Improving the Quality of Inpatient Consultations

Program Goal: To engage DOM Clinical Fellows in a peer-reviewed assessment of initial inpatient consultation notes to promote practice-based learning improvement and high-quality consultative skills.

Learning Objectives:

1. Describe the elements of a high quality consultation note
2. Critically evaluate initial inpatient consult notes for these elements
3. Identify specific opportunities to improve your inpatient consultation notes and practices

The following Primer includes:

I. FAQs: program and curricular overview

II. Quality of Consultation Assessment Tool (QCAT)

III. Two examples of how to critically evaluate a consultation note, using the QCAT, followed by improvements that could be made to the same consultation notes.

IV. Appended articles

QCAT Tool and Process: Frequently Asked Questions

1) What is the Fellow Quality of Consult Assessment Tool (QCAT) and what is its purpose?

The Fellow Quality of Consult Assessment Tool (QCAT) is a web-based survey to evaluate the quality of Department of Medicine sub-specialty fellows’ initial consultation notes. The QCAT was developed by Delphine Tuot, a renal fellow, and Lorrayne Ward, QI intern, under the guidance of Associate Professors Niraj Sehgal and Andy Auerbach of the Department of Medicine. Feedback from referring physicians and from fellows serving as consultants was sought, and incorporated in the tool and program design. It has been approved by the Committee on Human Research.

Given the importance of clear communication between primary teams and sub-specialty consultants, the QCAT measures core elements that all consult note should contain, regardless of specialty, such as specificity of recommendations and clarity of communication.

Increasing the quality of consultations, as measured by the QCAT, is the DOM Fellow Incentive Program Goal for 2010-11. One of UCSF’s goals is to ensure that fellows learn how to effectively communicate their reasoning and recommendations to primary teams. Improvement from the baseline QCAT scores by 20% will result in all fellows receiving a financial bonus of $400 in June 2011.

2) Who is participating in this evaluation?

All DOM ACGME-accredited fellows are participating, and are eligible for the incentive.

3) What about all the elements of the consult that are not part of the note?

We recognize there is much more that determines the quality of a consultation than what is captured in the note. However, accurately tracking such factors is challenging; to ensure standardization, the initial consult note was chosen as the unit of analysis, as it is the common element across all consultations and a part of the medical record.

4) How are the results being tracked and used?

The results are being tracked at a divisional level, and will be rolled up to an overall performance metric for the DOM. The first baseline data collection occurred in November, the midpoint review will occur in January, and the final assessment will be in May. The change from baseline evaluation to the last time period in May will be used to determine whether the Incentive Program Goal was achieved. Data will not be reported at an individual level.

5) How does the evaluation process work?

Each fellow will be asked to evaluate 3-5 initial consult notes from other sub-specialty fellows in January and again in May (baseline collection was conducted already by non-participating providers). The notes will not identify individual fellows to keep the peer evaluation anonymous. At time for peer assessment, you will receive a secure email with the consult notes and a link to the survey tool. We expect that the evaluation process should take no more than 5 minutes per consult. Reviewing the attached primer is the only other requirement so the time burden is small but we hope the impact will be significant to our clinical care.
## Elements of a high-quality and effective initial consultation note

<table>
<thead>
<tr>
<th>#</th>
<th>Factor</th>
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<tbody>
<tr>
<td>1</td>
<td>Focus on the specific consult question</td>
</tr>
<tr>
<td>2</td>
<td>Limited number of specific recommendations, preferably five or fewer</td>
</tr>
<tr>
<td>3</td>
<td>Identification of the most important recommendations as “crucial” or “critical”</td>
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<td>4</td>
<td>Specification of drug dosage, route, duration</td>
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<tr>
<td>5</td>
<td>Type of drug manipulation (&quot;continue&quot; vs. &quot;start&quot; vs. &quot;stop&quot; vs. &quot;change&quot;)</td>
</tr>
<tr>
<td>6</td>
<td>Frequent follow-up progress notes</td>
</tr>
<tr>
<td>7</td>
<td>Direct phone contact with the primary team</td>
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<tr>
<td>8</td>
<td>Atmosphere of positive communication/interaction; maintain professionalism</td>
</tr>
<tr>
<td>9</td>
<td>Offer at least one new teaching point</td>
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</tbody>
</table>

The Quality of Consult Assessment Tool (QCAT) is a web-based survey to evaluate the quality of Department of Medicine fellow-written initial consultation notes. The QCAT was developed by Delphine Tuot (renal fellow) and Lorrayne Ward (QI intern) under the guidance of Associate Professors Niraj Sehgal and Andy Auerbach of the Department of Medicine. Feedback from referring physicians and from fellows serving as consultants was sought, and incorporated in the tool and research design. Please fill out this quick survey below.

Thank you for your time and participation!

Consult Information

Tracking Number (number provided to you in the email) ________________________________

Consulting Service

- Cardiology
- Endocrinology
- Gastroenterology
- Hematology/Oncology
- Infectious Diseases (including Transplant)
- Nephrology (including Transplant)
- Pulmonary (including Transplant)
- Rheumatology
- Palliative Care

Referring Service ________________________________

Assessor Information

Assessor Name (your name) ________________________________

UCSF Provider number (5 digits) ________________________________

Date of Assessment (today's date) ________________________________
Reason for Consultation and Differential Diagnosis

1. Does the initial note specify a question to be answered by the consultant? Note that statement of a problem does not qualify as a question.
   □ Yes  □ No

2. Does the note include an assessment and plan focusing on the initial consult question (or the primary problem, if the answer to question #1 is no)?
   □ Yes  □ No

3. Does the assessment and plan provide a differential diagnosis related to the initial consult question?
   □ Yes  □ No  □ N/A

4. Does the assessment and plan include the thought process and rationale for the conclusion reached?
   □ Yes  □ Somewhat  □ No  □ N/A

Diagnostic Plan

5. Does the consulting team make clear the actions for which they take responsibility?
   □ Yes  □ No  □ N/A

6. Does the note recommend any labs or studies?
   □ Yes  □ No

6a. Does the note provide the rationale for the key (or most important) lab or study?
   □ Yes  □ No

Therapeutic Plan

7. Does the note recommend any new medications of changes to any existing medications?
   □ Yes  □ No

7a. Does the note provide the un-abbreviated name of EACH recommended medication?
   □ Yes  □ No

7b. Does the note provide the dose for EACH recommended medication?
   □ Yes  □ No

7c. Does the note provide the route for EACH recommended medication?
   □ Yes  □ No

7d. Does the note provide the schedule for EACH recommended medication?
   □ Yes  □ No

8. Does the plan specify that the consulting service will perform a procedure?
   □ Yes  □ No
8a. Does the note specify when the procedure will take place?  □ Yes □ No

8b. Does the note specify any peri-procedural orders or tasks? □ Yes □ No

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**Communication**

9. Did the consultant document discussing his/her recommendation with the primary team? □ Yes □ No

9a. Does the note document the name of the person with whom the consultant communicated on the referring team? □ Yes □ No

10. Does the note specify what developments should prompt a change in management or when to contact the consulting service again? Is there any anticipatory guidance?

□ Yes □ No

11. Does the note provide the consultant's contact number and/or preferred contact method? □ Yes □ No

12. Does the note contain any acronyms or abbreviations? □ Yes □ No

12a. Were you clear about what the acronyms or abbreviations referred to? □ Yes □ No

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**Educational Value**

13. Does the note incorporate teaching components? (ie: citation of relevant article, developed differential diagnosis, clinical pearls)

□ Yes □ No

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**Global Ratings - Please indicate how much you agree with the following statements.**

“*This note clearly conveys the information I would like to have about the patient if I were the referring clinician*.”

ie: How well does this note help with the consult question?

□ Completely Disagree □ Disagree □ Somewhat □ Agree □ Completely Agree

“*I believe this is a high quality consult note.*”

□ Completely Disagree □ Disagree □ Somewhat □ Agree □ Completely Agree
Please provide any additional comments about this tool or this evaluation process. Thanks!
Example of how to critically evaluate a consultation note, using the QCAT

1. Pulmonary Service:
Tracking #: 1

Requested by Attending MD Hoopes of the CT Surgery service

Reason for Consultation: s/p bilateral lung transplant, ARF

Assessment and Recommendations:
67 yo man with hx IPF s/p bilateral lung transplant 7/15, now admitted with hyperkalemia, ARF, and tac >20.

#ARF. Suspect hypovolemia + tac toxicity most likely. He has substantial ongoing loss of fluid into his pleural space, with urine spgr 1.025 suggesting dehydration
- would send urine electrolytes, creatinine
- would hold tacrolimus and follow levels
- IVF overnight
- reviewing med list, would hold augmentin (is now on too high a dose, and AIN is a possibility as well, with soft indication for abx)
- would hold septra, reduce valcyte to 450 q48 (will discuss with pharmacy in AM)
- would hold lasix
- if Cr not improved with IVF, please get renal ultrasound in AM

#Hyperkalemia. Likely due to high tac level and ARF
- check EKG. If any changes c/f hyperkalemia would institute standard measures (bicarb, Ca)
- hydration, serial labs

#Urinary frequency. Would consider urinary retention, though pt states his urinary stream has been good, and does not have an enlarged bladder on exam. UA neg
- f/u UCx, no abx for now

#s/p bilateral lung transplant:
- Immunosuppresion: holding tac, would continue Prednisone 20mg po daily
  - Cellcept 1000mg po q12h
- OI PPx: hold next dose septra given ARF, hyperkalemia, reduce Valcyte to 450mg q48, continue Voriconazole 200mg po bid, Amphotericin B 20mg IH bid, and TOBI 300mg IH bid.
- due for PFTs tomorrow
- on for endoscopy cleanout bronch [at 1 PM tomorrow]

Please call 443-2695 with any questions.
Example of how this consultation note could be improved

1. Pulmonary Service:
Tracking #: 1

Requested by Attending MD Hoopes of the CT Surgery service

Reason for Consultation: Help with medical management of acute renal failure (ARF) in a patient s/p bilateral lung transplant

Assessment and Recommendations:
67 yo gentle man with hx IPF s/p bilateral lung transplant 7/15, now admitted with hyperkalemia, ARF, and serum tacrolimus level >20.

#ARF. Suspect hypovolemia + tac toxicity most likely. He has substantial ongoing loss of fluid into his pleural space, with urine spgr 1.025 suggesting dehydration.
- would send urine electrolytes (Na, K, Cl) and urine creatinine to calculate a FeNa or FeUrea to help determine volume status
- would hold tacrolimus and follow levels
- IVF at 125cc/hour x 12 hours overnight and then reassess volume status
- reviewing med list, would hold augmentin (is now on too high a dose, and AIN is a possibility as well, with soft indication for abx)
- would hold septra, reduce valcyte to 450 q48 (will discuss with pharmacy in AM)
- would hold lasix
- if Cr not improved with IVF, please get renal ultrasound in AM to rule out an obstructive process

#Hyperkalemia. Likely due to high tacrolimus level and ARF
- check EKG, if any changes c/f hyperkalemia would institute standard measures (bicarb, Ca)
- hydration (ex: NS at 125cc/hour x 12 hours), serial labs (q12h for the next 1-2 days)

#Urinary frequency. Would consider urinary retention, though pt states his urinary stream has been good, and does not have an enlarged bladder on exam. UA neg
- f/u UCx, no abx for now

#s/p bilateral lung transplant:
- Immunosuppresion: holding tacrolimus, would continue Prednisone 20mg po daily
  Cellcept 1000mg po q12h
- OI PPx: hold next dose septra given ARF, and hyperkalemia, reduce Valcyte to 450mg q48, continue Voriconazole 200mg po bid, Amphotericin B 20mg IH bid, and Tobra mycin Inhaled 300mg IH bid
- due for PFTs tomorrow
- on for endoscopy cleanout bronch at 1 PM tomorrow; make NPO after midnight; we will send samples to the micro lab for routine follow up testing

Recommendations discussed with _____ of the CT surgery service.
Please call 443-2695 with any questions.
Example of how to critically evaluate a consultation note, using the QCAT

2. Hematology/Oncology Service:
Tracking #: 5

Requested by Attending MD Harris of the Red Surgery service

Reason for Consultation: evaluation and management of ileal carcinoid tumors found on ex-lap

Assessment:
72 y/o man dx with multiple carcinoid tumors s/p surgical resection from terminal ileum during sigmoid colectomy. Patient is now here for management of an enterocutaneous fistula and Onc consulted for evaluation of carcinoid tumors.

From OSH records, it was not clear whether patient was evaluated for metastatic carcinoid after small bowel resection. He did not report symptoms of carcinoid syndrome and Echo was negative for TR or pulmonary hypertension; this makes the likelihood of liver mets lower, however it does not rule them out. The first step in evaluation of this patient, therefore is evaluation for distant metastases or residual disease. We recommend that this be done prior to any surgical repair of the enterocutaneous fistula, as this may make him a higher risk surgical candidate or there may be additional surgical interventions necessary for the management of his carcinoid (such as prophylactic cholecystectomy if to be treated with sandostatin).

Recommendations:
# Carcinoid
-- please obtain octreotide scan
-- consider triple phase CT abdomen/pelvis, when considered safe based on renal function; consider CT chest as well for staging
-- 24-hour urine 5-HIAA level
-- send (serum) chromogranin A

# Anemia of unclear etiology
-- please send reticulocyte count, iron studies, B12, folate

Pager #: 443 ****
Example of how this consultation note could be improved

2. Hematology/Oncology Service:
   Tracking #: 5
   **Requested by** Attending MD Harris of the Red Surgery service
   **Reason for Consultation:** evaluation and management of ileal carcinoid tumors found on ex-lap

   **Assessment:**
   72 y/o man dx with multiple carcinoid tumors s/p surgical resection from terminal ileum during sigmoid colectomy. Patient is now here for management of an enterocutaneous fistula and Onc consulted for evaluation of carcinoid tumors.

   From OSH records, it was not clear whether patient was evaluated for metastatic carcinoid after small bowel resection. He did not report symptoms of carcinoid syndrome and Echo was negative for tricuspid regurgitation or pulmonary hypertension; this makes the likelihood of liver mets lower, however it does not rule them out. The first step in evaluation of this patient, therefore is evaluation for distant metastases or residual disease. We recommend that this be done prior to any surgical repair of the enterocutaneous fistula, as this may make him a higher risk surgical candidate or there may be additional surgical interventions necessary for the management of his carcinoid (such as prophylactic cholecystectomy if to be treated with sandostatin).

   **Recommendations:**
   # Carcinoid
   -- **please obtain octreotide scan**, as this will demonstrate if there is residual carcinoid tumor in his body
   -- consider triple phase CT abdomen/pelvis, when considered safe based on renal function; If this is impossible because of his renal function, please get an MRI of the abdomen/pelvis to look for enlarged lymph nodes that could be biopsied for diagnosis
   -- CT chest as well for staging
   -- 24-hour urine 5-Hydroxyindoleacetic acid (5-HIAA) level
   -- send (serum) chromogranin A, as the level correlates with tumor burden and can be helpful in determining patient prognosis

   # Anemia of unclear etiology
   -- please send reticulocyte count, iron studies, B12, folate

   Recommendations were discussed with _____ of the Red Surgery service. Thank you for this interesting consultation. Please page 443-**** with any concerns/questions.

   Comment [DT28]: Q6: Rationale for why the recommendation for the Octreotide scan and triple phase CT scan.
   Comment [DT29]: Q10: some anticipatory guidance is provided
   Comment [DT30]: Q12: fewer abbreviations
   Comment [DT31]: Q9: Documentation of discussion with primary team. Q11: Contact number is clearly listed.
Principles of Effective Consultation

An Update for the 21st-Century Consultant

Stephen M. Salerno, MD, MPH; Frank P. Hurst, MD; Stephanie Halvorson, MD; Donna L. Mercado, MD

**Background:** Little information in the literature exists to guide consult interactions between different medical specialties.

**Methods:** A total of 323 general internists, family medicine physicians, general surgeons, orthopedic surgeons, and obstetricians/gynecologists (OB/GYNs) from 3 academic medical centers completed a survey addressing their ideal relationship with consultants. Differences between surgeons and nonsurgeons were calculated using logistic regression, adjusting for location and trainee status. Differences between different specialties of surgeons were calculated using analysis of variance with Scheffe post hoc analysis.

**Results:** There was a 72% response rate. About half of respondents were surgeons and the rest were general internists and family medicine physicians. More nonsurgeons (69%) desired the consultant to focus on a narrow question than did surgeons (41%). Over half (59%) of family medicine physicians and internists preferred to retain order-writing authority on their patients compared with 37% of surgeons (P < .001). Of the surgeons preferring to retain authority, 70% believed it was appropriate for consultants to write orders after a verbal discussion. Orthopedic surgeons desired consultants to write orders and comanage patients significantly more compared with general surgeons and OB/GYNs (P < .001). Only 29% of physicians thought literature references were useful in consultations. Most physicians (75%) desired direct verbal communication with the specialist providing the consultation. Most family physicians (78%) believed there was little need for general internal medicine input, preferring to consult medicine subspecialists directly.

**Conclusions:** Specialty-dependent differences exist in consult preferences of physicians. These differences vary from the extremes of orthopedic surgeons desiring a comprehensive comanagement approach with the consultant to general internists and family medicine physicians desiring to retain control over order writing and have a more focused consultant approach.

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**THE MANNER IN WHICH PHYSICIANS FROM DIFFERENT SPECIALTIES INTERACT WITH EACH OTHER HAS LONG BEEN A TOPIC FOR DISCUSSION.** In 1983, Goldman and colleagues established guidelines for medical consultation, dubbed “Ten Commandments for Effective Consultations.” These commandments are to determine the question asked, establish the urgency of the consultation, gather primary data, communicate as briefly as appropriate, make specific recommendations, provide contingency plans, understand one’s role in the process, offer educational information, communicate recommendations directly to the requesting physician, and provide appropriate follow-up.

In 1999, Pearson published an opinion article promoting collegial and responsible relationships between specialist and generalist physicians in internal medicine. These guidelines stressed the referring physician’s role in patient advocacy, arranging the consultation, and respecting the consultant’s right to compensation. They also stressed the consultant’s role in deferring leadership of patient management to the referring physician unless specifically negotiated, teaching the referring physician, and providing thorough documentation of the consultation.

However, there is a lack of evidence-based data on the evolution of consulting practices with more recent changes in the medical profession. One profound change has been the shifting role in the relationship between internists and surgical subspecialties. Owing to financial demands to maximize productivity, surgeons are spending more time in the operating room and have less time to care for the increasing numbers of elderly, high-acuity patients. At the same time, patients are liv-
ing longer, and their medical problems are growing more complex. There is some evidence that a comanag- erial collaboration between orthopedic surgeons and internal medicine physicians, with the internists managing the majority of the nonsurgical issues, improves outcomes in patients with hip fracture. \(^*^\) In another study, Mac pherson and Lofgren\(^*^\) reported a scenario in which an internist joined a team of cardiothoracic surgeons, performing rounds with the team daily, writing orders for patients with medical comorbidities, and assisting with discharge planning. There were trends toward decreased mortality, decreased specialty consultations, and fewer transfers to the medical service. There were significant changes in length of stay, discharge medications, and reduction in radiology use. The surgeons and internists both agreed that the internist’s contribution improved patient care.

From our anecdotal experience, it often appears that many surgeons would prefer the internal medicine consultant to assume a more direct role in managing disease problems rather than a traditional relationship in which the consultant writes recommendations and the surgeon executes them. Devor and associates\(^*^\) also reported that physicians do indeed often share the responsibility for writing orders. In a review of 17 perioperative consultations requested by surgeons for the management of diabetes, Rudd and colleagues\(^*^\) found that there was often a mutual conception of a consultative relationship in which “the internist handles the diabetes while the surgeon handles the operation.” The authors thought that this notion countered a central theme in academic training, which is that the surgical house staff should be involved in the comprehensive care of their patients. Other literature demonstrates that consult recommendations are often not followed, but it is not clear if differing expectations between the referring and consulting physicians are responsible for this problem.\(^*^\)

The relationship between family physicians and internists is also changing. Decades ago, before internal medicine subspecialists were widely accessible, family medicine providers frequently consulted general internists for their diagnostic skill and expertise in treating patients with a higher acuity of illness. There is now a much higher population of internal medicine subspecialists providing greater opportunities for direct consultation. There is little information in the literature on family medicine consult preferences and whether they prefer a traditional consultant-referring service relationship or a more active comanagement role on the part of the consultant. It is also uncertain if the relationship between general internal medicine physicians and medicine subspecialists still follows the spirit of the “Ten Commandments for Effective Consultations,” in which the consultant generally plays an indirect role in patient management, recommending rather than comanaging. Evidence-based indications for referral from general internists to internal medicine subspecialists have been proposed,\(^*^\) but similar recommendations crossing specialties do not exist.

As a first step in trying to improve communication between referring physicians and consultants, we wanted to compare expectations of consultants between different specialties of referring physicians and reflect on any apparent changes that are different from the framework outlined by Goldman and colleagues\(^*^\) in 1983.

### METHODS

A multicenter, anonymous survey of surgeons of 3 specialties (orthopedic surgeons, general surgeons, and obstetricians/gynecologists [OB/GYN] physicians), general internists, and family medicine providers was performed in 3 tertiary care medical centers, with residences in each of the surveyed specialties in Oregon, Massachusetts, and Hawaii. The protocol was reviewed by the institutional review boards at each of the 3 locations and determined to be exempt.

The surveys consisted of a demographic section with data on the survey site, specialty, and training status of the respondent and a series of 11 questions on a 5-point Likert scale, with the anchors of 1 (strongly disagree) and 5 (strongly agree). There were 3 versions of the survey. The core survey questions given to all groups are given in Table 1 and constituted the entire survey given to general internists. The surveys given to surgeons included a question asking whether they would prefer having internal medicine as the attending service, with the sur-

### Table 1. Differences Between Surgeons and Nonsurgeons in Consult Preferences

<table>
<thead>
<tr>
<th>Question</th>
<th>Surgeons (n = 153)</th>
<th>Nonsurgeons (n = 170)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consults should be limited to a specific question</td>
<td>41</td>
<td>69</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Consultants should not write orders unless discussed with the primary</td>
<td>37</td>
<td>59</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A comanagement relationship is desired</td>
<td>59</td>
<td>24</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Literature references are useful as part of the consult</td>
<td>18</td>
<td>41</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Consult recommendations should have a description of importance and</td>
<td>78</td>
<td>69</td>
<td>.05</td>
</tr>
<tr>
<td>urgency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making over 5 recommendations limits compliance with the consult</td>
<td>22</td>
<td>21</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Recommendations are preferred at the beginning of the consult</td>
<td>41</td>
<td>54</td>
<td>.02</td>
</tr>
<tr>
<td>Initial recommendations should be discussed verbally with the referring</td>
<td>69</td>
<td>79</td>
<td>.05</td>
</tr>
<tr>
<td>service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regardless of the patient’s acuteness, daily progress notes from</td>
<td>78</td>
<td>67</td>
<td>.03</td>
</tr>
<tr>
<td>consultants are desired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find informal “curbside” consults helpful in caring for patients</td>
<td>53</td>
<td>83</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

\(^*^\)Scores of 4 or 5 on a 5-point Likert scale.
geon assuming a consultant role. The surgeon survey also included an additional question for those respondents disagreeing with consultants’ writing orders without verbal discussion, asking if it would be permissible for consultants to write orders with verbal discussion. Finally, the version of the survey given to family medicine providers asked if they would prefer to consult internal medicine specialists directly rather than involving a general internist as a consultant for difficult diagnostic and treatment issues.

Statistical analysis was performed using Stata 9.0 software (StataCorp, College Station, Tex). One-way analysis of variance with Scheffe post hoc analysis was used to compare Likert scores between study sites and between surgical specialties. The χ² test was used to compare proportions of surgeons and nonsurgeons agreeing with study questions. The study was powered with assumptions of an α level of .05, a β level of .80, and a 60% survey response rate of 450 surveys handed out to cover all the staff and residents in each specialty of interest at each medical center. These parameters allowed us to detect a difference of 1 point on a 5-point Likert scale and a 20% difference in providers agreeing (Likert scores of 4 or 5) with a survey question.

RESULTS

DEMOGRAPHICS

We handed out 446 anonymous surveys at the 3 study sites, receiving 323 completed documents for a response rate of 72%. Of the surveys, 33% came from the Hawaii study site, 39% from the Oregon site, and 28% from the Massachusetts site. There were equal proportions of staff and residents completing the surveys. General internists and family medicine providers made up 53% and surgeons made up 47% of the respondents. There were no significant differences between survey site or training level in any of the comparisons.

COMPARISONS BETWEEN SURGEONS AND NONSURGEONS

Surgeons had several distinct differences in consult preferences compared with nonsurgical providers (family medicine physicians and general internists) (Table 1). First, surgeons were more likely than nonsurgeons to prefer a comanagement relationship, to desire consultant order writing, and to not want the consultants to restrict themselves to a narrowly defined question. Nearly 70% of the surgeons and nonsurgeons who did not want consultants to write orders believed that it was permissible for them to do so after a verbal discussion. The remainder believed that the consultant should only make recommendations regardless of having a direct discussion. Surgeons were less likely than nonsurgeons to value literature references as part of the consult. While nonsurgeons were significantly more likely than surgeons to find references of value (41% vs 18%), most providers of all specialties did not think they were a useful part of the consult. There was no difference between resident physicians and faculty on this perception within specialties. Finally, more nonsurgeons (83%) thought that informal verbal consultations were helpful compared with only 53% of surgeons.

There were some aspects of the consultant-referrer relationship in which surgeons and nonsurgeons had similar preferences. First, the majority (75%) of both types of providers preferred verbal communication of initial consult results and daily updates from the consultant. Second, both valued a sense of importance and urgency attached to the consult recommendations, with surgeons valuing this more significantly than nonsurgeons. Surgeons and nonsurgeons were ambivalent if it was preferable to have recommendations at the beginning of a consult. Finally, neither surgeons nor nonsurgeons believed that consultants needed to list 5 or less recommendations.

COMPARISONS BETWEEN DIFFERENT SURGICAL SUBSPECIALTIES

Orthopedic surgeons differed from general surgeons and OB/GYN physicians in that they had a significantly higher preference for the more active consultant involvement. For example, orthopedic surgeons were significantly (P<.001 for all) more likely to prefer a comanagement relationship, more likely to want internal medicine to be the attending service on medically complex patients, more accepting of consultant order writing without prior discussion, and less likely to want consultants to restrict themselves to a narrow focus compared with general surgeons and OB/GYN physicians. Orthopedic surgeons were also less enthusiastic about written references as part of consults compared with OB/GYN physicians. There were no significant differences between preferences of OB/GYN surgeons and general surgeons.

COMPARISONS BETWEEN NONSURGICAL SPECIALTIES

There were no significant differences between the preferences of general internists and family medicine providers when dealing with other internal medicine specialty consultants. We additionally asked the family medicine providers if they preferred to consult internal medicine subspecialists directly rather than consulting general internists to care for patients with complex diagnostic and/or treatment issues. Most family medicine providers (78%) preferred to consult internal medicine subspecialists directly.

COMMENT

Our results demonstrate that the expectations of the referring physician differ by specialty. These expectations range from traditional relationships in which the consultant provides advice regarding a specific question and the referring physician writes all orders, to full management, including order writing, of all internal medicine issues by the consultant.

There are several trends that make the consulting milieu of 2006 different from that which Goldman and colleagues’ described in 1983. First, there has been a growth in pharmacology, available laboratory tests, and surgical technology, greatly complicating medical decision making. This makes it exceptionally difficult for any phy-
Table 2. Modified Ten Commandments for Effective Consultations

<table>
<thead>
<tr>
<th>1983 Commandments*</th>
<th>Meaning</th>
<th>2006 Modifications</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Determine the question</td>
<td>The consultant should call the primary physician if the specific question is not obvious</td>
<td>1. Determine your customer</td>
<td>Ask the requesting physician how you can best help them if a specific question is not obvious; they may want comanagement</td>
</tr>
<tr>
<td>2. Establish urgency</td>
<td>The consultant must determine whether the consultation is emergent, urgent, or elective</td>
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<td>3. Look for yourself</td>
<td>Consultants are most effective when they are willing to gather data on their own</td>
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<td>4. Be as brief as appropriate</td>
<td>The consultant need not repeat in full detail the data that were already recorded</td>
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</tr>
<tr>
<td>5. Be specific</td>
<td>Leaving a long list of suggestions may decrease the likelihood that any of them will be followed, including the critical ones</td>
<td>5. Be specific, thorough, and descend from thy ivory tower to help when requested</td>
<td>Leave as many specific recommendations as needed to answer the consult but ask the requesting physician if they need help with order writing</td>
</tr>
<tr>
<td>6. Provide contingency plans</td>
<td>Consultants should anticipate potential problems; a brief description of therapeutic options may save time later</td>
<td>6. Provide contingency plans and discuss their execution</td>
<td>Consultants should anticipate potential problems, document contingency plans, and provide a 24-h point of contact to help execute the plans if requested</td>
</tr>
<tr>
<td>7. Thou shalt not covet thy neighbor’s turf</td>
<td>In most cases, consultants should play a subsidiary role</td>
<td>7. Thou may negotiate joint title to thy neighbor’s turf</td>
<td>Consultants can and should comanage any facet of patient care that the requesting physician desires; a frank discussion defining which specialty is responsible for what aspects of patient care is needed</td>
</tr>
<tr>
<td>8. Teach with tact</td>
<td>Requesting physicians appreciate consultants who make an active effort to share their expertise</td>
<td>8. Teach with tact and pragmatism</td>
<td>Judgments on leaving references should be tailored to the requesting physician’s specialty, level of training, and urgency of the consult</td>
</tr>
<tr>
<td>9. Talk is cheap and effective</td>
<td>There is no substitute for direct personal contact with the primary physician</td>
<td>9. Talk is essential</td>
<td>There is no substitute for direct personal contact with the primary physician</td>
</tr>
<tr>
<td>10. Provide appropriate follow-up</td>
<td>Consultants should recognize the appropriate time to fade into a background role, but that time is almost never the same day the consultation note is signed</td>
<td>10. Follow-up daily</td>
<td>Daily written follow-up is desirable; when the patient’s problems are not active, the consultant should discuss signing-off with the requesting physician beforehand</td>
</tr>
</tbody>
</table>

*From Goldman et al.1

SECOND, RISING COSTS NOT FULLY MATCHED BY PROVIDER REIMBURSEMENT HAVE PLACED INCREASING DEMANDS ON HEALTH CARE PROVIDER PRODUCTIVITY. Finally, surgeons have had to adapt to increased productivity demands in the midst of new work hour requirements in graduate medical education, which may result in a less robust presence on surgical wards. The results obtained from the surgeons in this survey by specialty were remarkably consistent across levels of training and locations. The surgeons clearly wanted a more involved consultant and preferred a formal relationship rather than informal advice. Even most surgeons not wanting a consultant to have carte blanche in writing orders for their patients found it desirable for the consultant to do so after a verbal discussion.

Interestingly, in contrast to surgeons, general internist physicians and family medicine physicians follow more traditional referring physician patterns in which the consultant provides advice related to a narrow question and they consider and execute the instructions as appropriate.

With these profound changes in the profession of medicine, one might ask if “Ten Commandments for Effective Consultations” by Goldman and colleagues remain relevant in 2006. We think they are with minor modifications (Table 2). We propose that there are several features of the commandments, such as an emphasis on verbal communications, performing analysis of primary data at the bedside, being succinct, and establishing the urgency of the consult, that are still as relevant in 2006 as they were in 1983. The strong preferences for daily input in our study led us to recommend this explicitly for all consults as the 10th commandment, reinforcing that of Goldman and colleagues.1
There were some changes in our proposed command-ments, however. We recommend to focus less on defining a specific question for the consult and more on simply verbally asking how the consultant can help the referring physician when there is no clear question. This should quickly establish whether a comanagement relationship is desired. The consultant should not fear writing orders when the referring physician is not comfortable doing so or cannot in a timely manner, provided that this relationship is defined at least verbally at the time the consult is initiated. We propose that this conversation is an essential part of the initial consult. Finally, there does not appear to be hesi-tation or irritation with a consultant offering multiple recommendations salient to the patient’s care, at least among surgeons. We suggest that the consultant should offer to help order the tests and therapies he or she suggested if the referring physician is not immediately available or not comfortable writing the orders. Furthermore, the consult should provide explicit instructions on where he or she or an on-call colleague can be reached if the patient’s clinical condition deteriorates. This more involved and interactive approach to consultation may be an especially appropriate fit for today’s hospitalists and their relationship with many surgical subspecialists.

Though our study did not address the proper role of consultants as teachers of trainees and referring physicians, we were surprised to see a lack of interest in literature exchanges. Until further information exploring this is obtained, we suggest less emphasis on references in a busy surgical ward setting and more emphasis on bedside teaching, which is a natural extension of the “curbside consult.” The consultant should notify trainees on the primary team when he or she is conducting their assessment of the patient because teaching, primary data clinical gathering, and medical decision making may offer valuable opportunities for learners.

There were several limitations to our study. First, it was a small study that encompassed 5 specialties at 3 academic medical centers. It may not be reflective of community hospital relationships nor be generalizable to all specialties. Second, while the study measured preferences of the referring physician, it did not measure compliance with consultant recommendations or the actual relationship between consultants and referring physicians at the studied institutions. Finally, the study only addressed 1 perspective in the relationship, that of the referring physician, and did not address the perspective of the consultant. Unanswered questions resulting from this study include how often verbal interaction between the consultant and referring physician actually occurs and whether a more proactive approach by the consultant in volunteering to accept comanagement duties results in higher compliance with consult recommendations.

In conclusion, we recommend that internal medicine consultants adopt a flexible relationship strategy with the referring physician. For the traditional internal medicine specialist interacting with a family medicine provider or general internist, a traditional relationship centered on focused verbal and written input with the referring team managing order entry may be the norm. For other relationships, such as with orthopedic physicians, a comanagement strategy may make more sense. In all initial consults, a frank verbal discussion between the consultant and referring physician about the role of the consultant including optimal communication strategies, scope of responsibility, and order writing is desirable.

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REFERENCES

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Communication between Consultants and Referring Physicians: A Qualitative Study to Define Learning and Assessment Objectives in a Specialty Residency Program
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PLEASE SCROLL DOWN FOR ARTICLE
Communication between Consultants and Referring Physicians: A Qualitative Study to Define Learning and Assessment Objectives in a Specialty Residency Program

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Background: Outpatient consultation constitutes a major part of medical practice. However, little is known about the skills which should be taught to residents in order for them to improve their consultant-referring physician relationships.

Purposes: To specify the consultant skills which are required to ensure an effective communication between specialists and referring physicians.

Methods: A qualitative study based on (a) a literature search and (b) focus group interviews.

Results: Skills thus identified and described are classified in two groups: observable skills and principles / attitudes.

Conclusions: The consensual specification of these abilities permits a greater efficacy in the teaching of consultant skills.

Consultation is an important part of medical practice. It is well established that expertise in consultation requires specific knowledge of medical management, skills for interacting with patients, but also the ability to communicate effectively with the referring physicians. Several problems have been identified regarding the later component of the consultation process: disagreement regarding the main reason for consulting, results of consultation not communicated, inadequately written medical reports, unclear follow-up plans, and unequal distribution of tasks between the referral physician and the consultant. Nevertheless, scarce attention is currently given to the acquisition of consultation skills in most residency training programs. Inadequacy in teaching consultation skills is a general problem which may result in a diminished quality of patient care, patient frustration and confusion, and also strained relations between physicians.

To teach in an effective manner, a clear perception of what should be taught is necessary. The above cited descriptions of identified problems and solutions often reflect personal points of view. In order to obtain a wide and consensual perception of what should be taught about communication with referring physicians, we undertook a systematic approach of data collection involving health professionals. The research was done in a specific discipline, Urology. We assume that at least, part of the yield could be applicable to other fields of medicine.

The research’s goals should be (a) to identify the skills required in contacts with the referring physicians for an effective consultation; and (b) to produce a consensual definition of these skills. These skills specifications should contribute to better teaching and assessment of residents in this particular subject.

Method

Previous consensus conference reports have defined consultants in medicine as experts who interact
within a patient-centred network of health care professionals. This study is focused on competencies related to the interaction between the specialists and the referring physicians. Other components of consulting skills such as patient–consultant relationships are not addressed in this study. This fundamental component is considered a part of the physician–patient relationship and represents the object of a specific theme in the literature. Theoretical knowledge and technical skills specifically related to Urology practice are also excluded from this study.

The current study was conducted in two stages:

1. Review of the literature.
   A search for articles concerning consultation skills in medicine was done on Medline from 1966 to 2000. Key words used for the search were “consultation, consultation skill, referral and consultation, professional relationship, residency”. Two hundred and ten references were obtained. References concerning the specific skills of specialties were rejected. Twenty-four references exclusively related to the referring and the consulting physician were retained. A literature-based list of desirable skills was elaborated with this material.

2. A series of focus groups were organized. The main objective of these encounters was to produce and validate a list of desirable skills. The participants were selected to ensure a broad spectrum of demographic and professional characteristics. Four focus groups were successively held: one group of 6 urologists from different areas of practice (2 Faculty members, 2 general hospital urologists and 2 urologists in private practice); 1 group of 6 residents in Urology; 1 group of 6 referring specialist physicians (2 nephrologists, 1 internist, 1 primary care physician, 1 physician in geriatrics, 1 gastroenterologist); 1 group of 6 general practitioners.

   In each focus group meeting, the participants were first asked to write down all the abilities which they believed are required by a consultant. They were then given the literature-based list. We asked them to react to that list and their responses were recorded. In the first focus group, the production of new items was relatively important, but then gradually declined with the other focus groups. We stopped organizing new meetings when a saturation effect appeared. All recorded data were collected and subsequently analyzed.

**Results**

Most of the skills identified as important features of the referring and consultant relationship could be directly observed. We named this group “the Observable skills.” However, others skills or attributes could not be directly observed since they had to be inferred from the action taken. We named them “principles and attitudes.” Each item is hereafter specified and their meaning, as perceived by the focus group participants are described below.

**Group 1: Observable skills.**

1. Identification of reason for consultation.
   The first task of a consultant is to render explicit the concern of the referring physician. The lack of a specific reason for the consultation and the disagreement on the reason for the consultation will decrease the efficiency of the referral process. The reason for the consultation should be determined and should also correspond to the referring physician’s needs. The only manner in which the consultant can have a significant impact on the case is by answering to a specific question and also by monitoring the presence of factors which could influence the diagnostic and the therapeutic decision-making process.

2. Taking into account the referring physician characteristics.
   It is necessary to take into account the characteristics of the referring physician. Two different physicians caring for the same patient may have different expectations. For instance, a general practitioner will ask for a total specialized patient care for benign prostatic hyperplasia (BPH). In contrast, a cardiovascular surgeon will only ask to know if asymptomatic bacteriuria due to BPH is a contraindication to the implantation of a valve prosthesis.

3. To determine the urgency of the request.
   The urgency of the request must be determined. This will affect how urgently the consultation needs to be carried out and communicated. An excessive delay in forwarding the results of the consultation may affect patient care, increase the referral failure rate and eliminate future request for consultation. The consultant must improve administrative and secretarial efficiency in order to prevent subsequent problems in communication or delay in appropriate care. For instance, several members of the groups focused on a certain point of discontentment, e.g. the unnecessary lengthy delay for problems such as hematuria, symptomatic lithiasis or urinary tract infection.

4. Looking for additional pertinent information.
   The consultant should seek additional relevant information, since it is often necessary to answer the question. In most cases, referrals were not requested to obtain assistance in interpreting already available data. It is imperative that the consultant reviews the medical history directly with the patient and the important aspects of the physical examination. The consultant may often uncover overlooked information by reviewing old charts. This structured and planned problem-solving
 procedure should allow a new diagnostic interpretation as well as pertinent therapeutic recommendations.

5. Relevant communication depending on the urgency of the request.

Another significant finding of our focus groups was the crucial importance of the communication of results and recommendations to the referring physician. This is one of the primary aspects of the consultation process, but it may be an area where most deficiencies occur. It is essential to adapt the means of communication to the kind of information which is being transmitted, since the breakdown may adversely affect patient care, cost effectiveness and education. A written report is the most common means of communication. Obviously, focus groups put the emphasis on the fact that, in critical emergency situations, immediate and direct oral communication either during a meeting or by telephone is more relevant than written reports.

6. Consultation reports that are easy to read, concise, with fewer than 6 specific recommendations.

The quality of the consultation report directly affects consultation efficiency and the compliance to recommendations. The consultation letter should be formatted effectively and should be as brief as possible. A consultation report is more likely to be followed if it is concise, specific, relevant and easy to read. Focus group discussions have revealed, as previous studies have shown,\(^{11,12}\) that several points, such as limiting the list size to fewer than 6 recommendations, emphasizing on specific central issues and identifying crucial and therapeutic recommendations have a significant influence on the compliance to the consultant’s recommendations. Most of the focus groups underlined that consultations are most likely to be effective if the recommendations are specific regarding the drug dosage, the frequency and the route. Enumerating a long list of suggestions is likely to decrease the probability that they would be followed, including the crucial ones.

**Group 2: principles and attitudes (non-observable skills).**

1. Mutual respect and co-operation.

According to previous reports,\(^ {2,7}\) focus groups have expressed their concerns about the negative effect that open disagreement could have on patient care. Implementing the recommendations in a positive atmosphere of communication and respect is probably the dominant influence on consultation efficiency. If the consultant disagrees on some matter with the referring physician, he should be diplomatic when discussing issues with the patient in order to avoid criticism of the primary care physician’s management.

2. Clarification of the urologist’s and the referring physician’s respective roles in patient cares.

It is sometimes necessary for the consultant to clarify his role in patient management through direct communication with the referring physician. All of the focus participants emphasized the fact that the consultant should not overstep the limits of his specialty. He should be careful to address the problem for which he was consulted and to avoid running arguments in and out of the medical record with other departments, especially if the problem lies outside his field. The patient should be advised to return to the care of the referring physician. Referring physicians and consultants both share responsibility for continuing care.

3. Continuous medical education without condescension.

Consultation can also be an important way of continuing medical education. Referring physicians appreciate consultants who make an active effort to share their expertise and insights without condescension. In some cases, the consultant may appropriately provide the referring physician with 1 or 2 references relevant to the patient’s problems. This does not replace a written discussion of principles of management of the case with the referring physician. In general, the most worthwhile references to copy are from first-line subspecialty journals to which the requesting physician does not subscribe.

**Discussion**

The research goals were (a) to identify the skills required in contacts with the referring physicians for an effective consultation; and (b) to produce a consensual definition of these particular skills. The focus group method appears as a useful means to achieve this goal.\(^ {24}\) The specialists and the referring physicians participating in focus groups represented different areas of practice and were questioned independently. It is interesting to note that for both groups, the non-observable skills were judged as important as the observable ones.

The main value of our study is that it should increase the awareness of the importance of consultation skills in resident education. Our results raised questions about how to teach and assess the skills, principles and attitudes which define a good consultant. Limited attention is given to consultation and communication skills in specialty residency programs. Consultation skills of residents are rarely assessed in certification examinations. It is well established that students adapt the content of their learning to what they perceive as important in the evaluation system, which explains why residents are willing to invest more energy in developing their diagnostic and technical abilities, rather than in sharpening their consultation skills.

The establishment of this competency framework has had applications in our own residency program.
In order to evaluate the level of the residents’ performances in this particular area of Urology practice, a formative assessment of 5 standardized patient-based OSCE stations with outpatient problems was administered to 20 residents. The residents globally performed poorly. Furthermore, despite the fact that these outpatient cases were relevant, we found that the two-third of residents did not have the opportunity to experience similar problems in their practice. These data confirmed that education in this field should be improved, which prompted us to reassess the current teaching, learning and evaluation strategies regarding the Urology residents.

Therefore, significant improvements have been introduced in our educational practice. Resident rotation in our outpatient clinic has been started. Residents now carry out their own individual consultation and are encouraged to observe Faculty member consultations. Practical guidelines have been printed in a booklet form for all the residents. Our Faculty staff has prepared a selection of outpatient cases representative of Urology practice. For each case, this included the creation of a diagnostic investigation and therapeutic algorithms. The framework of inter-physician’s communication skills has been incorporated into the guidelines.

One point should be stressed during this curriculum change: we need to clearly define the attributes which should be measured. Effective assessment of interpersonal and communication skills will be a key challenge not only for our department, but also for the entire Faculty. Various other methods by which consultation skills assessments should be undertaken has currently been developed, including case studies during staff meeting and elaboration of OSCE stations. Our next challenge will be: (a) to establish the consensual validity of our criteria, which will be essential in order to make correct judgement about consultant performance (b) to assess the effectiveness of this training program change. Follow-up measurements should be performed to evaluate the level of expertise in consultation that our residents have reached after instituting remedial teaching and learning practice.

In conclusion, this research yielded an area in medical education which merits greater attention. It provides a framework of consultation skills that should lead to an improvement in the teaching and evaluation of consultation skills during residency in Urology as in other disciplines. This framework should be useful beyond our specialty, in other fields of medicine.

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COMMUNICATION SKILLS: A QUALITATIVE STUDY


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