

Functional Outcome: Methodological Considerations

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Functional communication has been defined as “the ability to receive or convey a message, regardless of the mode, to communicate effectively and independently in a given environment” (American Speech-Language-Hearing Association, ASHA, 1990). Although clinical aphasiologists have examined various aspects of functional communication in aphasia (Davis & Wilcox, 1985; Holland 1980, 1982; Newhoff & Apel, 1990; Sarno, 1969), functional assessment and measurement issues have become increasingly important from both a reimbursement and practical perspective. Generic, insensitive assessment tools have become widely used in rehabilitation settings as means of contributing to models for resource allocation. However, until recently speech-language pathologists have had little input into the development of functional assessment tools despite the rapid proliferation of such tools and the expanding influence over services provided by clinical aphasiologists.

The measurement of functional outcomes requires a delicate balance between third-party payers’ requests for accountability and the ethical and practical need to provide treatments that make a difference in aphasic patients’ lives. This paper will discuss this balance within the framework of methodological issues associated with functional outcome assessment (Warren, 1993). In addition, it will introduce an ecological approach to patient management that relates directly to documentation requirements for Medicare reimbursement for speech-language pathology services.

FUNCTIONAL ASSESSMENT PROCEDURES

Aphasiologists have approached the challenge of measuring functional communication from a variety of perspectives for more than two decades.

In Sarno's Functional Communication Profile (1969), clinicians rate verbal expression and reception abilities without direct patient observations. More recently, Holland (1980) incorporated role-playing and the use of props to simulate natural environments and communicative interactions into the Communicative Abilities of Daily Living (CADL). Other widely recognized attempts to measure functional communication in aphasia include the use of questionnaires (Lincoln, 1982), checklists of pragmatic abilities (Prutting & Kirchner, 1987) and having significant others rate aphasic patients' communicative abilities in specific situations (Lomas et al., 1989). Despite the wide range of evaluation batteries available, most functional assessment procedures for aphasia, with a few notable exceptions (Holland, 1980; Lomas et al., 1989), lack standardization considerations relating to reliability, validity and basic guidelines for test construction (APA, 1974).

This discussion focuses on functional assessment rating scales that have evolved within the discipline of Rehabilitation Medicine rather than the familiar evaluation procedures mentioned above. As Warren (1993) notes, many of these scales are neither population- nor discipline-specific and they usually consist of global ratings. Communication is one of several performance areas evaluated with these rating scales. The Functional Independence Measure (FIM; Granger, Hamilton, Keith, Zielezny, & Sherwin, 1986), for example, permits ratings of independence in the areas of self-care, sphincter control, mobility, locomotion, social adjustment, cognition and communication. Granger, et al. (1986) recently listed more than 30 functional assessment tools that have been used in rehabilitation settings.

The American Speech-Language-Hearing Association (ASHA) recently developed a more extensive functional communication tool, the Functional Communication Scales for Adults (FCS-A), which allows ratings of six areas of communication and swallowing (Frattali, 1991). The FCS-A was developed in recognition of the fact that communication assessment is often missing or limited in other generic functional assessments, reliability and validity of available instruments are often lacking or unpublished, and they may be insensitive to performance change over time (ASHA, 1990). An ASHA grant application has been submitted to establish the reliability and validity of this functional assessment tool.

Rationale for Functional Assessments

Granger and colleagues (1986) outlined the rationale for the development of functional assessments in Rehabilitation Medicine. Specifically, they note that these assessments direct our attention away from impairment and toward disabilities, help us identify deficits, capabilities, and func-

tional consequences of impairments such as aphasia, and allow us to explore the effectiveness of treatment. These goals are reasonable. A major contribution of the functional assessment trend has been to focus our clinical evaluations on the disability and handicaps that result from specific deficits rather than targeting the impairments themselves. Likewise, the need to identify functional consequences and examine the effectiveness of treatment are also as American as apple pie.

Unfortunately, as Granger et al. (1986) also point out, functional assessments primarily emphasize program evaluation. These tools were designed to examine program efficiency in terms of cost/benefit ratios and determine the comparability of outcomes across service providers. Thus, the true goal of functional assessment tools is program evaluation and not people evaluation. It appears that the momentum of functional assessment tools has been fed by a priority system that emphasizes the financial health of programs rather than treatment targeting outcomes for individual aphasic patients. From this perspective it is perhaps somewhat less surprising that the FIM and similar instruments have placed so little emphasis on basic methodological issues such as reliability, validity, test construction and test sensitivity. The program evaluation thrust of functional assessments also partially explains the overemphasis placed on generic rating scales of independence and the lack of detailed assessments of individual areas such as functional communication.

Warren (1993) noted the large number of cases that have been entered into a national FIM data base despite the fact that test development, reliability and validity issues have not been adequately addressed. Developers of functional assessment tools might be repeating the historic mistake of the Titanic, where size alone was thought to make the ship unsinkable. I think the basic hull construction of our functional measures should be the rivets of individual patient outcome documentation that are welded together with psychometrically sound data collection procedures. To date, there has been insufficient emphasis on measurement consideration and the validity of the individual assessments that make up the large but unimpressive functional assessment data base.

Warren, Loverso, and DePiero (1991) related levels of measurement and generalization to outcome as measured by the FIM. Their results demonstrated that individual subject data may correlate with the results of functional assessments. While this proactive attempt to link levels of measurement and generalization is worthwhile, it may be premature to correlate outcome data with the results of functional assessments until we have a better grasp on the measurement issues relating to functional assessments. By exploring relationships between legitimate measures, such as single-subject outcome data, and more generic, insensitive measurement tools, we may inadvertently lend tacit support to the continued use of functional assessment measures despite their psychometric limitations.

SUGGESTED DIRECTIONS

In conclusion, I offer a brief consideration of what individual clinicians and clinical researchers can do about the movement toward use of generic functional assessment tools to influence reimbursement and patient care. First, as mentioned earlier, ASHA is developing and field testing Functional Communication Scales for Adults that are more comprehensive and have considerably more face validity than currently available functional assessment tools. Efforts to field test the FCS-A can be supported by clinicians and clinics as opportunities present themselves.

Individual clinicians also have a continuing responsibility to enhance their measurement skills and broaden their view of functional outcome so that they can obtain reimbursement for services. Following the Health Care Finance Administration (HCFA) guidelines for speech-language pathology services, Medicare consultants have compiled suggestions for obtaining funding of clinical services. These guidelines now require a merging of basic measurement considerations and demonstration of significant improvement of functions relevant to our treatment goals. Specifically, a narrative, data-based description of significant and functional change over time is required for Medicare reimbursement. According to Damico (personal communication, 1991), reports of treatment need to include substantial, measurable functional improvements outside the therapeutic environment. Moreover, treatment objectives must be seen as realistic steps toward functional outcome goals. But the question arises as to whether clinicians can meet these new standards for functionality.

Generalization Planning

The issue for individual clinicians attempting to comply within the new Medicare guidelines ultimately relates to how well they can plan for, program, and measure generalization. Davis and Wilcox (1985) have noted that functional assessments evaluate patients' strengths and limitations and identify communicative strategies that will be helpful for treatment planning. Individual functional assessment, therefore, requires a battery of tests and procedures. Establishing and measuring functional treatment goals requires more than can be reasonably expected of any single tool. Furthermore, readily available test procedures do not measure parameters that clinicians identify as being critical to an examination of functional communication. Individual clinicians are wise to adopt a systematic and individualized approach to the assessment of aphasic patients' functional communicative abilities that goes beyond available assessment batteries.

What has been described as a "generalization planning" or programming approach to aphasia management provides one solution to this clin-

ical dilemma (Kearns, 1989). Whereas traditional treatment plans divide the clinical process into discrete phases, generalization planning requires the integration of all phases of patient management into a continuous loop. Specifically, generalization planning involves comprehensive, multi-faceted evaluation; the establishment of generalization criteria; incorporation of treatment strategies that might facilitate generalization; continuous measurement and probing for functional, generalized improvements; and, when necessary, extending treatment to additional settings, people and conditions until targeted levels of generalization occur.

Generalization planning is complex, and adoption of this approach may require additional training before it can be used for reimbursement purposes. However, this individualized, data-based approach is congruent with current reimbursement documentation requirements, and it presents a more patient-oriented model than is possible with so-called functional assessment approaches. As my brief introduction to generalization planning reveals, I believe that we need a wholesale change in our thinking about the clinical process if we are going to make a difference in our aphasic patients' lives and get properly remunerated for our services. We must continue to strive for clinical accountability and cost effectiveness simultaneously. Failure to apply scientific thinking and measurement during the clinical process is surely as misguided as leaving our empathy, clinical intuition, and caring attitudes behind as we enter the clinical arena and care for our aphasic patients.

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