Issues in Clinical Child Psychology

Bryan D. Carter
Kristin A. Kullgren *Editors*

Clinical Handbook of Psychological Consultation in Pediatric Medical Settings

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This book is dedicated to our dear friend and colleague, Dennis Drotar, Ph.D., a true pioneer in pediatric psychology who mentored and influenced so many students and early career psychologists and opened doors for our collaboration with our pediatric colleagues to the benefit of the children and families coping with challenges to their health and welfare.

BCD and KAK

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–KAK

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Part I

Pediatric Consultation-Liaison Psychology: Models, Roles, Settings, and Practice

Introduction to the Clinical Handbook of Psychological Consultation in Pediatric Medical Settings

Kristin A. Kullgren and Bryan D. Carter

In recent years, there has been increased demand for pediatric mental health consultation services in the context of changes in the current healthcare environment, increasing recognition of biopsychosocial factors impacting health, and the challenge of highly complex pediatric patients and medical conditions (Shaw, Pao, Holland, & DeMaso, 2016). Consultation-liaison (CL) in pediatric psychology is a core practice when interfacing with medical colleagues in pediatric settings. Specifically, *consultation* refers to the direct clinical activities provided to children and families at the request of medical colleagues with the goal of identifying and addressing the impact of psychosocial factors on the child's medical condition or functioning (Carter et al., 2017; Ernst et al., 2014). Consultation can occur in a variety of pediatric settings (e.g., inpatient hospital, outpatient subspecialty clinic, primary care clinic) via many different models of practice that vary by setting, team composition, scope of practice, and the psychologist's function within the team (Ernst et al., 2014; see chapter "Pediatric Consultation-Liaison: Models and Roles in Pediatric Psychology", this volume). Typically, the act of consultation starts with a medical provider identifying a clinical need with a patient or family and initiating a referral for the psychologist to conduct an evaluation, provide brief interventions and referrals, and communicate feedback and recommendations to the medical team. Consultants in medical settings are often seen as the "mediators" or "interpreters" between physician and psychology toward a more integrated, holistic point of view of patient care (Lipowski, 1971).

The *liaison* functions of the CL psychologist are broader and primarily relate to indirect patient care activities and systems-level interventions reflective of the psychologist's integration into the medical team (Carter et al., 2017; Carter, Kroenenberger, Scott, & Ernst, 2009; Ernst et al., 2014). These activities vary by the psychologists' role within the medical team and can range from participating in bedside rounds and care conferences to representing psychology on hospital committees, to educating medical learners through didactics, to conducting staff in-services and advocacy work (Carter et al., 2009; Ernst et al., 2014). The impact of liaison work cannot be understated as it allows the psychologist to promote our subspecialty, increases knowledge about psychosocial factors impacting youth

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experiencing medical illness or injury, and models for the medical community how to sensitively and empathically communicate with and about pediatric patients (Carter, Thompson, & Townsend, 2014). It is important to keep in mind that the above consultation and liaison activities are not mutually exclusive and that consultants often function best when these roles are intertwined (Drotar, 1995; Lipowski, 1971).

Distinguishing Aspects of CL Practice Within Pediatric Psychology

While the practice of CL psychology has more in common with other forms of pediatric psychology clinical practice than not, there are unique aspects of pediatric psychology CL that distinguish it from other forms of pediatric psychology practice (Table 1). The expectation for the pediatric psychologist is to adhere to the competency practice parameters set forth by the Society of Pediatric Psychology (Palermo et al., 2014). However, CL practice represents a unique application of pediatric psychology in that the psychologist is a consultant and adviser to the medical team rather than functioning as an independent practitioner. As such, the psychologist is not the primary provider with patients remaining the primary responsibility of the medical team. Additionally, the focus of the CL psychologist's activities often extends beyond the individual patient to address more broad systems-level issues that impact care. In CL practice, the referral source is almost always the medical team, making relationships between the psychologist and the medical team a crucial aspect of care. While CL treatment time may vary, it is often brief relative to more traditional therapy practice (Rodrigue et al., 1995). The CL psychologist is more often integrated into the practice setting, and the liaison functions are integrated into practice.

Table 1 Comparison between consultation-liaison and traditional pediatric psychology practice

	Traditional practice	Consultation-liaison
Focus of intervention	• Individual and/or family	• Individual and/or family • Medical system • Medical team
Source of referral	• Variable—often initiated by family	• Medical team • Less often family initiated • Protocol driven
Responsibility for patient	• Psychologist	• Physician maintains (Olson et al., 1988)
Timing	• Collaborative with family and psychologist schedule	• Dependent on accessibility of patient within the setting • Typically same day
Intervention targets	• Variable to psychologist practice	• Focused on a specific target
Length of treatment	• Variable to psychologist practice and intervention • More likely to be brief therapy at regular intervals with some long-term therapy	• Brief evaluation and intervention, often 1–2 sessions • Referral to outpatient therapist to continue treatment • Intermittent contact with patients who have frequent contacts in setting
Integration	• Independent • May be referral source for a specific hospital group, but not as likely to be integrated	• More likely to be integrated into setting of practice
Liaison	• May be limited based on degree of integration and psychologist interest	• Integrated into CL practice

Key Competencies in CL Practice

Being an effective CL psychologist is not without significant challenges (Table 2). A strong set of clinical skills for the practice of pediatric psychology forms the foundation for all CL practice, regardless of setting (Palermo et al., 2014). Other necessary qualities include tolerating the uncertainty and fast pace of the consult setting and an ability to move within and across multiple systems in a respectful, empathic way. This will ensure that the psychologist is able to meet the competing needs of the referring medical provider, patient/family, and medical system. Working in collaboration with our pediatric health-care colleagues is one of the core concepts of consultation (Carter et al., 2009; Drotar, 1995). Strong communication skills will help the CL psychologist serve as a "mediator" or "interpreter" between the family and medical providers (Carter et al., 2014; DeMaso, 2009; Lipowski, 1971). The CL psychologist must have strong skills in written communication/documentation and the ability to respond to the medical team's requests in an expeditious manner. Diplomacy and awareness of differences in professional and personal perspectives are essential to facilitate the joining process with patients and medical providers alike, in order to demonstrate and model sensitivity to all concerns (Carter et al., 2014). For example, the CL psychologist can play an important role as a facilitator of staff communication, particularly in stressful or dysfunctional situations (Drotar, 1975). Finally, the CL psychologist has the opportunity to significantly impact medical provider understanding and appreciation of the biopsychosocial factors impacting health and the roles that psychologist can play toward improving health and mental health outcomes. By attending to these competencies necessary for effective CL practice, the pediatric psychologist is more likely to increase referrals and medical provider satisfaction with psychology care (Shaw et al., 2016).

Table 2 Characteristics of the effective consultation-liaison (CL) pediatric psychologist

Characteristic	Description
Strong core pediatric psychology skills	Per pediatric psychology professional competencies outlined in 2014 Task Force report (Palermo et al., 2014)
Flexibility	Ability to cope with unpredictable schedule, flow of consults, and consult requests. Tolerance of uncertainty. Calm response in crisis. Ability to modify practice based on nature of setting, CL service makeup, nature of referral question, etc. (Olson et al., 1988)
Empathy	Ability to empathically respond to both patient and provider concerns, being understanding of the differential roles of colleagues and a shared willingness to enhance their skills
Respect	Understanding the unique contribution of all providers and willingness to interact across disciplines for the benefit of enhancing patient care. Appreciation of the culture within which you practice along with the culture of the families you are working with
Multisystem perspective	Being able to understand and operate across and within the multiple systems within which the child exists
Customer driven	Relationships with customers (i.e., physicians, nurses, etc.) determine referrals. Providing timely response and practical management strategies which match setting demands (Shaw et al., 2016)
Communication skills	Able to communicate across range of patients, families, and medical providers as the "interpreter" or "mediator" (Lipowski, 1971). Ability to communicate with diplomacy while respecting multiple viewpoints. Excellent oral and written communication skills
Acceptance of limitations of consultant role	Appreciating that the consultant role is to evaluate and give advice that may or may not be accepted or implemented
Role advocacy	Ability to educate in a nonhierarchical way about psychology's contribution to improving patient care and the benefit of a biopsychosocial perspective to care

From Collaboration to Consultation: CL in History

Mental health consultation was defined in the 1950s and was focused on the interactional, interpersonal relationship between two professional workers, one (the consultant, typically a psychiatrist or psychologist) aiming to assist the other (the consultee, typically a medical provider) by providing recommendations toward solving mental health concerns of a particular client (Bindman, 1959). In medicine, the development of CL psychology and psychiatry evolved from trends in medicine shifting toward prevention, patient-oriented, and community practice (Lipowski, 1971). Early discussions of the role of pediatric psychologists highlighted the consultant role and the importance of the "liaison between pediatric and psychological inquiry" even before these roles were more clearly defined (Kagan, 1965; Wright, 1967). There are references to pediatric psychological consultation services being established within hospitals and medical centers as early as the 1960s (Olson et al., 1988). The 1970s brought an increased focus on the consultation roles that pediatric psychologists can play in the hospital setting. Dennis Drotar, PhD, in whose memory this book is dedicated, was a pioneer in developing and promoting CL practice in the 1970s (see Drotar, 1975). His book *Consulting with Pediatricians* remains relevant to CL practice to this day and provides detailed description of consultation models and practices across pediatric settings (Drotar, 1995). It is notable that, while rather common for pediatric psychologists to work in primary care and subspecialty pediatric clinics today, Drotar described similar practices existing over three decades prior to the current time (Katon et al., 1995). One early conceptual model is that of the psychologist working independently from the pediatrician (referral with post-consultation information exchange), providing indirect consultation (psychologist providing the pediatrician with advice, instruction, protocols, etc.), and more integrated team collaboration (shared decision-making and treatment responsibility). This was followed shortly by the proposal of a systems model that broadened the scope of consultation to addressing family and multilevel systemic factors.

Training in CL Practice

Historically, training in consultation has been identified as a primary component in training to become a pediatric psychologist (La Greca, Stone, Drotar, & Maddux, 1988). CL roles have been one of the core pediatric psychology competencies since the development of the SPP Task Force on Recommendations for the Training of Pediatric Psychologists was published in 2003 (Spirito, 2003). The 2003 Task Force addressed the growing need for psychologists to develop competencies in consultation skills in ambulatory care settings in addition to more traditional hospital services (Spirito, 2003). With the revision of the training guidelines in 2014, competencies in consultation were subsumed under the category of application, addressing those evidence-based skills pertinent to the clinical practice of pediatric psychology (Palermo et al., 2014). These revised guidelines provide specific recommendations for the developmental progression of consultation skills from *readiness for practicum* (understanding of the pediatric psychology consultant's role relative to other health-care professionals), *internship* (knowledge of the consultant's role unique from other roles, communicating findings to other professionals with supervision), and *independent practice* (ability to identify and shift roles to match referrals, provide effective feedback and recommendations to referring providers) (Palermo et al., 2014). In creating this current volume, it is the editors' intent to complement these training and competency guidelines by providing a rich resource of applied practice information for pediatric psychologists at every level of training and practice.

Structure of this Pediatric CL Handbook

Thus far, the literature on pediatric CL psychology, particularly addressing the hospital inpatient setting, has largely focused on practice patterns and program evaluation (Brosig & Zahrt, 2006; Kullgren et al., 2015; Kullgren, Bravender, & Sullivan, 2018; Piazza-Waggoner, Roddenberry, Yeomans-Maldonado, Noll, & Ernst, 2013; Shaw et al., 2016; Shaw, Walmboldt, Bursch, & Stuber, 2006; Tunick, Gavin, DeMaso, & Meyer, 2013) with limited treatment of clinical practice strategies or guidelines for evidence-based practice (Ernst et al., 2010; Gallagher, McKenna, & Ibeziko, 2014; Victor, Hesham, & Tsang, 2018). As a result, education and training in CL psychology has relied heavily on the skills of experienced providers to pass on their clinical practice wisdom and experiences, as well as requiring the novice practitioner to translate and adapt clinical tools from the extant evidence-based literature to meet the needs of any particular clinical referral. In response, this volume was created to provide CL psychology practitioners with an accessible go-to, clinician-friendly handbook reference providing concise coverage of the major areas of CL psychology practice across pediatric medical settings. Each chapter is written by authors with clinical expertise in real-world pediatric medical settings. In areas of consultation practice lacking a direct evidence base or supporting literature, chapter authors were encouraged to share their rich clinical and professional experience to inform the reader of the current accepted best practices in their topic area. Our intent is that this sharing of expertise will encourage others to expand the clinical and research literature supporting these adapted interventions.

Section one, Pediatric Consultation-Liaison Psychology: Models, Roles, Settings, and Practice, provides an overview of roles, models, and configurations of pediatric psychology CL practice that one might encounter across diverse pediatric settings. The chapters in this section address the unique issues a CL psychologist faces that are impacted by practice setting, with chapters addressing inpatient, outpatient specialty clinic, and primary care environments. Other chapters address issues that are globally relevant and reflect the systemic nature of pediatric psychology CL work from the understanding of systems and organizational factors in practice, collaboration with our psychosocial colleagues in the medical setting (social workers, child life, psychiatry, etc.), and the basic medical information needed to become a medically informed psychologist. The important role that the CL psychologist plays in the education of medical learners (medical interns, residents, fellows, etc.) is highlighted, given the importance of educating the new generation of physicians on biopsychosocial factors in pediatric health and illness and the role that psychology can play in pediatric care. This section ends with a discussion of screening and assessment approaches and tools for addressing psychosocial concerns critical to CL practice across settings.

Section two, Clinical Conditions and Interventions, provides a structured overview of the most frequently seen major pediatric conditions encountered in consultation practice, with each subsection written by practicing clinician experts in the evaluation and intervention/treatment of the condition. Chapters in this section provide pediatric psychologists of all levels of training and practice (graduate students, practicum students, interns/residents, fellows, and practicing CL psychologists) with the basics needed to approach a referral, conduct a problem-focused assessment, and plan an intervention strategy targeting the referral question as applied in all the major medical settings (inpatient/hospitalization, integrated primary care, and subspecialty care clinic settings). For ease of reader access, authors were requested to conform to a consistent structure including brief topic background; concise review of the available research and adaptation to the relevant clinical populations; clinical formulation; consideration of relevant patient, provider, and system factors; and discussion of adapta-

tion of interventions to the major medical settings (Spring & Hitchcock, 2009). Where applicable, authors have provided treatment protocols, handouts, digital resources, and educational materials which can be found in the Springer online Electronic Supplemental Material (ESM).

Section three, Crosscutting Issues in Consultation-Liaison Practice, addresses issues that are relevant across patient populations and settings. A wide range of general medical concerns are addressed (e.g., non-accidental injury, medical child abuse, palliative care), issues that present challenges to medical care (e.g., distressed parents and families, psychiatric emergencies) and practice factors (e.g., technological innovations, advocacy). The practice of psychological consultation in medical settings has expanded considerably, with the growing need to provide our profession with the guidance, tools, and systemic perspectives necessary for practicing in ever-changing medical environments. Our goal is for the *Clinician's Handbook of Pediatric Psychological Consultation in Medical Settings* to serve as a ready resource and reference for the busy pediatric psychologist consultant in furthering the important work we do for the benefit of the children and families coping with the challenges of pediatric illness/injury.

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Pediatric Consultation-Liaison: Models and Roles in Pediatric Psychology

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Consultation-Liaison Defined

Consultation is defined as the action or process of formally consulting or discussing and a meeting with an expert, such as a medical doctor, in order to seek advice (Oxford's Lexico Online Dictionary, n.d.). The process of *consulting* involves the act of engagement in the business or activity of giving expert advice to people working in a professional or technical field. For pediatric psychologists, this typically involves the provision of some form of direct patient care via a referral from a physician, subspecialty service, or other health-care team member (nursing, social work, child life, etc.) in order to address a specific clinical problem or concern. *Liaison* involves the establishment of a relationship wherein two parties or organizations are involved in the exchange of information or ideas, with a goal of developing mutual understanding and cooperation (Oxford's Lexico Online Dictionary, n.d.). The liaison role of the consultation-liaison (CL) psychologist addresses the integration of the psychologist in the health-care team and is often dictated by the model of consultation adopted by the hosting medical organization. In the liaison role, the psychologist may have formally dedicated time to address the broader systemic and mental health concerns of a service that may directly or indirectly affect the adjustment and coping of individual patients and families. When applied to the practice of pediatric psychologists and child mental health professionals working in medical settings, the recipients of consultation-liaison (CL) services may be the pediatric patient and/or their family, those professionals providing direct clinical care to a population, those providing administration of health-care services, or those at the level of designing systems and executing policies and procedures impacting the overall health-care services or even the general socio-environmental conditions in which the population lives.

An important aspect in defining and considering the adoption of models of psychological consultation involves the realization that CL services typically evolve out of the unique characteristics of the parent institutions in which they reside (Ernst et al., 2014). Each institution has a unique

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culture and history that variously shape the nature and range of the services provided. Factors such as patient demographics, institutional subcultures, financial resources, and the impact of local, regional, state, and national government policies all have an influence on the evolution of any given CL service. However, in considering the development and maintenance of any consultation service or program, it is important to acknowledge the contexts in which various models of psychological consultation services have evolved before trying to fit that model to one's own unique health-care setting.

Models

A *model* is defined as a representation of a person or thing or of a proposed structure, typically on a smaller scale than the original, and a thing used as an example to follow or imitate (Oxford's Lexico Online Dictionary, n.d.). A model is an attempt to construct a representation of a particular phenomenon in the world and can be employed merely to conceptualize a construct or more actively to operationalize the processes necessary to make the model work. Ideally, the validity of a model can be determined by its utility and effectiveness in a given setting.

Traditional Models

Armstrong (2009) has posited a theoretical model for understanding the different levels of multispecialty collaboration in clinical care: *unidisciplinary*, *multidisciplinary*, *interdisciplinary*, and *transdisciplinary*. *Unidisciplinary* collaboration, akin to indirect consultation (and almost a vanishing model in modern medical systems), is that system in which a pediatrician/specialist practices in relative isolation from other disciplines. This model has been made virtually obsolete by a number of factors including the technology connectivity in today's health-care world (e.g., telehealth (Doarn et al., 2014)), provisions under the Affordable Care Act for the "medical home" (Bachrach, Anthony, & Detty, 2014), increased emphasis on multidisciplinary care (Conroy & Logan, 2014), interprofessional education (Ward, Shaffer, & Getzoff, 2018), and the increased recognition of the biopsychosocial model in health care (Bolton & Gillett, 2019).

According to Armstrong (2009), the distinguishing feature between the *multidisciplinary* and *interdisciplinary* models of care is the degree of coordination and integration of the providers from different disciplines (with unique areas of knowledge and skill) working in conjunction to benefit patient health and functioning. Within the *multidisciplinary* model, while there may be an agreed-upon common problem, there is a relatively low level of integration and an often poorly formulated or loosely agreed-upon case conceptualization. This can lead to a failure in addressing complex interactions of physical and psychological factors contributing to symptom and illness management. For example, within the *multidisciplinary* model, the physician may make a referral to a psychologist colleague who applies evidence-based interventions to address the patient's presenting symptoms, e.g., cognitive-behavioral therapy and biofeedback for chronic headaches, while the neurologist manages medications. However, when the patient has a pain flare, the lack of closely coordinated and ongoing communication within a shared conceptual framework makes it difficult to determine whether the patient needs a change in medication, help with treatment adherence, different behavioral and coping skills, or some combination of medical and psychosocial interventions.

Integrative Models

Armstrong (2009) posits that the degree of coordination and integration of the providers from different disciplines employed in *interdisciplinary* and *transdisciplinary* models can reduce the risk of the types of diagnostic and treatment errors in the above example. Efforts to conceptualize the varied processes of psychological consultation in medical settings have led to the creation of visual models such as the *Integrated Comprehensive Consultation-Liaison Model* (ICCLM; Carter, Kronenberger, Kullgren, Piazza-Waggoner, & Brady, 2017; Carter,