

**GASTROENTEROLOGY FELLOWSHIP  
PANCREATICOBILIARY CONSULTATION SERVICE  
GOALS AND OBJECTIVES  
University of Toledo**

**Educational Purpose:**

The Pancreaticobiliary Service at UTMC introduces the fellow to inpatient and outpatient management of patients with pancreas and biliary diseases. During this period, the fellow will have the opportunity to assess a wide variety of acute and chronic pancreaticobiliary conditions. As such, there will be an introduction to ERCP and EUS, but for advanced training, fellows will require a fourth year. Additionally, a faculty committee will decide if certain fellows merit more intensive ERCP and EUS training during the three year fellowship. These fellows will be selected by the faculty. Pancreaticobiliary Consultation Service fellows will participate in increasing levels of management/ treatment involvement with patient needs and procedures, depending on the fellow's level of experience. The fellow will be expected to formulate the differential diagnosis, institute diagnostic studies and recommend therapy.

**Objectives:**

Fellows will learn all aspects of pancreas and biliary disease care and will display all general competencies during this experience. Minimum levels of achievement in each competency are expected during Years II and III of training, when fellows may participate in the Pancreaticobiliary Consultation Service. The following are the goals and objectives for each competency at each level of training for the Pancreaticobiliary Service:

**Second Year Fellow:**

**Goal:** A Year II fellow should be able to assess and care for a large volume of patients and learn and teach basic textbook and evidence-based medicine to medical students and other trainees. Year II fellows should independently perform upper endoscopy procedures with a side viewing scope. Year II fellows should understand the indications for ERCP and EUS as well as risks and benefits of such procedures.

	<b>Second Year Fellow</b>
<b>Patient Care</b>	<p>Complete a time-efficient history and physical examination.</p> <p>Direct medical students successfully with the appropriate level of intervention for each trainee's skills.</p> <p>Complete competency-level performance of the following pancreaticobiliary procedures:</p> <ul style="list-style-type: none"> <li>• Upper Endoscopy</li> <li>• Passage of side viewing endoscope and visualization of the ampulla of vater.</li> <li>• Begin to perform cannulation of the bile duct.</li> </ul> <p>Develop clear expertise in the diagnosis and management of acute and chronic pancreaticobiliary diseases including:</p> <ul style="list-style-type: none"> <li>• Acute Pancreatitis</li> <li>• Chronic Pancreatitis</li> <li>• Pancreatic Cancer</li> <li>• Bile Duct Stones</li> <li>• Liver Cancer</li> </ul>

	<ul style="list-style-type: none"> <li>• Biliary Cancer</li> <li>• Post-Operative Injuries to the Liver, Bile Ducts &amp; Pancreas</li> </ul> <p>Present cases succinctly in a direct manner.</p> <p>Know the Pancreaticobiliary Consultation Service’s patients at a management level.</p> <p>Handle consult calls respectfully and appropriately.</p> <p>Teach good symptom management skills to medical students and other trainees.</p> <p>Provide inpatient care that is safe and compassionate and develop the ability to thoroughly and clearly educate the inpatient in the relevant areas of disease prevention, detection, progression and therapy to promote gastrointestinal health.</p>
<b>Medical Knowledge</b>	<p>Begin to take a leadership role at core conferences and teaching rounds regarding the pathophysiology, epidemiology, disease management and procedures and medicine management skills for common and uncommon pancreaticobiliary diseases including:</p> <ul style="list-style-type: none"> <li>• Acute Pancreatitis</li> <li>• Chronic Pancreatitis</li> <li>• Pancreatic Cancer</li> <li>• Bile Duct Stones</li> <li>• Liver Cancer</li> <li>• Biliary Cancer</li> <li>• Post-Operative Injuries to the Liver, Bile Ducts &amp; Pancreas</li> </ul> <p>Organize the team’s performance at teaching rounds.</p> <p>Read textbook and pertinent literature materials concerning problems encountered.</p> <p>Teach medical students and other trainees about pancreas and biliary disease states and patient management.</p>
<b>Practice-Based Learning and Improvement</b>	<ul style="list-style-type: none"> <li>• Participate in project groups, committees and hospital groups when requested.</li> <li>• Participate in programmatic reviews and conferences studying adverse events.</li> <li>• Give usable feedback to medical students and other trainees based on observation of their performance and assess improvement.</li> <li>• Participate in problem-based quality improvement projects.</li> <li>• Review, analyze and utilize scientific evidence from pancreaticobiliary literature related to patient management.</li> <li>• Know the best practice patterns to facilitate pancreaticobiliary care through clinic operating procedures and patient interactions</li> </ul>
<b>Interpersonal and Communication Skills</b>	<ul style="list-style-type: none"> <li>• Interview patients and family members accurately, patiently and compassionately and present information in an understandable manner. Convey bad news compassionately and honestly.</li> </ul>

	<ul style="list-style-type: none"> <li>• Plan patient and family conferences.</li> <li>• Counsel patients about transitioning to palliative care, when needed.</li> <li>• Address or refer patients related to spiritual or existential issues.</li> <li>• Communicate effectively with staff, peers, attending gastroenterologists, referring physicians and other consultants.</li> <li>• Present cases succinctly, in a problem-based, direct manner.</li> <li>• Learn to become a teacher of pancreas and biliary diseases to junior trainees, medical students and other healthcare professionals.</li> </ul>
<b>Professionalism</b>	<ul style="list-style-type: none"> <li>• Begin to mentor medical students and other trainees in professional conduct.</li> <li>• Understand and demonstrate professional behavior in daily activities.</li> <li>• Participate in professionalism-based learning activities through conferences.</li> <li>• Interact collegially with his/her peer group and other healthcare professionals, including acting responsibly in the larger context of pursuing programmatic successes.</li> <li>• Practice ethical principles with relation to patient care and confidentiality.</li> <li>• Practice interactions with pharmaceutical representatives and be unbiased in prescribing habits.</li> <li>• Practice sensitivity to cultural, age, gender and disability issues.</li> <li>• Cross-cover colleagues' services when needed and conduct this coverage carefully with appropriate feedback to responsible colleagues.</li> <li>• Participate in program planning</li> </ul>
<b>Systems-Based Practice</b>	<ul style="list-style-type: none"> <li>• Attend conferences concerning healthcare system patient management and components of systems of healthcare.</li> <li>• Understand and be able to work effectively related to hospital functions within UTMC hospital.</li> <li>• Understand and practice proper documentation and billing skills to practice cost-effective care.</li> <li>• Assist other trainees in the utilization of appropriate healthcare resources for the best care of Pancreaticobiliary Service patients.</li> <li>• Model appropriate interactions in multidisciplinary planning, including standard operating procedures and quality improvement initiatives.</li> <li>• Attend national gastroenterology conferences (e.g., DDW, ACG or APA).</li> </ul>

**Third Year Fellow:**

**Goal:** The senior-level, Year III fellow should demonstrate rapid assessment and planning skills and near-attending level care planning and management, while teaching medical students and other trainees at near to or exceeding attending level teaching. Year III fellows should be able to perform diagnostic and therapeutic upper endoscopy procedures independently with direct supervision available, as well as passage of the side viewing scope.

	<b>Third Year Fellow</b>
<b>Patient Care</b>	Master the Year II fellow objectives.

	<p>Demonstrate efficient organization of the Pancreaticobiliary Service and a working knowledge of all patients.</p> <p>Demonstrate near-attending level capacity for program assessment and care planning.</p> <p>Attain trainer level proficiency in the following procedures pertinent to his/her career choices:</p> <p>Complete competency-level performance of the following pancreaticobiliary procedures reflecting Year III responsibilities:</p> <ul style="list-style-type: none"> <li>• Biliary stone extraction</li> <li>• Upper Endoscopy</li> <li>• ERCP</li> <li>• Cannulation of bile duct and perform sphincterotomy and placement of bile duct stents</li> </ul> <p>Secure expertise in the diagnosis and management of acute and chronic inpatient pancreaticobiliary diseases including:</p> <ul style="list-style-type: none"> <li>• Acute Pancreatitis</li> <li>• Chronic Pancreatitis</li> <li>• Pancreatic Cancer</li> <li>• Pancreatic divisum</li> <li>• Congenital biliary abnormalities</li> <li>• Biliary strictures and primary sclerosing cholangitis</li> <li>• Pancreatic necrosis</li> <li>• Management of bile duct injuries related to trauma</li> <li>• Bile Duct Stones</li> <li>• Liver Cancer</li> <li>• Biliary Cancer</li> <li>• Post-Operative Injuries to the Liver, Bile Ducts &amp; Pancreas</li> </ul> <p>Provide inpatient care that is safe and compassionate with the leadership ability to thoroughly and clearly educate the inpatient and all other trainees regarding relevant areas of disease prevention, detection, progression and therapy to promote pancreas and biliary health.</p>
<p><b>Medical Knowledge</b></p>	<p>Access and critique the medical literature regarding pancreas and biliary problems encountered.</p> <p>Assume the trainee leadership role at core conferences and teaching rounds regarding the pathophysiology, epidemiology, disease management, procedures and medicine management skills for common and uncommon inpatient pancreaticobiliary diseases including</p> <ul style="list-style-type: none"> <li>• Acute Pancreatitis</li> <li>• Chronic Pancreatitis</li> <li>• Pancreatic Cancer</li> <li>• Pancreatic divisum</li> </ul>

	<ul style="list-style-type: none"> <li>• Congenital biliary abnormalities</li> <li>• Biliary strictures and primary sclerosing cholangitis</li> <li>• Pancreatic necrosis</li> <li>• Management of bile duct injuries related to trauma</li> <li>• Bile Duct Stones</li> <li>• Liver Cancer</li> <li>• Biliary Cancer</li> <li>• Post-Operative Injuries to the Liver, Bile Ducts &amp; Pancreas</li> </ul> <p>Teach medical students, other trainees and Year I &amp; II fellows at near-attending level.</p> <p>Organize team activities in a smooth and efficient fashion.</p> <p>Assist Year II fellows' development directly at teaching conferences and indirectly at work sites.</p>
<b>Practice-Based Learning and Improvement</b>	<ul style="list-style-type: none"> <li>• Demonstrate mastery of Year II fellow skills and encourage participation of colleagues.</li> <li>• Review, analyze and utilize scientific evidence from the hepatology literature for the management of pancreatic and hepatobiliary disease patients, taking a leadership role in guiding Year I &amp; II fellows and sharing relevant literature reviews with them.</li> <li>• Know and be able to succinctly communicate the best practice patterns to facilitate pancreatic and hepatobiliary disease care through clinic operating procedures and patient interactions.</li> </ul>
<b>Interpersonal and Communication Skills</b>	<ul style="list-style-type: none"> <li>• Interview patients and family members accurately, patiently and compassionately and present information in an understandable manner. Convey bad news compassionately and honestly.</li> <li>• Supervise Year I &amp; II fellows' work related to planning patient/family conferences and patient communications/counseling.</li> <li>• Communicate effectively as a consultant with staff, peers, attending gastroenterologists, referring physicians and other consultants and lead other trainees related to appropriate fellow-to-medical-professional communications.</li> <li>• Present cases succinctly, in a problem-based, direct manner.</li> <li>• Assume the role of a teacher of pancreas and biliary diseases to junior trainees, medical students and other healthcare professionals.</li> </ul>
<b>Professionalism</b>	<ul style="list-style-type: none"> <li>• Demonstrate proficiency in Year II objectives.</li> <li>• Mentor medical students, other trainees and fellows in professional conduct.</li> <li>• Assist in formal teaching exercises as requested.</li> <li>• Assert leadership in program planning.</li> </ul>
<b>Systems-Based Practice</b>	<ul style="list-style-type: none"> <li>• Attend conferences concerning healthcare system patient management and components of systems of healthcare.</li> <li>• Model appropriate interactions in multidisciplinary planning, including improvements related to standard operating procedures and quality improvement</li> </ul>

	<p>initiatives.</p> <ul style="list-style-type: none"> <li>• Participate in hospital and national medical association committees and multidisciplinary planning groups when requested.</li> <li>• Attend national conferences directed at career goals.</li> <li>• Demonstrate near-attending level utilization of overall systems of care.</li> </ul>
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**Teaching Methods:**

Gastroenterology fellows participate in the Pancreaticobiliary Consultation Service during Years II and III of fellowship training. One fellow is assigned to the Pancreaticobiliary Service during all rotations. Teaching of medical students, residents and other trainees as well as appropriate interactions with other healthcare providers are important aspects of this rotation. Participating in all required conferences is mandatory, and rounding is an integral part of this experience. As fellows gain experience throughout their training, skills of organization and efficiency as well as team leadership become increasingly important.

The Pancreaticobiliary Service experience is rigorous and will prepare the fellow to evaluate and manage acute and chronic pancreas and biliary diseases that will be encountered in the fellow’s future practice. This rotation will expose the fellow to a wide variety of pancreas and biliary disease diseases and problems.

Fellows assigned to this service will evaluate all new consults at UTMC and will be assigned to a continuity clinic one-half day per week. They will present new consults to the attending within 24 hours for routine consults and as soon as possible for emergencies. Fellows will evaluate each patient and will make initial recommendations regarding diagnostic tests and treatments. They will make arrangements for studies such as upper endoscopy, ERCP, EUS, and MRCP etc. They will review the appropriateness of the procedure with the attending before making final scheduling plans. The fellow will follow each patient under active consultation on a regular basis, will make further recommendations as indicated and will keep the attending informed of the patient’s status. Fellows must also communicate with the procedure fellow for all diagnostic studies.

**Progressive Fellow Responsibility:** Attending Staff supervise participants in professional graduate medical education programs in their patient care responsibilities in a manner commensurate with the Fellow’s level of training and experience. The Program Director is responsible for ensuring that the degree of professional responsibility accorded to each Fellow is progressively increased through the course of training, commensurate with his or her skill, training and experience. Fellow graded responsibilities for each level of training are described in the individual goals and objectives for each clinical rotation. The attending physician is also responsible for determining in an individual case the degree of resident independent functioning.

**Disease Mix:**

Fellows see a complete mix of liver diseases and conditions within the Pancreaticobiliary Consultation Service’s teaching hospital. UTMC has a substantial primary care basis, which provides the entire spectrum of internal medicine diagnoses and gastroenterology care. Diagnoses range from acute pancreatitis to pancreatic cancer, and there is an appropriate concentration of common pancreas and biliary diseases such as Cholangitis, cholelithiasis, biliary strictures.

**Patient Characteristics:**

UTMC offers a diverse mix of socioeconomic and gender status. Teaching faculty provides an abundant supply of upper and middle-class patients, and our contracts with medical assistance and pro bono care efforts ensure access to lower income patients. Due to a primary care base simultaneous with the hospitals’ constantly active

referrals (UTMC is complete with helicopter transport), patients are seen in both acute status and in diagnostic dilemma status, with both common and uncommon disorders.

### **Types of Clinical Encounters – Attending Supervision:**

Encounters are inpatient in nature during the Pancreaticobiliary Consultation Service. Fellows provide 24/7 consultative care under the supervision of an attending within duty hour limits and with faculty back up for situations of overload. Daily attending supervision is available at UTMC seven days per week, and in-house supervision is available all night as well. The attending has ultimate responsibility for patients.

Supervising attending physicians have the responsibility to enhance the knowledge of the Fellow and to ensure the quality of care delivered to each patient by any Fellow. This responsibility is exercised by observation, consultation and direction. It includes the imparting of the practitioner's knowledge, skills and attitudes by the practitioner to the Fellow and assuring that the care is delivered in an appropriate, timely and effective manner. Fulfillment of such responsibility requires personal involvement with each patient and each Fellow who is providing care as part of the training experience. Supervising attending physicians should act professionally and as a role model for trainees.

Supervisors will direct the care of the patient and provide the appropriate level of supervision based on the complexity of care, and the experience, judgment and level of training of the Fellow being supervised.

### **Procedures:**

During the Pancreaticobiliary Consultation Service, emergency procedures are performed 24/7 within duty hour limits by the fellow with the attending. Non-emergent procedures are performed during daytime hours in the GI lab by the fellow under the direct supervision of the attending. Procedure based evaluation is performed twice per year by a supervising attending.

### **Evaluation:**

Fellows are evaluated during all Pancreaticobiliary Service rotations and are expected to participate in the evaluation of other fellows as well. This occurs in the following forms:

- Detailed, automated evaluations using the New Innovation system are submitted for each rotation. These evaluations are reflective of the program's curriculum requirements. Attendings evaluate fellows, and the fellows evaluate the attendings as well.

Quarterly evaluations include:

- 360-degree (attending, nurse, nurse practitioner, staff/clerkical, etc.);
- Peer-reviewed; and
- Patient.
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Evaluation summaries become part of the fellows' and attendings' promotional documents.

- The fellow also evaluates the Gastroenterology Fellowship Program annually through a confidential basis.
- Attendings evaluate the Gastroenterology Fellowship Program annually.
- A Curriculum Committee oversees major changes to the curriculum. Representative program personnel (i.e., program director, representative faculty and at least one fellow) are organized to review program goals and objectives and the effectiveness with which they are achieved. This group conducts a formal documented meeting at least annually for this purpose. In the evaluation process, the group must take into consideration written comments from the faculty and the residents' confidential written evaluations.

If deficiencies are found, the group will prepare an explicit plan of action, which should be approved by the faculty and documented in the minutes of the meeting.

- The Program Director meets with all fellows individually twice per year.
- An in-service GTE exam is given to all fellows annually.

### **Additional Instructions for Fellows Participating in the Pancreaticobiliary Service:**

#### **I. Patient Care**

Consultations/inpatient admissions: Consultations and inpatient admissions are evaluated by the pancreaticobiliary fellow on service on the day they are called in. They are to be written up and presented to the attending on service. Additionally, the attending should be notified of any urgent consultations or admissions as soon as possible, particularly if a same-day procedure is anticipated. Pre-procedure evaluation: The fellow is expected to pre-round on inpatients in the morning prior to beginning the day's procedures. If issues arise, the attending on service should be contacted as soon as possible. A pre-review of all outpatients slated for procedures that day should similarly be completed. This may be done by reviewing the patients electronic medical record (EMR), hospital chart review and, if appropriate, a phone call to the patient to introduce yourself and gather any further information that may be applicable. A thorough patient history, physical exam, and a review of the laboratory and radiologic data should be performed prior to ERCP and EUS. The history should be obtained sufficiently in advance to permit procedural changes as warranted (e.g., general anesthesia, correction of coagulation factors, set-up of sphincter of Oddi manometry, enrollment in an ongoing protocol, etc.). The fellow is responsible for reporting all pertinent patient data to the nurse coordinator to enter it to the ERCP database following the procedure. The attending physician and the fellow are expected to discuss the case in detail prior to proceeding, so that both are in agreement regarding the procedure. All inpatients should be seen daily, and a note should be written prior to attending rounds. Attending rounds will be performed daily after all procedures have been completed. All admissions and consultations will be seen on the day they are called, with rare exceptions as approved by the attending on service.

Intraoperative: The fellow will assist the attending in performance of the ERCP procedure. The goals for the fellow are to build a solid foundation in patient assessment, approach to the procedure, endoscopic technique, and familiarity with accessories (such as wires, catheters, stents, needles, etc.) as well as the workings of the ERCP team. The number of "successful cannulations, papillotomies, guide wire placements, etc." performed should not, by any means, be considered the ultimate measure of success. These come with time, as skills mature. Since the risks of therapeutic ERCP are equal to those of many surgical procedures, factors such as patient care and safety must remain paramount. Certain cases (high risk, difficult/prior failed procedure, pediatric, etc.) may be considered attending-only cases in so far as the actual performance of the procedure is concerned, and limitation of the fellow's participation in the case will be at the discretion of the attending. However, the observant fellow will learn a great deal in assisting the attending and watching vigilantly. Such non-hands-on participation is important to the learning process.

Postoperative:

- Inpatients: Postop orders are to be written immediately after the procedure is completed. Pertinent postop data must be entered into the database and a preliminary report generated, signed, and placed on the chart before the patient leaves the GI lab. The attending will be responsible for dictating the procedure note. All inpatients who undergo a procedure must be seen on evening rounds, and a post-procedure check must be documented on the chart. The pancreatico-biliary service will be responsible for ALL aspects of the immediate postoperative management, as occurs on a surgical service. The pancreatico-biliary fellow on service will keep their pagers on, and will be immediately accessible within pager range, 24 hours a day, six days per week, respectively while on service, with no exceptions.



On Saturdays, the fellow on-service will round with the GI attending on service. On Sunday, the fellow will sign out to the GI team. On Monday am, the pancreaticobiliary fellow will take report from the GI team for Sunday's events/admissions. The pancreaticobiliary attending will leave their beepers on 24Hr/7Day to serve as a back-up for the fellow and GI team on weekends for complex cases and for call-ins for emergency procedures.

- Outpatients: Outpatient post-procedure follow-up mirrors the inpatient model. The fellow will evaluate each patient in the hospital to assess for post-ERCP complications. If the fellow has personal business which would interfere with his/her responsibilities while on service, special coverage arrangements must be made in advance with the attending. Fellow cross coverage is acceptable only if the crosscovering fellow has had prior experience with ERCP and has been adequately familiarized with the patients on the service. The service fellow will remain responsible for assuring that cross-coverage proceeds smoothly.

## II. Research Protocols

Fellows are encouraged to become familiar with existing research protocols, while they are on the pancreaticobiliary service. Fellows are expected to participate in patient enrollment and in carrying out the steps involved in any procedure-related protocols which apply to procedures they perform. Any fellow wishing to design studies is encouraged to discuss such ideas with the attendings. Fellows with a particular interest in pancreaticobiliary gastroenterology are encouraged to discuss the research opportunities available in the pancreatico-biliary section with the attendings, so that they can develop projects early in the fellowship.

## Bibliography:

### Resource Documents

- *Up-To-Date*
- *PubMed*
- *Textbook of Gastroenterology* – Yamada, et.al.
- *Gastrointestinal Disease: Pathophysiology Diagnosis Management* – Sleisenger & Fordtran.
- Major Gastroenterology journals online and in the program's fellow library including *Gastroenterology*, *American Journal of Gastroenterology*, *Gut*, and other major publications.
- *Gastrointestinal Endoscopy: the Journal of the American Society for Gastrointestinal Endoscopy*, the endoscopy journal with the widest circulation throughout the world (monthly).
- *Endoscopy: the Journal of the European Society for Gastrointestinal Endoscopy* (monthly).
- *Pancreas: the Journal of the American Pancreatic Association*.
- *Gastrointestinal Endoscopy Clinics of North America* (quarterly).
- *Annual of Gastrointestinal Endoscopy* (annual review of therapeutic endoscopy literature worldwide).
- *Practical Gastrointestinal Endoscopy*, by Peter Cotton and Christopher Williams, the classic "beginner's guide to endoscopy" and a perennial favorite of GI fellows.

### Curricular Design

- ACGME Outcome Project documentation (from [www.acgme.org](http://www.acgme.org)).
- Graduate Education in Internal Medicine: A Resource Guide to Curriculum Development
- The report of the Federated Council for Internal Medicine Task Force on the Internal Medicine Residency Curriculum, 1997.

### Pertinent Teaching References:

- *Textbook of Gastroenterology* – Yamada, et.al.
- *Gastrointestinal Disease: Pathophysiology Diagnosis Management* – Sleisenger & Fordtran.