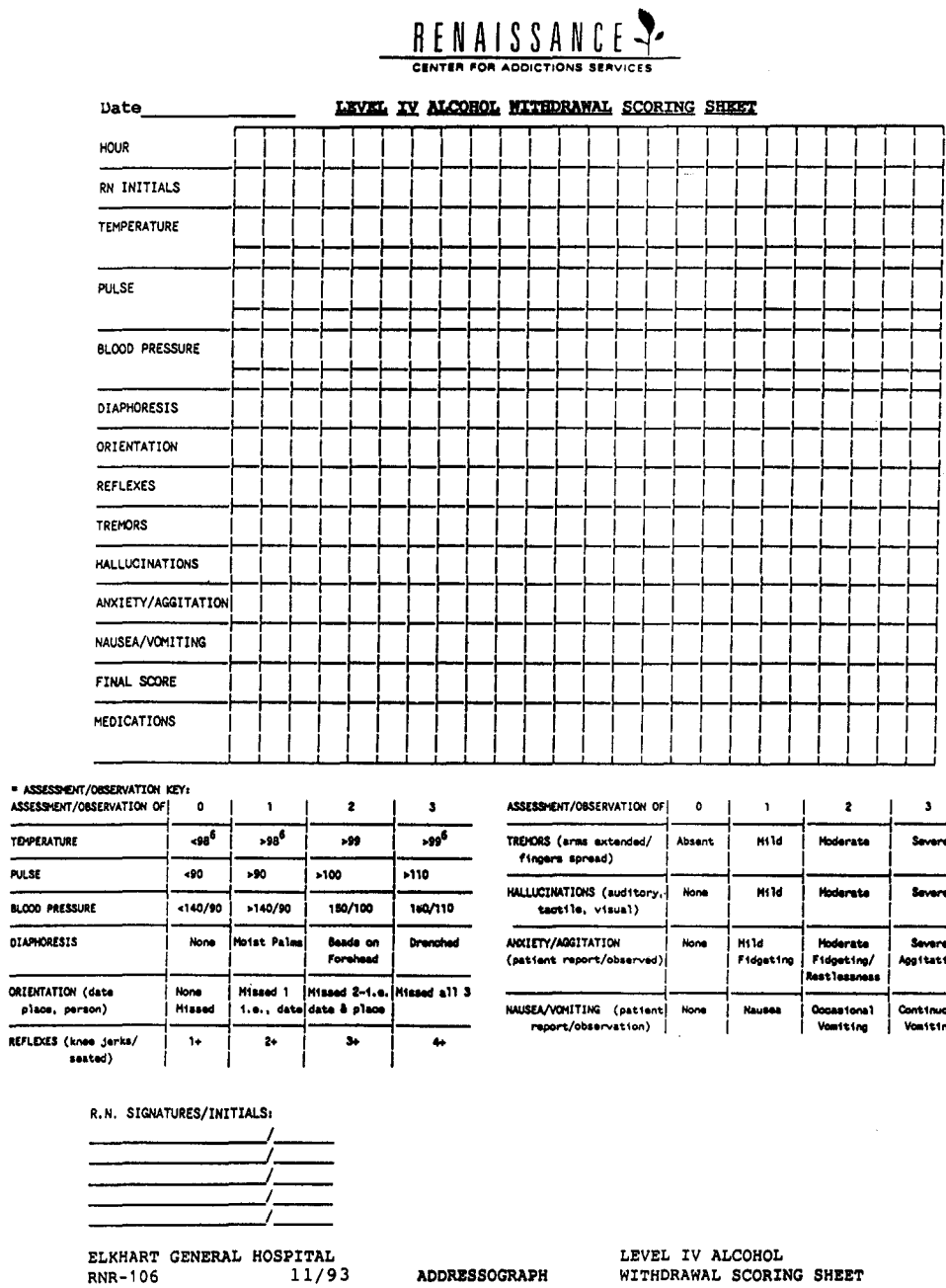
RENAISSANCE
CENTER FOR ADDICTIONS SERVICES

Date_____ LEVEL IV ALCOHOL WITHDRAWAL SCORING SHEET

| HOUR | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RN INITIALS | | | | | | | | | | | | | | | | | | | | | | | |
| TEMPERATURE | | | | | | | | | | | | | | | | | | | | | | | |
| PULSE | | | | | | | | | | | | | | | | | | | | | | | |
| BLOOD PRESSURE | | | | | | | | | | | | | | | | | | | | | | | |
| DIAPHORESIS | | | | | | | | | | | | | | | | | | | | | | | |
| ORIENTATION | | | | | | | | | | | | | | | | | | | | | | | |
| REFLEXES | | | | | | | | | | | | | | | | | | | | | | | |
| TREMORS | | | | | | | | | | | | | | | | | | | | | | | |
| HALLUCINATIONS | | | | | | | | | | | | | | | | | | | | | | | |
| ANXIETY/AGGITATION | | | | | | | | | | | | | | | | | | | | | | | |
| NAUSEA/VOMITING | | | | | | | | | | | | | | | | | | | | | | | |
| FINAL SCORE | | | | | | | | | | | | | | | | | | | | | | | |
| MEDICATIONS | | | | | | | | | | | | | | | | | | | | | | | |

* ASSESSMENT/OBSERVATION KEY:

| ASSESSMENT/OBSERVATION OF | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| TEMPERATURE | <98[6] | >98[6] | >99 | >99[6] |
| PULSE | <90 | >90 | >100 | >110 |
| BLOOD PRESSURE | <140/90 | >140/90 | 150/100 | 160/110 |
| DIAPHORESIS | None | Moist Palms | Beads on Forehead | Drenched |
| ORIENTATION (date place, person) | None Missed | Missed 1 i.e., date | Missed 2-i.e. date & place | Missed all 3 |
| REFLEXES (knee jerks/ seated) | 1+ | 2+ | 3+ | 4+ |

| ASSESSMENT/OBSERVATION OF | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| TREMORS (arms extended/ fingers spread) | Absent | Mild | Moderate | Severe |
| HALLUCINATIONS (auditory, tactile, visual) | None | Mild | Moderate | Severe |
| ANXIETY/AGGITATION (patient report/observed) | None | Mild Fidgeting | Moderate Fidgeting/ Restlessness | Severe Agitation |
| NAUSEA/VOMITING (patient report/observation) | None | Nausea | Occasional Vomiting | Continuous Vomiting |

R.N. SIGNATURES/INITIALS:

_____/_____
_____/_____
_____/_____
_____/_____
_____/_____

ELKHART GENERAL HOSPITAL
RNR-106 11/93 ADDRESSOGRAPH
LEVEL IV ALCOHOL
WITHDRAWAL SCORING SHEET

**Figure 1. Alcohol withdrawal scoring sheet. Reproduced with permission from Elkhart General Hospital, Elkhart, IN.**

### Cost and Outcome of Inpatient Care

*To the Editor:* The otherwise excellent paper of MacLean,[1] comparing the outcome and cost of inpatient care by family physicians with that provided by other specialists, contains one problematic statement. Discussing in-hospital mortality for patients in diagnosis-related group (DRG) 243 (medical back disorders), the author asserts that, "there was 1 mortality for family physicians' patients among the 4 in severity group 3 compared with none of 16 for other physicians, a statistically significant difference." The calculation is presumably correct, although some would be uncomfortable with assigning a $P$ value to such small numbers, but the data on which it is based appear to be invalid, illustrating the common fallacy of assuming that information is meaningful just because the numbers are "statistically significant."

The real world mortality rate for medical back disorders is close to zero. People with backache might die of other diseases, in or out of the hospital, but not of back pain *per se*. Those with cancer might have back pain, but it is their malignancy, not their pain,

that is lethal. The apparent discordance between these observations and the deaths reported by MacLean is explained by the nature of the MedisGroups system, under which patients are classified by the primary diagnosis that caused their admission. For example, a patient who was admitted with back pain but developed a fatal myocardial infarction in the hospital would still be classified in DRG 243. The numbers reported by MacLean thus reflect concurrent morbidity and mortality, not the outcome of inpatient management of backaches.

Two "soft" observations from the paper's Table 3 suggest that the two patient populations (those treated by family physicians and those managed by others) might not be comparable. First, twice as high a percentage of patients admitted by family physicians fall in a relatively severe category, admission severity 3 (4/68 = 5.9 percent, versus 16/560 = 2.9 percent), suggesting that they could have been sicker than those of other practitioners. Second, family physicians appear to have been more selective in admitting backache patients, averaging 1.66 admissions per physician during the study period as opposed to 2.15 admissions for each non-family physician. It thus appears that the finding that backache patients treated by family physicians in the study population experienced excessive mortality is an artifact of the MedisGroups system, a result of noncomparable patient populations, or both.

Robert D. Gillette, MD
Youngstown, OH

**References**

1. MacLean DS. Outcome and cost of family physicians' care — pilot study of three diagnosis-related groups in elderly inpatients. J Am Board Fam Pract 1993; 6:588-93.

*To the Editor:* The recent article, "Outcome and Cost of Family Physicians' Care — Pilot Study of Three Diagnosis-related Groups in Elderly Inpatients,"[1] although interesting, was flawed and contained geographically limiting data about its application to the general population of primary care physicians. Most of the current research literature investigating cost-effectiveness of primary care also suffers the same limitations.[2] The author states in his introductory paragraph, ". . . that care directed by primary care generalists would be more efficient and effective than the care currently provided by our preponderantly specialist-directed system," but provides few data to support such a statement. Certainly the author is not at fault, given the difficulty of structuring investigational protocols to validate such hypotheses.

Assessing the cost-effectiveness of health care is a difficult and arduous task when the use of medical resources depends on both the health care setting and physician. Choice of resources will differ for primary care physicians and specialists depending on the geographic locale, medical institution, and personal preferences of physicians. Care of patients in hospitals can escalate depending on the diagnostics and the therapeutics ordered. Specialists, delivering a large percentage of hospital care, perform detailed diagnostics and aggressive therapeutics. These might drive up costs but do not necessarily constitute a less cost-effective way to provide care if morbidity and mortality are lowered.

The role of the family physician in caring for hospitalized patients is to coordinate and facilitate care that decreases morbidity and mortality. In cases where a specialist is consulted, one would expect a direct effect on the cost and mortality of such patients admitted under family physicians. Would the outcome of care have been different if these patients were solely cared for by the family physician? Can family physicians ethically restrict the utilization of any resources deemed necessary by specialists who are consulted in patients' interests?

The complexity of the current medical system makes it difficult to assess quality of care in terms of cost and mortality alone, with different practice styles and resource utilization among physicians around the country. An understanding of primary care, access, cost, quality, and professional relationships must be integrated into future studies of cost-effective health care delivery.

Christopher E. Armour, MD
Smyrna, GA

**References**

1. MacLean D. Outcome and cost of family physicians' care — pilot study of three diagnosis-related groups in elderly inpatients. J Am Board Fam Pract 1993; 6:588-93.
2. Welch WP, Miller ME, Welch HG, Fisher ES, Wennberg JE. Geographic variation in expenditures for physicians' services in the United States. N Engl J Med 1993; 329:621-7.

The above letters were referred to Dr. MacLean, who offers the following reply:

*To the Editor:* I thank Drs. Gillette and Armour for their letters and Dr. Bertakis[1] for her editorial comments, and I would like to offer several comments in response.

I emphasize my agreement with Drs. Armour and Gillette, and with Welch, et al., on the nongeneralizability of this pilot study. In fact, I would claim that *all* outcome research is inherently nongeneralizable, or to paraphrase the late House Speaker Thomas (Tip) O'Neill, all outcome research is local. Generalizability is a property of mechanistic analysis, which studies relatively simple nonrandom "machines" (such as physics, biology, physiology, and mechanisms of disease). It is also a limited property of statistical analysis, including clinical epidemiology, which studies large, random, but controlled, populations. By contrast, generalizability is never a property of system analysis, which studies groups too complex for mechanistic analysis yet not sufficiently numerous