WISE Educator Guide

How to Use WISE-MD During Your Clerkship
WISE-MD is an online program designed to serve the educational needs of allopathic and osteopathic medical students, as well as other advanced practice providers, during their surgical clerkship. WISE-MD consists of thirty-eight modules, edited by members of the Association for Surgical Education for content and accuracy, that address all the major topics typically taught during a surgical clerkship.
Depending on your institution’s subscription you may have access to any combination of the following courses:

- **WISE-MD**
- **WISE-OnCall**
- **CARE**

**Disease-based modules**

**Symptom-based modules**

**Addiction modules**

**Access modules, module progress, and question progress**

**Search function**
To access WISE-MD reports, click on the “WISE-MD” button at the top of the Course page for your program in Aqueduct.

All administrative accounts should see the following screen with an Admin navigation tab where reports can be accessed.

For each report type, the following are applicable:

**Domain:** your institution or program; this will be auto-populated

**Clerkship:** grouping of learners specified by the institution or program. These groupings are created on the backend by the WISE team and are useful for reporting. If you are interested in hearing more, please email wise@nyulangone.org.

**Date Added:** this is the date the user was added to the WISE database. A note on this: users are added to the WISE database the first time they click on a WISE product button from Aqueduct. If a learner does not show up in the search, alter this parameter.
User List

This report will give you a list of users based on the date range you specified. The date range is the date the user was added to the database.

User Progress

This report will give you individual learner reports. If you do not specify names, then you will receive a list of all learners added within the date range specified. Click on the Progress button corresponding to the learner you are interested in to get their report.
User Activity

This report will give you group activity reporting based on 2 date parameters: date the account was added and date of activity. This will show give you a report of multiple learners at once. If you use more than one product (Surgery, OnCall, or CARE) then you are able to filter by product.

The questions and practice cases in WISE are for learner self-assessment only and are not designed to be used for grading purposes other than completion.

There are no reports about the questions available to faculty/administrative staff and learners are able to attempt the questions and practice cases infinite times.

Faculty interested in noting completion of these questions can ask the learners to screenshot the learner facing reports and that image/file can be uploaded.
Surgery modules are disease-based case modules

Abdominal Aortic Aneurysms
Adrenal Adenoma
Anorectal Disease
Appendicitis
Bariatric
Bowel Obstruction
Breast Cancer
Burn Management
Carotid Stenosis
Cholecystitis
Colon Cancer

Diverticulitis
Hypercalcemia
Inguinal Hernia
Lung Cancer
Pancreatitis
Pediatric Hernia
Pediatric Pyloric Stenosis
Skin Cancer
Thyroid Nodule
Trauma Resuscitation
Venous Thromboembolism

Skills modules are the modules not necessarily specific to a case or a specific surgical treatment.

Best Practices
Epidural Placement Technique
Foley Catheter Placement
Surgical Instruments
Suturing and Instrument Tie
Two Handed Knot Tie
Ultrasound Basic Principles
Ultrasound: ABI
Ultrasound: Abdominal Aortic Aneurysm
Ultrasound: Breast
Ultrasound: Carotid Artery
Ultrasound: Cholelithiasis/Cholecystitis
Ultrasound: E-FAST Exam
Ultrasound: For Vascular Access
Ultrasound: Thyroid
Ultrasound: Venous

Access module progress, and question progress

Search function

Hover over "Details" for a brief module description and duration
Skills modules focus on the specific surgical skills that are integral to the education of students during their surgical clerkship. Learning about suturing, knot tying, surgical instruments, and ultrasound skills (to name a few) will enhance each student’s understanding, experience, and appreciation of their surgical rotation.
Each surgery module includes educational goals and objectives, self-assessment questions, and summaries.

**Overview**
Outlines the overall module goal and section-specific objectives

**Topic Content**
(Fundamentals, History, Physical Exam, Laboratory Studies, etc.)
Note: some modules may have additional topics, such as Pathology

**Cholecystitis**

- **Goals**
  
  Upon completion of this module, the student should be able to recognize and evaluate the key considerations in the diagnosis and surgical management of a patient with acute cholecystitis, including:
  1. the key findings underlying the diagnosis of acute cholecystitis
  2. the principal considerations surrounding the decision to treat it surgically
  3. the anatomy and surgical steps associated with a laparoscopic cholecystectomy
  4. the post-operative considerations and complications that may be encountered during a patient's recovery.

- **Objectives**

- **Fundamentals**
  - Describe the relevant anatomy of the gall bladder and how the location of the gall stone changes the symptoms and disease process.

**Questions**
Self-assessment questions to complete after viewing module

**Summary**
Access Key Points, Section Details, and “My Activity”
Fundamentals
Begin optional quiz or watch video

Questions
4 ? Total

What would you like to do next?
Take Quiz  Watch Video

Quiz
Optional preparatory questions to complete before watching video content

Access main module content here (video, details, and patient case findings)

Cholecystitis

Overview
 Topics
Questions
Summary

Topics
- Fundamentals
  - History
  - Physical Exam
  - Laboratory Studies
  - Imaging Studies
  - Decision Making
  - Surgery
  - Pathology
  - Post-operative Care

Question 1 / 4
A stone in the cystic duct will cause (choose all that apply):

Answer
- Biliary colic
- Acute cholecystitis
- Gall stone pancreatitis
- Chronic cholecystitis

Feedback
A stone in the cystic duct will cause issues only with the gallbladder itself. Examples would include biliary colic, acute cholecystitis, and chronic cholecystitis. If a gallstone leaves the cystic duct and travels into the common bile duct it will cause entities such as gallstone pancreatitis, cholecystolithiasis, and cholangitis.

Quiz questions test your baseline knowledge and prime for important points found within the module section. They are not required to complete a module
The videos within each module will walk you through the continuum of care for a patient seeking intervention for a health issue which often leads to surgical intervention.

**Objectives for the topic**

- Discuss the relevant lab test to obtain in patients with RUQ pain including CBC, LFTs, bilirubin fractionation, lipase and pregnancy test and what impact they have on ruling the differential diagnosis.

**Findings**

Data that supports the physician’s clinical reasoning and differential diagnosis for the example patient case. You can refer to this section to help keep track of the patient as you progress through the module.

**Details**

Links to additional information pertaining to the topic.
Questions

Vignette-based questions meant to serve as a self-assessment after you have completed viewing all of the module content.

Multiple attempts are allowed and scores are not reported to faculty.

Cholecystitis

Question 1 / 15
A 23 year old, overweight, black woman with a history of hemolytic anemia presents to the emergency department with fever and right upper quadrant pain. A right upper quadrant ultrasound is performed which demonstrates gallstones, a thickened gallbladder wall, and pericholecystic fluid.

Which patient characteristic puts her at highest risk of developing acute cholecystitis?

Answer
- Patients with hemolytic anemia
- Obesity
- Young age
- Ethnicity
- Female sex

Feedback
Compared to males, females have a 3:1 risk ratio. Having a first degree relative with a history of acute cholecystitis increases risk by a 2:1 ratio. Other factors that increase patient’s risk are a history of hemolytic anemia, terminal ileal disease, type IV hypercholesterolemia, native American ethnicity, and diabetes mellitus.

Cholecystitis

Key Points
An outline of the module for quick and easy reference.

Key diagnostic factors
- RUQ or epigastric pain radiating to the back
- Positive Murphy’s sign
- Previous episode of biliary pain

Other diagnostic factors
- Anorexia
- Nausea
- Fever
- Jaundice

NOTE: Because some modules may refer to material in the Details section, we recommend that students look through all the Details content.
### Cholecystitis

#### Sections
- **Summary**
  - Key Points
  - Section Details
  - My Activity

#### Fundamentals
- Epidemiology of Biliary Tract Disease
- Other Important Considerations
- Cholesterol Solubility Phase Diagram
- Fundamentals Transcript

#### Physical Exam
- Courv ist’s Sign
- Murphy’s Sign
- Gallbladder Inters
- Physical Exam Transcript

#### Laboratory Studies
- WBC count in Biliary Tract Pathology
- Alkaline Phosphatase in Biliary Tract Pathology
- Amylase in Biliary Tract Pathology
- Bilirubin in Biliary Tract Pathology
- AST/ALT in Biliary Tract Pathology
- Charcot’s Triad and Reynolds’ Peritonitis
- Laboratory Studies Transcript

#### History
- History in other Biliary Tract Disease
- History Transcript

#### My Activity
- View records of your activity and quiz scores

#### Topic Progress
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Status</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals</td>
<td>completed</td>
<td>7/18/2020, 1:20 PM</td>
</tr>
<tr>
<td>History</td>
<td>completed</td>
<td>7/18/2020, 12:10 PM</td>
</tr>
<tr>
<td>Physical Exam</td>
<td>completed</td>
<td>7/18/2020, 12:19 PM</td>
</tr>
<tr>
<td>Laboratory Studies</td>
<td>completed</td>
<td>7/18/2020, 12:20 PM</td>
</tr>
<tr>
<td>Imaging Studies</td>
<td>completed</td>
<td>7/18/2020, 12:31 PM</td>
</tr>
<tr>
<td>Decision Making</td>
<td>completed</td>
<td>7/18/2020, 12:37 PM</td>
</tr>
<tr>
<td>Surgery</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pathology</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Post-operative Care</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Quiz Progress
<table>
<thead>
<tr>
<th>Quiz</th>
<th>Attempt</th>
<th>Status</th>
<th>Progress</th>
<th>Score</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary questions</td>
<td>1</td>
<td>In Progress</td>
<td>1/1</td>
<td>100 %</td>
<td>00:29</td>
</tr>
<tr>
<td>Fundamentals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>History</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Physical Exam</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Laboratory Studies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Imaging Studies</td>
<td>1</td>
<td>Completed</td>
<td>1/1</td>
<td>100 %</td>
<td>00:37</td>
</tr>
<tr>
<td>Decision Making</td>
<td>1</td>
<td>Completed</td>
<td>0/1</td>
<td>0 %</td>
<td>00:39</td>
</tr>
<tr>
<td>Surgery</td>
<td>1</td>
<td>Completed</td>
<td>0/2</td>
<td>0 %</td>
<td>00:34</td>
</tr>
<tr>
<td>Pathology</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Post-operative Care</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
How to Use WISE-MD For Your Clerkship

Schools have found a variety of ways to incorporate WISE-MD into their curriculum. Let us share some of the models so that you can find the best use for your program:

Use WISE-MD to replace lectures in a variety of settings:

Replace lectures entirely:  
Free up time for students to view more surgical procedures, participate in clinics, and spend time at the bedside in the evaluation, treatment, and care of patients

Flipped classroom settings:  
If students view the modules before class, then classroom time can then be devoted to discussing and expanding on the principles learned in the modules.

Clerkships using this approach have found increased student satisfaction in their didactic curriculum.

Use WISE-MD for a standardized clerkship experience:

Schools that have multiple clinical venues for students find it difficult to provide quality and consistent content at all hospital sites used for the clinical rotations.

WISE-MD enables all students to be exposed to similar core surgical content and basic skills of all surgical topics, regardless of clerkship location and elective choices.

WISE-MD modules address the requirements of the LCMEs.
Encourage students to use WISE-MD as a clinical study aid

Just-in-time teaching tool: WISE-MD can help orient students to surgical procedures prior to their operating room experience.

Remediation:
Students that appear to be underperforming in certain areas can be assigned WISE-MD modules as part of a remediation program.

OSCEs:
WISE-MD modules can serve as preparatory material for students taking OSCEs

Shelf Exam:
Post test questions are written in the vignette style of shelf exam questions.

Use WISE-MD modules as a model for simulation

Many clerkship directors have created OSCEs that are based on specific modules as a way to assess whether students have truly grasped the relevant material.

The modules could be used to create other formative simulation experiences.