Case Studies in *Clinical Practice in Pediatric Psychology: The “Why” and “How To”*

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Case studies are an important venue for reporting clinical processes relevant to clinical care, research agendas, and interprofessional collaboration. *Clinical Practice in Pediatric Psychology (CPPP)* is actively soliciting case studies to further the mission of promoting evidence-based practice, highlighting important areas for further empirical study related to biopsychosocial phenomena and advocating for the value and relevance of pediatric psychology in the current health care climate. This article highlights desired topic areas for case studies for CPPP, reviews methodological considerations, and provides recommendations for case study reporting. In addition, ethical considerations related to case study report methodology are reviewed. Our hope is that this article will promote submission and acceptance of case studies to *Clinical Practice in Pediatric Psychology*.

**Keywords:** pediatric psychology, case study, methodology, intervention

There is solid empirical support for the efficacy of pediatric psychology interventions to improve biopsychosocial outcomes across a range of pediatric populations and health-related behaviors (e.g., Beale, 2006; Graves, Roberts, Rapoff, & Boyer, 2010; Palermo, Eccleston, Lewandowski, Williams, & Morley, 2009; Uman, Chambers, McGrath, & Kisely, 2008). However, translating findings from controlled research studies into actual clinical care can be daunting for a number of reasons including: (a) generalizability of information from subjects that are often selected based on exclusion of complicating factors (e.g., comorbidities, psychosocial complexity of families, limited motivation); (b) the limited resources available to clinicians compared with grant-funded randomized clinical trials (RCTs); (c) lack of details about research interventions to allow for replication in clinical practice; (d) practicalities of working in treatment settings which include a variety of uncontrolled variables not seen in research settings (e.g., staff not psychosocially trained, lack of space); and (e) lack of clinician training on evidence-based protocols (American Psychological Association Task Force on Evidence-Based Practice for Children & Adolescents, 2008; Pagoto et al., 2007).

One key mission objective of *Clinical Practice in Pediatric Psychology (CPPP)* is to enhance the incorporation of the pediatric psychology empirical literature in day-to-day clinical activities by presenting articles that provide modeling of evidence-based practice in “real world” settings with a focus on highlighting both the facilitators and barriers of successful implementation. Another focus of CPPP is to promote publication of clinical reports that can serve as the impetus for relevant larger-scale research studies that grow organically from clinical need. Addition-

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ally, exploration of professional practice issues (e.g., care integration with nonmental health professionals), from both conceptual and applied perspectives, is encouraged in order to strengthen the capabilities, recognition, and value-added potential of pediatric psychologists in health care settings.

Case studies are a vital mechanism for meeting these goals. The case study utilizes analysis of an individual “unit” for purposes of describing or explaining clinical or systems-oriented phenomena. The “unit” of study may consist of an individual person, a family, a program, or even a health care system with the emphasis on presenting unit-specific details relevant for understanding the context in which the phenomenon is occurring. Case studies have been highlighted as being instrumental in making the science of pediatric psychology more clinically relevant by identifying new clinical populations, exploring the effectiveness and feasibility of new intervention approaches, clarifying clinical (vs. statistical) significance of outcome improvement, and developing ways to address the barriers of implementing interventions developed with the rigor and resources of research paradigms into clinical care (Drotar, 2009; Drotar & Lemanek, 2001). A number of authors have provided guidance for the writing and submission of case studies to other journals (Drotar, 2009, 2011; Hong, 2006). Drotar (2011), in particular, has written a comprehensive overview of key issues to consider in submitting case reports to the Journal of Pediatric Psychology.

CPPP is actively soliciting case studies. The goal of this article is to provide prospective authors with guidance to facilitate successful submissions of case studies to this journal, with concepts particularly relevant to the mission and goals of CPPP highlighted (for a broader review of topics relevant to case report submissions, see Drotar, 2011). First, examples of potential content areas for case study analysis will be discussed to identify a broad but relevant scope of topics for possible submissions to CPPP. Next, design considerations will be reviewed to inform methodological considerations for conducting and reporting clinically feasible and effective case studies. Finally, recommendations for preparation of a compelling, focused, and useful case study that will highlight information important for the pediatric psychologist involved in evidence-based care will be discussed. Ethical considerations, including privacy and consent issues, will also be addressed. Throughout the article, published case studies exemplifying section points will be referenced.

Case Study Content Areas Relevant to CPPP

Interprofessionalism and Care Integration

The recently passed Affordable Care Act (ACA; Public Law No: 111–148, 2010) specifies a transformation in the United States health care system in which interprofessionalism and coordinated care among health care providers is considered paramount for optimizing biopsychosocial outcomes for patients (Rozenysky, 2012). Given that new financial models will also reflect this emphasis on coordinated care (e.g., identified “gatekeepers” managing per-patient capitation of health care dollars across a range of specialties), effective collaboration skills and the ability to document cost-efficient clinically relevant outcomes will be paramount for psychologists to remain viable participants in the health care system (Kelly & Coons, 2012).

Collaborating with health professionals to optimize patient outcomes is a cornerstone of pediatric psychology practice. Case studies can serve as an excellent mechanism for specifying specific procedures and reflecting on lessons learned in order to promote psychologist collaborative skills and multidisciplinary care. For example, Ernst and colleagues (2010) detailed the evolution of a unit-based behavioral treatment to increase quality of airway clearance therapy for hospitalized adolescents with cystic fibrosis (CF), via development of a behavioral program that could be incorporated into the daily workflow of other health care providers. Case studies can detail multidisciplinary intervention delivery (e.g., Ehrenreich, Boggs, Seif, Strother, & Gross, 2003; Gorski, Slifer, Townsend, Kelly-Suttka, & Amari, 2005; Shaw, Palmer, Hyte, Yorgin, & Sarwal, 2001), demonstrate the ability of psychologists to help other care providers be more effective in their interactions with patients/families (e.g., Martin, Southall, Liveley, Shea, & Whitehead, 2009), and explore role issues (e.g., Ehrenreich et al.,
Thus, case reports can provide guidance to psychologists in their conduct of interprofessional practice, as well as create exemplars for our health care colleagues of meaningful integration of pediatric psychology in coordinated health care.

Given that increasing access and “point of care” intervention is an emphasis in current health care models, reports of the feasibility of effective behavioral medicine interventions within the medical setting highlight the value and flexibility of pediatric psychology to meet the needs of patients. For example, articles detailing utilization of evidence-based treatment strategies in inpatient settings can provide a useful window into how to adapt treatments tested in outpatient mental health “clinic” settings to other medical venues, as well as provide compelling effectiveness data (e.g., Gorski et al., 2005; Shaw et al., 2001; Slifer et al., 2007). Highlighting brief treatments that could be conducted within outpatient medical care settings will also be instructive, such as bibliotherapy for children’s bedtime refusal (Burke, Kuhn, & Peterson, 2004) and brief behavioral interventions for the routine procedures experienced by patients with CF (Ward, Brinkman, Slifer, & Paranjape, 2010).

Pediatric psychologists are often consulted by health care providers to help tease apart psychosocial issues related to presentations that include physical symptoms, but there is surprisingly little research on best practice assessment in these situations. Case studies highlighting diagnostic issues related to somatoform disorders (Campo & Negrini, 2000), factitious disorders, and malingering (Kannai, 2009; Peebles, Sabella, Franco, & Goldfarb, 2005; Wallace, Sim, Harrison, Bruce, & Harbeck-Weber, 2012) clarify diagnostic strategies/issues, promote best patient outcomes by identifying and expediting most appropriate clinical care, and demonstrate psychology’s value within the multidisciplinary health care team. For example, Raby and Edwards (2011) describe how effective treatment of trauma improved physical symptom presentation in a child who had not benefited from medical treatment for an inaccurate diagnosis of epilepsy.

Essential to ensuring the integration of pediatric psychology into the emerging health care system is the accumulation of evidence that these interventions contribute to substantive enhancement in outcomes for children and families. Case studies that document clear improvement on physiologic outcomes due directly to behavioral health interventions may be most salient to medical colleagues (e.g., Ellis, Naar-King, Frey, Rowland, & Greger, 2003; Letourneau, Ellis, Naar-King, Cunningham, & Fowler, 2010). Likewise, studies that highlight functional improvements demonstrate that pediatric psychology enhances the quality of life of children and families in ways that are most meaningful to them (e.g., Masuda, Cohen, Wicksell, Kemani, & Johnson, 2011). Case studies may be particularly appropriate for demonstrating cost-offset analyses which may be prohibitive when done with larger groups of patients due to institutional resources needed to conduct these analyses on a bigger scale. In a case study of the inpatient treatment of a girl with severe somatoform pain disorder, Palermo and Scher (2001) provided a convincing fiscal argument for the cost of intensive inpatient behavioral treatment by comparing care-related expenditures for the 5 months prior to admission with the cost of the admission and health care costs incurred the 6 months following discharge.

Other Relevant Content Areas

One clear role for case study methodology is to highlight issues related to bench-to-bedside translation of research-derived manualized treatments, both with specific patients (e.g., Carter, Kronenberger, Threlkeld, Townsend, & Pruitt, in press; Kerig, Sink, Cuellar, Vanderzee, & Elfstrom, 2010) and on a more programmatic level (e.g., Lowe, Bunnell, Neeren, Chernyak, & Greberman, 2011). Case studies also can document extension of treatments empirically studied in one population to other clinical populations not yet studied, such as the application of procedural coping techniques to port access procedures (Barrera, 2000), and employing cognitive–behavioral treatments for coping with the use of an implantable cardioverter defibrillator (Hirsh, Sears, & Conti, 2009). Case reports also can help bridge the gap between more traditional child clinical treatments and the clinical needs of pediatric populations. For example, case studies have been used to document the use of Multisystemic Therapy (MST), originally developed for treatment of antisocial youth, to improving treat-
ment adherence and disease management in pediatric patients with insulin-dependent diabetes mellitus (Martin et al., 2009; Naar-King, Ellis, Kolmodin, Cunningham, & Secord, 2009) and HIV (Letourneau et al., 2010). Other examples include the application of Parent–Child Interaction Therapy (PCIT) within the context of pediatric cancer to improve behavior during medical care (Bagner, Fernandez, & Eyberg, 2004) and the use of Acceptance and Commitment Therapy (ACT) to enhance participation in meaningful life activities while coping with sickle cell disease (Masuda et al., 2011).

Case studies can also be used to highlight the importance of developmental and family factors in biopsychosocial phenomena. For example, Logan and Meltzer (2006) used a case series to highlight the potential impact of developmental transition on the experience of pediatric pain. Case studies can also highlight modification of interventions developed within a specific age group to be used with a different age group, such as use of PCIT with premature infant–mother dyads (Bagner et al., 2009). Adaptation of clinical interventions based on other patient characteristics, including cultural background (e.g., Barrera, 2000; Hilliard, Ernst, Gray, Saeed, & Cortina, 2012), developmental disabilities (e.g., Moon, Corkum, & Smith, 2011), or unusual clinical presentation (e.g., psychogenic deafness, Mooney & Gurrister, 2004) are all areas that have been explored with case study methodology, promoting both clinical care as well as highlighting potential areas for further empirical attention.

Other relevant areas include case studies that detail involvement of caregivers and other family members in treatment plans, which reflect the systems-orientation of pediatric psychology as well as acknowledge the critical role that parenting and family dynamics play in successful biopsychosocial outcomes (e.g., Graziano, Callueng, & Geffken, 2010; Letourneau et al., 2010). Ethical considerations related to pediatric psychology areas of interest can also be explored richly via use of case reports, such as the use of covert monitoring of medically unexplained symptoms (Wallace et al., 2012) and the role of the psychologist in organ transplant evaluations (e.g., Collins, Holden, & Scheel, 1996). Finally, one area that has been sorely neglected in terms of optimizing clinical care is issues related to therapist self-care and burnout.

Caring for critically ill children and their families can be very stressful, and studies looking at how pediatric psychologists manage their own stress and work–life balance/integration can promote more effective care delivery by helping psychologists enhance self-management skills (e.g., O’Brien, 2011; Veilleux, 2011).

Case Study Design Considerations

Although not truly “experimental” in design, ideally case studies and series should involve proactive planning that includes the collection of relevant practice-based data, measures that target specific presenting problems, symptoms, and functional impairments, and the use of standardized outcome measures sensitive to the clinical significance of changes from pre- to posttreatment (Drotar, 2009). Wide variation exists in the collection and presentation of single-case studies and series and the clinician has a wealth of interesting, practical, and pertinent information that, if collected and presented in a focused way, can contribute greatly to other clinicians’ work as well as potentially identify areas for further research. In these situations, the clinician–researcher has many options as there are elements of experimental design that can be incorporated, yielding a quasi-experimental design (e.g., Kazdin, 2003). Key aspects to a quasi-experimental design that can be incorporated to strengthen these studies include (a) clear outcome variables consistent with goal of study, (b) some baseline data/assessment, and (c) multiple data/assessment points. The degree to which authors provide details and outcomes matching the goal of their case report will correspond with the degree of confidence they can have in their conclusions and recommendations. Replication of a nonexperimental design with multiple participants strengthens the inference that the treatment caused the observed effect. Kazdin (2003) and Tate et al. (2008) both encourage clinicians to consider the heterogeneity of participants. If treatment effects are observed among less homogenous samples, this provides further support in terms of generalizability. Moreover, replication with different clinicians, or even different sites/geographic locales, could serve this same purpose. Specific considerations for assessment and outcome variables selection, including strategies for identifying robust retro-
spective baseline data, are discussed in the next section.

Variable Selection

It is critical to determine which outcomes might be especially relevant or logical for the question at hand. It is also important to consider whether or not these variables can be collected during baseline and treatment phases, so that change over time can be clearly demonstrated on the same metric. Clinicians may consider using a multimethod approach, collecting data from multiple sources. Options for relevant and clinically meaningful outcome measures abound, and might include the following:

Physiological health-related outcomes. This may be a particularly important choice for many pediatric psychologists working within a medical team. Improvement in objective physiological outcomes, such as lung functioning in children with asthma (e.g., Naar-King et al., 2009) or viral load in patients with HIV (e.g., Letourneau et al., 2010) can demonstrate potent patient benefit within a case study report. Other health-related outcomes are also important, with collection facilitated by the increased prevalence of electronic medical records. Examples include attendance at clinic visits, ED visits or hospital admissions, and whether refills are filled on time (e.g., Naar-King et al., 2009). Health outcome data that is already being collected as routine clinical or administrative practice places no further burden on participants or clinicians and can yield rich and objective outcome data.

Behavioral observation. Observable behaviors might be relevant for many clinical and research questions, particularly when specific medical treatment-interfering behaviors are present. For example, Barrera (2000) examined the effect of a family-focused intervention for pain and anxiety management during procedures for a child with acute lymphoblastic leukemia (ALL). The author included information at baseline and posttreatment on behaviors such as kicking and screaming. Data can be presented dichotomously (e.g., present/absent) or continuously (e.g., frequency counts of behaviors). Ratings by multiple observers should be considered when appropriate (e.g., parent, nursing).

Questionnaires. Clinicians may wish to use validated parent-, self-, or teacher-report forms to gather baseline and/or treatment phase outcome data. For example, a commonly used self-report measure is the Functional Disability Inventory (Walker & Greene, 1991) a well-established measure of functional impairment in youth with chronic pain (Kashikar-Zuck et al., 2011). In terms of assessing symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD), the Vanderbilt ADHD Rating Scales, part of the American Academy of Pediatrics (AAP) ADHD Toolkit, are often administered to parents and teachers to assess symptoms in children (e.g., Langberg, Vaughn, Brinkman, Froehlich, & Epstein, 2010). A caveat for using questionnaire measures is that if the measure is going to be administered multiple times, it is important from a validity standpoint to consider whether the measure is sensitive enough to show change over short periods of time, and if it is validated to be used in a repeated-measures manner (e.g., Lynch-Jordan et al., 2010).

Academic/developmentally-appropriate functional outcomes. Functional school outcomes may be relevant to many case studies and, sometimes, may be more meaningful to patients than more physiologic variables. For example, school performance is important in determining the functioning of children and teens with chronic pain, and assessment could include aspects such as attendance, grades, and participation in extracurricular activities (e.g., Gorodzinsky, Hainsworth, & Weisman, 2011). For older adolescents, follow-through with work or volunteer commitments would be clinically meaningful. For a treatment aimed at reducing physical aggression at school, number of suspensions or “write-ups” might be an interesting and useful outcome measure. Inpatient “functional” measures could include participation in therapies, hours that lights are on in room, or time spent out of bed.

Financial. As discussed previously, this type of outcome data may be especially relevant given recent and ongoing changes in federal insurance policies. Please see Palermo and Scher (2001) for an example of a study that calculated evaluation and treatment cost by using insurance and hospital billing data.

Collaborative care outcomes. Although demonstration of improvement in physical health or other clinically relevant outcomes may
be the most important means by which pediatric psychologists can insure viability in current health care climate, identifying variables that demonstrate successful interprofessionalism with care providers from other disciplines may be particularly relevant in helping pediatric psychologists advocate for roles within health care teams and apply “best-practice” principles to expedient and successful care integration. These variables could include “consumer satisfaction” measures (e.g., satisfaction with psychological services as rated by health care providers), but could also be other measures such as health care providers’ improvement in psychosocial knowledge relevant to specific populations, confidence in working with challenging psychosocial situation, increase in referral stream, and so forth.

Variable Collection

**Baseline data.** Baseline data may be considered one of the most critical elements to show change over time. Tate et al. (2008) encourage collection on at least three pretreatment time points, to ensure that a stable pretreatment baseline is demonstrated. Though clinician-verified baseline data would be ideal, retrospective data from the participant or their family would provide some indication of pretreatment level of symptomology or other outcomes of interest. Alternative ways to collect baseline information should be considered. For example, if an outcome such as school attendance is of interest to the study, one might determine if records can be obtained from school; if health outcomes are a key feature of the study, medical clinics may be able to provide data on attendance at scheduled visits, medication refills, and so forth. Although the baseline assessment serves to address the existing level of subject performance via a description of the extent of the patient’s problem, distress, or dysfunction, it also serves as a predictor of future performance in the absence of the intervention.

**Collect data at multiple time points.** Multiple points of data collection during treatment allow for a closer and more nuanced examination of the process of change. Change may not be linear; instead, there may be a delayed treatment effect, diminishing returns over time, or sharp and clear periods of treatment gains. Additionally, collection of follow-up data after time has passed (e.g., Barrera, 2000; Palermo & Scher, 2001) permits examination of whether gains were maintained.

Experimental Designs

When opportunity, resources, and situation permit use of single-subject designs, confidence can be increased (relative to case reports) in attributing change in measured outcomes to clinical interventions. Single-case experimental design has been comprehensively addressed in numerous texts and publications (e.g., Barlow & Hensen, 1984; Kazdin, 2011; Rapoff & Stark, 2008). As highlighted by Rapoff and Stark (2008), some examples of true experimental designs that can permit causal attributions for the effect of an intervention on a given outcome include the reversal or withdrawal design (e.g., exercise adherence and CF; Bernard, Cohen, & Moffett, 2009) and the multiple baseline design (e.g., electronic monitoring of adherence in asthma; Spaulding, Devine, Duncan, Wilson, & Hogan, 2012). Studies such as the one conducted by Spaulding, Devine, Duncan, Wilson, and Hogan (2012) which include a components analysis (in this example, feedback plus monitoring vs. monitoring alone) further inform research and clinical practice in that essential elements of treatment packages can be explored and clarified (see Ward-Horner & Sturmey, 2010 for further discussion of components analyses in single-case experimental design). In addition, cutting edge and clinician-friendly statistical methods for understanding time series data have been recently highlighted in the literature (Borckardt et al., 2008; see also Drotar, 2011 for review).

Writing the Case Study

What is included in the case study write-up depends on the goals of the case study, but, generally, an overview of relevant literature, a cogent case description, and a summary of important themes/findings should be provided. An outline that includes potential elements for a strong case report submission is presented in the Appendix. This should only be considered as one example of how to present information and is, by no means, the only way to present cases. This outline also may not be applicable to all types of cases. Note-
worthy aspects of some of these elements are as follows:

**Report Introduction**

**Relevant theoretical and empirical literature.** Pediatric psychology has a large and growing empirical literature related to models for health-related functioning, critical psychosocial factors impacting child and family functioning, and evidence-based interventions. Critical to case study design is a thorough review of existing studies of interventions employed with the patient population and clinical phenomena of concern. A review of the literature related to the case report should provide the context for the outcomes and interventions chosen, and help to clarify the importance of the case study for moving clinical and/or research agendas forward.

**Goal/relevancy of case presentation.** In order to maximize the utility of a case report or series in informing clinical practice and stimulating further research and investigation, authors must clearly communicate to the reader the relevance of their topic to pediatric psychology. In general, it is not enough that the subject of the case study be rare and compelling. As Drotar (2009, 2011) has noted, it is important that prospective authors determine the most compelling and significant focus for their case study in order to best capture the potential contribution of their case material to the field. The focus of CPPP is decidedly on the relevance of case reports and empirical investigations to informing and expanding the clinical practice of pediatric psychology. Thus, authors must clearly substantiate the clinical importance, significance for suggesting new research, potential for expanding understanding or knowledge of a clinical phenomenon, and expansion of the role of pediatric psychologists in the broader health care system. In addition, characteristics of the clinical population for which the intervention/program may be most relevant should be highlighted. Case studies and series that illustrate important clinical information and principles of pediatric psychology practice in medical/health care settings are most pertinent to the goals of CPPP.

**Specific Case Presentation(s)**

**Background/assessment.** The provision of relevant subject history, background information and demographic data (age, gender, socioeconomic status, ethnicity/cultural background, etc.) is crucial to better determine the limitations to generalization as well as relevancy for other populations. Initial presentation and referral questions should be specified, as should relevant psychosocial factors.

One particularly noteworthy aspect for pediatric psychology case presentation is specification of relevant medical information. Pediatric psychologists operate in settings where at least a rudimentary understanding of physiology, childhood illnesses, medical tests, procedure, and treatments is mandatory to competently conceptualize a patient’s (and their family’s) clinical presentation. The relevance and complexity of the subject’s medical condition will dictate the amount of detail required in the describing the subject’s illness and relevance to case conceptualization and assessing clinical outcomes. For example, a fairly detailed description would be needed for a multifaceted intervention to improve treatment adherence in a subject with poorly controlled Type I diabetes (e.g., Glasgow & Anderson, 1995), such as blood glucose readings, hemoglobin A1c levels, carb counts, adherence to dietary guidelines, insulin injections, and so forth. In contrast, a diaphragmatic breathing intervention to decrease the frequency of coughing episodes in a subject with vocal cord dysfunction or habit cough might be limited to frequency counts and intensity ratings of coughing, as well as intervention practice logs for breathing practice (e.g., Earles, Kerr, & Kellar, 2003). Most important is that the selective medical information be pertinent to the understanding of the case, diagnostic questions, and interventions being illustrated. Collaboration with one’s pediatrician and pediatric specialist colleagues can often facilitate the process of constructing a tight, relevant, and cogent description of the subject’s medical presentation.

**Conceptualization.** A theoretically-driven case conceptualization, which meaningfully integrates background and assessment information into a cogent working hypothesis for explaining patient presentation, should logically drive the choice of intervention and selection of
treatment outcomes, as well as articulate the conceptual and theoretical underpinnings of the chosen intervention.

**Method.** The method will provide details on the design of the study, as well as details on interventions. In conducting and reporting case studies it is important to spell out the details of the intervention/program as explicitly as possible in order to facilitate replication in future clinical work or research. The creation of specific written protocols and manualized treatment interventions greatly facilitate this process, compared with generalized descriptions of the intervention (e.g., Carter et al., in press). Electronic versions of materials can be electronically linked with online versions of published *CPPP* articles. Detailed descriptions of what actually happened during the intervention, including real world examples of barriers, stumbles, and insights gained along the way are of particular relevance. This can include diverse events such as funding problems, treatment team and systems-level issues, unanticipated side effects, and so forth. Such descriptions help set the stage for future studies by providing guidance as to factors and procedures to avoid. Rationale for outcome selection should also be provided.

One particularly important area of information to provide relates to intervention environment factors. Although most RCT’s focus on the efficacy of a treatment in a research settings with homogeneous samples defined by narrow inclusion/exclusion criteria, case studies often have the advantage of being conducted in naturalistic clinical settings, at times with a broad sample of consecutive clinical referrals. The primary advantage of this approach is to address questions of effectiveness of the treatment in the real-world clinical setting with real-life clinical problems. However, such conditions must be clearly articulated in the case report in order to inform generalizability and future studies. Well-designed case studies conducted in such real world clinical settings may be of particular relevance to *CPPP*.

**Results.** Data analysis from case studies typically employ nonstatistical visualization of changes on the study measures to identify whether change has occurred, often in the form of graphical displays of changes in means, levels, latencies, slopes, and so forth. These may be particularly useful in the evaluation of functional outcomes of the intervention and can be annotated with time-relevant clinical strategies or changes in background medical/psychosocial status (as noted above, time series analysis may be employed depending on experimental design; Borckardt et al., 2008). Other methods of determining clinical success include predetermination with patients of clinically meaningful improvement or, when using standardized assessments, comparison with normative data or achievement of nonclinical range.

**Report Discussion**

Summarization of important issues, particularly as related to the explicitly stated goals of the case report, will highlight for readers the critical “take-home” messages. Noting important implications for clinical and research arenas, and positing implications for the role and practice of pediatric psychology in the various health care system settings are important components of any case study, especially in this transformative period in health care.

**Lessons Learned**

As case study and series reports are more likely to be written by pediatric psychologists actively engaged in ongoing clinical practice, descriptions of the insights gained via clinical experience can be especially informative to decisions regarding possible limitations of the intervention (e.g., age, gender, practice settings, ethnic/cultural group, primary and comorbid illness, and psychological conditions, etc.). *CPPP* readership may be particularly interested in understanding the steps taken to address barriers identified during intervention planning/implementation and what recommendations can be made to address systemic issues preventing implementation of quality pediatric psychology practice. Additionally, such clinical insights can provide direction to drive future research investigations, including generalization to other practice settings and populations (Drotar, 2011).

**Ethical Considerations**

The Federal Policy for the Protection of Human Subjects defines “research” as a systematic investigation, including research development, testing, and evaluation designed to develop or
contribute to generalizable knowledge (U.S. Office for Human Research Protections, 2009). Case studies normally fail to meet the federal definition of research because there is not an attempt to ask specific research questions leading to formal systematic collection of data. Many case studies tend to rely upon retrospective chart reviews of three or fewer patients, treatment not directed by a research protocol, and confidentiality protected in accordance with the Health Insurance Portability and Accountability Act (HIPAA) of 1996, all of which limit the generalizability of the data. As a result, case studies commonly qualify for exempt review status by Institutional Review Boards (IRBs). However, authors should always consult their IRB to determine if approval is necessary prior to publication of a case study.

Case studies are permissible as long as confidentiality is maintained in accordance with HIPAA Standards for Privacy of Individually Identifiable Health Information (HIPAA Privacy Rule; U.S. Office for Civil Rights, 2003). Specifically, no identifiable information can be provided about the patient (e.g., name, date of birth, admit dates, medical record number) or their location (e.g., geographic location smaller than a State, address, e-mail, or device identifiers—see Web address in reference list for a complete list of information never to be disclosed). Privacy issues secondary to the “small cell problem” may emerge with case studies, as individuals with unique diagnoses or medical problems may be easily identifiable with only limited information provided (University of Florida Gainesville Health Science Center, 2007). One way to maintain privacy is to present the written case material to the subject/legal guardian the case report is based on and obtain written consent for its publication. An additional option might be to disguise some aspects of the case material. This may include altering specific characteristics, limiting the description of specific characteristics, or adding extraneous material (American Psychological Association, 2010).

Privacy should never be sacrificed for clinical or scientific accuracy. This is consistent with Principle 4.07 of the APA Ethics Code, Use of Confidential Information for Didactic or Other Purposes: “Psychologists should not disclose in their writings, lectures, or other public media confidential, personally identifiable information concerning their clients/patients, students, research participants, organizational clients, or other recipients of their services that they obtained during the course of their work unless 1) they take reasonable steps to disguise the person or organization, 2) the person or organization has consented in writing, or 3) there is legal authorization for doing so” (American Psychological Association, 2002). Authors should carefully consider balancing the use of rich clinical data and confidential material responsibly.

Summary

Case studies will be an important venue for achieving the goals of CPPP and will continue to play an instrumental role in forwarding both clinical care and empirical study of issues related to the biopsychosocial health of children and families. In addition, case reports can also be a mechanism for highlighting and improving the capacity of pediatric psychologists to meaningfully participate in the changing health care landscape. Clinicians and researchers alike are encouraged to think broadly about relevant topic areas, and be on the “look-out” for potential interesting case reports that reflect efforts to adapt evidence-based treatments in innovative ways or common systems-related issues not documented in the literature. The editors of CPPP are eager to discuss and encourage specific potential submissions with authors to help formulate or refine case reports in areas of interests.

References

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Appendix

Potential Topic Areas for Inclusion in a Case Study Report

1. Introduction
   a. Background/literature on theoretical approach for treatment
   b. Goal of case presentation:
      i. Why is it novel/interesting/relevant for journal and field
      ii. Clinical populations/research areas specifically related
      iii. Focus of case presentation (details of what will be included and why)

2. Specific Case Presentation(s)
   a. Background
      i. Referral question/issue to be addressed/clinical presentation
      ii. Demographics
      iii. Medical Information
      iv. Psychosocial factors
      v. Standardized/structured assessment
   b. Conceptualization (related to theoretical model)
   c. Method
      i. Treatment/study design
      ii. Outcome measures and why selected
   d. Results
      i. Data presentation
         1. Graphical displays of measures across multiple sessions (can be annotated with noteworthy events impacting changes in trend)
         2. Pre–post results

3. Discussion
   a. Implications of findings
      i. Clinical practice
      ii. Health care system/managed care
      iii. Research
   b. Lessons learned:
      i. Strategies for success
      ii. Barriers and complicating factors; limitations
      iii. What author would do “next time”
      iv. The “Big take-home message”

Received March 1, 2013
Revision received April 1, 2013
Accepted April 3, 2013