Ethics Consultation at a Large Urban Public Teaching Hospital

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OBJECTIVES: To describe the population served and issues encountered by Hospital Ethics Committee consultation, to describe the incidence of consultation per hospital admission, and to describe the resource utilization per consult.

PATIENTS AND METHODS: This is a retrospective review of all ethics consults at a large urban teaching hospital and level one trauma center in a metropolitan area from January 1, 2004, through December 31, 2006. The data points analyzed were patient demographics, time spent by consultants (resource utilization), and the choice to pursue a full consult, which differs from a brief consult by the number of ethics consultants involved and the formality of the deliberative process.

RESULTS: A total of 285 consults were conducted or 0.16% (95% confidence interval, 0.14%-0.18%) of all hospital admissions. The highest incidence was 0.88% (95% confidence interval, 0.59%-1.3%) for the trauma intensive care unit. The average age of patients consulted on was 51 years, and 54% were in the intensive care unit. Of the consults, 90% were brief, and 52% were requested by house staff. Consultants logged 60,368 minutes, 38% of which were devoted to full consults (10% of total). Consults in obstetrics, general medicine, and surgery were the most time-consuming. Pregnancy and human immunodeficiency virus were more prevalent in full consults. The "classic" ethics cases of confidentiality (5%), patients requesting futile treatment (5%), brain death (4%), error disclosure (1%), and organ-donor rights (0.3%) were marginal in our series.

CONCLUSION: Little data exist on the practice of ethics consultation services. To our knowledge, this series represents the largest to date. Specific issues, patient characteristics, and hospital services were more prevalent in the most time-consuming consults. These data can be used to target the education of residents and inform hospital quality initiatives.

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ECS = ethics consultation services; HEC = Hospital Ethics Committee; HIV = human immunodeficiency virus; ICU = intensive care unit

Since the first report of formal ethics consultation in 1984,¹ ethics consultation services (ECS) have proliferated so widely that they are now nearly universal.² Since 1992, the Joint Commission has required hospitals to have a formal process for resolving ethical problems in clinical practice. Roughly 55% of US physicians have requested an ethics consultation³ and, most importantly, up to 95% think the availability of such a service is useful and important.⁴

Because most of the literature on ECS is theoretical, Mark Siegler, MD, widely considered the founder of clinical ethics, recently made a plea for quantitative studies (Introductory Remarks, presented at 20th annual conference of the MacLean Center for Clinical Medical Ethics, at the University of Chicago; Chicago, IL, November 14, 2008). Indeed, what little we know about the patients served by

and the issues that generate ethics consults is obtained from case series. In their thorough review, Swetz et al⁵ found only a handful of case series with quantitative analysis, and only 3 in the past 20 years. The combined experiences of diverse institutions will paint a more complete picture of the current ethical landscape as experienced in hospitals. To our knowledge, this is the largest case series to date from a large urban public teaching hospital and level one trauma center. Because consensus has been achieved on the goals of consultation,⁶ namely to improve the "process and outcomes of patient care," we offer our data as a springboard to quality initiatives and targeted educational programs. Clinical ethics is a field that needs more data to drive ethics education, to best allocate resources, to determine satisfaction, and, above all, to evaluate how well it accomplishes its stated goals.

PATIENTS AND METHODS

The Emory University Institutional Review Board approved this retrospective study. All ethics consultations performed at a large urban public teaching hospital in Atlanta during the calendar years 2004-2006 were included. At our institution, anyone can request an ethics consult, which is available 24 hours per day, 7 days per week. Once initiated, the Ethics Intake Team, consisting of one physician and one nonphysician (both members of the Hospital Ethics Committee [HEC]), assesses the situation in a manner described previously.^{7,8} They identify the ethical issues involved by reviewing the patient's record and interviewing the parties involved. In all situations, a standard ethics data collection "intake form" is filled out by the Ethics Intake Team, and a file for each consult is created and maintained by the HEC. This form details the clinical specifics and the ethical dimensions of the case. If the question can be answered by an informal conversation with the staff and/or family, by referencing a hospital policy, or by collecting more data, the consultant leaves a written recommendation in the chart

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TABLE 1. Consultations per Admission by Service

Service	Total admissions	Brief consultation		Full consultation		All consultations	
		Total	% (95% CI)	Total	% (95% CI)	Total	% (95% CI)
General medicine	52,673	103	0.20 (0.17%-0.24%)	9	0.017 (0.01%-0.04%)	112	0.21 (0.17%-0.25%)
Medical ICU	11,485	53	0.46 (0.35%-0.6%)	11	0.096 (0.06%-0.018%)	64	0.56 (0.44%-0.71%)
Trauma ICU	2724	23	0.84 (0.56%-1.3%)	1	0.037 (0.01%-0.21%)	24	0.88 (0.59%-1.3%)
General surgery	6952	12	0.17 (0.1%-0.3%)	2	0.029 (0.01%-0.11%)	14	0.2 (0.12%-0.34%)
Obstetrics	27,396	7	0.026 (0.02%-0.06%)	4	0.015 (0.0%-0.03%)	11	0.04 (0.02%-0.07%)
Psychiatry	4072	3	0.074 (0.02%-0.21%)	0	0.0 (0.0%-0.09%)	3	0.07 (0.02%-0.21%)
All ICUs	21,841	140	0.64 (0.54%-0.75%)	15	0.069 (0.04%-0.11%)	155	0.71 (0.61%-0.83%)
Overall	181,558	256	0.14 (0.12%-0.16%)	29	0.016 (0.01%-0.03%)	285	0.16 (0.14%-0.18%)

Values are displayed as follows: total consultations, percentage of admissions (95% confidence interval [CI]). ICU = intensive care unit.

(a brief consult). Some cases are more difficult to resolve, so a formal (full) ethics consult is convened, consisting of a larger subset of the entire HEC, to review the information, talk to all parties involved, and render a formal recommendation. During these full-case consults, the members of the health care team and patient and/or family members are invited to join the HEC to share their concerns and discuss the issues at stake. The resources invested are described in terms of the time (minutes) HEC members spend in active conversation or deliberation. Ethics consultations are not billable services, and during the time under study only one member of the committee (a clinical ethicist by training) received a salary for the purpose of ethics consultation.

One member of the HEC reviewed all the cases, coded and entered all data related to the ethics consultations (scrubbed of any HIPAA [Health Insurance Portability and Accountability Act] identifiers) into a Microsoft Excel file (C.J.V.). These data were then analyzed by another member who was not involved with the consultations in the timeframe under study (E.B.T.). The statistical analysis is univariate, which included unpaired Student *t* test for continuous variables and Fisher exact method for categorical variables. Data on the incidence of ethics consultation were derived from the actual institutional data of admissions per service annually, during the years studied.

RESULTS

In the 3-year period under review, in which our hospital had a total of 181,558 admissions, the HEC staffed 285 consultations corresponding to an incidence of 0.16% (95% confidence interval, 0.14%-0.18%). By year, the distribution was 82 in 2004 (0.14%), 82 in 2005 (0.14%), and 121 in 2006 (0.2%). The incidence of consultation by service is described in Table 1. We also describe the differences between brief and full consultation. Overall, 256 consults were brief, with 29 proceeding to full consultation. The overall monthly rate of consultation was 7.9, with 7.1 brief consults and less than one full consult each month. A significant difference

($P<.001$) was noted between the proportion of brief and full consults per service overall and for all intensive care unit (ICU) beds, as well as the specific services of general medicine, medical ICU, and trauma ICU.

Both demographic and clinical information are shown in Table 2. Given that the records of time spent for 18 brief consultations were missing information, we chose not to include the partial records in Tables 3, 4, and 5.

Of the brief consults, 51% involved male patients, the mean $\pm$ SD age of the patients was 52 ± 21.8 years (median, 53 years; range, 1 day to 108 years), and the time spent per case averaged 185 minutes. Of the brief consults, 140 (59%) occurred in the ICU, which represented 0.64% of ICU admissions. Of the full consults, 12 (41%) involved male patients, the mean $\pm$ SD age was 41.9 ± 20.7 years (median, 45 years; range, 1 day to 83 years), and the time spent per case averaged 935 minutes. Of full consults, 15 (52%) occurred in the ICU, representing 0.07% of all ICU admissions. The differences between brief and full consults for the age of patients involved and time spent in consultation were significant ($P=.02$ and $P<.001$, respectively). The consultations involved a wide variety of diagnoses. For each patient, we identified a primary diagnosis (the main reason a patient was hospitalized) and secondary diagnoses. Some diagnoses are counted twice when associated with trauma. For brief consults, the most common primary diagnosis was neurologic disease (34%), followed by infectious diseases (24%), malignancy (16%), and trauma (11%). The diagnosis of pregnancy was statistically significant: 10% of the full and 5% of the brief consults ($P=.03$). Of the secondary diagnoses, psychiatric disease was the most common. Human immunodeficiency virus (HIV)/AIDS ($P=.05$) and pregnancy were the only secondary diagnoses that were statistically significant among the full consults. For context, at a time when 4% to 5% of adult discharges from our hospital had a diagnosis of HIV/AIDS, 15% of brief and 28% of full consults involved HIV-positive patients.

Those requesting the consult were of diverse ranks and services (Table 3). For brief consults, the most common

TABLE 2. Demographics, Diagnoses, and Documentation^a

Characteristic	Brief consultation	Full consultation
Total	256 (90)	29 (10)
Male	122 (51)	12 (41)
Age (y), mean $\pm$ SD ^b	52 $\pm$ 21.8	41.9 $\pm$ 20.7
ICU bed	140 (59)	15 (52)
Time spent (min), mean $\pm$ SD ^c	185 $\pm$ 177	935 $\pm$ 766
Primary diagnosis ^d		
Neurologic disease	82 (34)	7 (24)
Infectious diseases	58 (24)	5 (17)
Malignancy	38 (16)	4 (14)
Trauma	26 (11)	1 (3)
Renal disease	9 (4)	3 (10)
Multiorgan failure	11 (5)	1 (3)
Psychiatric diagnosis	12 (5)	2 (7)
Pulmonary failure	13 (5)	0 (0)
Pregnancy ^b	14 (5)	3 (10)
Other	15 (5)	3 (10)
Secondary diagnosis		
HIV/AIDS ^b	36 (15)	8 (28)
Malignancy	12 (5)	1 (3)
Pregnancy ^b	1 (0)	2 (7)
Psychiatric diagnosis	40 (17)	5 (17)
Pulmonary failure	12 (5)	2 (7)
Renal disease	23 (10)	2 (7)
Sepsis	25 (11)	3 (10)
Documentation		
Advance directive	5 (2)	0 (0)
DNR status	36 (15)	3 (10)
Issue of hospital policy	31 (13)	3 (10)
Power of attorney	7 (3)	0 (0)
Surrogate available ^c	166 (70)	3 (10)

^a Data are No. (percentage) unless indicated otherwise. DNR = do not resuscitate; HIV = human immunodeficiency virus; ICU = intensive care unit.

^b Significant difference, $P < .05$.

^c Significant difference, $P < .001$.

^d Primary diagnoses are counted twice if associated with trauma.

requesting teams were general medicine (43%), medical ICU (22%), and trauma ICU (10%); however, the trauma ICU, medical ICU, and general medicine services had the highest consult per admission ratios (Table 1). The general medicine services continue to perform rounds on patients admitted to the ICU and thus often request consults from the ICU. The only significant difference between brief and full consult requestors was the prevalence of obstetric cases: 3% brief vs 14% full consults ($P = .02$). The actual requestor was most often a house staff member (52%), an attending physician (20%) or social worker (11%), with no significant differences between our 2 groups. For Tables 3, 4, and 5, we analyzed only those cases with complete records (time spent). Accordingly, these percentages reflect proportions of 238 cases.

Each consult involved multiple ethical issues, all of which are included in Table 4. For brief consults, the most common reason recorded involved issues relating to the level of care. For example, code status was discussed in 46%

and curative vs palliative therapy in 40%. Withholding or withdrawing life-sustaining treatment was involved in 18% of brief and 24% of full consults. This is in keeping with the fact that only 2% of patients had advance directives, and 15% had previously determined their do-not-resuscitate status. Of patients involved in brief consults, 70% had surrogates to speak on their behalf and clarify their wishes, whereas only 10% of patients for whom full consults were performed had surrogates available ($P < .001$). In contrast, the issues of code status ($P < .001$) and curative vs palliative care ($P = .02$) were underrepresented in the full consults. Similarly, communication issues or disagreements between the patient or surrogate and the health care team played a role in 22% of brief consults but in only 10% of full consults ($P = .05$); however, a specific subset of cases relating to obligations to patients considered "noncompliant" were more represented among the full consults ($P = .02$). That said, when disagreements and communication issues arose within families, they were consistently more prevalent in the full consults ($P = .01$). Some other issues were slightly more represented in full consultations: initiating hospice care ($P = .04$) and cultural barriers ($P = .03$). In terms of the frequency in which they arose, the specific issues of confidentiality (5%), brain death (4%), language (4%) or cultural (2%) barriers, cost-resource utilization (3%), legal risk (2%), disclosure of error (1%), and spiritual issues (1%) played marginal roles in our series. The same was true for donor rights (0.3%). For context, our hospital has received the Medal of Honor for Organ Donation from the Department of Health and Human Services for converting greater than 75% of those eligible into organ donors.

As we tracked resource utilization in minutes logged by consultants, we also commented on the difficulty of cases

TABLE 3. Team of Origin and Rank of Requestor^a

	Brief consultation ^b	Full consultation
Team of origin		
General medicine	103 (43)	9 (31)
Medical ICU	53 (22)	11 (38)
Trauma ICU	23 (10)	1 (3)
General surgery	12 (5)	2 (7)
Obstetrics	7 (3)	4 (14)
Neonatology	6 (3)	1 (3)
Psychiatry	3 (1)	0 (0)
Other	31 (12)	1 (3)
Requestor		
House staff	123 (52)	17 (59)
Attending physician	47 (20)	3 (10)
Social worker	26 (11)	4 (14)
Nurse	18 (8)	2 (7)
Other	24 (10)	3 (10)

^a Data are No. (percentage). ICU = intensive care unit.

^b Percentages reflect 238 cases for which records were complete.

TABLE 4. Reasons for Consultation^{a,b}

	Brief consultation	Full consultation
Level of care		
Code status ^c	109 (46)	3 (10)
Curative vs palliative ^d	95 (37)	5 (17)
Withhold or withdraw from life-sustaining therapy	43 (18)	7 (24)
Hospice care ^d	27 (11)	8 (28)
Incompetent patient refuses non-life-sustaining therapy	11 (5)	1 (3)
Incompetent patient refuses life-sustaining therapy	10 (4)	0 (0)
Competent patient refuses non-life-sustaining therapy	9 (4)	1 (3)
Competent patient refuses life-sustaining therapy	7 (3)	1 (3)
Futility issues		
Patient/surrogate requests futile therapy	12 (5)	0 (0)
Health care team requests futile therapy	2 (1)	1 (3)
Communication issues/disagreements		
Between patient/surrogate and team	53 (22)	3 (10)
Between patient and surrogate	24 (9)	5 (17)
Among staff	30 (12)	4 (14)
Other		
Informed consent	40 (17)	1 (3)
Confidentiality	12 (5)	0 (0)
Brain death	9 (4)	0 (0)
Language barrier	9 (4)	2 (7)
Cost/resource	7 (4)	1 (3)
Obligations to noncompliant patient ^d	7 (3)	4 (14)
Patient's coping mechanism	6 (3)	2 (7)
Legal risk	5 (2)	0 (0)
Cultural barriers ^d	4 (2)	3 (10)
Disclosure of error	3 (1)	0 (0)
Spiritual issues	3 (1)	0 (0)
Professional boundaries	2 (1)	1 (3)
Quality of life ^e	1 (0)	3 (10)
Genetics	0 (0)	1 (3)
Donor rights	0 (0)	1 (3)

^a Data are No. (percentage). Because more than 1 reason may apply to a given consultation, percentages do not equal 100.

^b Percentages reflect 238 cases in which records were complete.

^c Significant difference, $P < .001$.

^d Significant difference, $P < .05$.

^e Significant difference, $P = .004$.

by team of origin (Table 5). Overall, in 3 years, the HEC spent a total of 60,368 minutes on all 285 consults, 23,218 minutes (38%) of which were spent on the 29 full consults. Furthermore, 8010 minutes (13%) were spent on the 3 most time-consuming consults. Large differences were noted between our hospital's services with respect to the average time spent per consultation. In general, although the ICU teams are well represented in the full consult group, the intensity of their consultations was milder than that of the non-ICU teams. For many services, brief consults did not progress to full consults. The services that required the most time-intensive consultations were obstetrics, general surgery, and the medical ICU. These were also the top ser-

TABLE 5. Resource Utilization by Service

	Overall	Brief consultation	Full consultation
Obstetrics	536±747.3	312.5±320.4	871.3±1120.0
Surgery	464±833.2	161±105.3	1965.0±1633.4
Medical ICU	332±331.1	186.8±184.5	692.4±615.2
Medicine	269±373.8	192±190	1176.4±655.7
Orthopedics	202.4±198.7	202.4±198.7	NA
ED	202.5±180.2	202.5±180.2	NA
Radiation oncology	195±0.0	195±0.0	NA
Trauma ICU	182±91.9	172.5±84.6	331±0.0
Neonatology	175±72.7	185.0±181.8	135±0.0
Pediatrics	171.0±105.4	171.0±105.4	NA
Neurosurgery	140±115.8	140±115.8	NA
Neurology	137.3±39.7	137.3±39.7	NA
Psychiatry	135.3±24.6	135.3±24.6	NA

Data are mean ± SD minutes spent per consultation. ED = emergency department; ICU = intensive care unit; NA = not applicable.

vices in terms of the proportion of consults that progressed to full level.

DISCUSSION

Our ethics consultation service in a large urban public teaching hospital and level one trauma center is busy. This is the second series⁹ from such an institution, the first in 20 years, and to our knowledge, it represents the largest to date. This series is also the first to detail the incidence of consultations in general and by service, as well as the differences in character and resource utilization between those cases receiving brief and full consultation.

The population we serve is similar to that discussed previously in the literature.^{5,8-16} The average age (51 years) and proportion of consults in the ICU (52%-59%) are in keeping with published data, as is the proportion of primary diagnoses of neurologic disease and trauma, although we had more related to infectious diseases than most.⁶ The proportion of diagnoses was, with the exception of HIV and pregnancy, not significantly different between the brief and full consults. Indeed, although only 7 consults involved obstetric services, 4 resulted in full consults. That 15% of brief and 28% of full consultations were for HIV-positive patients may be unique to our experience because we found no similar published data regarding such patients.

The vast majority (90%) of our consultations were brief, and we think this finding can be explained by the differential reasons for consultation. Some conflicts can be handled easily by clarifying the issues and facilitating communication. Nowhere was this more obvious than in the differential representation by surrogates (70% in brief vs 10% in full consults); it is helpful to have a person who can answer questions. In terms of the content, several reasons predominated in the brief, but not the full, consults: those related

to code status, deciding whether to pursue palliative vs curative options, informed consent, and disagreements or communication issues between patients and the health care team. However, some conflicts required more than a reference to policy or a clarifying conversation. Whereas choosing palliative therapy is often a conclusion supported by data and experience, the same cannot be said, for example, for weighing quality of life. In our experience, the issues that prompted full consultation tended to require a discussion that is not merely informed by medical indications, but one that forces confrontation with deeper or cultural values and that may involve active, rather than passive, decisions. Hence, communication issues and disagreements within families or between patients and surrogates, which likely have occurred before the medical scenario, tended to result in full consults. Similarly, whereas disagreements between the patient and the health care team were easily handled, the subset that involved issues of obligations to noncompliant patients was more prevalent in our full consults, implying deeper, personal tensions between caregiver and patient and, more broadly, larger issues of justice and resource distribution. At the same time, certain clinical scenarios are inherently more difficult to navigate. For us, this was apparent in the significant representation of obstetric cases within the full consultations. The ethical issues manifest in pregnancy are famously turbulent, a reality borne out by our experience.

The teams of origin tell an interesting story for our series. The service with the highest incidence of consultation was the trauma ICU (0.88%). This service involved a unique and younger population (average age, 40 years) for whom, given the abrupt, accidental, or violent nature of their presentation to the hospital, discussions about end of life, code status, palliative care, and the goals of care were probably unexpected. We think that the relatively high incidence of ethics consultations on this service reflects the difficulty of navigating those particular conversations in a younger population. Nevertheless, and in keeping with the general trend for those issues in particular, very few consults from the trauma ICU proceeded to full consultation. This experience is echoed by that of the medical ICU; although it had the second highest incidence of consults (0.56%), few of them progressed to full consultation. The ICU setting prompts many ethical conflicts, but they were more likely to be settled with a clarifying conversation or reference to policy in the brief consult. The opposite experience is that of obstetrics, in which many of the conflicts did progress to full consultation.

Some services produced few consults. For example, the psychiatry service had a consult incidence of 0.07% despite psychiatric diagnoses being involved in 21% of all consults. The resource utilization by consult also differs

widely between services, with those from the general surgery and medicine services being the most time-costly. As for the specific reasons for these discrepancies, we can only speculate. We are inclined to think that there are underlying differences in each service's ability to identify and handle ethical dilemmas, as well as differences in receptivity to ethics consultation in general. Regardless, much like the differential representation by diagnosis and ethical issue in our most time-costly consults, there are quality improvement implications to these data. Further studies are needed to determine whether some services intrinsically deal with more difficult ethical issues, whether some medical conditions predispose patients to more ethical troubles, and whether these represent opportunities for education initiatives or proactive consultations.

Most consults are from house staff. This is largely because our hospital is house staff driven, and it is important for 2 reasons. First, for urban teaching hospitals such as ours, it underscores the importance of appropriate training in clinical ethics before and during the house staff years. We believe that for ethics education to be practically useful, it needs to be data driven. At our institution, the bulk of the ethics instruction for house staff deals primarily with paperwork issues—code status and informed consent. However, our experience shows that these issues, although very common, are easily solved. Other ethical issues discussed frequently in our ethics instruction—confidentiality, brain death, donor rights, language or cultural barriers, cost-resource utilization, legal risk, disclosure of error, spiritual issues—were very rare in this series, let alone in the most time-intensive consults. Instead, our data support a refocus on the skills that best address the most difficult conflicts, which in our series are conflicts that demand excellent communication and mediation skills. Namely, disagreements that arise within families and discussions regarding both the choice to initiate hospice care and to pursue palliative rather than curative treatment. Second, it is equally important to recognize that in this house staff–driven hospital, 48% of consults were triggered by non-house staff. Studies are under way to dissect these issues. Our inclination is that these data represent differences in both the house staff's preparation for ethical conflict and familiarity with ethics consultation services.

Our study has some limitations. We do not have the data or follow-up to comment on in-hospital mortality, as has been the custom in previous series. As such we are unable to associate or draw any inferences about the effect of consultation on the length of stay or use of hospital resources, as others have done.^{17,18} In addition, our data were handled by several people, from the intake ethicists, to the database creator, to the primary author. We can only respond to this by drawing attention to our internally consistent and logi-

cally reasonable data. Although it would have been useful and interesting to describe the intensity of consultation by reason for consultation, we could not. As in most series, the reasons for consultation are multiple; given the way we constructed the data, it would be impossible to make such arguments.

CONCLUSION

Our findings have 3 central implications. First, we think that the increasing use of our readily available ECS speaks to its value in this setting for most services. Certainly, the ideal ethics consult comes from within, and there is much room for improvement in the ethical education of medical school and beyond. However, for the time being, ethics consultations are a commonly requested service in our hospital, whose use is increasing over time. Second, the absence of the "classic" ethics cases from our series and the differential representation of certain conditions within our most time-consuming consultations highlight areas to address in the content and quality improvement ethical component of medical education. In this regard, we think that education should be data driven so that a program responds to the specific dilemmas of the clinical environment as part of a quality initiative. Finally, the distinction between brief and full consultation is useful. Our data have helped us uncover potentially at-risk populations and identify the particular ethical issues most troublesome for a given hospital's patients. In this sense, the data from this retrospective study may indicate a role for proactive consultations. A prospective study is under way that is aimed at identifying the clinical characteristics of patients who will request or need an ethics consult on admission to the medical ICU or trauma bay.

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