

The Art and Science of Infectious Disease Consultation

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Abstract: Infectious disease is a cognitive specialty, procedurally represented by the consultation. Done correctly, a consultation is a powerful tool that can change physician behavior, strengthen critical relationships, and establish a consultant's reputation for excellence. The process of consultation requires multiple learnable skills that, when practiced and perfected, translate into a blueprint for professional success and satisfaction.

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Introduction

The most powerful tool in the infectious disease (ID) armamentarium is the clinical consultation. It demonstrates our skill and expertise, and when performed correctly, serves as a professional lifeline. Incorporating numerous verbal and writing skills, the ultimate goal of consultation is to optimize a patient's care. Our ability to master this procedure translates to a sense of professional accomplishment and acceptance as valuable contributors to the healthcare team. A successful consultation leaves both the referral source and patient thankful that the ID consultant was invited to participate in the case.

The value of an ID consultation has been documented repeatedly over several decades. While the detailed benefits are beyond the scope of this paper, they are referenced for your benefit [1–6]. In contrast to many other procedures, performance of an ID consultation is complex, blending scientific, written, and verbal skills. These skills, combined with the ability to comfortably interact socially and the desire to educate, are major determinants of success. Thus, our ability to master and consistently perform this procedure is crucial to our professional longevity and sense of value.

Types of Consultation

Formal consultations are requested, structured, written, reimbursable, and communicated to the requesting entity. Informal consultations usually take the form of spontaneous conversations. By definition, they are not written, entered into a medical record, or based on a physical evaluation of the patient. As such, no physician–patient relationship is established, and the physician is not typically liable for opinions rendered. These are infamously known as “curbside consultations.” For the purposes of this article, only formal consultations will be discussed.

Characteristics of Successful Consultants

Successful ID physicians possess definable qualities that identify them as exceptional consultants (Table 1).

First, excellent consultants are exemplary communicators. While the effectiveness of communication has been laboriously documented [7], it is the verbal aspect that appears most critical in a consultation [8]. As such, communication is an active process with interpersonal aspects being the most critical.

Second, excellent consultants must have the desire and ability to teach. This desire compels them to perfect and display verbal communication skills [9]. Early in an individual’s career, education serves as the effector mechanism to a practice’s growth. Through the act of teaching, these physicians gain a reputation for availability, interconnectedness, and passion for the practice of ID.

Third, doctors in this category keep abreast of the rapidly changing database of ID. As subspecialty consultants, we are mandated to be knowledgeable concerning new disease entities, diagnostic testing, and antimicrobial therapy. Through educational efforts, consultants have opportunities to display their distinctive competencies.

Table 1: Characteristics of a Successful ID Consultant.

Excellent communication skills
Active and available to teach
Keeps abreast of current ID trends and data
Displays passion for ID
Solidly able to direct patient care
Widely respected

Fourth, because passion cannot be taught, fabricated, or bought, successful consultants who consistently display a passion for their profession establish a reputation for energy and excellence. Successful consultants remain available and grateful for consultations, even at inconvenient times of the day.

Fifth, an extremely valuable but difficult skill is the ability and fortitude to direct a patient’s care. This is frequently manifested by an ID consultant who takes charge of a critical case, moving it toward an optimal patient outcome, while remaining respectful of diplomatic and political boundaries.

Lastly, successful consultants, through mastery of the above, are respected by multiple sectors of the hospital including nurses, physicians, clerks, administrators, and students. This respect is earned, not awarded, and manifested in multiple ways.

Components of Consultation

Historical elaboration—A cornerstone of ID consultation, our ability to identify historical clues is critical but may require multiple evaluations.

Transmission of information—Verbal as well as written. Generation of the differential diagnosis allows for information transmission and also displays our distinctive competencies.

Educational—At its very core, an ID consult is an educational event with all participants able to be active learners. While we must embrace the opportunity to educate, any message that is transmitted in a condescending fashion will be detrimental to the patient relationship and the consult overall. Conducted appropriately, the education imparted here has the ability to engender good will, enhance reputation, and serve as a major cog in the future growth of a consultant.

Direction of care—To optimally direct a patient's care, an ID consultant must: (1) make recommendations, (2) communicate actively (verbally and in writing), (3) generate a contingency plan, (4) restructure recommendations as necessary, and (5) follow the patient to the conclusion of their clinical course.

Medical/Legal Documentation

With all positive attributes there is the possibility of unwanted and potentially negative consequences. Too often insecure physicians will wage a confrontation in the chart rather than verbally discussing the issue in question [10]. The result can be the framework for a plaintiff's attorney.

Alternatively, documentation in a medical/legal document such as the medical record serves as a buffer when a physician is accused of wrongdoing. A concisely written note or a list of conditions in the differential diagnosis (DDx) can delineate the thought processes of the consultant and rebuke or defer litigation. When physicians differ on the appropriate course of action, these issues should be decided before documentation is completed in an effort to present as close to a consensus as possible. In general, medical/legal concerns cannot dominate our consultation style. Helpful guidelines include:

- (a) Complimenting the medical care provided as often as reasonably possible both in the chart and verbally to the family and patient.
- (b) Honesty, without representing one's opinion as edict, unless the clinician feels that the alternative plan would be potentially harmful to the patient.
- (c) Holding no debates concerning patient care in the medical record.
- (d) Incorporating direct infectious disease aspects of a case, but not trying to dominate all decisions. Other specialists may have other opinions that need to be discussed outside of the medical record.

Building the Relationship Bridge

Life revolves around relationship-building. One of our most precious assets of an ID consultant is our physician referral network. Without an extensive network to generate consult requests, we may indeed be looking for alternative means of professional satisfaction. Optimally, the referring physician should ultimately be gratified that they consulted you.

An ID consult can strengthen or weaken relationships with potential referring physicians in several ways. Initially, a patient should understand that you have been asked to consult because the patient's issue or diagnosis is difficult or unusual. A casual conversation with the patient inferring that the answer to the question being posed is medically simple, or basic, may damage a consultant's relationship with the referring doctor. In contrast, any complimentary statement to the patient or family about the medical care the patient has already received and the need to obtain a specialist's viewpoint works to the betterment of that relationship.

Cognitive Shortcuts

As ID consultants, our procedure resides in the body of consultation. As with other procedures, it must be studied, broken into its component parts, and practiced so that it can be consistently executed. Achieving excellence mandates that we also analyze the potential pitfalls of the procedure in an effort to avoid errors. Unfortunately, cognitive errors are complex and more common than sometimes perceived.

Cognitive psychologists have studied the mechanism by which people reach conclusions and make decisions [11]. In reality, these shortcuts have been firmly established over many years of clinical decision-making because they typically lead to the correct answers [12]. For example, epigastric pain typically predicts peptic ulcer disease or pancreatitis. Unfortunately, this can also be the presenting symptom of cholecystitis, lower lobe pneumonia, or inferior wall myocardial infarction. Because of the efficiency inherent in utilizing shortcuts, it is impractical to eliminate them. It is more logical to understand the pitfalls and structure a procedural approach to minimize any potential damage.

As delineated by Redelmeier [11], the following are the most commonly encountered cognitive shortcuts:

Availability—Decisions are made based on recall of recent cases.

Anchoring—Relying on initial impressions.

Framing—Swayed by subtle wording.

Blind obedience—Bowing to a more senior or experienced physician's opinion.

Premature closure—Decisions are sometimes made based on a single idea/diagnosis.

Structuring an ID consultation into an educational framework obviates cognitive shortcuts. A consultant cannot engage in an educational activity without being prepared for subsequent questions.

Faux Pas

Defined as a “socially awkward or tactless remarks,” the following faux pas represent common miscues that may be devastating to an individual consult or the reputation of a well-intentioned consultant:

1. Responding to the wrong question: The first mistake in ID consultation is not answering the question being posed to you.
2. Writing without talking: Leaving a note in the medical record is an excellent means to document thought processes or conversations with the patient and family. It is, however, a suboptimal mechanism for actively communicating recommendations and directing a patient's care.
3. Idiot savantism: The term “idiot” typically refers to someone simple, whereas “savant” is a French word meaning “a learned one.” Too often, we achieve insight into the clinical problem, but ramble aimlessly in our writing and speaking, to no concise end. Verbose pontification is a misguided activity and usually intimidates or aggravates a referring physician. Writing cogently and speaking articulately would serve the consultant well.
4. Alexander Haig approach: Under Ronald Reagan, Alexander Haig was the United States secretary of state, who, when told that the president would be under anesthesia for a surgical procedure, declared that he was in charge, even though he was not next in the line of succession. In fact, he was not in charge, and neither is an ID consultant. We are given authority by the primary care physician or whoever consults us. Unless specifically asked to do so, we should not assume responsibility for all aspects of a patient's care.
5. Rigidity: A hallmark of tetanus and of Parkinson's disease, inflexibility (in a characterological way) has no role in ID consultation. Life is a negotiation, and differences need to be resolved by the medical team to achieve the best outcome for the patient. Criticizing other healthcare

providers, complaining about consults because of inopportune timing or an easy diagnosis, are forms of rigidity and should be avoided.

6. Hit and run: Some consultants feel that an initial ID opinion is adequate service to both the patient and attending physician. Frequently, only one consult is performed under the guise of minimizing patients' expenditures, not interfering with the attending physician's plan of care, or prioritizing only the sickest patients for follow-up evaluation. In reality, the "hit and run" phenomenon may lead to increasing costs by delaying critical decisions, thereby lengthening the patient's hospital stay. This may also aggravate an attending physician or family who is anticipating concurrent evaluations. By its very nature, this approach could increase the likelihood of missed diagnoses, unfortunate patient outcomes, and potential litigation.

Eight Steps to Successful Consultation

The following is a blueprint that can be utilized as such or incorporated into an already successful consultation schema. Table 2 summarizes these steps with associated benefits.

Table 2: Eight Steps of Consultation Identifying Avoided Shortcuts and Benefits.

Consultation Step	Shortcut Avoided	Benefit
Identify question being asked	Unemployment	Longevity
Gather data	Availability, anchoring	Establish case infrastructure
Analyze data	Framing, premature closure	A preliminary step to DDx generation, this is the cornerstone of ID consultation
Generate DDx	Anchoring, premature closure	Distinctive competency is displayed; thought process is articulated
Make recommendations	Blind obedience	Tailors care direction; displays investigative insight
Contingency plan	Availability, anchoring, blind obedience	Enhances investigative thought process; displays competency
Communicate throughout	Premature closure	Avoids misfortune; breeds collegiality; effector mechanism of care direction
Follow case to conclusion	All the above	Demonstrates desire to be an active member of the team, providing active care direction

Conclusion

A consultant who can review a difficult case, rapidly survey the literature, discuss the case with other colleagues, and concisely convey specific recommendations to members of the patient care team will be touted as an asset in any clinical arena. Despite the multiple avenues available to demonstrate one's value, the consultation remains the most demonstrative and active process by which to accomplish this goal. Rooted in a framework of education, the consultation balances art and science and incorporates numerous defined and learnable skills. The dedicated ID clinician should

work diligently to perfect this “lifeline,” studying the patterns of success and cognitively mechanistic pitfalls. As we learn to modify and perfect our individual styles of consultation, it will be critical to both the individual and the ID specialty to continue to share these experiences.

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