Commentary: Health & Behavior Codes: Great Idea, Questionable Outcome

Danny C. Duke, PhD, Kim Guion, PhD, Kurt A. Freeman, PhD, Anna C. Wilson, PhD, and Michael A. Harris, PhD

Child Development and Rehabilitation Center, Oregon Health & Science University

All correspondence concerning this article should be addressed to Michael A. Harris, PhD, Associate Professor, Pediatrics, Oregon Health & Science University, 707 SW Gaines Street, Portland, OR, 97239, USA. E-mail: harrismi@ohsu.edu

Received December 13, 2011; revisions received December 19, 2011; accepted December 22, 2011

Operating a successful pediatric psychology service in a hospital setting requires attention to three primary domains of professional practice: the clinical, operational, and financial (Kessler, 2008). Even an optimally provided service in the clinical and operational domains is unlikely to be sustainable if not also financially viable. One major challenge to financial viability is that overhead expenses charged to pediatric psychology services are typically similar to charges made to medical services, which receive considerably more money per unit of service and thus generate significantly more revenue. This disparity in income potential has contributed to placing considerable financial pressure and time demands on providers of hospital-based pediatric psychology services.

The financial challenges associated with the successful practice of pediatric psychology in hospital settings highlights the importance of optimizing billing practices as a necessary component of sustainable practice. Providing behavioral health services to patients with primary medical conditions has been demonstrated as an an important aspect of medical care, but can only become a standard of care when psychologists are adequately compensated for providing the service. In this commentary, we briefly review the potential economic benefits of using Health and Behavior (H&B) codes, describe the use of these codes in our practice, and discuss current pragmatic barriers and problems associated with their use.

Economic Value of Behavioral Health Services

Based on the statistics from the Agency for Healthcare Research and Quality (2011), the average Medicaid patient stay in 2008 was \$6,900 and about the same for an uninsured patient, compared to \$8,400 for a patient stay covered by private insurance, adjusted for inflation. For children with complex medical conditions, a hospital stay is rarely just a single day, but more often becomes a week or more. Frequently, these patients require stabilization services rather than intensive medical care. As such, they can be financially costly both to insurance companies and to healthcare systems. Many hospitalizations could be avoided or abbreviated if patients and their families received behavioral health services, as hospitalizations and length of stay are often associated with behaviorally based barriers such as nonadherence, pain management difficulty, or other domains for which behavioral interventions are especially effective.

Integrating behavioral health services into health care has distinct financial advantages (e.g., Chiles, Lambert, & Hatch, 1999; Harris & Mertlich, 2003). In fact, behavioral healthcare services have been shown to be cost-effective. For example, consider the care provided to individuals with diabetes. In 2003, the average national cost of one hospitalization for diabetic ketoacidosis (DKA) is approximately \$11,000 (Maldonado, Chong, Oehl, & Balasubramanyam, 2003). Approximately 100,000 hospitalizations for DKA occur in the United States each year (Fishbein & Palumbo, 1995), with associated costs that exceed \$1 billion per year (Kitabchi, Umpierrrez, & Murphy, 2001). Given that participation in behavioral healthcare services focused on improving adherence to treatment has been shown to result in fewer hospitalizations of youth with poorly controlled diabetes (Harris & Mertlich, 2003), improved access to such care represents a cost-effective intervention.

Mental Health Versus H&B Codes

Historically, licensed psychologists who delivered clinical assessment and treatment in medical settings relied primarily on the use of Current Procedural Terminology (CPT) codes 90801 (Psychiatric Diagnostic Interview), 90804 (Individual Psychotherapy, 20-30 min), 90806 (Individual Psychotherapy, 45-50 min), and 90847 (Family Psychotherapy) to designate the care provided. To receive reimbursement for services billed under these codes, third-party insurers require that they be associated with a mental health diagnosis derived from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; APA, 2000; Noll & Fischer, 2004) or the World Health Organization's International Classification of Diseases (World Health Organization ICD-10; 2004). This requirement has placed significant pressure on psychologists to provide a mental health diagnosis (Carter et al., 2003), even when the primary referral was for assessment, preventative services, or behavioral health care of individuals with acute or chronic health conditions, focused on assisting people with those health conditions.

Although the economic value of behavioral health services has been well established (e.g., Blount et al., 2007; Chiles et al., 1999; Harris & Mertlich, 2003), and significant efforts have been undertaken by national organizations to increase appropriate behavioral/mental health care in pediatrics (Meschan Foy, Kelleher, & Laraque, 2010), it continues to be challenging to use behavioral health services to screen for and provide appropriate early intervention services to patients. The growth of behavioral medicine provided expanded roles and opportunities for psychologists to collaborate with other healthcare professionals to address important health issues (Brown et al., 2002). The introduction of H&B codes, developed by the American Psychological Association Practice Directorate and approved by the American Medical Association for use in integrated medical settings, was expected to change how billing occurred for patients presenting with a primary medical diagnosis when behavioral health care was provided (Miyamoto, 2006). This change in billing practice had potential to improve the quality of care delivered by psychologists serving these patients. Examples of services appropriately captured using these codes has included improving patient adherence to medical treatment, symptom management (e.g., pain), promoting improved health-related behaviors (e.g., exercise), reducing health-related risk-taking behaviors (e.g., smoking), and improving adjustment and coping with physical illness or disability (Miyamoto, 2006). Behavioral healthcare services, best captured with H&B codes, has the potential to offer the most appropriate care (and cost-effective care, as noted previously) given that the majority of the challenges of adhering to treatment regimens for complex medical conditions are behavioral, psychological, and social.

Our Service Experience: Great Idea, Questionable Outcomes

The advent of H&B codes created a sense of optimism among pediatric psychologists that more comprehensive and preventative behavioral health services could be provided to patients with primary medical diagnoses, and that insurance payment would be at rates similar to other comparable psychological services. Unfortunately, the reality has not lived up to the optimism in our medical setting.

In our pediatric psychology service, we have faced an ongoing struggle to obtain adequate authorization and reimbursement for both inpatient and outpatient services that have been appropriately captured using H&B codes. Anecdotally, our billing specialists have reported that when insurance company case managers learn that a psychologist has provided behavioral and/or psychological services, the authorization is frequently denied due to limits to mental health coverage or a lack or preauthorization. This is in direct contrast to the intent of the H&B codes, which should be covered by medical benefits and should not require preauthorization. When authorization for care under H&B codes has been denied under the insurance company's assumption that services by a psychologist should be billed under the mental health arm of coverage, both the billing staff and treating psychologists have contacted the insurance agency to educate them about the proper use of H&B codes; however, upward of 75% of those attempts to obtain coverage under H&B codes were still denied. In many of these cases, an in-depth appeal letter was sent outlining the proper use of H&B codes accompanied by citing outcome research supporting psychological and behavioral interventions for youth with complex medical conditions. Unfortunately, our experiences have been that evidence regarding the cost-saving benefit of service captured with H&B codes is largely insufficient to reverse insurance denials.

In an effort to empirically evaluate the use of H&B codes in our setting, we examined clinical billing data from our inpatient pediatric psychology practice within a large tertiary medical care center in the Pacific Northwest. We also generated an estimate of cost-effectiveness for our services. The inpatient consultation service is available to all other services within a 350-bed university children's hospital, which provide approximately 20,000 admissions each year. The medical teams most frequently using our

services have included general pediatrics, endocrinology, and hematology/oncology. The most frequent referral concerns have included adjustment to medical diagnoses, pain management, adherence, and anxiety.

Analysis of H&B Code Reimbursement in Our Inpatient Program

During a trial period that emphasized increased use of H&B code billing as the most appropriate code for the provided services, our practice billed for similar assessment services using both the traditional mental health code 90801 and H&B code 96150 (H&B Assessment, 15-min units) for a total of 101 patients seen. We analyzed the use of code 96150 to capture behavioral assessment services provided to 45 children hospitalized for an acute or chronic health condition over a period of approximately 6 months. When considering all services billed, our analysis showed that the mean reimbursement rate was approximately 26% of the total fees billed (Table I). Denial of coverage occurred for 25 patients, representing a greater than 55% denial rate. When considering the remaining 20 patients for whom we received reimbursement for services, the rate of return was approximately 59% of the total amount billed (Table I).

During the same time period, providers utilized traditional CPT evaluation code 90801 to capture the services provided to 56 children hospitalized for similar reasons. Considering all services billed using 90801, our total reimbursement rate was almost 33% (Table I). However, third-party insurers denied coverage for 22 of these patients, or a 39% denial rate. When considering only the services reimbursed, our return rate was 53.7% of the amount billed (Table I). While this was lower than the reimbursement for the H&B code (59%), because 90801 was billed at a higher rate, it resulted in a 2.5 times higher financial return per encounter. Thus, while percentage of the billed amount paid by insurance (when reimbursed) was greater for H&B codes (59% vs. 53.7%), the lower denial rate for traditional CPT codes (39.3% vs. 55.5%; Table I) and the higher rate billed resulted in significantly greater financial recovery for services.

Table I. Amount Paid by CPT Code

CPT Code	Sessions	Paid	Denied	Percent paid per session	Percent paid for all sessions
90801	45	34	22	53.70	26.23
96150	56	20	25	59.03	32.60

We further investigated our experience using H&B codes within the context of inpatient care as it relates to overall costs associated with adherence problems. The mean duration of stays for pediatric inpatients in our hospital has been at 4.5 days over the recent past. Using the mean daily cost of hospitalization based on the most conservative statistics from the Agency for Healthcare Research and Quality in 2008, the total mean cost of hospitalization for our patients can be estimated to be \$31,050 per patient. Approximately 10% of the 101 services we provided were for problems related to nonadherence to treatment, which suggests approximately \$310,500 in potential healthcare expenses for nonadherence alone. Given that appropriate behavioral health care can significantly reduce future health risks, including reduced hospitalizations (e.g., Harris & Mertlich, 2003), this analysis illustrates the pragmatic value of the services represented by H&B codes. Given the potential financial savings and benefits to healthcare systems, we submit that it is in the best interests of third-party payers to adequately reimburse for behavioral health care for patients presenting with primary medical conditions.

Our data suggest that the lower reimbursement rate for assessments billed for using H&B code 96150 makes its use financially less desirable if an appropriate mental health diagnosis can be identified and the encounter billed using CPT code 90801. The significant disparity in reimbursement rates and actual dollars received between 90801 and 96150 codes is striking. While children hospitalized with acute or chronic health conditions often have co-existing mental health conditions, this disparity in payment for similar services likely creates pressure for practitioners to identify mental health diagnoses to maximize financial return for services provided (Carter et al., 2003).

Recommendations and Future Directions

The ethical quandary for our pediatric psychology practice and the use of H&B codes is exemplified in the disconnect between our financial data, our service data, and the empirical evidence supporting the value of providing the highest level and the most cost-effective care for youth with complex medical conditions. Specifically, H&B codes often represent the most appropriate CPT code for the delivery of evidence-supported behavioral health care to youth struggling to manage their health; however, in our institution, it also results in the greatest financial losses and renders our pediatric psychology services unsustainable without alternative funding. Although the

introduction of H&B codes was a step in the right direction, appropriate reimbursement of these codes remains problematic. Below we present recommendations and encourage ongoing individual and collaborative efforts to address these issues.

Advocacy and Financial Reforms

Payment for H&B assessments using H&B code 96150 should be comparable to other similar services (90801). In our experience, this has not been the case and remains a barrier to providing optimal services. The need for preapproval for services best captured with H&B codes is contrary to their intent. H&B codes were developed for use in busy hospital and clinic settings where preauthorization is often difficult and at times impossible. Additionally, both payment rate and percentage of return have been inadequate and do not sufficiently compensate for services provided, are not enough to sustain H&B services, and cannot sustain the practice of pediatric psychology in a medical setting.

It is our responsibility to advocate individually and as members of larger organizations, such as APA, to eliminate the preauthorization requirement for insurance payment for H&B services. The common practice of denying coverage following delivery of the service is unacceptable when a physician referral for the service has been made appropriately. Advocacy also occurs on a case-by-case basis, and thus we agree with the recommendations of Noll and Fischer (2004) regarding lobbying third-party payers or the medical director of a specific carrier for improved acceptance of these codes. Individual cases should be appealed and parent and pediatric medical provider advocacy encouraged. Joint efforts to inform medical providers, patients, and third-party insurance companies about H&B services have the potential to improve patient access to optimal care (Noll & Fischer, 2004), and improve reimbursement rates and procedures.

Research

Updated research is needed to further demonstrate the financial value of preventative behavioral health care and early intervention services in medical settings. Growing evidence supports satisfaction with, and effectiveness of, inpatient and outpatient behavioral health consultative services (e.g., Carter et al., 2003). However, the reality in which we function as pediatric psychologists is that third-party payers are only likely to reimburse for services that are demonstrably cost-effective and in their economic benefit. Thus, continued efforts to empirically demonstrate the cost-savings values of both inpatient and outpatient behavioral health care for patients with acute and chronic

health conditions is critical. With increasing research evidence, efforts at advocacy and education will likely be more effective.

Glimmers of Hope: Demonstration Project to Avoid Repeated Hospitalizations

Recently, our division has partnered with the area's Medicaid program to provide intensive behavioral health to young people with complex medical conditions who have been repeatedly hospitalized for health issues related to nonadherence to treatment. These individuals are financially costly to insurance companies due to avoidable hospitalizations (e.g., five DKA hospitalizations in 1 year). In addition, our hospital loses a great deal of money when these young people are hospitalized in that they are taking up beds that could be occupied by patients with a much higher level of acuity. Besides being funded to develop the infrastructure to support this intervention, our regional Medicaid has approved our use of billing for our services using H&B codes. We see this partnership as an exciting opportunity to establish the benefit of services using H&B codes, and are hopeful that outcomes will be useful in discussions with other insurance carriers.

Conclusion

In conclusion, although the focus of our commentary has been primarily on the financial aspects of H&B code use, the delivery of optimal patient care should always underlie decision-making; this approach has guided our continued provision of inpatient consultative services, despite being unprofitable. Unfortunately, in the world of modern health care, the financial and the clinical aspects of care are inextricably linked. Although pediatric psychologists have made tremendous strides in the past decade, we submit that financial systems of authorization and payment remain barriers to providing efficient and effective delivery of behavioral health care for youth in hospital settings. Much work needs to be done at both the individual practitioner and professional levesl to address these barriers. We remain optimistic that our collective efforts in the face of these challenges will improve service delivery and the sustainability of pediatric psychology services in medical settings.

Funding

Dr. Anna Wilson's contribution to this project was supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NICHD K23HD064705; PI: Wilson).

Conflicts of interest: None declared.

References

- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed (Text Revision). Washington, DC: American Psychiatric Association.
- Agency for Healthcare Research and Quality. (2011).

 Growth in Medicaid Patient Hospital Admissions
 Outpace Those for Privately Insured Patients. Rockville,
 MD: AHRQ News and Numbers, January 19, 2011.
 Retrieved from http://www.ahrq.gov/news/nn/
 nn011911.htm
- Blount, A., Schoenbaum, M., Kathol, R., Rollman, B. L., Thomas, M., & O'Donohue, W. (2007). The economics of behavioral health services in medical settings: A summary of the evidence. *Professional Psychology: Research and Practice*, 38, 290–297.
- Brown, R. T., Freeman, W. S., Brown, R., Belar, C., Hersch, L., Hornyak, L. M., ... Reed, G. (2002). The role of psychology in health care delivery. *Professional Psychology: Research and Practice*, 33, 536–545.
- Carter, B. D., Kronenberger, W. G., Baker, J., Grimes, L. M., Crabtree, V. M., Smith, C., & McGraw, K. (2003). Inpatient pediatric consultation-liaison: A case-controlled study. *Journal of Pediatric Psychology*, 28, 423–432.
- Chiles, J. A., Lambert, M. J., & Hatch, A. L. (1999).

 The impact of psychological interventions on medical cost offset: A meta-analytic review. *Clinical Psychology: Science and Practice*, 6, 204–220.
- Fishbein, H., & Palumbo, P. J. (1995). *Acute metabolic complications in diabetes.* (pp. #NIH 95–1468). Bethesda (MD): National Institutes of Health.

- Harris, M. A., & Mertlich, D. (2003). Piloting home-based behavioral family systems therapy for adolescents with poorly controlled diabetes. *Children's Health Care*, 32, 65–79.
- Kessler, R. (2008). Integration of care is about money too: The health and behavior codes as an element of the new financial paradigm. *Families, Systems, and Health*, 26, 207–216.
- Kitabchi, A. E., Umpierrez, G. E., Murphy, M. B., Barrett, E. J., Kreisberg, R. A., Malone, J. I., & Wall, B. M. (2001). Management of hyperglycemic crises in patients with diabetes. *Diabetes Care*, 24, 131–153.
- Maldonado, M. R., Chong, E. R., Oehl, M. A., & Balasubramanyam, A. (2003). Economic impact of diabetic ketoacidosis in a multiethnic indigent population: analysis of costs based on the precipitating cause. *Diabetes Care*, 26(4), 1265–1269.
- Meschan Foy, J., Kelleher, K. J., & Laraque, D., for the American Academy of Pediatrics Task Force on Mental Health. (2010). Enhancing pediatric mental health care: Strategies for preparing a primary care practice. *Pediatrics*, 125(Suppl 3), S87–S108.
- Miyamoto, R. E. S. (2006). Billing effectively with the new health and behavior current procedural terminology codes in primary care and specialty clinics. *Journal of Clinical Psychology*, 62, 1221–1229.
- Noll, R. B., & Fischer, S. (2004). Health and behavior codes: An opportunity to revolutionize reimbursement in pediatric psychology. *Journal of Pediatric Psychology*, 29, 571–578.
- World Health Organization. International Classification of Diseases-10th revision ICD-10; 2004. Retrieved from http://www.who.int/classifications/icd/en/