complications of therapy. We chose to begin IV alteplase (provide dose, frequency, duration of therapy, monitoring parameters, and therapeutic endpoints) . . . .”

## **Part III: Evaluation**

Judges will score the Pharmacist's Care Plan and the oral presentation using the answer key and evaluation rubric provided by ASHP. In the event of a tie, the team with the highest score on the Pharmacist's Care Plan will be declared the winner of the local-level Preliminary Round competition.

### **Evaluation and Scoring of Pharmacist's Care Plan (100 points + up to 10 bonus points)**

#### ***Problem Identification and Prioritization***

- The most urgent problem is correctly identified
- Problems that need to be addressed immediately or during this clinical encounter are identified
- Problems that can be addressed later (e.g., a week or more later/at discharge or next follow up visit) are identified

#### ***Therapeutic Goals***

- Goals are individualized, appropriate, and realistic
  - Priority 1 goals
  - Priority 2 and 3 goals

#### ***Recommendations for Therapy***

- Recommendations are individualized, realistic, and consistent with medical standards and principles of evidence-based medicine
  - Priority 1 recommendations
  - Priority 2 recommendations
  - Priority 3 recommendations

#### ***Monitoring Parameters & Endpoints***

- Goals are individualized, appropriate, and realistic
  - Priority 1 goals
  - Priority 2 goals
  - Priority 3 goals
- Parameters are practical and effective measures of the desired endpoint
- Endpoints are reasonable and appropriate choices for the patient
- Frequency is reasonable for the plan and appropriate for the patient

#### ***Bonus Points***

- Judges may award up to 10 bonus points at their own discretion

### **Evaluation and Scoring of Oral Case Presentation (100 points + up to 10 bonus points)**

#### ***Presentation Skills (30 points)***

- Verbal communication —clear, coherent, concise, complete, organized, convincing, confident
- Non-verbal behavior —eye contact, facial expressions, body language, voice, demeanor, presence
- Interpersonal—warmth, compassion, manners/tact, professionalism

#### ***Case Summarization (10 points)***

- Utilization of time provided to present case

#### ***Pharmacotherapy Knowledge (20 points)***

- Demonstration of knowledge that incorporates an understanding of important drug principles
- Ability to integrate drug knowledge into patient care

#### ***Defense of Recommendations (40 points)***

- Problem solving and decision-making
- Therapeutic rationale
- Use of evidence to support recommendations
- Responsiveness to judges' questions

#### ***Bonus Points***

- Judges may award up to 10 bonus points at their own discretion

**MAXIMUM TOTAL POINTS FOR ENTIRE COMPETITION = 200 POINTS + up to 20 BONUS POINTS**

## Prizes/Awards

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Awards may be provided locally by the school or college of pharmacy, student society of health-system pharmacy (SSHP), or ASHP state affiliate. ASHP provides complimentary registration to the Midyear Clinical Meeting to the winning student team from each school. If the school's winning team cannot participate in the national CSC, no substitute prizes will be awarded in lieu of the complimentary registration. Registration is transferable only to individuals participating in the national competition. ASHP cannot process a complimentary Midyear Clinical Meeting registration for a student who is not a current ASHP member.

### National Competition at the ASHP Midyear Clinical Meeting

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The 2023 National Clinical Skills Competition will be held during the ASHP Midyear Clinical Meeting in Anaheim, California from December 2-3, 2023. It is a two-day event completed in two rounds. Only student teams that have qualified at a local-level Preliminary Round competition and are current ASHP members are eligible to participate in the national competition. Cases used in the national competition are in the same format as the cases used in the local-level competition, but have an advanced level of difficulty.

Detailed information (e.g., competition schedule, rules and regulations, and reference details, etc.) will be sent to student teams who advance to the national competition in November. Please be sure to provide ASHP with the correct email addresses for your school's winners to ensure prompt receipt of these materials. Contact information and ASHP member ID number for each winning team member must be submitted to ASHP via the Form B survey located on the CSC website ([ashp.org/clinicalskills](https://ashp.org/clinicalskills)) no later than November 1.

#### **Semi-Final Round (national-level): Written Case**

Each student team has **two (2) hours** to complete the written portion of the competition. The written competition is a closed session—no visitors, faculty, or other students are permitted in the competition room at any time. Students are encouraged to bring a personal laptop and/or tablet (maximum 2 per team) to the competition room for research purposes and to ensure access to Lexi-Complete®, AccessPharmacy, AHFS® CDI™, and other online materials. Competition proctors will monitor use and notify participants when there are 60, 30, 15, and 5 minutes remaining in the competition. ASHP will provide all other necessary materials including calculators, scratch paper, pencils, etc. for student teams to complete their written Pharmacist's Care Plans. No other personal items may be on the students' desks during the competition without permission of the competition proctors. Additionally, teams may not take anything from or bring anything into the competition room while the competition is in progress.

#### **Final Round (national-level): Oral Presentation**

As in the preliminary round competition, a total of **ten (10) minutes** will be allotted for each presentation, which includes a **two (2) minute presentation period** and an **eight (8) minute question and answer period**. The oral presentation should follow the same format described in the local competition instructions. The top ten finalists present their cases in random order—students should be prepared to wait up to 4 hours in a holding room until they have presented. Teams are sequestered until they complete their oral presentation.

Other meeting attendees are invited to observe the final round of oral presentations. Winners of the National Clinical Skills Competition will be announced during the MCM Opening General Session on Monday, featured on various social media platforms, and posted on the ASHP website.

#### **Prizes/Awards**

Each member of a top ten finalist team will receive an iPad, a 1-year subscription of Lexi-Complete®, a \$50 Amazon gift card, and a choice of 1 ASHP Self-Assessment Resource. In addition to these prizes, each member of the first place winning team will receive a \$500 cash award, individual first place trophies, and one large first place trophy for their school or college of pharmacy.

# ASHP CLINICAL SKILLS COMPETITION PATIENT CASE

Team # \_\_\_\_\_

## NATIONAL CASE 2023 ASHP CLINICAL SKILLS COMPETITION

### Demographic and Administrative Information

<b>Name:</b>	<b>Patient ID:</b>
<b>Sex:</b>	<b>Room &amp; Bed:</b>
<b>Date of Birth:</b>	<b>Physician:</b>
<b>Height: XXX / Weight: XXX lbs / Race: XXX</b>	<b>Religion:</b>
<b>Prescription Coverage Insurance:</b> Medicaid/Medicare/Private/None	<b>Pharmacy:</b> Local Pharmacy
<b>Copay: \$</b>	<b>Annual Income: \$</b>

### Chief Complaint

“Sentence”

### History of Present Illness

Paragraph description

### Past Medical History

Condition – Diagnosed DATE

### Outpatient Drug Therapy

Prescription Medication & Schedule	Duration Start–Stop Dates	Prescriber	Pharmacy

Non-Prescription Medication/Herbal Supplements/Vitamins	Duration Start–Stop Dates	Prescriber	Pharmacy

### Medication History

XX

### Allergies/Intolerances

XX

### Surgical History

XX

### Family History

XX

### Social History

XX

### Immunization History

XX

**Review of Symptoms**

XX

Team # \_\_\_\_\_

**Physical Exam**

XX

**Vital Signs**

HR:

RR:

O2 Saturation:

BP:

Temp:

<b>Labs and Microbiology</b>	
<b>Metabolic Panel</b>	
Na (mEq/L)	
K (mEq/L)	
Cl (mEq/L)	
CO2 (mEq/L)	
BUN (mg/dL)	
SCr (mg/dL)	
Glucose (mg/dL)	
Calcium (mg/dL)	
Phosphorus (mg/dL)	
Magnesium (mg/dL)	
Albumin (g/dL)	
AST (IU/L)	
ALT (IU/L)	
Total bili (mg/dL)	
<b>CBC</b>	
WBC (million/mm3)	
Hgb (g/dL)	
Hct (%)	
Plt (K/mm3)	
<b>Fasting Lipid Panel</b>	
Total cholesterol (mg/dL)	
LDL (mg/dL)	
HDL (mg/dL)	
Triglycerides (mg/dL)	
<b>Urinalysis</b>	
Clarity	
Color	
Glucose	
Hemoglobin	
Ketone	
Leukocyte esterase	
Nitrite	
Urine pH	
Specific gravity	

Protein	
Epithelial cells per high-power field	
WBC per high-power field	
<b>Other</b>	
LDH (U/L)	
PT (seconds)	
INR	
Room air arterial oxygen, pO2 (mmHg)	
Alveolar-arterial O2 gradient (mmHg)	
MRSA nares screening	
CD4 absolute count	
CD4 %	
<i>Toxoplasma gondii</i> IgG	
4 <sup>th</sup> Generation HIV Ag/Ab	
HIV viral load (copies/mL)	
HLAB*5701	
Glucose-6-Phosphate Dehydrogenase (u/g Hb)	
Hepatitis B surface antibody	
Hepatitis B core antibody	
Hepatitis B surface antigen	
Hepatitis A IgG	
<b>Microbiology</b>	
Expectorated sputum culture (collected 11/30 at 1930)	
Blood cultures x2 (collected 11/30 at 1930)	
Direct fluorescent antibody (DFA) stain from induced sputum	

**Other Diagnostic Tests**

XX

**Current Drug Therapy**

Medication Prescription & Schedule	Start Date

**Assessment & Plan**

XX

## ASHP CLINICAL SKILLS COMPETITION PHARMACIST'S CARE PLAN

Using the patient's data, you will be able to develop an effective care plan for your patient. Clearly define the healthcare problems. Healthcare problems include treatment of all acute and chronic medical problems, resolution of all actual or potential drug-related problems, and identification of any other healthcare services from which your patient may benefit.

Remember to think about potential medical problems for which your patient may be at risk and disease prevention and disease screening activities that may be appropriate to recommend. Also, don't forget to consider specific patient factors that may influence your goals and recommendations for therapy (e.g., physical, psychological, spiritual, social, economic, cultural, and environmental).

To complete your care plan, specify all of your patient's health care problems that need to be addressed. Then prioritize the problems into one of three categories: (1) Most urgent problem, (2) Other problems that must be addressed immediately (or during this clinical encounter), OR (3) Problems that can be addressed later (e.g. a week or more later/at discharge or next follow up visit). Please note that only **one** problem should be identified as the "most urgent problem."

Then **for each problem** describe the (1) therapeutic goals, (2) recommendations for therapy, and (3) monitoring parameters and endpoints. Your monitoring parameters should include the frequency of follow-up and endpoints should be measurable by clinical, laboratory, quality of life, and/or other defined parameters (e.g., target HDL is greater than 50 mg/dL within 6 months).

List all health care problems that need to be addressed in this patient using the table below.

- A. Prioritize the problems by indicating the appropriate number in the "Priority" column below:
- 1 = Most urgent problem (Note: There can only be one most urgent problem)
  - 2 = Other problems that must be addressed immediately or during this clinical encounter; **OR**
  - 3 = Problems that can be addressed later (e.g. a week or more later)

*\*Please note, there should be only a "1", "2", or "3" listed in the priority column, and the number "1" should only be used once. When identifying individual problems for the case, use more specific terms when possible vs. general disease conditions. Also, use actual rather than weight-based doses when providing recommendations for therapy.*

Health Care Problem	Priority	Recommendations for Therapy	Therapeutic Goals & Monitoring Parameters