2006

Constructing Competence: Formulating Standards of Legal Competence to Make Medical Decisions

Jessica Wilen Berg
Case Western University School of Law, jessica.berg@case.edu

CONSTRUCTING COMPETENCE: FORMULATING STANDARDS OF LEGAL COMPETENCE TO MAKE MEDICAL DECISIONS

Jessica Wilen Berg, J.D.

*Paul S. Appelbaum, M.D. & Thomas Grisso, Ph.D.**

A young woman twenty-six weeks pregnant and dying from cancer lies heavily sedated and attached to a respirator. Is she competent to determine what life-prolonging measures should be taken, or to consent to an emergency cesarean section that may save her fetus but will probably shorten her life?[1] A quadriplegic young man wishes to end his life and requests a court order granting immunity for the medical staff who will unhook his respirator and administer sedatives. Is he competent to choose to die?[2] A delusional man wanders into a psychiatric hospital and believes he is entering heaven rather than a hospital. Is he "too crazy" to admit himself voluntarily?[3] As these cases indicate, questions of decisionmaking com-

* Ms. Berg is a legal fellow in the Law and Psychiatry Program, Department of Psychiatry, University of Massachusetts Medical School. Dr. Appelbaum is an A.F. Zeleznik Distinguished Professor, Director of the Law and Psychiatry Program and the Chairman of the Department of Psychiatry, University of Massachusetts Medical School. Dr. Grisso is a Professor and Director of Forensic Training and Research, Department of Psychiatry, University of Massachusetts Medical School. This work was funded in part by the John D. and Catherine T. MacArthur Foundation Research Network on Mental Health and the Law.

We would like to thank Professors Richard Bonnie, Ken Hoge, John Monahan, Stephen Morse and John Petrila for their extremely helpful comments on earlier drafts.

1. *See In re* A.C., 573 A.2d 1235, 1238 (D.C. 1990) (en banc).
2. *See* McKay v. Bergstedt, 801 P.2d 617, 620 (Nev. 1990).
3. Zinermon v. Burch, 494 U.S. 113, 114 (1990); Steven K. Hoge, *On Being "Too Crazy" to Sign Into a Mental Hospital: The Issue of Consent to Psychiatric Hospitalization,* 22 BULL. AM. ACAD. OF PSYCHIATRY & L.

petence are inescapable in medicine today. A person's competence will have implications for whether he or she is allowed to decide what type of treatment, if any, is received; whether treatment is discontinued, including life-sustaining treatment; and whether medical professionals implementing decisions are exposed to civil or criminal liability.

The notion of competence in the medical context stems from the law of informed consent,[4] which has evolved over the past three decades into a complex doctrine designed to promote patients' autonomous decisionmaking.[5] Autonomy requires that the patient be offered an active role in the decisionmaking process.[6] This principle recognizes that although physicians have technical expertise, patients have an essential knowledge of their own subjective values and are the best judges of their own interests.[7] There is also an intrinsic value in autonomy; even if an outside expert is better able to make a decision, it is preferable to allow a competent individual to make his or her own choices.[8] Embedded in the philosophical notion of autonomy are concrete requirements of capacity.[9] To the extent that

431, 432 (1994).

4. Informed consent is a legal construct. Much of the jurisprudence in this area has focused on the elements of disclosure, i.e., the amount and type of information that must be imparted to the patient. Valid informed consent also requires an element of voluntariness, or absence of coercion, and a competent patient. *See* Alan Meisel et al., *Toward a Model of the Legal Doctrine of Informed Consent,* 134 AM. J. PSYCHIATRY 285, 286-87 (1977) (describing the development of the doctrine of informed consent); PAUL S. APPELBAUM ET AL., INFORMED CONSENT: LEGAL THEORY AND CLINICAL PRACTICE 23 (1987).

5. *See generally* RUTH R. PADEN & TOM L. BEAUCHAMP, A HISTORY AND THEORY OF INFORMED CONSENT (1986); Meisel et al., *supra* note 4, at 286; APPELBAUM ET AL., *supra* note 4.

6. Bouvia v. Superior Court, 25 Cal. Rptr. 297, 343 (Ct. App. 1986) (citing American Hospital Association statement supporting premise that "the controlling decision belongs to a competent, informed patient").

7. *See, e.g.,* ALLEN E. BUCHANAN & DAN W. BROCK, DECIDING FOR OTHERS: THE ETHICS OF SURROGATE DECISION MAKING 29 (1989); Charles W. Lidz & Robert M. Arnold, *Rethinking Autonomy in Long Term Care,* 47 U. MIAMI L. REV. 603, 605 (1993) (allowing patients to select their own treatment maximizes their best interest).

8. Lidz & Arnold, *supra* note 7, at 605 (suggesting people are better judges of their own interest than the most benevolent outsider).

9. E. Haavi Morreim, *Competence: At the Intersection of Law, Medi-*

a patient's capacity is impaired with respect to abilities necessary to exercise autonomy, that person is less able to participate competently in the decisionmaking process.[10]

Presently there is a lack of both an authoritative framework for thinking about legal competence and clear standards for determining it. Cases and statutes generally lack sufficient analysis of competence and its different elements. Terms such as "understanding" or "rationality" may be poorly defined and used indiscriminately.[11] Even when a statute articulates a

cine, and Philosophy, in COMPETENCY: A STUDY OF INFORMAL COMPETENCY DETERMINATIONS IN PRIMARY CARE 93, 93-125 (Mary Ann Gardell Cutter & Earl E. Shelp eds. 1991). Autonomy enables a person to "examine even his naturally given needs and desires and choose whether to identify with them, shun them, or pursue them." *Id.* at 101. This requires the person to form a "coherent picture of the world and of his place in it." *Id.* In addition, it is "essential that the autonomous person be generally rational in his thinking and judging processes." *Id.* Even John Stuart Mill apparently recognized that limitations on liberty are warranted when a person is "delirious or in some state of excitement or absorption incompatible with the full use of the reflecting faculty." John Monahan, *John Stuart Mill on the Liberty of the Mentally III: A Historical Note,* 134 AM. J. PSYCHIATRY 1428, 1429 (1977) (citing J.S. MILL, ON LIBERTY (1859)).

10. Competency and autonomy, however, are not synonymous. While autonomy refers to the capacity to make independent decisions in general, competence refers to the ability to perform a particular task. Morreim, *supra* note 9, at 102; Tom Beauchamp, *Competence, in* COMPETENCY: A STUDY OF INFORMAL COMPETENCY DETERMINATIONS IN PRIMARY CARE 49, 61 (Mary Ann Gardell Cutter & Earl E. Shelp eds. 1991); *cf.* Lidz & Arnold, *supra* note 7, at 608-19 (identifying three academic models of autonomy, including total independence, free action, and effective deliberation, and proposing a fourth model: consistency with one's values and life goals). The authors argue that autonomy should not always be centered around discrete decisionmaking models. For example, in nursing homes autonomy should focus on the "relationship between patients' lives and their goals and commitments." Lidz & Arnold, *supra* note 7, at 607. Competence and autonomy largely overlap in medical decisionmaking because the focus is on "the patient's competence to do one basic task, namely, to make autonomous decisions regarding his medical situation." Morreim, *supra* note 9, at 102. The capacities needed to be able competently to make a decision are necessary but not always sufficient to be able autonomously to make a decision (e.g., autonomy may be impaired by the application of coercive pressure on an otherwise competent person).

11. *See, e.g.,* Loren H. Roth et al., *Tests of Competency to Consent to*

standard of competence, it is often vague and provides little guidance for those who must apply it. For example, what degree of incapacity suffices to establish incompetence under an "understanding" standard? How much understanding is necessary and what does the patient need to be able to understand? Do different situations warrant the application of different standards or the demonstration of different levels of ability?

The first Part of this Article provides a conceptual clarification of legal competence and identifies a framework of four relevant abilities that are elements of competence standards. It offers a uniform vocabulary derived from competence standards found in cases and statutes and proposes a framework for characterizing four abilities associated with legal competence to make medical decisions. Part II describes the MacArthur Treatment Competence Study, which developed instruments to evaluate capacity based upon the four abilities and applied them to three patient populations: patients suffering from angina pectoris, severe depression and schizophrenia. Finally, Part III examines the policy implications of the foregoing empirical analysis for future reforms of the law on competence.

I. LEGAL STANDARDS OF COMPETENCE

Competence is a legal construct:[12] in most jurisdictions only a court can decide if a person is incompetent.[13] Assessments of *capacity,*[14] on the other hand, are relegated to medical or

Treatment, 134 AM. J. PSYCHIATRY 279, 280 (1977) (listing a number of terms which are used in judicial decisions and statutes "interchangeably without sufficient explanation or clear behavioral referents"). Although there has been some improvement, this continues to be true today.

12. "Competence" is used here in its legal sense. There is a vast psychological and social science literature in which the term may be used differently.

13. *See, e.g.,* Kristine C. Karnezis, Annotation, *Patient's Right to Refuse Treatment Allegedly Necessary to Sustain Life,* 93 A.L.R. 3d 67, 70-71 (1979) (stating that due to questions of competency, cases where life-saving medical treatment is refused are brought to the courts).

14. "Capacity," as used here, refers to a patient's present level of decisionmaking ability, or likely ability when faced with a future situation requiring a decision. A determination of incapacity has no direct legal consequences, although it may lead to an eventual determination of incompetence. There may, however, be practical consequences of a

mental health professionals. Legislatures, in drafting competence statutes, may determine what type and degree[15] of clinically assessed incapacity will allow a judge to declare an individual legally "incompetent." Theories of competence to make medical decisions focus on various criteria, the most common of which, and the ones adopted by the law, are cognitive.[16] Although the law focuses on cognitive impairments, there are no uniform standards among the jurisdictions to identify the relevant abilities that, when impaired, constitute incompetence.

A number of authors have proposed different conceptualizations of the abilities that should be incorporated into competence standards.[17] Their diverse approaches contribute to the

physician's determination that a patient cannot make decisions (e.g., the physician may ask a family member to make decisions on the patient's behalf). A determination of incompetence, on the other hand, brings with it a number of legal restrictions (e.g., the incompetent person will be legally prohibited from making certain decisions).

15. Legislatures often do not specify the degree of incapacity (except, perhaps, in broad terms such as "substantial" or "minimal") required for a finding of incompetence and instead leave the decision to the courts or to clinicians. See *infra* notes 132-35 and accompanying text on the distinction between rules and standards.

16. *But see* Elyn R. Saks, *Competency to Refuse Psychotropic Medication: Three Alternatives to the Law's Cognitive Standard, Al* U. MIAMI L. REV. 689, 692-94 (1993). Professor Saks analyzes three models: the different person test, the volitional impairment test, and the product of mental illness test. *See id.* at 692. She concludes that the law's cognitive standard is the most attractive, but that additional attention should be paid to alternative theories to clarify the issues surrounding competence. *See id.* at 694; Lawrence Hipshman, *Defining a Clinically Useful Model for Assessing Competence to Consent to Treatment,* 15 BULL. AM. ACAD. PSYCHIATRY & L. 235, 239 (1987) (proposing a "therapeutic alliance" standard, i.e., whether a patient is able to work with a doctor regarding treatment); Harold J. Bursztajn et al., *Beyond Cognition: The Role of Disordered Affective States in Impairing Competence to Consent to Treatment,* 19 BULL. AM. ACAD. PSYCHIATRY & L. 383, 384 (1991) (suggesting an affective dimension to competence).

17. *See, e.g.,* Elyn R. Saks, *Competency to Refuse Treatment,* 69 N.C. L. REV. 945 *passim* (1991). Professor Saks identifies four categories: pure understanding, modified understanding, understanding and belief, and full reasoning. Under the "pure understanding" test, a patient must be able to assimilate the information that the caregiver provides. *See id.* at 952. A "modified understanding" test, by contrast, requires that a patient not only comprehend the information, but also believe that the doctor be-

lieves it. *Id.* at 952-54. With regard to the "understanding and belief category, Saks also differentiates between what she refers to as a "naive" test (a patient must comprehend the information and believe the information) and a "sophisticated" test (a patient must comprehend the information and form no "patently false beliefs"). *See id.* at 955-56. As Saks herself admits, the sophisticated understanding and belief test suffers from the need to establish what beliefs are "patently false." *Id.* at 965. She attempts to define patently false as encompassing beliefs supported by no evidence. *See id.* Saks defines "full reasoning" as requiring a greater capacity to assess evidence than the "understanding and belief" test and focuses on the integrity of the "reasoning process." *Id.* at 957. Integrity is not defined. Saks merely notes that "the 'full reasoning' view requires fairly intact reasoning ability." *Id.* Although Saks' categorizations are closely linked to language found in cases and statutes, they do not adequately distinguish between different capacities. For example, her "sophisticated understanding and belief test is a compound standard that encompasses various abilities, none of which is adequately identified. As a result, it is difficult to translate her legal competence requirements into cognitive abilities that health professionals can evaluate.

The British Law Commission likewise only broadly defines different capacities. In a 1995 report it defined an incapacitated person as one who is "(1) unable by reason of a mental disability to make a decision on the matter in question or (2) unable to communicate a decision on that matter because he or she is unconscious or for any other reason." THE BRITISH LAW COMMISSION REPORT NO. 231, MENTAL INCAPACITY 32-41 (1995) [hereinafter LAW COMM'N]. The Commission defines the first requirement as encompassing both the ability to understand information relevant to the decision and the ability to use the information in making a decision. *See id.* at 37. The latter concept—ability to use the information—seems to include the ability to process information logically as well as to acknowledge its relevance to one's own circumstances. *Id.* at 38-39. Further explanation of the understanding requirement shows that it, too, is intended to cover both factual understanding of information and the patient's appreciation of its relevance to one's own situation. Thus a number of different abilities are integrated into two articulated standards. The result is confusing: how does one evaluate an individual who understands all relevant information and is able to process it in a rational manner, but refuses treatment for schizophrenia because he does not believe he is mentally ill, and believes instead that "his brain has been blackened"? *See In re* Witthans, No. CX-94-280, 1994 Minn. App. LEXIS 934, at *2 (Sept. 27, 1994) (unpublished). Clearly this person fails to appreciate the nature of his illness and the likely consequences of refusing treatment although he may factually understand the situation and employ logical reasoning to arrive at his decision.

Other commentators have defined competence differently. *See* THOMAS GRISSO, EVALUATING COMPETENCIES 2 (1986) (describing some of the

confusion surrounding competence. Nevertheless, a review of American cases discloses a reasonably coherent set of approaches. Following the pioneering work of Loren Roth et al. in this area,[18] Paul Appelbaum and Thomas Grisso identified four potential components of competence standards: (i) ability to communicate a choice, (ii) ability to understand relevant information, (hi) ability to appreciate the nature of the situation and its likely consequences, and (iv) ability to manipulate information rationally.[19] Although the four-part framework was suggested in previous literature, this Article reviews cases and statutes to show that the components are actually reflected in, and in fact drawn from, the law.[20] Thus it provides a unique perspective—no other commentator has undertaken an extensive examination of existing law in relation to the elements of proposed competence standards.[21] The following sec-

different approaches); BECKY COX WHITE, COMPETENCE TO CONSENT 154 (1994) (defining the capacities necessary for competence to include the ability to process information in various specific ways in order to make a choice).

18. Roth et al., *supra* note 11.

19. Paul S. Appelbaum & Thomas Grisso, *Assessing Patients' Capacities to Consent to Treatment*, 319 NEW ENG. J. MED. 1635, 1635-36 (1988) [hereinafter NEJM]; Paul S. Appelbaum & Thomas Grisso, *The MacArthur Treatment Competence Study I: Mental Illness and Competence to Consent to Treatment*, 19 L. & HUM. BEHAV. 105, 110 (1995) Diereinafter *MacArthur I*\. State statutes and cases may use one or a combination of these components to establish competence.

20. The cases and statutes cited herein are categorized according to which of the four components are explicitly articulated. This is not to imply that the standard(s) for which the cases or statutes are cited are the only ones in use in the jurisdiction in question. On the contrary, the standard articulated is likely to have been tailored to the particular facts, and the proliferation of compound standards found in statutes is evidence that more than one test is applied. "Standard" may be used here to refer either to one of the four components or criteria, or to some combination of those elements (i.e., a "compound standard"). The terms "test" and "measure" are used to refer to the MacArthur instruments *(see infra* Parts II and III), or the MacCAT-T *(see infra* note 148 and accompanying text).

21. There are only three or four compound standards actually found in the cases and statutes: (i) choice and understanding; (ii) choice, understanding and appreciation; (iii) choice, understanding, appreciation and reasoning; or (iv) choice, understanding and reasoning. This final stan-

tions will discuss each of the four elements in turn.[22]

A. Ability to Communicate a Choice

We define this least stringent component applied by courts and legislatures as an inability to reach or communicate a decision. The first aspect, inability to reach a decision, is demonstrated by a patient who simply cannot make up his or her mind or vacillates to such a degree that it is impossible to implement a treatment choice. Inability to communicate a decision means that the patient is unable effectively to make known his or her wishes regarding treatment. Many courts use

dard is relatively rare. *See infra* note 50 and accompanying text. Courts that explicitly articulate some other combination of components are either implicitly applying additional elements or tailoring the discussion of competence to the facts of the case.

22. One criterion missing from the above components focuses on the reasonableness of the patient's choice. *See, e.g.,* Roth et al., *supra* note 11, at 280-81. Application of a standard based on this criterion may be unusually susceptible to the bias against an unpopular choice since reasonability typically will be determined by comparison with the options that the majority of patients select. *Id.* at 281 (explaining that the standard is biased in favor of decisions to accept treatment); Saks, *supra* note 16, at 951-52 (arguing that a reasonable result standard frustrates the purposes of competency doctrine). Moreover, the standard is not necessary to protect autonomy since autonomy focuses on the *process* of decisionmaking, not the outcome. *But see* Lidz & Arnold, *supra* note 7, at 606-07 (noting alternative definitions of autonomy). Thus an autonomous choice is one that is the product of autonomous action, regardless of whether its result is "good" or "bad." Standards should focus on the decisionmaking process rather than the final decision. Likewise, competence determinations should address the capacity of the decisionmaker, not the reasonableness of the choice. *See, e.g.,* Beauchamp, *supra* note 10, at 49-77 (arguing that "one who is competent to choose may not 'competently choose,' and therefore "the latter use of the word 'competent' [should] be avoided"); *cf* Marc Stauch, *Rationality and the Refusal of Medical Treatment: A Critique of the Recent Approach of the English Courts,* 21 J. MED. ETHICS 162, 163-65 (1995) (making a distinction between non-rational reasons and irrational reasons, and arguing that an "irrational choice" to refuse life-saving treatment is grounds for incompetence). *But see* Andrew Pomerantz & Alexander de Nesnera, *Informed Consent, Competency, and the Illusion of Rationality,* 13 GEN. HOSP. PSYCHIATRY 138, 141-42 (1991) (emphasizing the need for careful competence assessments even when patients articulate rational reasons for their choices).

this element for a threshold determination of competence.[23] Thus patients who are comatose or in a persistent vegetative state are per se incompetent.[24] Some courts have implicitly adopted this criterion by holding that an uncommunicative patient is incompetent.[25] Used alone, this standard would offer the greatest protection for individual decisionmaking rights because it focuses simply on communication and disregards the decisionmaking process. It would, however, allow a number of patients with poor decisionmaking capacity to make decisions. Although ability to communicate a choice may be a necessary component of competence, demonstration of this ability alone does not necessarily entail the capacity to make decisions autonomously. Thus courts and legislatures have combined the communication component with one or more of the others.[26]

B. Ability to Understand the Relevant Information

The most common ability required by courts and legislatures in their competence standards focuses on the patient's comprehension of information related to the particular decision at hand.[27] Understanding in this sense is simply the ability to

23. *In re* Department of Veteran's Affairs Medical Ctr., 749 F. Supp. 495, 497 (S.D.N.Y. 1990) (patient was delirious, semi-conscious, and incapable of meaningful communication); *In re* R.H., 622 N.E.2d 1071, 1073 (Mass. App. Ct. 1993) (mentally retarded patient had limited communication skills); *In re* O'Brien, 517 N.Y.S.2d 346, 347 (Sup. Ct. 1986) (describing patient as unable to communicate except through nods, gestures and pressing of hands).

24. *See, e.g., In re* Estate of Loungeway, 549 N.E.2d 292, 299 (111. 1989) ("Obviously, a patient who is irreversibly comatose or in a vegetative state will be incompetent, unable to communicate his intent."); Morgan v. Olds, 417 N.W.2d 232, 235 (Iowa Ct. App. 1987) ("[T]he patient is incompetent, as the result of being comatose . . . and unable to make the decision.").

25. *See, e.g.,* Superintendent of Belchertown State Sch. v. Saikewicz, 370 N.E.2d 417, 423 (Mass. 1977) (accepting, without examination, finding of lower court that mentally retarded patient, unable to speak, was incompetent).

26. *See infra* notes 27 and 54.

27. *See, e.g.,* Ross v. Hilltop Rehabilitation Hosp., 676 F. Supp. 1528, 1533 (D. Colo. 1987); Bouvia v. Superior Court, 225 Cal.Rptr. 297, 304 (Ct. App. 1986); *In re* Boyd, 403 A.2d 744, 752-53 (D.C. 1979); *In re* Jane A., 629 N.E.2d 1337, 1339 (Mass. App. Ct. 1994); McKay v. Bergstedt,

comprehend the concepts involved, especially in the informed consent disclosure; it does not require the patient to comprehend the situation as a whole. Thus we distinguish between *understanding*, and *appreciation*, which will be discussed in the following section. While courts and legislatures always include an understanding component, they often fail to define it. The common language found in statutes—"understand the nature and consequences"—may be interpreted to encompass both an understanding and appreciation component.[28] Part III argues that although understanding and appreciation should both be included in a competence standard, they are distinct concepts that should be recognized independently.

801 P.2d 617, 625-26 (Nev. 1990); *In re* Conroy, 486 A.2d 1209, 1240-41 (N.J. 1985); *In re* Grady, 426 A.2d 467, 474 (N.J. 1981); *In re* Nemser, 273 N.Y.S.2d 624, 626-27 (Sup. Ct. 1966); Estate of C.W., 640 A.2d 427, 431 (Pa. Super. Ct. 1994); Miller v. Rhode Island Hosp., 625 A.2d 778, 786 (R.I. 1993); *In re* Virgil D., 524 N.W.2d 894, 898 (Wis. 1994); *In re* Fadley, 205 Cal. Rptr. 572 (Ct. App. 1984); Aponte v. United States, 582 F. Supp. 65 (D.P.R. 1984); IDAHO CODE § 66-402 (1994); N.C. GEN. STAT. § 32A-15 (b) (1994); OHIO REV. CODE ANN. § 5126.30 (Anderson 1994); Wis. STAT. § 51.61 (1994).

28. *See, e.g.*, *In re* Schiller, 372 A.2d 360, 367 (N.J. Super. Ct. Ch. Div. 1977) (expressing the standard for capacity as understanding the condition, nature and effects of the proposed treatment, and its attendant risks); *In re* Virgil D., 524 N.W.2d 894, 895 (Wis. 1994) (interpreting the Wisconsin statutory standard for incompetence as inability to express "an understanding of the advantages and disadvantages of accepting medication or treatment, and the alternatives to accepting the particular medication or treatment offered") (quoting text of Wis. STAT. § 51.61 (1994)). The court held that the standard did not require the patient to appreciate the nature of her mental illness where administration of psychotropic drugs is at issue. *See id.* Thus the fact that the patient denied any illness or problem was irrelevant to the determination of competence. *In re* W.S., 377 A.2d 969 (Essex County Ct. 1977); *In re* Merrill, 531 N.Y.S.2d 201 (Sup. Ct. 1988). CAL. HEALTH & SAFETY CODE § 1418.8(b) (West 1995) (using language similar to Wisconsin statute and requiring ability to communicate); 1995 Fla. Laws ch. 158(9) (defining capacity to consent as understanding the nature and consequences of decisions); MD. CODE ANN., HEALTH-GEN. § 5-601(l)(l) (1994) (defining capability to give informed consent as ability to understand nature and consequences of decision and evaluate risks and benefits); VA. CODE ANN. § 54.1-2982 (Michie 1994) (same).

C. Ability to Appreciate the Nature of the Situation and its Likely Consequences

This criterion requires that the patient be able to apply information that is understood in a context-neutral sense to his or her own situation. Therefore, it is most often combined with an understanding requirement.[29] Patients who accept that their physicians believe they are ill, but deny that there is a problem in the face of objective[30] evidence to the contrary, would fail this component.[31] Thus in *In re Roe*,[32] the Massa-

29. Rodriguez v. Pino, 634 So. 2d 681, 685-86 (Fla. Dist. Ct. App. 1994); *In re* E.G., 549 N.E.2d 322, 326 (111. 1989); *In re* Roe, 583 N.E.2d 1282, 1286 (Mass. 1992); Northwood Hosp. v. Munoz, 564 N.E.2d 1017, 1025 (Mass. 1991); *In re* Martin, 504 N.W.2d 917, 924 (Mich. Ct. App. 1993); *In re* Riebel, 1994 Minn. App. LEXIS 942, at *4; *In re* Thornblad, 1991 Minn. App. LEXIS 1218, at *9-10 (1991); *In re* Requena, 517 A.2d 886, 893 (N.J. Super. Ct. Ch. Div. 1986); *In re* Quackenbush, 383 A.2d 785, 789 (Morris County Ct. 1978); *In re* W.S., 377 A.2d 969, 973 (Essex County Ct. 1977); Rivers v. Katz, 495 N.E.2d 337, 341 (N.Y. 1986); *In re* Rochester Gen. Hosp., 601 N.Y.S.2d 375, 379 (Sup. Ct. 1993); Belcher v. Charleston Area Medical Ctr., 422 S.E.2d 827, 838 (W. Va. 1992); *In re* Romero, 790 P.2d 819 (Colo. 1990); N.H. REV. STAT. ANN. § 137-J:1 dV) (1994) (defining "capacity to make health care decisions"); N.D. CENT. CODE § 23-06.5-02 (1993); TENN. CODE ANN. § 32-11-103(1) (1995) (defining a "competent person"); TEX. HEALTH & SAFETY CODE ANN. § 313.002(5) (West 1996) (defining "incapacitated"); VT. STAT. ANN. tit. 14, § 3452(3) (1994) (defining "capacity to make health care decisions").

Even where there is no explicit understanding component in a case or statute, language referring to an appreciation component is usually interpreted to incorporate an understanding requirement.

30. This may include evidence that the patient's symptoms correspond to generally accepted criteria for a specific diagnosis and corroborating opinions by other physicians. Some commentators may still find this insufficient. *See, e.g.,* Virginia Abernethy, *Compassion, Control, and Decisions about Competency,* 141 AM. J. PSYCHIATRY 53, 57 (1984) (stressing that hope for recovery in the face of physicians' pessimistic prognosis is not necessarily "a criterion of psychotic denial").

31. People v. Delgado, 213 Cal. Rptr. 122, 124-25 (Ct. App. 1989) (holding that the state must show that the use of psychotropic drugs is the least restrictive alternative available to treat a prisoner deemed unable to give informed consent due to his inability to perceive his mental illness); *In re* Roe, 583 N.E.2d 1282, 1286 (Mass. 1992) (holding that a ward of the state was incompetent to make an informed decision about his use of antipsychotic medication because, despite medical evidence to the contrary, the ward denied that he was mentally ill); Lane v.

chusetts Supreme Judicial Court held that a man suffering from schizophrenia was incompetent because he refused to take his medication and because he denied he was mentally ill.[33] The court deemed him incompetent since the denial prevented him from "appreciating] the need to control his illness with antipsychotic medication," and "the risks associated with refusing it."[34] On the other hand, refusal of potentially beneficial, even life-saving, treatment does not necessarily indicate that a patient is incompetent. For example, in *Lane v. Candura?*[5] a Massachusetts Appellate Court upheld the right of a woman to refuse amputation of a gangrenous leg.[36] The court found that Ms. Candura appreciated the nature and consequences of her act because she accurately believed that she was suffering from gangrene and would likely die without surgery.

The appreciation criterion recognizes that delusional beliefs properly affect competence determinations only to the extent that they affect the patient's ability to appreciate the relevance of information to his or her own circumstances.[38] A patient

Fiasconaro, 1995 WL 584522 (Mass. App. Div.); *In re* Witthans, No. CX-94-280, 1994 Minn. App. LEXIS 934 (Sept. 27, 1994) (affirming order of trial court authorizing the involuntary use in neuroleptic medication for a patient who denied his mental illness despite medical evidence to the contrary); *In re* Muntner, 470 N.W.2d 717, 719 (Minn. Ct. App. 1991) (same); ALASKA STAT. § 47.30.837(d)(1)(B) (1995) (noting that denial of a disorder when faced with substantial evidence of its existence constitutes a failure of appreciation and is evidence of incompetence).

An appreciation criterion does not require that the patient accept all of the doctor's beliefs as true. For example, the patient may disagree with the label used by the physician. Thus a person can accept that he is ill, but object to the specific diagnosis. For example, a patient can accept that he hears voices in his head and appreciate the need for medication to stop the voices, but object to a diagnosis of schizophrenia.

32. 583 N.E.2d 1282 (Mass. 1992).

33. *Id.* at 1288.

34. *Id* at 1286.

35. 376 N.E.2d 1232 (Mass. App. Ct. 1978).

36. *Id.* at 1236.

37. *Id.*

38. *See* George J. Annas & Jean E. Densberger, *Competence to Refuse Medical Treatment: "Autonomy vs. Paternalism,"* 15 TOLEDO L. REV. 561, 580 n.63 (1984) (explaining that in order to qualify under the insane delusion test, the delusion needs to be closely related to the subject mat-

who refuses treatment because she thinks that massive discoloration of her leg is a result of dirt rather than an internal injury is not incompetent merely because she is delusional, but because she is unable—as a result of her delusions—to adequately evaluate the consequences of refusing treatment. Under the appreciation criterion, even quite unconventional beliefs do not negate competence as long as they do not interfere with the patient's ability to appreciate the nature of the situation and the likely effect of treatment. For example, in *In Re Milton*™ the patient refused treatment for cancer of the uterus because she preferred faith healing and believed (erroneously) that an evangelist, who claimed to be a faith healer, was her husband.[40] The court distinguished between her delusional belief regarding her marriage and her religious belief in faith healing, stating that the "belief in spiritual healing stands on its own, without regard to her delusion," and thus she had the capacity to make treatment decisions.[41] In essence, the court applied an appreciation criterion, since the patient recognized and accepted the fact that she was ill and that without treatment she would likely die.[42]

D. Ability to Manipulate Information Rationally

The ability to manipulate information rationally is the ability least often included in legal competence standards and it is the hardest to operationalize. It addresses the patient's reasoning capacity or ability to employ logical thought processes to compare the risks and benefits of treatment options. This criterion does not look at the outcome of a decision, but, like understanding and appreciation, it is concerned with the patient's decisionmaking process. Thus, a patient who can understand, appreciate and communicate a decision may still be impaired because she is unable to process information logically, in accordance with her preferences. Conversely, a patient may employ

ter at issue).

39. 505 N.E.2d 255 (Ohio 1987).

40. *Id.* at 256.

41. *Id.* at 258.

42. *Milton* is illustrative of the difficulty courts have *in* distinguishing between delusion and religious belief. Courts tend to err on the side of religion and are generally unwilling to challenge individual beliefs.

logical thought processes but base them on impaired understanding. Because of this, rational manipulation is never found alone and is always part of a compound legal standard. In *Reise v. St. Mary's Hospital,*[43] for example, the court held that in addition to meeting the understanding and appreciation criteria, the patient must also demonstrate the ability to "knowingly and intelligently evaluate the information . . . and otherwise participate in the treatment decision by means of rational thought processes."[44] In *In re Conroy*[45] the New Jersey Supreme Court held that a "patient may be incompetent because he lacks the ability to understand the information conveyed, to evaluate the options, or to communicate a decision."[46] In reaching this conclusion, the court utilized understanding, rational manipulation and communication components.

Inclusion of rational manipulation in a legal standard of competence may seem troublesome because it could lead to incompetence adjudications based simply on the unconventionally of a patient's decisions.[47] If the legal standard is sensibly applied, however, this fear is unwarranted. For example, in *United States v. Charters*[48] the Fourth Circuit held that a "court should evaluate whether [a patient] has followed a rational process in deciding to refuse antipsychotic medication and can give rational reasons for the choice he has made."[49]

43. 243 Gal. Rptr. 241 (1987).

44. *Id.* at 254; *cf.,* ALASKA STAT. § 47.30.837(d)(1)(C) (West 1995) (explicitly requiring that a patient have the capacity to participate in treatment decisions by means of a rational thought process, in addition to the ability to understand and to appreciate).

45. 486 A.2d 1209 (N.J. 1985).

46. *Id.* at 1240.

47. *But see In re* Yetter, 62 Pa. D. & C.2d 619 (1973) (holding that simply because a decision to refuse treatment appears irrational or foolish does not mean the patient is incompetent); *In re* Milton, 505 N.E.2d 255, 256 (Ohio 1987) (reasoning that even though unusual, a patient's belief in faith healing was a valid religious tenet and could not be disregarded).

48. 829 F.2d 479 (4th Cir. 1987).

49. *Id.* at 496. (It is not clear whether the *Charters* court actually applied the standard as stated.) *See* United States v. Waddell, 687 F. Supp. 208, 209 (M.D.N.C. 1988) (stating that to determine the defendant's competence the state should evaluate whether he followed a

E. Compound Standards

Cases and statutes evidence a variety of combinations of the four components.[50] It is difficult to know the extent to which

rational process in deciding to reject medication and whether he can give a rational reason for his choice); United States v. Ballard, 704 F. Supp. 620, 622 (E.D.N.C. 1987) (holding that the state had failed to prove that inmates were incompetent according to the *Charters* formula).

As we define the rational manipulation criterion, a patient need not be able to give objectively "rational" reasons for her choice as long as she can demonstrate that the final decision follows logically from whatever reasons are offered. *Cf.* Benjamin Freedman, *Competence, Marginal and Otherwise,* 4 INT'L J. PSYCHIATRY 53 (1981) (noting that a "rational reasons" test should focus on the process of decisionmaking, not the end result, and should require that the patient provide both acceptable premises and a conclusion related to those premises). Thus, a patient who based her argument on false premises, or who failed to produce premises that support the conclusion, would fail this test. Our reasoning criterion would allow a patient to rest on any premises (even a false one) as long as the conclusion drawn follows logically from those premises.

50. *See* Woodland v. Angus, 820 F. Supp. 1497, 1502-04 (D. Utah 1993) (utilizing the understanding, appreciation and rational manipulation standards); *In re* Gordy, 658 A.2d 613, 617-18 (Del. Ch. 1994) (using the understanding, appreciation and rational manipulation standards); *In re* Osbourne, 294 A.2d 372, 375-76 (D.C. 1972) (applying the understanding, appreciation, and rational manipulation standards); *In re* Moe, 579 N.E.2d 682, 685 (Mass. App. Ct. 1991) (adopting communication and rational manipulation standards); *In re* Lambert, 437 N.W.2d 106, 108 (Minn. Ct. App. 1989) (utilizing the understanding, appreciation and rational manipulation standards); *In re* Peterson, 446 N.W.2d 669, 673-74 (Minn. Ct. App. 1989) (employing the understanding, appreciation and rational manipulation standards); Gleason v. Abrams, 593 A.2d 1232, 1235-36 (N.J. Super. Ct. App. Div. 1991) (using the understanding, appreciation and rational manipulation standards); *In re* A.C., 573 A.2d 1235, 1249-51 (D.C. 1990) (relying on the communication, understanding and rational manipulation standards); *In re* Farrell, 529 A.2d 404, 410-13 (N.J. 1987) (using the understanding and rational manipulation standards); *In re* Lydia E. Hall Hosp., 455 N.Y.S.2d 706, 710-13 (Sup. Ct. 1982) (articulating the understanding, appreciation and rational manipulation standards); State Dep't. of Human Servs. v. Northern, 563 S.W.2d 197, 209-10 (Tenn. Ct. App. 1978) (utilizing the understanding, appreciation and rational manipulation standards), *cert, denied,* 575 S.W.2d 946 (Tenn. 1978), *and cert, denied,* 436 U.S. 923 (1978); *In re* Beth Israel Medical Ctr., 519 N.Y.S.2d 511, 512-13 (Sup. Ct. 1987) (employing the communication, understanding and rational manipulation standards); *In re* Waltz, 227 Cal. Rptr. 436 (1986) (understanding, appreciation, rational

decisions are being narrowly tailored to fit the facts of a case, and additional components may be used within the same jurisdiction in different situations.[51] In addition, some cases and statutes clearly articulate one or two of the four elements but also use vague and broader language which could be interpreted to include additional components. For example, in *Thor v. Superior Court*,[62] the court stated that to be competent, the patient must have "the capacity to reason and make judgments," "a clear understanding of the risks and benefits of the proposed treatment alternatives," and "a full understanding of the nature of the disease and the prognosis."[53] Although appreciation is not mentioned by name, it appears by the latter statement that the court may have intended it to be a part of the competence assessment. On the other hand, the court simply may have wanted to stress the understanding requirement, rather than require that a patient be able to apply relevant information regarding the disease and prognosis to his or her own situation. Colorado defines incapacity to include someone who "lacks sufficient understanding or capacity to make or communicate responsible decisions."[54] The addition of the

manipulation); ALASKA STAT. § 47.30.837(d)(1) (West 1995) (adopting the understanding, appreciation and rational manipulation standards); S.C. CODE ANN. § 44-66-20(6) (Law. Co-op. Supp. 1993) (relying on the communication, appreciation and rational manipulation standards). *See also supra* note 21.

51. *See, e.g.*, United States v. Charters, 829 F.2d 479, 496-97 (4th Cir. 1987) (articulating a rational manipulation criterion but noting that "it would not be a competent decision based on rational reasons if Charters refused medication out of a denial that he suffers from schizophrenia," seemingly referring to an appreciation criterion).

52. 855 P.2d 375 (Cal. 1993).

53. *Id.* at 381.

54. Co. REV. STAT. ANN. 26-3.1-101(1) (West 1995) (requiring communication and understanding); *see also* ALA. CODE § 26-2a-20(8) (1992); Az. REV. STAT. Ann. § 14-5105 (1995) (same); GA. CODE ANN. § 31-9-2 (c) (1994) (same); HAW. REV. STAT. § 327F-2 (1994) (same); ME. REV. STAT. ANN. tit. 34B, § 11001(F) (West Supp. 1995) (communication and understanding); Miss. CODE ANN. § 43-47-5(j) (1993) (same); N.D. CENT. CODE § 25-03.1-18.1 (1995) (communication); OKLA. STAT ANN. tit. 30, §1-111 (West Supp. 1996) and tit. 43A, § 10-103 (West Supp. 1996) (same); WYO. STAT. § 35-20-102(a)(x) (1994) (communication and understanding).

Other statutes refer to the ability to reach or make an "informed

term "responsible" could be interpreted to mean that the person must be able to appreciate his or her illness, that the decision be reached by means of a rational thought process, or even that the final decision be conventional. Missouri requires that the person be able to "receive and evaluate information or . . . communicate decisions"[55]—possibly combining the understanding, rational manipulation and communication components. Some statutes fail to define the terms with any specificity. For example, Utah defines "incapacitated person" as "any person whose decisionmaking process is impaired . . . to the extent that the person is unable to care for his or her personal safety or is unable to attend to and provide for such necessities as food, shelter, clothing and medical care"[56]—apparently

decision." ARIZ. REV. STAT. ANN. § 36-661 (1993) (also requiring understanding and appreciation); ILL. REV. STAT. ch. 755, para. 40/10 (Smith-Hurd & Supp. 1995) (communication, understanding and appreciation); MASS. GEN. L. ANN. ch. 201(D), §1 (1994) (understanding and appreciation); N.J. STAT. ANN. § 26-.2H-55 (Supp. 1995) (same); 1995 N.M. Laws 182(C) (communication, understanding and appreciation); N.Y. MENTAL HYGIENE LAW § 33.21(a)(5) (McKinney 1988) (understanding and appreciation); N.Y. PUBLIC HEALTH LAW § 2980 (McKinney 1993) (same); W. VA. CODE § 16-30C-3(j) (1995) (communication).

One statute requires the ability to make an "intelligent" decision. ARK. CODE ANN. § 20-9-601(a) (Michie 1991) (also requires understanding). Another allows administration of psychotropic medication against a patient's will if the individual "lacks the capacity to make a reasoned decision." ILL. REV. STAT. ch. 405, para. 5/2-107.(d)(5) (1993); *see also* Estate of Austwick, 656 N.E.2d 779 (111. App. 1 Dist.) (finding that the trial court's determination that Mrs. Austwick could not distinguish right from wrong and lacked the capacity to make a responsible decision met the statutory test).

55. MO. REV. STAT. § 404.805(1X2) (1995); *see also* D.C. CODE ANN. § 21-2011(11) (1989); KAN. STAT. ANN. § 59-3002(a) (1994); OKLA. STAT ANN. tit. 30, § 1-111(10), (19) (West 1996) and tit. 43A, § 10-103(5), (6) (West 1996); OR. REV. STAT. § 126.003 (4) (1994); Wis. STAT. § 50.06 (1) (1995).

56. UTAH CODE ANN. § 75-1-201 (18) (1995). Interestingly, this statute could also be interpreted to encompass a "reasonable outcome" standard. For example, decisional choices that result in a person lacking food, shelter, clothing or medical care could be seen as an indication that the person's decisionmaking ability is impaired and therefore imply he or she is incapacitated. *See* IND. CODE ANN. § 29-3-1-7.5 (West 1994); KY. REV. STAT. ANN. § 311.621 (Michie/Bobbs-Merrill 1990) ("make and communicate a health care decision"); MlNN. STAT. § 145C.02 (West Supp. 1995)

leaving it to the courts to interpret the specific capacity requirements.

Clarification of commonly used elements and standards (or identifying a vocabulary) is the first step toward assessing policies and creating appropriate procedures for adjudications of competence. Clearly enunciating the components of legal standards, however, provides no firm basis for choosing among them on either normative or empirical grounds (assuming they identify different sets of presumably incompetent persons), or for setting required levels of ability that maintain the usual presumption that most people will be permitted to make their own decisions. In addition, evidence is lacking regarding how reliably standards can be applied to ensure that most people who are unable to make autonomous decisions are identified as incompetent, and that most competent persons are not identified as such.[57] Moreover, without more information, it is impossible to comment on the relative value of different procedures (judicial or non-judicial) for determining competence. The remainder of this Article describes the MacArthur Treatment Competence Study's empirical investigation of medical decisionmaking competence and the implications of both the data and the four-part framework for some of these issues.

II. THE MACARTHUR TREATMENT COMPETENCE STUDY

The MacArthur Treatment Competence Study was designed to address clinical and policy questions regarding the abilities of persons with mental and medical illnesses to make decisions about treatment.[58] Although the Study is described in greater

("make or communicate health care decisions"); NEV. REV. STAT. ANN. § 159.019 (Michie 1993); 20 PA. CONS. STAT. ANN. § 5403 (Supp. 1995) ("make or communicate decisions"); WASH. REV. CODE ANN. § 11.88.010(l)(a) (West Supp. 1995).

57. The MacArthur data presented below do not address this issue.

58. Thomas Grisso & Paul S. Appelbaum, *The MacArthur Treatment Competence Study III: Abilities of Patients to Consent to Psychiatric and Medical Treatments,* 19 LAW & HUM. BEHAV. 149 (1995) [hereinafter *MacArthur III].* The study sought to provide answers to three empirical questions. First, do persons with mental illness differ from non-mentally ill persons in their decisionmaking abilities, particularly as they relate to legal standards of competence? Second, if there are differences, are there

detail in other publications,[69] a short summary of the instruments, methods and results is offered to set the stage for the discussion in Part III.

A. Instruments[60]

Instruments were developed to establish reliable and valid[61] measures of decisionmaking abilities conceptually related to the four major legal components of competence to consent to treatment identified in the previous section.[62] Six criteria were used to guide the development of the measures:

> 1. The functions being assessed needed to have close conceptual relationships with the appropriate legal standards of competence.[63]

reliable demographic or clinical characteristics that could be used to identify patients who are at greater risk of manifesting treatment decisionmaking incapacities? Finally, what patterns of deficits in abilities are related to various legal standards of competence?

59. *MacArthur I, supra* note 19; Thomas Grisso et al., *The MacArthur Treatment Competence Study II: Measures of Abilities Related to Competence to Consent to Treatment,* 19 LAW & HUM. BEHAV. 127 (1995) [hereinafter *MacArthur II]*; *MacArthur III, supra* note 58; Thomas Grisso and Paul S. Appelbaum, *A Comparison of Standards for Assessing Patients' Capacities to Make Treatment Decisions,* 152 AM. J. OF PSYCHIATRY 1033 (1995).

60. This information is published in greater detail in *MacArthur II, supra* note 59.

The initial research instruments were eventually modified to create the MacArthur Competence Assessment Tool [hereinafter "Tool"] which can be used in routine clinical practice as a screening mechanism to identify those patients whose ability in one or more areas is impaired.

61. Reliability refers to the instrument's ability to generate reproducible data (i.e., to measure a variable consistently). Validity refers to whether the abilities that the instruments measure correspond with real-world determinants of competence (i.e., they measure the abilities that are related to legal competence).

62. This information is published in greater detail in *MacArthur I, supra* note 19.

63. Standard psychological assessment tools have always suffered from an incongruency between the abilities they measure and the legal standards to which they are applied. *See, e.g.,* Ruth Macklin, *Philosophical Conceptions of Rationality and Psychiatric Notions of Competency* 57 SYNTHESE 205, 208-09 (1983); *cf.* ENQUIRY ON MENTAL COMPETENCY, FINAL REPORT 231 (David N. Weisstub, Chairman, Canadian Commission

2. The content of the instruments needed to be relevant to the decision being studied. Since the specific concern was whether or not to proceed with treatment, the instruments needed to reflect this goal.[64]

3. The content of the instruments needed to be meaningful to the persons being studied.[65]

1990) [hereinafter CANADIAN COMM'N ENQUIRY] (listing a number of elements of decisionmaking capacity which should be evaluated including the following: cognition/sensorium, memory and intellectual abilities, thought content, thought process and context-specific functional parameters and relying on traditional psychological tests to examine these abilities and aid in competence determinations). For example, IQ scores are limited indicators of one's competence to consent to treatment since IQ tests measure general intelligence, rather than the specific ability to make treatment decisions. The inferential step from general intelligence to ability to make treatment decisions increases the likelihood of an erroneous determination of patient capacity. Although a low score on an IQ test may correlate with a decreased ability to perform on any component of competence, it is not sufficient, in itself, for a determination of impaired capacity.

64. There are a number of reasons for this. First, competence is generally recognized as being task-specific. FADEN & BEAUCHAMP, *supra* note 5, at 287. This is true even in the legal arena since competence to stand trial is different from competence to make a will, and is distinguished from competence to make treatment decisions. GRISSO, *supra* note 17, at 7. Global determinations of competence are becoming less popular as evidenced by the trend towards limited guardianships (i.e., awarding guardians the decisionmaking authority in only specific areas, such as financial or major medical treatments, rather than awarding guardians the power to control multiple aspects of a person's life where such intervention is unnecessary). Even those states which still allow for broad guardianship powers generally recognize that the appointment of a guardian does not establish that the ward is incompetent to make all decisions. *See generally* SAMUEL BRAKEL ET AL., THE MENTALLY DISABLED AND THE LAW 375 (1985) (stating that the modern trend is to limit decisionmaking rights only to the extent necessary to cure the particular problem). Second, measures of performance in different domains lack relevance to the treatment decisionmaking context and may involve different levels of complexity. Thus courts are less likely to view such measures as accurate indicators of treatment decisionmaking competence.

65. Performance may be positively affected by the patient's greater motivation to reach a good decision on an important issue. Conversely, performance may be negatively affected by the anxiety which accompanies difficult treatment decisions. Since the net effect of these factors is unclear, the content of the instruments had to focus, as much as possible,

4. The content of the instruments needed to be sufficiently standardized so that comparisons within and across subject groups were possible.[66]

5. Measurements had to have objective criteria for scoring that could be applied in a reliable fashion.[67]

6. The instruments had to be practical for use in a research setting and potentially adaptable for clinical use. Most importantly, the instruments had to be able to be administered *in* one sitting and by interviewers without extensive clinical training.

The instruments developed for the MacArthur study reflect the four legally relevant abilities described in Part I and the principles identified above. First, ability to communicate a choice was operationalized as a patient's selection of a treatment option in a decisionmaking task. A patient who selected an option received full credit, one who expressed ambivalence received less credit, while a patient who did not choose an option received no credit.

Second, the information required as part of the understanding component was drawn from the requirements of informed consent.[68] After simultaneous oral and written disclosure

on information relevant to the individual patient. Thus, persons with different disorders required different versions of the instruments.

Two questions embedded in each of the four components are: (i) whether the patient has the ability to do something and (ii) whether the patient actually evidences that ability in a specific decisionmaking context. For example, a patient who has the ability to communicate may not do so in a particular case. Likewise, a patient who has the ability to comprehend information may not actually comprehend the pertinent information. The MacArthur instruments are tailored to the specific diagnosis and can concurrently test a patient's capacity to understand and evaluate the patient's actual understanding.

66. Although some variation of the instruments was necessary to accommodate the third requirement, the differences could not be so great that they did not allow valid comparisons. As a result, the content of the instruments reflected information generally relevant to a diagnostic group but allowed parallel versions to be generated for other diagnostic groups.

67. The development of reliable methods for assessing competence-related functions would allow further research on these issues to proceed with greater ease. Moreover, such consistency will likely be looked upon favorably by the courts who will want assurances that scores on the instruments are easily interpretable and replicable.

68. APPELBAUM ET AL., *supra* note 4.

(worded at an 8th grade level) incorporating each element, the patient was tested on his or her comprehension of the following: (a) the nature of the disorder, (b) the nature of the recommended treatment, (c) the probable benefits of the treatment, (d) the probable risks and discomforts of the treatment, and (e) an alternative treatment and its related benefits and risks.[69] The disclosure focused on the patient's diagnosed medical or mental illness. The patient was asked to demonstrate his comprehension of such information by paraphrasing it, then by recognizing the items of information after their presentation.[70]

Appreciation[71] was more difficult to evaluate since patients could rationally disagree with their diagnosis or prognosis. Only disagreements based on rigidly-held beliefs involving distortions or denial as symptoms of psychopathology most strongly suggested incompetence.[72] Therefore, the appreciation component was operationalized as the patient's acknowledgment of his or her illness and the potential value of treatment or acknowledgment of these things after illogical premises underlying the initial non-acknowledgment were challenged. Because the acknowledgment factor focused on the patient's perception of the value of treatment, whether the patient would actually accept treatment was irrelevant. Patients[73] were asked six questions aimed at assessing their acknowledgment of the following: (1) their symptoms (confirmed by the

69. *MacArthur II*, *supra* note 59, at 128.

70. Understanding was assessed in three ways: (i) subjects were given an uninterrupted disclosure and asked to paraphrase it, (ii) subjects were given each element of the disclosure separately and asked to paraphrase it, and then (iii) subjects were asked to recognize statements (i.e., identify them as the "same as" or "different from" the messages in the disclosure) before moving on to the next element disclosure.

71. Paul S. Appelbaum & Loren Roth, *Competency to Consent to Research*, 39 ARCHIVES OF GEN. PSYCHIATRY 951 (1982) (first identifying an appreciation criterion).

72. *See* NEJM, *supra* note 19 (stating that a patient's deficiency in appreciating the situation and its consequences is usually caused by pathologic distortion or denial due to the patient's perception, impairment, treatment or the treating agency's motivation).

73. The appreciation instrument was not administered to community control ("comparison") groups since they were not ill and therefore could not be tested on this measure.

hospital chart), (2) their beliefs about the severity of their symptoms (confirmed by the Brief Psychiatric Rating Scale ("BPRS")),[74] (3) their diagnosis (confirmed by the hospital chart), (4) the benefits of treatment for their condition, (5) the potential benefit of a specific, proposed treatment, and (6) the likelihood, if any, of improvement without treatment.[75] Patients who initially did not acknowledge any benefits to be derived from treatment were asked to explain their reasons, and were presented with a hypothetical nullifying those reasons. For example, a patient who denied the potential benefit of a specific treatment (such as antipsychotic medication) because he thought that he was too ill to benefit from treatment would have the inquiry re-framed in such a way as to negate his objections ("Imagine that a doctor tells you a medication exists that has been proven to help 90% of the people with problems as serious as yours. Do you think this medication might be of more benefit to you than getting no treatment at all?"). Only those patients who continued to disavow the potential value of the treatment in the face of a hypothetical which nullified their original premise received no credit.

Rational manipulation refers to the reasoning processes employed in decisionmaking rather than the rationality or reasonableness of the actual choice. The accuracy of the premises relied upon is irrelevant. A patient who scored poorly on appreciation because of inaccurate beliefs about treatment (e.g., the treatment would cause the person to shrink in size), could still score well on rational manipulation if the patient manifested a logical *process* of decisionmaking. Thus, a patient who erroneously believes that treatment would cause him to shrink demonstrates logical decisionmaking when he refuses treatment because he does not want to become microscopically small. This rationality component was defined operationally as the degree to which patients demonstrated an ability to do the following: (1) seek information, (2) consider the consequences of

74. The BPRS provides a method for rating the presence and severity of psychiatric symptoms/signs manifested by a psychiatric patient, based on a clinical interview in which inquiry and observation provide data for the ratings. The version of the BPRS used in this study contained 19 items. *MacArthur III, supra* note 58.

75. *MacArthur II, supra* note 59, at 132.

treatment alternatives, (3) compare two treatment alternatives, (4) consider numerous treatment alternatives at one time, (5) consider potential risks or discomforts from treatment, (6) apply personal preferences consistently, (7) make logical inferences about ordinal relationships (i.e., to infer that A is the largest when given, A>B and B>C), and (8) distinguish correctly the relative values of numerical probabilities.[76] Patients were provided with a hypothetical in which they were asked to choose a treatment. They were then questioned about their treatment choice and evaluated on the eight variables identified above.

The MacArthur competence assessment instruments and the subsequently developed Tool[77] do not function as replacements for the informed consent process and are not meant to serve as substitutes for clinically based competence determinations; rather they are designed to identify possible impairments in decisionmaking ability that are relevant to the assessment of patients' competence.

B. Sampling Procedures

Once the instruments were designed and pre-tested, they were administered to various diagnostic groups. It should be noted at the outset that mental illness is not a homogeneous category; many different types of disorders can be thought of as mental illnesses and cognitive functioning can vary across and within diagnostic categories.[78] Thus, while discrete diagnostic groupings may afford grounds for making inferences, one should keep in mind that competence determinations must always be made on an individual basis. Two mental illnesses were chosen for the study: schizophrenia and major depression. Schizophrenia affects patients' thought processes and their contact with reality.[79] Numerous approaches to treatment ex-

76. *MacArthur II*, *supra* note 59, at 135-36.

77. *See infra* note 148.

78. AMERICAN PSYCHIATRIC ASS'N, TASK FORCE REPORT 32, THE USE OF PSYCHIATRIC DIAGNOSES IN THE LEGAL PROCESS 7-8 (1992).

79. DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 273-289 (4th ed. 1994) [hereinafter DSM IV] ("Schizophrenia is a disturbance that lasts for at least 6 months and includes at least 1 month of active-phase symptoms (i.e., two [or more] of the following: delusions, hallucina-

ist, most of which focus on antipsychotic medications.[80] Schizophrenia is considered the most severe mental illness and it affects cognitive functioning adversely.[81] Major depression,[82] on the other hand, is the most common major mental illness, and while it usually does not entail as much thought disturbance as schizophrenia, severe depression may also raise questions of competence. The majority of research on competence focuses on these two disorders, allowing comparison of the MacArthur[83] results with previous studies.

The MacArthur study investigated decisionmaking capacities of patients soon after their admission to an inpatient facility, since evaluating subjects during this period maximizes the possibility of studying a range of impairments, including the most severe ones. In addition, decisionmaking by psychiatric inpatients includes the right to refuse treatment, and the decisions are frequently made in the first few days of hospitalization.[84] Mental illness is not equivalent to incompetence; many people who suffer from mental illness, even the most severe forms, are competent to make treatment decisions. Moreover, involuntary commitment to a hospital does not automatically result in a legal determination of one's incompetence, nor is voluntary commitment a waiver of decisionmaking rights.[85] Hence, persons with mental illness may be called upon to

tions, disorganized speech, grossly disorganized or catatonic behavior, negative symptoms)." *Id.* at 273).

80. TABER'S CYCLOPEDIC MEDICAL DICTIONARY at 1759 (17th ed. 1993).

81. James M. Gold & Philip D. Harvey, *Cognitive Deficits in Schizophrenia,* 16 PSYCHIATRIC CLINICS OP N. AM. 295 (1993).

82. DSM IV, *supra* note 79, at 320 ("The essential feature of a Major Depressive Episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities . . . . The individual must also experience at least four additional symptoms drawn from a list that includes changes in appetite or weight, sleep and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating or making decisions; or recurrent thoughts of death or suicidal ideation, plans or attempts.").

83. This research literature is reviewed in *MacArthur I, supra* note 19.

84. PAUL S. APPELBAUM, ALMOST A REVOLUTION: MENTAL HEALTH LAW AND THE LIMITS OF CHANGE (1994).

85. *See generally* BRAKEL ET AL., *supra* note 64, at 375.

make treatment-related decisions at multiple points during their illness.

Along with the two groups of mentally ill patients, a third group—medically ill patients[86]—was included. Comparisons between the performance of mentally ill and medically ill patients enable researchers to draw inferences about the impact of mental illness *per se* (as opposed to the undifferentiated effects of hospitalization) on decisionmaking abilities. Patients with ischemic heart disease (angina pectoris)[87] were chosen for the study since they matched the other two populations in their high incidence of hospitalization, considerable chronicity, frequent treatment using medications, and accessibility during hospitalization for interview.[88] Since one of our objectives was to isolate the impact of mental illness, of greatest importance was the fact that both the illness and treatment do not typically cause significant cognitive impairments.

The three groups were compared with subjects who were not

86. Many mental illnesses are thought to be biologically based. In this sense they may be no different from "medical" illnesses. The term is used here to highlight the distinction between mental illnesses, which are thought to result primarily in cognitive, perceptual, mood and behavioral impairments, and illnesses which primarily result in impairments of physical functioning.

Overall, the degree of impairment of decisionmaking capacity resulting from medical illnesses is probably underestimated. *See, e.g.*, Lewis M. Cohen et al., *Do Clinical and Formal Assessments of the Capacity of Patients in the Intensive Care Unit to Make Decisions Agree?* 153 ARCH. INTERN. MED. 2481 (1993) (finding 60% of patients have impaired scores on a global measure of cognitive functioning, but only one-third of patients are judged by medical staff as incapable of giving informed consent); L. Jaime Fitten & Martha S. Waite, *Impact of Medical Hospitalization on Treatment Decision-Making Capacity of the Elderly*, 150 ARCH. INTERN. MED. 1717, 1720 (1990) (finding that elderly inpatients scored significantly worse than control subjects on tests of understanding and reasoning, with physicians markedly underestimating the degree of impairment of the patient group). As a result, the relative effect of mental illness is overestimated. By comparing both subject populations and their community comparisons, the MacArthur study controls for the baseline effect of illness per se on capacity.

87. TABER'S CYCLOPEDIC MEDICAL DICTIONARY at 104 (17th ed. 1993).

88. Symptoms of angina include steady severe pain and feeling of pressure in a region of the heart, sweating, difficulty with breathing, and variable pulse rate (usually tense and quick). *Id.*

ill. Because a random sample of the community is unlikely to match all three subject populations on factors which may affect performance on cognitive tasks, comparison subjects were recruited and matched to each diagnostic group in terms of age, gender, race, education and highest level of occupation. Standard diagnostic interviews were employed to screen out those who met the criteria for either schizophrenia or depression.

The study was conducted at three sites: Worcester, Massachusetts; Kansas City, Missouri; and Pittsburgh, Pennsylvania. Ten research assistants who were trained to administer and score the instruments[89] collected data from the subjects: 75 schizophrenia patients, 92 depressed patients, 82 angina patients, and 249 community subjects.

89. The instruments were standardized; that is, questions were asked of the subjects in exactly the same way and the scoring was objective, based on specific scoring rules rather than subjective judgments about the quality of the subjects' responses.

Although it is ordinarily desirable to have raters blind as to which group a subject belongs, this was obviously impractical here. Therefore, expectancy effects cannot be ruled out entirely. However, they are reduced by the fact that researchers at each site had primary responsibility for only one diagnostic group.

C. *Results*[90]

There were three main findings of the MacArthur study. First, patients hospitalized with schizophrenia or depression more often showed deficits in their decisionmaking than hospitalized medically ill patients and non-patient comparison groups.[91] Most of this performance differential, however, was attributable to patients with schizophrenia. Low performance on the MacArthur measures can be mapped on a continuum ranging from slight to substantial deficits. For this study, the

90. This information is published in greater detail in *MacArthur III, supra* note 58. It is important to note that the data that follow probably *underestimate* the prevalence of impairments among the various populations. First, because of the delay between the hospital admission and study participation, many of the subjects had already begun treatment for their illness. Second, in some cases, both mentally ill and medically ill patients who suffer from serious impairments were excluded from the study for a number of reasons—sometimes doctors did not allow the researchers to approach potential subjects in order to protect the patients from intrusions or to protect the researchers from potentially violent patients. In addition, the most severely impaired subjects would likely have been unable to provide informed consent for participation in the study or to participate in extended interviews. All of the excluded groups probably would have manifested poorer performance on the measures of decisional abilities than the subjects who were recruited.

91. The MacArthur study found that patients with mental illness more often manifested deficits in performance on the measures of understanding, appreciation and reasoning than did medically ill patients and their non-ill comparison groups (only 5% of respondents overall were unable to express a choice, usually because of extreme ambivalence, and there was no significant difference between hospitalized patients and their comparison groups).

Percent of Subjects Scoring in the "Impaired" Range on the Three Measures

Measures	*Schizophrenia*	*Depression*	*Angina*	*Comparison*
Understanding	28.0	5.4	7.3	2.4
Appreciation	22.6	11.9	4.8	NA*
Reasoning	24.0	7.6	0.0	2.0

* *See supra* note 73.

MacArthur III, supra note 58.

extent a performance was deemed inadequate or "impaired" was determined by the relative infrequency of scores below a certain point. Thus, "impaired" subjects in the Mac Arthur Study were those who scored in the bottom 5% of the distribution of scores for the total study sample.[92] Here, "impairment" is an arbitrary measure—although it takes into account the distribution of capacities in the general study population (which is not necessarily representative of the non-study population), it is highly dependent upon the choice of statistical cut-off points. Thus, the percentages of subjects identified as "impaired" would increase if the cut-off were raised above 5% (e.g., "adequate" performance is defined as encompassing the range of scores within only one standard deviation from the mean), or decrease if the cut-off were lowered below 5% (e.g., "adequate" performance is defined as encompassing the range of scores within three standard deviations from the mean).

Second, although patients with schizophrenia showed the greatest impairments, the majority of these patients performed in the "unimpaired" range on each measure—72% on understanding, 77.4% on appreciation, and 76% on reasoning. Thus the lower overall performance on each individual measure was due to a minority of patients within the schizophrenia group. Moreover, examination of the correlations between low scores on each of the measures showed that the instruments identified different subgroups of "impaired" subjects. Although approximately the same percentage of subjects scored in the "impaired" range on each measure (one-quarter of the patients with schizophrenia), the identity of the impaired group changed. A substantial number of participants who demonstrated "adequate" performance on one measure manifested

92. This is a basic statistical means of identifying the lower end of a range of scores—"adequate" scores include any score falling within two standard deviations of the mean, and "impaired" scores fall below this range. Courts and legislatures may find this number (5%) to be too high for use in competence determinations and may prefer to set the statistical cut-off point so that a larger majority (i.e., greater than 95%) of the population is presumed competent. It should be stressed here that there are problems in using statistical cut-off points to set competence criteria, and if one were inclined to use statistical data in this way, it would need to be based upon epidemiologically valid samples, not the matched samples utilized here.

"impaired" performance on another. For example, of the 72% of subjects with schizophrenia who performed adequately on the understanding measure, 24.1% had impaired performance on appreciation and 14.8% on reasoning.[93]

Third, although age, gender, race, education and highest occupation failed to provide a basis for accurately predicting impairments among the groups, patients who manifested greater severity of psychiatric symptoms, especially thought disturbances, also tended to manifest deficits in understanding and reasoning. This finding was consistent with previous literature and research on cognitive deficits associated with schizophrenia.[94] The following Part of this Article addresses the implications of these data for legal determinations of competence.

93.

Percent of Subjects with Adequate Performance on One Measure who Show Impairment on Another

Adequate Performance on:	Impaired Performance on Understanding	Appreciation	Reasoning
Understanding			
Schizophrenia		24.1	14.8
Depression		13.8	6.9
Angina		5.3	0
Comparison		NA	1.6
Appreciation			
Schizophrenia	29.8		24.5
Depression	6.3		7.5
Angina	6.3		0
Comparison	NA		NA
Reasoning			
Schizophrenia	18.2	21.8	
Depression	4.7	11.9	
Angina	7.3	4.8	
Comparison	2.0	NA	

MacArthur III, supra note 58.

94. *See, e.g.,* Barry D. Rosenfield et al., *Decision Making in a Schizophrenic Population,* 16 LAW & HUM. BEHAV. 651 (1992); Paul R. Benson et al., *Information Disclosure, Subject Understanding, and Informed Consent in Psychiatric Research,* 12 LAW & HUM. BEHAV. 455, 455 (1988) (stating that people with schizophrenia demonstrated poor comprehension); *see also MacArthur I, supra* note 19.

III. APPLYING THE MACARTHUR TREATMENT COMPETENCE STUDY TO QUESTIONS REGARDING POLICIES FOR DETERMINING COMPETENCE

The framework described in Part I and the data obtained from the MacArthur study can be applied to two sets of policy-related issues. First, they assist in formulating standards of legal competence. There are three initial policy questions that must be addressed in undertaking this task: (1) which components of capacity should be included in a standard of legal competence, (2) what degree of incapacity or deficiency on one or more of the components should result in a determination of legal incompetence, (3) and what specific information must the patient understand, appreciate or rationally manipulate? There are also a number of procedural issues that can be explored using the MacArthur data, including the following: the value of competence screening for specific patient populations, procedural mechanisms for determining competence, and the weight courts should give to data such as the MacArthur findings. The remaining Part of the Article discusses how the MacArthur data may help answer these questions. The subsequent initial reflections on how the MacArthur data can help to construct standards of legal competence should not be taken to imply that an empirical analysis alone will suffice. On the contrary, we recognize that the answers to these questions are influenced as well by normative criteria. Although we provide a sketch of the normative issues, a full account is beyond the scope of this Article.

A. *Formulating the Standard*

Every jurisdiction faces the challenge of formulating a governing standard for decisionmaking competence. Existing standards, as noted above, whether developed through case law or statutes, often contain vague and confusing criteria.[95] Case law standards, in particular, are highly sensitive to the fact situation of the case on which they are based, leaving residual uncertainty as to whether other standards might be applied by the same court in other circumstances. To improve the stan-

95. *See supra* Part I.

dards used to govern competence determinations, a number of scholars and committees have attempted to develop model standards delineating specific requirements of capacity.[96]

The framework of standards for competence elaborated by the MacArthur research group should help to order and clarify the present confusion about standards by delineating the range

96. For example, the Uniform Probate Code defines an "incapacitated person" as "any person who is impaired . . . to the extent of lacking sufficient understanding or capacity to make or communicate responsible decisions." UNIF. PROB. CODE § 5-103(7) (1994). (Under our framework this would likely translate into understanding, communication and appreciation.) See *also* RESTATEMENT (SECOND) OP TORTS § 892A cmt. b (1977) (stating that to constitute effective consent, the individual must be "capable of appreciating the nature, extent and probable consequences of the conduct consented to . . . . "). The President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research identifies three elements of patients' capacity to make health care decisions: "(1) possession of a set of values and goals, (2) the ability to communicate and to understand information, and (3) the ability to reason and to deliberate about one's choices." PRESIDENT'S COMM'N FOR THE STUDY OF ETHICAL PROBLEMS IN MEDICINE AND BIOMEDICAL AND BEHAVIORAL RESEARCH, MAKING HEALTH CARE DECISIONS: THE ETHICAL AND LEGAL IMPLICATIONS OF INFORMED CONSENT IN THE PATIENT-PRACTITIONER RELATIONSHIP 57 (1982) (internal citation omitted) [hereinafter PRESIDENT'S COMM'N]. A Canadian report on mental competence proposed that "in order to be considered mentally capable to make a treatment decision, an individual must have the ability to (a) understand the nature of the condition for which the treatment is proposed, (b) to understand the nature of the proposed treatment, and (c) to appreciate the consequences of giving or withholding consent." CANADIAN COMM'N ENQUIRY, *supra* note 63, at 250. (Under our framework this would likely translate into understanding and appreciation.) Finally, Allen Buchanan and Dan Brock argue that "[t]he chief elements of patient competence are: (a) the ability to understand the relevant options, (b) the ability to understand the relevant consequences for the patient's life of each of the relevant options, [and] (c) the ability to evaluate the consequences of the various options by relating them to his or her own values." BUCHANAN & BROCK, *supra* note 7, at 83. (Under our framework this would likely translate into understanding, appreciation and rational manipulation.) Although all of the above formulations of competence may be intuitively acceptable, all omit one or more of the commonly used legal criteria. Moreover, the drafters of these and other models do not always indicate their awareness of the existence of other potential standards, and often fail to justify the choices they made to include one component in a standard and exclude others.

of standards endorsed by the courts and legislatures. Formulators of standards should now have a common starting point and a common vocabulary by which to compare the approaches in various jurisdictions. Other standards than those identified here may evolve, of course, but the burden should be on persons who deviate from the general common law and statutory structure to justify their reasons for doing so.

Formulating a standard will begin with the identification of the governing normative principles. On a normative level, the choice between standards involves balancing the extent to which a failure to demonstrate the ability measured by a component indicates impaired autonomy in decisionmaking against whether such a failure is a sufficient basis for limiting a patient's decisionmaking authority. Although seriously impaired people should be protected, the right to make decisions for oneself should not be burdened more than is absolutely necessary. In consequentialist terms the issue is whether the harm of incorrectly labeling autonomous agents as incompetent is outweighed by the harm of incorrectly labeling nonautonomous agents as competent. The former is a harm to the patient's autonomy, or right of self-determination. The latter is only significant to the extent that the patient's well-being is at risk; no harm results from allowing an incompetent patient to make a decision of minimal effect or one that is in keeping with his or her objective best interests. Only competent patients, however, are free to make decisions that are not in their best interests.[97]

Once the governing normative principles have been identified and, in many cases, balanced against each other, effecting

97. *See generally* BUCHANAN & BROCK, *supra* note 7, at 40-41. The doctrine of "substituted judgment" complicates this somewhat. When substituted judgment is used, a proxy decisionmaker must decide what an incompetent individual would have wanted if he or she had been competent. *Id.* at 10. The final choice does not have to be in the patient's objective best interest. As a result, although an incompetent patient should not be allowed to make a decision that is not in her objective best interest, a decision can be made for an incompetent patient that is not in her objective best interest. This distinction is important as the substituted judgment standard does not allow incompetent decisionmaking, but rather, effectuates the previous (competent) wishes of a presently incompetent patient.

the desired result will depend on crafting a standard that results in people being correctly identified as competent or incompetent. Three aspects of formulating a standard need to be taken into account here. First, the choice of components of the final standard is important, as different standards may result in different people and different numbers of people being identified as impaired. Second, the required level of performance, in a quantitative sense, must be specified. For example, in addition to applying an "understanding standard," one must also establish how much understanding is necessary: is it sufficient that a patient manifests understanding of only 50% of the information that is disclosed, or must a patient understand 95% of what he or she is told? Third, necessary qualitative aspects of performance must be identified. For example, a patient may understand that coronary bypass surgery is aimed at relieving the pain in her chest but fail to grasp that it will do so (if successful) by creating a shunt to permit blood to travel past an arterial obstruction. Is understanding of both pieces of information necessary? The following sections will address each of these three factors in turn.

1. Choice of Components of a Standard

Selecting the components of a standard, as noted above, involves a combination of normative and empirical considerations. The first issue that must be addressed in this process is whether a single standard will serve for all medical decisionmaking, or whether discretion will be allowed in choosing components. Obvious advantages of a single standard include greater ease and consistency of application, with fewer opportunities to manipulate the outcome by changing the way in which a situation is characterized (e.g., construing a case as involving a "high-risk" decision, thus altering the relevant standard).

Although these factors weigh strongly in favor of a uniform standard for all competence determinations, there may be circumstances in which important policy goals can be achieved by varying which of the four components of decisionmaking competence are applied.[98] These "exceptions" to the single

98. *See, e.g.,* James F. Drane, *The Many Faces of Competency,* 15

standard should be clearly delineated ahead of time and professional discretion should be minimized.

The American Psychiatric Association Task Force on Consent to Voluntary Hospitalization sets out such an exception by suggesting the application of an "understanding standard" to assess the capacity of persons who desire to admit themselves to a psychiatric facility—regardless of the standard that might be applied to other treatment decisions." Under the Task Force's approach, the patient would be required to demonstrate that he knew he was entering a hospital for treatment and that release may not be automatic.[100] He would not, however, need to demonstrate an appreciation of the treatment (e.g., a patient who thought that treatment would be effective because of interference from ultra-violet light waves emanating from overhead fixtures may still be considered competent to admit himself). This minimal standard of competence may be warranted, the APA Task Force argued, because of the low risk of harm from voluntary hospitalization, particularly when the patient's choice is confirmed by an independent professional judgment, as well as society's interest in encouraging individual choice in this context.[101] Voluntary admission is linked both with better treatment outcome and less stigma.[102] The alternative, involuntary commitment, will likely result in a greater (longer-term) deprivation of liberty. In this case, the Task Force concluded, the harm to the individual (i.e., a minor deprivation of liberty) should be balanced against the possible harm of not allowing people who need treatment to get help.[103] To the degree that we want to encourage individual

HASTINGS CENTER REP. 17, 18 (1985) (arguing for a sliding scale of standards which increase in rigor as the consequences flowing from patient decisions become more serious).

99. AMERICAN PSYCHIATRIC ASS'N, TASK FORCE REPORT 34, CONSENT TO VOLUNTARY HOSPITALIZATION 8-9 (1993) [hereinafter APA REPORT].

100. *Id.* at 9. Most states use a "conditional" voluntary admission model which allows for the temporary retention of a voluntary patient for a period of up to five days after discharge is requested, even over that patient's objection. This is generally used to permit the initiation of involuntary proceedings where necessary. *Id.* at 4; *see also* BRAKEL ET AL., *supra* note 64.

101. APA REPORT, *supra* note 99, at 7.

102. *Id.* at 1.

103. The balance of harms depends on whether the people who would

choice in this context, even at the risk of possibly allowing an incompetent and therefore non-autonomous person to make a decision, a limited standard of competence may be appropriate.

Whether or not exceptions to the general standard of competence are recognized in a jurisdiction, determining which components to include in that standard requires careful attention. All jurisdictions appear to include in their standards of competence a requirement that patients be able to evidence a choice and a minimal understanding requirement.[104] This is based on the normative judgments that a person who cannot evidence a decision, or who fails to comprehend the information relevant to a treatment decision, is not able to make even a minimally adequate choice. We believe these judgments are sound.

Ought a jurisdiction stop with an "understanding standard" or should consideration be given to the addition of appreciation or rational manipulation components? The MacArthur data are helpful here. If addition of the appreciation and rational manipulation criteria identify persons as impaired who would not have been detected using an understanding standard alone, there is a practical gain from incorporating them into a final standard.[105] In fact, the data suggest that the four components *do* identify different people as impaired. Application of any one of the three major criteria (understanding, appreciation and reasoning) to the sample of patients with schizophrenia revealed impairment in approximately 25% of the group.

not be permitted to sign in voluntarily meet the involuntary commitment criteria (i.e., there is an alternative means to enter the hospital). If these individuals met the involuntary standard, then the harm resulting from the deprivation of liberty that ensues from voluntary hospitalization should be balanced against the possible deprivation of liberty that results from involuntary hospitalization. If, on the other hand, voluntary patients do not meet the involuntary criteria, and both voluntary and involuntary hospitalization are thereby ruled out, then the balance of harms must also take into consideration the detrimental effects of not getting needed (and requested) help.

104. *See supra* notes 23*57 and accompanying text.

105. There might be other goals achieved by including appreciation or rational manipulation, even if no additional incompetent individuals were identified. Such an approach might serve to educate the public about the dimensions of capacity normatively required before a decisionmaking process is considered adequate.

But use of all three *elements* conjointly resulted *in more than* half of the patients with schizophrenia being classified as impaired.[106] There are empirical grounds, therefore, for adding appreciation and/or reasoning components to a compound standard, as many jurisdictions presently do.[107]

106. We would reemphasize here that data reported below apply to patients recently admitted to an inpatient facility and therefore represent a more severely ill sample of people suffering from schizophrenia or depression then would be observed in the general population. *But see supra* note 90 (noting that the data probably underestimate impairment in hospitalized groups).

Percent of Subjects Scoring in the Impaired Range on Compound Standards

Standards	*Schizophrenia*	*Depression*	*Angina*	*Comparison*
Understanding &/or Appreciation	45.3	18.4	12.2	2.4
Understanding &/or Reasoning	38.7	11.9	7.3	4.0
Understanding, Appreciation &/or Reasoning	52.0	23.8	12.2	4.0*

*These percentages do not reflect performance on Appreciation, which was not administered to comparison subjects.

Grisso & Appelbaum, *supra* note 59, at 1036.

107. The case law and commentaries tend to establish a hierarchical model of competence, *see, e.g.,* Appelbaum & Roth, *supra* note 71, as though the four *elements* of capacity that might form the components of a legal standard represent a linear progression of increasingly difficult measures. On *a priori* grounds, it is difficult to quarrel with the conclusion that evidencing a choice is a threshold requirement and understanding is a logical predicate to appreciation and rational manipulation. The results of the MacArthur Study, however, suggest that a strictly hierarchical model is flawed from an empirical perspective. Although evidencing a choice does appear to have a threshold function, understanding, appreciation and rational manipulation do not seem to represent increasingly rigorous criteria. Instead, each entails approximately the same amount of rigor, but identifies different, albeit partially overlapping, populations with impaired capacities. *See supra* note 91 and accompanying text.

David Weisstub, Chairman of the Canadian Enquiry on Mental Competency, argues that a rational manipulation criterion is inappropriate because it is indistinguishable from appreciation. *See* CANADIAN COMM'N ENQUIRY, *supra* note 63, at 188. Analysis of the MacArthur data

Appreciation has been incorporated into a compound standard of competence in many jurisdictions. The likely rationale for inclusion is that people who fail to acknowledge that they are ill or that effective treatment may be available (the most common impairments of appreciation) cannot make meaningful choices about treatment. People who do not know they are sick cannot weigh adequately the risks and benefits of potential treatments. Thus in *Lane v. Candura*[108] the patient was considered competent to refuse amputation of a gangrenous leg since she "appreciated] the nature and consequences of her act" (i.e., that she would likely die without surgery).[109] Conversely, in *In re Roe,*[110] the patient was held to be incompetent to make an informed decision about antipsychotic medication because although he "understood] the risks attendant on taking [the medication], ... he clearly d[id] not appreciate the risks associated with refusing it" (i.e., he did not believe he was mentally ill).[111] The MacArthur data suggest that a significant number of additional patients—24% of patients with schizophrenia, 13.8% of patients suffering from depression, and 5.3% of patients with angina in the study population—would be identified as impaired when an appreciation component is combined with an "understanding standard."[112] Taken together, the normative and empirical rationales constitute strong justification for inclusion of appreciation in a compound competence standard.

shows that rational manipulation *is* distinguishable from the other measures of capacity. See *MacArthur I, supra* note 19, at 116-18.

108. 376 N.E.2d 1232 (Mass. App. Ct. 1978).

109. *Id.* at 1236.

110. 583 N.E.2d 1282 (Mass. 1992).

111. *Id.* at 1286.

It may be significant to note that in *Roe* the court appointed a guardian to make a decision based upon what the patient would have wanted had he been competent. *Id.* Thus any potential harm to patients' autonomy may be lessened by the use of a substituted judgment standard which seeks to maximize patients' right of self-determination by effectuating their competent preferences. *But see* Thomas G. Gutheil & Paul S. Appelbaum, *Substituted Judgment: Best Interests in Disguise,* 13 HASTINGS CENTER REP. 8, 9 (1983) (criticizing this aspect of the substituted judgment approach).

112. *See supra* note 93.

Whether a rational manipulation component is desirable as well is a closer question. Analysis of the MacArthur data shows a smaller percentage of people who understand and appreciate adequately but score in the impaired range on reasoning.[113] Jurisdictions that already omit this component may do so because of the perceived likelihood of abuse. For example, there is the possibility that a clinician or a court will confuse the requirement of a "reasoned choice" with requirement of a "reasonable choice," thus inappropriately shifting the inquiry from the decisionmaking process to the outcome.[114] Abuse is possible, however, under any of the proposed standards, and there is no evidence that the rational manipulation component is especially susceptible.

If, however, concerns over misuse of a rational manipulation component are thought to outweigh the desirability of identifying persons with impaired reasoning, one alternative would be to hold the criterion in reserve for exceptional cases.[115] Thus, a jurisdiction might identify specific situations in which the criterion should apply, such as cases in which the patient must choose between a number of complex alternatives, and thus the possibility of error in application is outweighed by the harm of letting potentially incompetent patients make complex treatment decisions. As the number of treatment options increases, assuming only one option best satisfies one's interests, the probability of choosing an option that is not in one's best interest is greater (e.g., if only 2 choices exist, there is a 50% proba-

113. 6.7% of schizophrenia patients, 5.4% of depressed patients, and 0% of angina patients. *See supra* note 93. Note, however, that even these small percentages may account for a large number of actual patients since hundreds of thousands of persons with each of these disorders are hospitalized each year.

114. *See supra* note 22.

115. Permitting discretion in whether to apply the rational manipulation criterion may lead to a number of negative consequences including less consistency in competence determinations and greater opportunity to manipulate the outcome of a competence assessment by changing the required abilities (e.g., adding a rational manipulation component) when a patient refuses treatment. This may be mitigated, to a large degree, by clearly specifying the situations in which a rational manipulation criterion should be applied. The less discretion allowed, the less possibility the standard will be abused, or applied inconsistently.

bility of selecting the against-interest choice; three choices, 66%; four choices, 75%).[116] Moreover, as the complexity of each option increases, a patient whose ability to process information logically is impaired may be more likely to fail to make an autonomous decision (i.e., a decision in accordance with his or her preferences). When the number and complexity of treatment options are high or the degree of risk involved is high, there is a stronger argument for including a rational manipulation component in the legal standard of competence.

2. Quantitative Aspects: Degree of Capacity Required

In addition to which components are chosen, the degree of deficits in ability required to establish incompetence depends on how "impaired" performance is defined.[117] Raising the degree of ability required for competence will result in fewer subjects considered competent, while lowering the degree of requisite ability may have the effect of allowing people who show significant impairments to make binding decisions. In setting competence criteria, courts and legislatures will want to ensure that the vast majority of the population is considered competent, but that the requisite level of capacity is not set so low as to be meaningless (i.e., requiring almost no understanding, appreciation or reasoning).

One option is to use a fixed level of performance above which an individual would be considered competent to make all treatment decisions (e.g., understanding, appreciating and/or rationally manipulating 75% of the information presented.)[118] There are certain advantages to this alternative, including greater consistency in application of the standards, and increased certainty on the part of medical professionals who

116. These percentages are based on the assumption of essentially random choice in a state of incompetence.

117. *See* discussion *supra* Part II.

118. For example, instead of requiring a higher degree of capacity to consent to an appendectomy than to consent to an x-ray, once a patient met some fixed level of capacity she would be competent to consent to any medical treatment. A fixed standard is akin to a "rule" discussed below, whereas a sliding scale would entail application of a "standard." See the discussion *infra* notes 132-37 and accompanying text on rules versus standards.

need to decide which patients' decisions to accept.[119] In addition, the possibility of manipulating the standards according to subjective judgments about a patient's choice is lessened.

The use of a fixed level of performance, however, has a number of disadvantages. The standard may be insufficiently rigorous because of the need to set the level of required capacity low in order to accommodate the majority of the population. On the other hand, the standard may be overly restrictive if the line is set too high in order to prevent any incapacitated people from making decisions.

Instead of using a fixed level of competence, a sliding scale could be applied.[120] This might allow competence determinations to take into account the features of the patient's situation, which many commentators believe is desirable,[121] in a less confusing manner than would result from varying the components which are included in the legal standard. For example, although a patient would be required to demonstrate both understanding and appreciation for all treatment decisions, the level of understanding or appreciation may vary according to the specific context. A patient who shows minor impairments on the measures may be competent to make simple treatment decisions, but those same impairments would cause greater concern when the treatment decision involves more complex elements. Relevant factors to consider might include the number of treatment options and the amount of risk entailed in any one treatment option—risk being of greater importance than complexity.

One author suggested that while a patient could consent to "conventional treatment without demonstrating a high degree of competency, a greater showing of competency [would be] appropriate when the intervention chosen is of questionable value and carries great risk."[122] Although this would allow a

119. *NEJM, supra* note 19, at 1637.

120. *See, e.g.,* PRESIDENT'S COMM'N, *supra* note 96, at 60 (suggesting that the level of capacity should depend on the potential consequences of the patient's decision).

121. *See, e.g., id.;* Drane, *supra* note 98, at 18.

122. Bruce Winick, *Competency to Consent to Treatment: The Distinction Between Assent and Objection,* 28 HOUS. L. REV. 15, 43-44 (1991). Another author requires that physicians first determine whether a mental

great deal of flexibility, it is also highly subjective. How does one determine the "conventional" treatment? For example, if a patient in the end stage of terminal cancer refuses any intervention (including simple antibiotics) would such action be considered conventional or unconventional?[123] Likewise, determining what treatments are of "questionable value" is also difficult. How should value be defined—extending life, easing pain, or effectuating a cure?[124] What if a patient refuses a treatment that has a high probability of alleviating some of the symptoms (and thus prolonging life) but holds no hope of cure? Alternatively, what if the patient requests a treatment that has a low probability of alleviating symptoms but is the only procedure available? It would appear that considerations should include more than the economic cost-benefit ratio of a treatment, yet assigning a value to life, or quality of life, is fraught with difficulties. These arguments demonstrate the problems posed by requiring a greater showing of competence based upon amorphous factors such as unconventionality of treatment.

Allen Buchanan and Dan Brock argue that the level of competence should vary according to the "net balance of expected benefits and risks of the patient's choice in comparison with other alternatives," an approach that we find persuasive.[125] Although this approach does not avoid all of the difficulties identified above (as costs and benefits would still need to be identified and balanced against each other), it makes the need to address these issues explicit and insures that a patient's acceptance or refusal of treatment would only be circumstantially relevant. Moreover, cost/benefit analyses (here performed by the physician) can be tailored to accord with individual

disorder is present, then question whether the symptoms disable decision-making, and finally whether the decision is dangerous. Robert P. Roca, *Determining Decisional Capacity: A Medical Perspective,* 62 FORDHAM L. REV. 1177, 1190 (1994) (demonstrating, in Figure 1, how the answers to these questions influence capacity determinations).

123. Winick defines conventionality as what treatment would be generally recommended by a physician. *See* Winick, *supra* note 122, at 44.

124. Winick looks at the risk/benefit ratio of the intervention in order to determine "questionable value." *See id.*

125. BUCHANAN & BROCK, *supra* note 7, at 52.

patient values, like mechanisms of substituted decisionmaking. Thus the physician may consider the patient's subjective values in determining what counts as a cost or a benefit. According to this model, when the net balance is substantially better than the alternatives, the patient need only demonstrate a low level of competence. When the balance is equal to the alternatives, a moderate level of competence would be required; and when the balance is substantially worse, a high level of competence would be required.[126] This avoids the need to establish which treatments are conventional, while at the same time it takes into account the fact that treatment refusal may be the most appropriate course of action.

3. Qualitative Aspects of Applying the Standard

It is as critical to determine which cognitive functions are impaired as it is to identify the overall level of impairment. For example, in a complex surgical procedure, substantial deficits in understanding the technical aspects of the operation may be common. If, however, a patient fails to understand a basic feature of the operation (e.g., that general anesthesia renders a person unconscious), such an individual should not be allowed to make the decision. At issue is not the degree or quantity of understanding,[127] but the quality or content of understanding (i.e., *what* the patient understands).[128]

Informed consent law requires that a patient's decision be voluntary, informed and competent.[129] Each element, however, is not completely distinct from the others. For example, although the right to information requirement is generally applied to assess the nature of the physician's disclosure to the patient,[130] it also has implications for evaluations of competence. In other words, what the patient is required to understand or appreciate is linked to what information the physician

126. *Id.* at 53-57. See examples cited therein.

127. Whether the patient understands the information well, moderately or poorly is not measured. *See supra* text accompanying note 121.

128. The MacArthur data do not provide adequate information on this point since the study focused only on one form of consent disclosure for each patient.

129. BRAKEL ET AL., *supra* note 64, at 448; *see also supra* note 4.

130. BRAKEL ET AL., *supra* note 64, at 449.

is required to disclose. In this sense, competence standards can vary in accordance with the amount and complexity of information involved. As a result, competence standards have a type of "built-in" sliding scale—more complex procedures involve increasingly complex elements of information which may be more difficult to understand. The amount of information a patient is required to understand will affect whether that person is considered competent. For instance, if we take the voluntary hospitalization example from above, patients would only be required to understand that they are entering a hospital and that discharge may not be automatic. They would not be expected to understand all the legal aspects of voluntary hospitalization or the details of the hospital's procedures for dealing with voluntary patients.

Relying solely upon quantitative data (how much the patient understands) to evaluate competence may be inappropriate in some cases. There are certain aspects of understanding, appreciation and reasoning that are so crucial to competent consent that allowing a person to make a treatment decision without these elements present would be inadvisable. A patient who scores above the "impaired" cut-off point on a given measure—that is, he or she has not scored in the lower range of the score distribution scale when compared to the rest of the population—arguably should still be considered incompetent if he or she has failed to demonstrate a particular capacity that is essential for competent decisionmaking. For example, a subject who is asked to enter a research protocol and understands the procedure she is asked to participate in but fails to understand the distinction between ordinary treatment and research, should probably be considered incompetent to consent to participation in the experiment.[131]

In summary, all three factors—which components are included in a standard, how the standards are applied, and to what information the standards are applied—will affect competence determinations. Clearly more research on these issues is necessary before conclusively establishing a legal standard of competence. At present, it may be sufficient to note that for-

131. *See, e.g.,* Paul S. Appelbaum, *Patients' Competence to Consent to Neurobiological Research,* ACCOUNTABILITY IN RESEARCH 241, 248 (1996).

mulating a legal standard of competence is somewhat context specific, and as a result, different situations may require different application of those standards.

Moreover, the debate here reflects the classic "rules versus standards" controversy in creation of laws. A "rule" is a precise legal instruction "which requires for its application nothing more than a determination of the happening or non-happening of physical or mental events" (e.g., the speed limit is 55 mph).[132] A "standard" is a less precise legal instruction "which requires a comparison of the quality or tendency of what happened in the particular instance with what is believed to be the quality or tendency of happenings in like situations" (e.g., no person should drive at an excessive speed).[133] In theory, the distinction between "rules" and "standards" (using the terms in their legal sense) is merely in the degree of specificity.[134] In practice the issue is whether judges will determine the law *ex post* in creating precedent, or whether legislatures will determine the law *ex ante* in writing statutes, and whether one option is more desirable than the other.[135] At issue here is how specific legislatures should be in drafting statutes (or courts in formulating case law) governing competence determinations. There are several available options ranging from identifying general characteristics of acceptable decisions (e.g., "sufficient capacity to make or communicate responsible decisions") to identifying the components of a competence standard (e.g., evidencing a choice, understanding and appreciation). In addition, the specificity of the nature and degree of performance required to pass each component of the standard is in-

132. HENRY H. HART, JR. & ALBERT M. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW 139 (1994).

133. *Id.* at 140. In reality the distinction between "rules" and "standards" is not so clear-cut because the application of "rules" in certain circumstances entails some uncertainty. *Id.* at 139; *see also* H.L.A. HART, THE CONCEPT OF LAW 151-80 (1961) (discussing the "open-texture" of law).

134. *See, e.g.,* Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking,* 3 J. LEGAL STUD. 257, 258 (1974) (discussing whether specificity or generality is more efficient in legal rulemaking).

135. *See, e.g.,* Louis Kaplow, *Rules Versus Standards: An Economic Analysis,* 42 DUKE L.J. 557, 559-60 (1992) (noting the distinction between whether the law will be deemed *ex ante* or *ex post).*

volved, as is how they may vary according to the degree of risk faced by the patient.[136] Lack of specificity in statutes will mandate either judicial, medical or administrative determinations of competence requirements. Resolving the dilemma between "rules" and "standards" is beyond the scope of this Article. The MacArthur data do not provide specific guidance on this issue.[137] Suffice it to say that lawmakers should carefully consider not only which of the four components identified in Part I should be included in a competence standard, but also the extent to which the application of those standards should be determined ahead of time, rather than left to judicial, or even medical, interpretation.

B. What Procedures Should Be Used to Determine Incompetence[1]?

Competence determinations also raise procedural issues. For example, should patients routinely be screened in order to assess their decisionmaking capacity? What mechanism(s) should be used to determine competence, and what role should experts' opinions play in this process? The MacArthur data also provide guidance concerning these issues.

1. Screening of Patients for Incompetence

Whether a screening mechanism should be used routinely to assess patients' decisionmaking capacities depends on the cost of applying the procedure to the target population balanced against the benefit of identifying incompetent decisionmak-

136. Some states take this last approach for informed consent disclosure requirements. *See* Anthony Szczygiel, *Beyond Informed Consent,* 21 OHIO N.U. L. REV. 171, 212 (1994) (referring to lists published by the Louisiana Medical Disclosure Panel specifying the degree and form of disclosure for particular procedures).

137. A number of authors have argued that the controversy should be decided on economic grounds, comparing the costs and benefits of legislative rules versus judge-made rules. *See, e.g.,* Ehrlich & Posner, *supra* note 134, at 261; Kaplow, *supra* note 135, at 562 (noting that rules are more costly for legislatures, whereas standards are more costly for legal advisors or enforcement authorities). To the extent that the MacArthur data provide information regarding the costs of competence determinations, they may have some bearing on this issue.

ers.[138] There are three factors that are crucial to this analysis: first, the cost of screening will depend on the method chosen; second, the degree of benefit will depend on the prevalence of incapacity in the population, or the base-rate; and third, the benefit will relate to the extent of harm avoided. For an unselected sample of the general population, competence screening is probably unwarranted because the incidence of incapacity, and the corresponding likelihood of an incompetent person making a binding decision, is relatively low. The MacArthur data show that the prevalence of incapacity is low even among the type of medical patients included in the study. It increases considerably, however, in the population of people with schizophrenia, especially those recently admitted to a hospital.[139] Even for this group, though, competence screening may not be economically feasible except for the more severely ill patients.[140] Thus a maximally efficient screening process would focus only on patients who are clearly thought disordered, delusional or otherwise severely mentally ill.[141] As the risk inherent in a decision increases (e.g., a patient with

138. Also important is the mechanism's effectiveness—i.e., its ability to appropriately identify impaired or incompetent patients.

139. For any given measure, 25% of these patients scored in the "impaired" range compared to 5-7% of the angina patients and a mere 2% of the community subjects. When all measures are combined, 52% of patients with schizophrenia showed impairment on at least one measure, compared with 12% of angina patients and 4% of community subjects. For more information see *supra* notes 91 and 106. Note that the utility of screening in a general medical population will vary depending on the precise nature of that population, i.e., outpatients in a rheumatology clinic are likely to have fewer impairments of decisionmaking than stroke victims in an intensive care unit (ICU). Extrapolation to medical populations other than the one included in this study should be done cautiously with this variability in mind.

140. Greater severity of certain psychiatric symptoms was correlated with greater impairment. *MacArthur II, supra* note 59 (Table 8—showing correlations between experimental measures and scores on the BPRS and BDI).

141. For example, in Zinermon v. Burch, 494 U.S. 113, 118 (1990), the Supreme Court held that where a Florida statute required that a patient be competent to admit himself or herself into a psychiatric facility, hospital officials could be held liable for allowing the voluntary commitment of a patient who thought he was entering heaven instead of a hospital.

schizophrenia's decision to enter a high-risk research project), so does the justification for routine screening.

An alternative screening method derived from the rationale that the usefulness of screening is proportionate to the risk involved in patient decisionmaking is to focus on treatment refusers. Most medical professionals do not question the competence of a patient who is consenting to treatment. This may be due to the clinician's unwillingness to question a patient's autonomy when the physician reasonably believes the patient is agreeing to a procedure that is in his or her best interests.[142] On the other hand, it has been argued that rejection of treatment may function as a useful indicator of the need for a competence assessment.[143] That is to say, only patients who are making choices that, in the judgment of their clinicians, threaten their medical welfare should be subjected to rigorous examination of their capacity to make treatment decisions.[144]

142. *See, e.g.,* BUCHANAN & BROCK, *supra* note 7, at 57-58 ("[I]t is a reasonable assumption that physicians' treatment recommendations are more often than not in the interests of their patients. Consequently, it is in turn a reasonable presumption—although rebuttable in any particular instance—that a treatment refusal is contrary to the patient's interest." *Id.* at 58); Charles M. Culver, *The Clinical Determination of Competence in* LEGAL AND ETHICAL ASPECTS OF HEALTH CARE FOR THE ELDERLY 277, 282 (Kapp et al. eds., 1986) (arguing that [a][i]t would rarely if ever be irrational for a patient to consent to a suggested treatment, because competent physicians rarely if ever suggest irrational treatments." Nevertheless, "[r]efusing a treatment can be either an irrational or a rational act.").

143. *See generally* Steven K. Hoge et al., *A Prospective, Multicenter Study of Patients' Refusal of Antipsychotic Medication,* 47 ARCHIVES GEN. PSYCHIATRY 949 (1990) (discussing the negative effects on patients who are deemed treatment refusers).

144. *See, e.g.,* BUCHANAN & BROCK, *supra* note 7, at 22. *Compare* Rivers v. Katz, 495 N.E.2d 337, 343-44 (N.Y. 1986) (requiring judicial review of patients who are thought to be incompetent and are refusing treatment) *with* Rogers v. Commissioner of Dep't of Mental Health, 458 N.E.2d 308, 310 (Mass. 1983) (requiring judicial review of all competence determinations).

Using treatment refusal as a sole screening indicator may result in a number of incapacitated patients being allowed to make decisions. For example, one study of psychiatric inpatients found that the incidence of treatment refusal was 7.2%. *See* Hoge, *supra* note 143, at 950. Compare this percentage with the percentages of subjects in the MacArthur study

All patients who refuse treatment are not *per se* incompetent, nor should formal screening mechanisms be applied to all non-consenting patients, but rejection can be used as a means of identifying those patients whose competence should be examined further.[145]

2. Making Decisions About Impaired Decisionmaking

If impairment is suspected, who should decide whether the person should be allowed to make his or her own decision about treatment? The answer to this question probably depends on the mechanism used to identify those presumed to be incompetent. In an acute psychiatric setting, use of widespread screening would probably preclude, on economic grounds, exclusive reliance on judicial determinations of competence. Incapacity would be determined and decisionmaking power allocated by some less formal process. Extrapolating from the MacArthur data, which demonstrated the presence of significant impairments in half of the schizophrenic population, there would likely be a high incidence of hearings, especially involving patients with schizophrenia, representing a substantial burden if the judicial system were employed.[146] On the other hand, judicial review limited to disputed capacity determinations (i.e., appeals of initial findings) may be a more feasible alternative. While judicial mechanisms provide a significant degree of protection for individual rights, they also entail a number of disadvantages, including high cost and substantial delay.[147] Thus they are reasonably efficient only in a system

who showed decisionmaking impairments. *See supra* notes 91 and 106. Moreover, the high incidence of non-compliance with medication among seriously medically ill patients suggests that many more factors (besides competence) control treatment refusal.

145. Degree of risk associated with the patient's medical treatment also may be sufficient to warrant competence screening, even when the patient shows no signs of a mental disorder and is consenting to treatment. For example, it could be argued that patients faced with extremely high risk treatment alternatives (e.g., cancer patients) should be administered a competence screening device no matter what indicia are present.

146. The exact frequency of positive findings of impairment for particular screening measures would depend on the factors discussed in the previous sections. The MacArthur data probably underestimate the prevalence of impairments among the various populations. *See supra* note 90.

147. The President's Commission noted that "resorting to the courts to

that does not frequently require formal determinations of competence.

One of the primary concerns that led to the use of judicial mechanisms in the past was the mental health system's reliance on unstructured methods of uncertain validity and reliability for assessing decisionmaking capacities. Eventually technologies for structured assessment were developed but initial instruments either did not correspond closely enough to the articulated legal standards or failed reliably to identify relevant impairments. The instruments used in the MacArthur Study have been modified to create the MacArthur Competence Assessment Tool for Treatment ("MaeCAT-T") for use in a clinical setting.[148] The MacCAT-T provides a standardized method for assessing patients' capacities to make treatment decisions, thereby reducing potential sources of clinician bias

adjudicate incompetency . . . is often burdensome . . . [and] the proceedings are in many cases so perfunctory and/or deferential to the professional expertise of providers that the role of the courts amounts to little more than pro forma ratification of what was readily apparent to health professionals." PRESIDENT'S COMM'N, supra note 96, at 175. See *also* FADON & BEAUCHAMP, *supra* note 5, at 97-100 (1986) (noting that informed consent requirements are more policy-oriented than legal); *cf.* Grant H. Morris, *Judging Judgment: Assessing the Competence of Mental Patients to Refuse Treatment*, 32 SAN DIEGO L. REV. 343, 431 (1995) (arguing that *law-trained* assessors (not necessarily judges) are needed to assure due process in competence hearings). Thus the Commission recommended that "determinations of decisional incapacity be made at the institutional level and that lawmakers be encouraged to recognize the validity of such determinations." PRESIDENT'S COMM'N, *supra* note 96, at 175. *See also* Paul S. Appelbaum & Warren F. Schwartz, *Minimizing the Social Cost of Choosing Treatment for the Involuntarily Hospitalized Mentally-Ill Patient: A New Approach to Defining the Patient's Role*, 24 CONN. L. REV. 433 (1992) (arguing that the costs and benefits of possible approaches to substitute decisionmaking should be compared before selecting a particular model). The MacArthur data does not conclude that judicial hearings are inappropriate. In fact, judicial hearings may be more accurate and may carry strong symbolic value. *See* Dennis E. Cichon, *The Right to "Just Say No": A History and Analysis of the Right to Refuse Antipsychotic Drugs*, 53 LA. L. REV. 283, 395 (1992) (noting that "research indicates that the adversarial process itself may be therapeutic").

148. *See generally* Thomas Grisso & Paul S. Appelbaum, *MacArthur Competence Assessment Tool—Treatment* ("MacCAT-T") (Draft Manual, on file with authors).

or inter-clinician disagreement regarding the patient's degree of capacity.[149] Employed properly, this tool, or ones similar to it, may enable the utilization of nonjudicial mechanisms for ascertaining capacity and allocating decisionmaking power, thereby allowing greater reliance on the determinations of medical professionals.[150] For example, if a consensus can be reached regarding the nature and degree of impairment that would constitute incompetence in a particular situation, the risk of error can be reduced since clinicians or non-judicial reviewers would have clear-cut data upon which to base their determinations of incompetence. Moreover, the use of identifiable data will also facilitate *post hoc* review of the process; in addition to a physician's testimony regarding the factors upon which she based her determination, there will also be test scores available as evidence of the degree of impairment. Even if judicial mechanisms are employed, the MacCAT-T or similar measures can provide a structured basis for judicial competence determinations.

149. Test-retest data on the MacArthur instruments (used in the study reported here) from which the MacCAT-T was derived show that the tests can be scored reliably and that the tests measure abilities in a relatively stable manner. These tests are also sensitive to changes in mental status that would influence the manner in which these abilities are manifested in performance at a given time. *See generally MacArthur II, supra* note 59.

150. Without additional data regarding the degree to which the measures correspond to legal determinations of competence, patients who score low might best be seen as at greater risk of failing to meet the threshold of ability associated with determinations of legal competence. *See, e.g.,* Rains v. Belshe, 38 Cal. Rptr. 2d 185, 201 (Ct. App. 1995) (holding that a statute which "permits an initial *nonjudicial* determination of a patient's incompetence by a physician or surgeon," does not deny patients due process).

Another option is to institute quasi-judicial competence hearings presided over by judicial masters or designated committees. States may want to establish special hearing boards similar to those used in New York for surrogate decisionmaking. N.Y. MENTAL HYG. LAW § 80.01 (McKinney 1995) (noting that "[t]he public interest [would] be served by the establishment of a statewide quasi-judicial . . . process, which would determine patient capacity to consent to or refuse medical treatment"); *see also* Clarence Sundram, *Informed Consent for Major Medical Treatment of Mentally Disabled People*, 318 NEW ENG. J. OF MED. 1368 (1988) (favorably evaluating the efficacy of the New York committee system).

It is important to note, however, that while scores below a certain point on the MacCAT-T or other functional measures may indicate problems in decisionmaking capacity, they do not in themselves mean that the patient is incompetent. Notwithstanding the tests' ability to identify subjects with impairments, low scores on any of the measures should not be taken as *de facto* determinants of incompetence. In this sense, patients who score low might be best seen as *at greater risk* (the lower the scores, the greater the risk) of failing to meet the threshold of ability associated with determinations of legal competence. As a result, more data are needed regarding the degree to which the measures correspond to legal determinations of competence before recommending substantial reliance, in judicial or even less formal settings, on structured methods such as those used in the MacArthur study.

IV. CONCLUSION

The MacArthur Treatment Competence study provides an important step towards developing usable legal standards of competence for medical decisionmaking by identifying a conceptualization of competence that can be used to guide further endeavors. Moreover, the framework and issues this Article addresses can be used to formulate standards of competence for other areas of decisionmaking beyond the medical treatment context.[151] Although the need to standardize legal determinations of competence is apparent, courts and legislatures should explore the policy implications of the various alternatives before authorizing adoption of a particular standard in a given context. As the answers to the remaining questions become clearer, we can move not only towards constructing usable standards, but also towards developing systematic procedures for evaluating and determining competence in other legal domains.

151. *See, e.g.*, Steven K. Hoge et al., *The MacArthur Adjudicative Competence Study I: Development of a Research Instrument* (draft manuscript, on file with authors, 1996); Richard J. Bonnie, *The Competence of Criminal Defendants: Beyond Dusky and Drope,* 47 U. MIAMI L. REV. 539 (1993) (discussing the various tests administered for assessing "competence" among criminal defendants and how the tests are based on context).