

Clinicians' Judgment of Capacity of Nursing Home Patients to Give Informed Consent

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Objective: The study determined the rate of incapacity to give informed consent for medical treatment among patients admitted to a nursing home and assessed whether clinical staff members recognized this incapacity and whether they used alternative means to provide surrogate decision making for their patients' treatment. **Methods:** After 44 patients admitted to a nursing home affiliated with a major teaching hospital gave oral consent, two standardized tests, the Hopkins Competency Assessment Test (HCAT) and the Mini Mental State Examination (MMSE) were administered to them. Later a researcher blind to the test results reviewed subjects' clinical records to determine whether staff recognized any incapacity in giving informed consent for medical treatment. **Results:** Twenty of 44 subjects were identified by the HCAT as incompetent to give informed consent for medical treatment. Clinical staff had identified 13 of those subjects as clinically incompetent. None of the subjects whom clinical staff identified as clinically incompetent was provided with surrogate decision makers in accordance with procedures outlined in state law. **Conclusions:** The prevalence of incapacity to give informed consent in the nursing home population was high. Clinical screening by staff did not identify all clinically incompetent patients, and staff had unresolved conflicting opinions about individual patients' capacity to give informed consent. Even when staff recognized a patient's incapacity to give informed consent, proper legal procedures for appointing surrogate decision makers were not followed. (*Psychiatric Services* 47:956-960, 1996)

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The modern doctrine of informed consent has come to mean that a patient's consent to medical treatment must be knowing, competent, and voluntary. For informed consent to meet these requirements, the physician must explain the proposed treatment so that the patient understands its indications, the attendant risks and benefits, and the alternatives to the treatment.

All adult patients are presumed competent to make medical treatment decisions for themselves. In *Cruzan v. Director, Missouri Department of Health* (1), the Supreme Court held that, under the 14th Amendment to the Constitution, "a competent person has a constitutionally protected liberty interest in refusing unwanted medical treatment." Although technically competency is a legal term and only a judge can declare a patient incompetent, physicians frequently assess patients' capacity to make informed decisions about their health care. This capacity is often termed clinical competency or medical capacity. To avoid confusion in the discussion presented here, we use the terms "clinically competent" and "clinically incompetent" to describe patients whose clinical capacity is assessed by physicians rather than subject to a judicial finding.

Although the process of obtaining informed consent for clinically in-

competent patients through surrogates may be standardized in acute care hospitals, this process may not be well established in nursing homes or, if it is established, may not be followed (2). This issue is of particular concern because nursing home patients are at high risk for impairment in their decision-making processes. For example, Rovner and colleagues (3) found that 80 percent of new admissions to nursing homes had a diagnosable psychiatric disorder, with dementia, identified among 67 percent of new admissions, the most common.

Several standards have been proposed to assess decision-making capacity among elderly persons (4-8). Our review of the geriatrics literature revealed several studies that discussed "competence" and "informed consent" among nursing home patients (4,5, 9-13), but in only a few studies has the issue of decision-making capacity been explored systematically (14-20).

In nonemergency situations in Maryland, where the study reported here was conducted, the physician who feels that a patient lacks the clinical capacity to give informed consent for treatment must choose an alternative means to obtain consent to provide treatment. Alternatives include a previously executed written or oral advance directive, the surrogate decision process, or guardianship procedures (21).

The study reported here investigated whether nursing home staff recognized patients' incapacity to consent to treatment and, if so, how informed consent was obtained from clinically incompetent patients. We first used a standardized competency assessment instrument to determine the prevalence of incapacity to consent to treatment among patients admitted to a nursing home. We then compared the views of clinical staff about patients' capacity to consent to treatment with the results of the standardized competency assessment. Finally, we reviewed how staff clinically applied Maryland's legally prescribed procedures for treating patients whom they viewed as lacking the capacity to give informed consent for medical treatment.

Methods

The study was done in 1994 in a nursing home associated with a major teaching hospital. After receiving institutional review board approval, we screened consecutive admissions to the nursing home for participation in the study. We informed patients' attending physicians of our research protocol, and then we sought subjects' verbal assent by reading a description of the study to the potential subject and asking whether he or she wished to participate. Anyone who gave any indication of refusal, either verbally or behaviorally, was not interviewed further. We collected demographic data from the nursing home charts of all potential subjects, including those who refused to participate.

Patients who agreed to participate in the study were assessed by members of the research team using standardized interview instruments, and the patients' charts were reviewed to gain information about whether clinical staff viewed the patient as clinically competent or incompetent. Two postdoctoral fellows in forensic psychiatry (the first two authors) and one PGY-IV adult psychiatry resident (the third author) conducted the interviews with the subjects and gathered data from the charts. After obtaining a subject's verbal assent, one of the three researchers, who was blind to the content of the subject's chart, administered the Hopkins Competency Assessment Test (HCAT) (22) and the Mini Mental State Examination (MMSE) (23). Although the MMSE is widely accepted as a means of assessing patients' cognitive functioning, its scores do not necessarily correlate with measures of decision-making capacity (22). The instruments were administered within the first seven days of admission to the nursing home.

The HCAT is a brief instrument developed to screen patients for capacity to make treatment decisions and to write advance directives. It consists of a short essay describing informed consent and advance medical directives, followed by six questions about the material. In a previous study to validate the HCAT, Janofsky and colleagues (22) compared HCAT scores with results of clinical competency examinations by a forensic psychia-

trist and found that the HCAT has a sensitivity and specificity of 100 percent when scores of 4 and higher are used to indicate clinical competency. In the same study, they found that MMSE scores did not reliably differentiate clinically competent from incompetent patients with reasonable sensitivity or specificity.

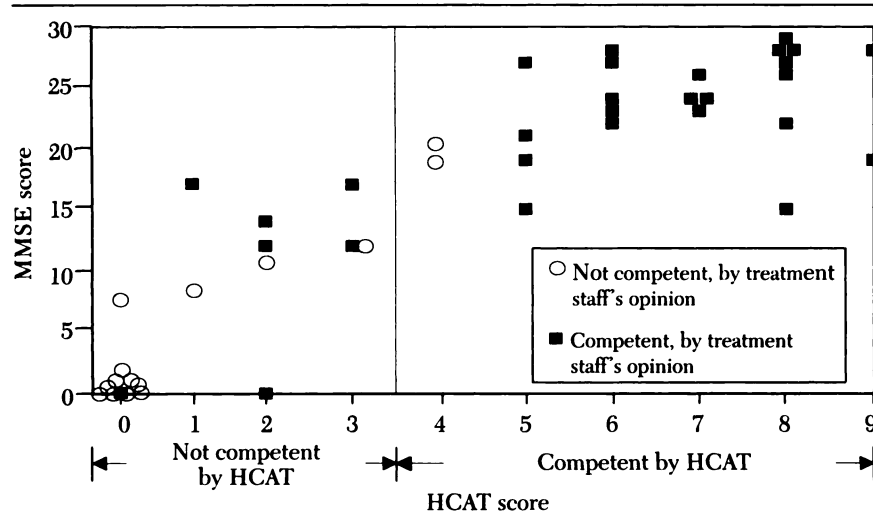
Based on these previous findings, we elected to use HCAT scores in this study as a measure of subjects' decision-making capacities. Subjects received a copy of the instrument to read while it was being read to them by the researcher. The range of possible scores on the HCAT was divided categorically into those indicating clinical incompetence and those indicating clinical competence, with a score of 4 or above indicating clinical competence. The HCAT was slightly modified for this study to take into account recent changes in Maryland's law on advance directives.

A different researcher, blind to the subject's performance on the HCAT and MMSE, later reviewed the subject's chart after the subject had been a patient in the nursing home for at least two weeks. The chart review was done to gain information about whether the clinical staff viewed or treated the subject as clinically competent to make decisions about treatment. The charts included information about the subject's mental status at the time of admission and throughout the subject's stay in the nursing home. The researcher looked for nine specific factors in six different places in the medical record to determine clinical staff's view of the subject's clinical competency.

Conflicting assessments of clinical competency in a given chart were resolved by research team members who were not aware of HCAT results. Each chart was first reviewed by one researcher, and if all assessments in the chart were consistent, that researcher made the categorization. If the researcher found conflicting assessments, the chart was reviewed by another researcher and the two made the categorization by consensus. We then compared the categorizations of clinical competency based on HCAT scores with the categorizations based on the chart review.

Figure 1

Scores on the Hopkins Competency Assessment Test (HCAT) and the Mini Mental State Examination (MMSE) of 44 nursing home patients, by treatment staff's opinion of the subject's clinical competency



Results

The three researchers' interobserver reliability was tested in administrations of the HCAT with a group of 15 subjects not included in the study population. Spearman's rank-order correlation coefficients for all possible pairs of researchers were .96, .97, and .99 ($p < .001$ for each). These coefficients indicated a high degree of interobserver reliability.

Fifty-nine subjects were screened within one week of their admission to the nursing home. Forty-four subjects (75 percent) agreed explicitly (38 subjects, or 86 percent) to participate or gave no behavioral indications of not wishing to participate (six subjects, or 14 percent). The remaining 15 subjects did not differ significantly from the participating subjects in age, sex, race, or mental or physical diagnoses.

The mean \pm SD age of the 44 subjects was 68 ± 15 years, with a range of 26 to 95 years. Thirteen of the subjects, or 30 percent, were African American; 28, or 64 percent, were Caucasian; and one, or 2 percent, was Asian. The ethnicity of two subjects was unknown. Thirty-one subjects, or 71 percent, were women.

Twenty-eight subjects, or 64 percent, had no mental illness diagnosis recorded in their charts. Ten subjects, or 23 percent, had a diagnosis of dementia, but this diagnosis was

not further characterized by type. Twenty-two subjects, or 50 percent, suffered from multiple medical problems, most typically coronary artery disease, diabetes, hypertension, and stroke. For four subjects, or 9 percent, stroke, which included both multi-infarct disease and large-vessel strokes, was listed as a single diagnosis for their admission.

Figure 1 shows the distribution of HCAT and MMSE scores. MMSE scores are provided as a rough guide to subjects' cognitive status. Subjects' HCAT scores ranged from 0 to 9.

The HCAT identified 20 subjects, or 45 percent, as clinically incompetent and 24 subjects, or 55 percent, as competent. Of the 20 subjects who were identified as clinically incompetent by the HCAT, 11, or 55 percent, had an HCAT score of 0.

In contrast, clinicians identified 15 subjects, or 34 percent, as clinically incompetent and 29 subjects, or 66 percent, as clinically competent. Of the 20 subjects identified as clinically incompetent by the HCAT, 13 subjects, or 65 percent, were recognized as incompetent by clinicians. Twenty-two of the 24 subjects identified as clinically competent by the HCAT, or 92 percent, were treated by clinicians as if they were competent.

Further analysis revealed that when clinicians treated patients as if they were clinically incompetent,

those clinicians were likely to be correct in their assessments 87 percent of the time. Thirteen of 15 patients treated by clinicians as clinically incompetent had scores on the HCAT that indicated clinical incompetence. Conversely, when clinicians treated a subject as clinically competent, they were likely to be correct 76 percent of the time. Twenty-two of the 29 patients treated by clinicians as clinically competent were categorized as clinically competent based on HCAT scores.

Although five subjects were identified on the chart as having a guardian, none of these charts included guardianship documents. Six subjects had advance directives; two were written advance directives, and four were oral. Of the four oral advance directives, none conformed to the legal requirements. According to Maryland's Health Care Decisions Act (21), "An oral advance directive shall have the same effect as a written advance directive if made in the presence of the attending physician and one witness and documented as part of the individual's medical record. The documentation shall be dated and signed by the attending physician and the witness." Typically, clinicians documented in the chart that a subject had discussed some aspect of future medical interventions, including whether or not to be resuscitated, but did not further investigate this request or ascertain if the patient was competent to give such a directive.

The second aspect of this study examined how clinical staff actually treated patients they viewed as being not competent to give informed consent for medical treatment. Of the 15 patients viewed by clinical staff as clinically incompetent, none was treated as incompetent by staff physicians in the manner outlined in Maryland law. That is, in the charts of patients whom the treatment team explicitly identified as unable to give informed consent, there was no evidence that treatment was being provided based on the state's surrogate decision-making process, a written or legally valid oral advance directive, or the decisions of a court-appointed guardian.

Discussion and conclusions

The prevalence of clinical incompetence to give informed consent for medical treatments among the nursing home patients in this study was high; 45 percent were clinically incompetent. Furthermore, 55 percent of the patients identified as clinically incompetent by the HCAT had profound impairment in their decision-making capacities, as indicated by HCAT scores of 0. Because the HCAT measures ability to understand simple instructions that have a low threshold for competence, these results are particularly striking.

The results of this study show that clinicians at an academic nursing home were able to identify accurately only 65 percent of the patients whose HCAT scores indicated they were clinically incompetent. This relatively low sensitivity was present despite the multiple opportunities clinicians are given to address clinical incompetency in the patients' record and the clinicians' focus at the nursing home on ethical and practical issues of patient autonomy.

The clinicians were able to identify 92 percent of the patients with clinical competency, as measured by the HCAT. This finding of higher specificity must be interpreted cautiously. In this study, specificity is a measure of the rate of clinical competency (true negatives) in the nursing home population. The number of true negatives may be elevated not because of a direct assessment that the patient was competent but rather because patients are presumed to be clinically competent. If the treatment team takes no action to test this presumption, the result is an indirect assessment by clinicians that the patient is clinically competent to make treatment decisions.

For eight of the 15 patients who were identified as clinically incompetent based on the chart review, clinical incompetence was indicated in the chart by the physician's having checked a box at the time the admission orders were signed. Nonetheless, for at least three of the remaining seven patients categorized as clinically incompetent based on chart review, the chart included conflicting opinions about the patient's ability to give informed consent.

The relevance of these conflicts is further supported by reviewing the chart's code status sheet, where physicians could indicate any discussion of advance directives, treatment limitations, or code status. Although physicians indicated that only two patients, or 5 percent of the study group, were explicitly clinically incompetent, they raised an issue about competency but drew no conclusions in the charts of 13 subjects, or 30 percent. This finding suggests that the physicians had questions about the patient's capacity to give informed consent but either did not further evaluate the patient's capacity or did

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not resort to the proper procedures for enlisting a surrogate decision maker.

The low sensitivity of clinicians' tests to identify clinical incompetency is of particular concern when one considers that this study was conducted in an academic center where, through didactic training, residents and fellows are alerted to the possibility that many of their patients lack the ability to give informed consent. Although the "screening" process for clinical competency used by clinicians in this particular setting has many components, it is not sensitive enough to identify all patients who lack the capacity to give informed

consent. As a result, a significant percentage of patients who did not have the capacity to understand all aspects of their medical care were allowed to make serious decisions about their care, including whether or not they wished to be resuscitated.

If we accept the concept of "relative" competency in which greater scrutiny is required of treatment refusals that may have grave consequences, then physicians should pay particular attention to a geriatric nursing home population because its members are asked to make decisions about their resuscitative status and about withdrawal of other life-sustaining treatments.

We were most surprised to find that even when a subject was identified as clinically incompetent, staff did not further address this lack of capacity at the time treatment decisions were made, as Maryland's Health Care Decisions Act requires (21). Perhaps physicians were attempting to maximize patients' autonomy or else found that the legal requirements were not easily implemented in a clinical situation.

Further study is needed to examine the attitudes of physicians and other health care professionals about the competency of elderly patients. It could be argued that it is ethically permissible for the treatment team not to follow exact legal guidelines for dealing with patients they had identified as clinically incompetent if staff were informally asking surrogate decision makers for their input. Although we did not question staff directly about their attitudes toward clinically incompetent patients and the legal requirements for treating them, such interviews may provide useful information about how treatment decisions for incompetent patients were made. They may also illuminate clinical concerns that should be considered by state legislatures in drafting future laws.

Our study's major weak point is the use of HCAT scores as the gold standard for clinical competency. At present, the HCAT appears to be a useful research instrument for assessing clinical competency. Other research instruments that may provide a better gold standard for measuring clin-

ical competency could be used in future studies of geriatric populations in an attempt to replicate our findings (24). ♦

References

1. Cruzan v Director, Missouri Department of Mental Health, 497 US 261, 278 (1990)
2. Steinberg A, Fitten LJ, Kachuch N: Patient participation in treatment decision-making in the nursing home: the issue of competence. *Gerontologist* 26:362-366, 1986
3. Rovner BW, German PS, Broadhead J, et al: The prevalence and management of dementia and other psychiatric disorders in nursing homes. *International Psychogeriatrics* 2:13-24, 1990
4. Janofsky JS: Assessing competency in the elderly. *Geriatrics* 45:45-48, 1990
5. Drane JF: Competency to give an informed consent: a model for making clinical assessments. *JAMA* 252:925-927, 1984
6. Roth LH, Meisel A, Lidz CW: Tests of competency to consent to treatment. *American Journal of Psychiatry* 134:279-284, 1977
7. Pfeiffer E: A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. *Journal of the American Geriatrics Society* 23:433-441, 1975
8. Appelbaum PS, Grisso T: Assessing patients' capacities to consent to treatment. *New England Journal of Medicine* 319:1635-1638, 1988
9. Kapp MB: Decision making by and for nursing home residents: a legal view. *Clinical Geriatric Medicine* 4:667-679, 1988
10. Costa LM: Competency and consent. *Geriatric Nursing* 12:254, 1991
11. Tymchuk AJ, Ouslander JG, Rader N: Informing the elderly: a comparison of four methods. *Journal of the American Geriatrics Society* 34:818-822, 1986
12. Overman W Jr, Stoudemire A: Guidelines for legal and financial counseling of Alzheimer's disease patients and their families. *American Journal of Psychiatry* 145:1495-1500, 1988
13. Hoffman PB, Marron KR, Fillit H, et al: Obtaining informed consent in the teaching nursing home. *Journal of the American Geriatrics Society* 31:565-569, 1983
14. Fitten LJ, Lusk R, Hamann C: Assessing treatment decision-making capacity in elderly nursing home residents. *Journal of the American Geriatrics Society* 38:1097-1104, 1990
15. Fitten LJ, Waite MS: Impact of acute medical hospitalization on treatment decision-making capacity in the elderly. *Archives of Internal Medicine* 150:1717-1721, 1990
16. Fitten LJ, Hamann C, Evans GL, et al: Relationship of cognitive impairment to decision-making competence in nursing home residents: development of a competence assessment protocol. *Journal of the American Geriatrics Society* 32(suppl):S19, 1984
17. Tymchuk AJ, Ouslander JG, Rahbar B, et al: Medical decision-making among elderly people in long-term care. *Gerontologist* 28(suppl):59-63, 1988
18. Kloesen S, Fitten LJ, Steinberg A: Assessment of treatment decision-making capacity in a medically ill patient. *Journal of the American Geriatrics Society* 36:1055-1058, 1988
19. Cohen-Mansfield J, Rabinovich BA, Lipson S, et al: The decision to execute a durable power of attorney for health care and preferences regarding the utilization of life-sustaining treatments in nursing home residents. *Archives of Internal Medicine* 151:289-294, 1991
20. Diamond EL, Jernigan JA, Moseley RA, et al: Decision-making ability and advance directive preferences in nursing home patients and proxies. *Gerontologist* 29:622-626, 1989
21. Health Care Decisions Act, Maryland Code, Annotated, Health Gen Sections 5-601 to 5-618 (supp 1993)(effective Oct 1, 1993)
22. Janofsky JS, McCarthy RA, Folstein NE: The Hopkins Competency Assessment Test: a brief method for evaluating patients' capacity to give informed consent. *Hospital and Community Psychiatry* 43:132-136, 1992
23. Folstein MF, Folstein SE, McHugh PR: "Mini-Mental State": a practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research* 12:189-198, 1975
24. Appelbaum PS, Grisso T: The MacArthur treatment and competence study: I. mental illness and competence to consent to treatment. *Law and Human Behavior* 19:105-174, 1995

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