The Current Procedures Terminology manual (CPT), which lists the codes used to document procedures for billing purposes, has been modified to include six new codes which will allow more precise characterization of assessment and intervention services provided to individuals without psychiatric diagnoses.

Particularly relevant to the fields of health psychology and neuropsychology, these new codes provide more flexibility and accuracy in documenting professional activities that vary from those of the stereotypical psychological practice. The new codes are as follows:

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>96150</td>
<td>Health and behavior assessment</td>
</tr>
<tr>
<td>96151</td>
<td>Re-assessment</td>
</tr>
<tr>
<td>96152</td>
<td>Health and behavior intervention - individual</td>
</tr>
<tr>
<td>96153</td>
<td>Health and behavior intervention - group of 8</td>
</tr>
<tr>
<td>96154</td>
<td>Health and behavior intervention - family w/ patient</td>
</tr>
<tr>
<td>96155</td>
<td>Health and behavior intervention - family w/o patient</td>
</tr>
</tbody>
</table>

These codes are based on units of 15 minutes of service; thus, one would bill for three units for providing 45 minutes of service. This flexibility is particularly helpful in inpatient and rehabilitation settings, where the standard hourly billing convention often does not apply.

Also particularly relevant for neuropsychologists is the ability to bill for time spent with a patient’s family. This interaction is often critical to address the referral or consultation question, as there are often instances in inpatient and medical settings that the referred individual is simply unable to interact or provide important information (e.g., aphasia, confusional states).

Federal reimbursement for these services will be drawn from funds from “medical” services rather than from funds for “psychiatric” services. This is an important recognition of the fact that many of the valuable services psychologists provide are not limited to individuals with psychiatric diagnoses.

Development and implementation of these codes took several years and involved the combined efforts of the Interdivisional Healthcare Committee and the Practice Directorate of the American Psychological Association. Dr. Antonio Puente and Dr. Jim Georgoulakis played important roles in

(issue taken largely from 12-21-01 memo written by Marilyn Richmond and Russ Newman, Ph.D., J.D. from The Medicare Task Force and Medical Information Network)
Three distinct clinical syndromes have been discussed as occurring as sequelae of lesions of the frontal lobes (Cummings, 1985). The present paper focuses on two of these three syndromes. The “pseudopsychopathic syndrome”, characterized by impulsive, disinhibited behavior, in which inappropriate jocularity and phasically elevated mood fluctuations which are situationally inappropriate, has been described in association with orbitofrontal lesions (Blumer & Benson, 1975; Luria, 1966; Cummings, 1985; Goldberg, 2000). A “pseudodepressed syndrome”, characterized by “behavioral inertia”, with primary deficits in executive functions at the stage of “initiation”, is associated with lesions of the dorsolateral or lateral convexital surfaces of the frontal lobes. Both syndromes are associated with “losses of set” in which “loss of the abstract attitude” and subsequent “concreteness of thinking” (Goldstein, 1942), along with perseverative motoric performances (Luria, 1966; Goldstein, 1942; Cummings, 1985; Goldberg, 2000), are observed.

Case Study #1: “Pseudopsychopathic” / Disinhibited / Orbitofrontal Syndrome Following Traumatic Brain Injury

Background: Mr. OF is a 43-year-old white, right handed, married male, one year status post a head-on motor vehicle accident (MVA) with a “semi” truck in which he sustained a traumatic brain injury (TBI) which produced an initial Glasgow Coma Scale score of 12, associated retrograde amnesia of approximately 12 hours, and estimated anterograde amnesia of approximately 2 weeks. In addition to numerous limb and torso fractures, he showed lacerations of face, lip and nose, thus documenting frontal impact.

Assessment: OF was referred for neuropsychological evaluation following report of dramatic behavioral changes noted after his return to work. This gentleman, who has a Master’s Degree in Engineering and had previously earned security clearance as a high level defense industry engineer/systems analyst, was reported to have had persistent and significant changes in personality and behavior that were underestimated by self report as compared to reports of his wife (Vamey, 1999; Sbordone, Seyrianian, & Ruff, 2000). These included excesses of joking, laughter, gregariousness and flirtation, sexual disinhibition and inappropriate behavior, and sudden mood changes. These were perhaps best exemplified by his wife’s report that coworkers would complain and query about why he was now so flippant, flirtatious, rude, excessively talkative and lacking in social graces.

Neuropsychologic test data demonstrated only minor abnormalities. The most striking single finding in this gentleman, who still showed above average intellectual abilities, was a release of inhibition noted on Luria’s competing motor programs test, a “go-no go task.” More important, however, was the quality of his behavioral presentation. Qualitatively, he showed silly behaviors and silly affect and inappropriate jocularity (“Witzelsucht”) throughout the testing. This intensified during tasks that were more challenging, sometimes making it difficult to determine the seriousness of his responses. Report of a hospital employee during the patient’s
lunch break revealed that he was observed ducking his head under a cafeteria tray-return area in order to see and talk inappropriately to dishwashers. During testing, OF openly flirted when the examination was conducted by a female post-doc, and he showed only minimal reduction with his wife present. His talkativeness required frequent redirection to complete several testing tasks. The dénouement of this patient’s callous jocular-ity occurred when he called the first author, impersonated a Fire Marshall asking permission to kick in the door to gain entry to the author’s fire stricken residence, only to apprise him of the joke as he was running home in acute panic.

Noteworthy was the consistency of the patient’s inappropriate and disinhibited jocularity in social interactions. Objective personality assessment revealed a “Peak 6” MMPI profile that corroborated a significant self-reported complaint of feeling “very paranoid.” These referential trends primarily reflected interpersonal sensitivity in reaction to perceptions that others were unfairly complaining about him to his wife and avoiding him. Notably, his inappropriate behavior clearly alienated others. Combined with reduced appreciation of the impact of his inappropriateness on others, he was unable to modify his behavior and was left prone to referential misinterpretations of slights and mistreatment, with associated fluctuations in anxiety and dysphoria.

Recommendations: Given that OF was in town only for assessment and that specific treatment recommendations were not requested, we did not specifically delineate our usual protocol for addressing disinhibition disorders (Martelli, 2000; Martelli, Liljedahl, & Zasler, 2000). Instead more general recommendations were offered to address neurobehavioral problems, with emphasis on cognitive-behavioral intervention toward the following goals: I. Improved self-awareness and self-control: (a) increased appreciation of his inappropriateness and impact in producing reactions from others; (b) assistance with increasing appreciation/anticipation of social cues and boundaries, and “reading” this information in order to deliberately modulate his social behaviors; (c) assistance with increasing appreciation of internal emotional state “red flags” as they relate to his social behavior, and incorporating this information to adjust or accommodate deliberate behavioral self control responses emitted very early in interpersonal situations; II. Interventive pharmacology for reducing arousal states and/or buttressing behavioral control/inhibitory mechanisms; III. Behavioral-ecological strategies designed to reduce arousal states and facilitate increased self-monitoring and behavioral self-control, in addition to resistance to distraction; IV. Medical, pharmacologic and behavioral interventions, used adjunctively with behavioral-ecological interventions aimed at (a) reducing levels of extraneous stimuli, (b) minimizing environmental complexity, and (c) reducing potentially catastrophic consequences for impulsive actions at home and at work.

Case Study #2: “Pseudodepressed” / Dorsolateral Syndrome Following Anterior Communicating Artery Stroke

Background: Dr. DL is 52y/o, doctoral level high school principle who sustained an Anterior Communicating Artery (ACoA) aneurysm rupture that produced three week coma and inability to return to work. Premorbidly, DL worked 50 - 55 hours per week, and engaged in activities with children, yard work, weekend activities, etc., and was reported to have a slightly above average activity level. He was seen 1.5 years status post aneurysm hemorrhage. By the time DL was seen, his wife was trying a virtual last ditch effort to avoid divorce. DL would not get out of bed until early afternoon and would return to bed after getting up and completing only one or two poorly executed grooming or washing tasks. He would not shave, cut his nails, or get a haircut. When queried about his behavior changes, he minimized his deficits by explaining “I got no get up and go...it’s too hard...just let me sit here a while...”.
Assessment: “Neuropsychological” assessment was performed at another facility just prior to treatment. The most compelling findings included significant impairments in word list generation and deficits in nonverbal concept formation, cognitive flexibility, and problem solving on Halstead’s Category test. As would be anticipated syndromally, reductions in motor speed and strength were observed.

Intervention and Results: The relevance of this case does not lie in the presence of any exotic neurobehavioral syndromes. DL presents a classic dorsolateral frontal lobe syndrome characterized by profound difficulties with initiation. The presence of an encephalopathic event, which involves a destructive lesion in the distribution of the anterior communicating artery, provides the expected neuroanatomic locus. What is indeed novel about this case was the salutary response shown to a potent neurobehavioral intervention plan consisting of two components. The first aspect of the intervention is design and implementation of a detailed task analysis reinforced by a contingency management behavioral program intended to reinforce a previously low rate of operant responding.

Subsequent to only slight noticeable improvement with Amantadine and intolerance to traditional psychostimulant side effects, the behavioral plan was initiated. A Task Analysis, represented as a poster checklist, was implemented. Dr. DL’s wife and family cued him to follow the steps. He showed almost immediate improvement given a structured task analysis. Within three weeks, he was able to complete the routine without fail, even without referring to the checklist. He quickly graduated from the initial requirement for supervision when getting out of bed to start the routine to setting and responding consistently to the alarm to independently initiate and complete the routine. Concurrently, a Contingency Management Plan was adopted, requiring the patient to rate the difficulty of tasks preferred by his wife, with his wife rating the desirability of these response. DL then rated the desirability of a few hard tasks to identify motivating appetitive interest rewards. Only a few rewards could be identified at first: foot massage, home made chocolate cream pie, sex, etc. Over a couple months, a list of approximately 20 was identified, with increased activity being associated with identifying new motivating rewards. His wife rated the difficulty of providing rewards, and the results were compiled into a simple multiplication calculation (i.e., desirability X difficulty on 1-10 rating scale). This system produced points awarded for performed activities that could be exchanged for appetitive satisfaction. A sample Task Analysis and Contingency Management program is posted in the NAN website along with this issue of the Bulletin (www.nanonline.org).

A proliferation in the number of activities, increasing from an average of about 10 per week pre-program (with requirement of considerable effort and cueing) to an agreed quota of 50 per week, usually with minimal cueing, resulted after implementation. DL became semi-autonomous with activity completion, usually needing only minimal supervision from his wife (e.g., occasional calls, reminders about chores that could be completed). At times, more intense supervision, cues, and phone call reminders were required. Significantly, every change in routine (e.g., holidays) produced regression and return for a booster treatment session. As the behavioral management strategies were adopted by his family, a reduced need for formal intervention was noted. Eventually, his family devised a contingency wherein DL could ‘self-initiate’ by increasing activities back to quota to avoid hour long drives for neuropsychological appointments.

References:


After Effects of Brain Injuries in Man. New York: Grune & Stratton.


Summary
The coding and reimbursement process is highly volatile and in a constant state of evolution. The American Psychological Association through its Practice Directorate and the National Academy of Neuropsychology through its Professional Affairs and Information Office are closely monitoring and working on these issues. As an example two separate meetings have been held with committees or panels of the AMA (with CMS representation) during the first week in February. One of the primary purposes of NAN’s new office to provide monthly up-dates through its web site as to these and related developments. Information regarding individual, state, or regional shifts is always welcomed.